



ECONOMIC GEOGRAPHY

A CONTEMPORARY INTRODUCTION

THIRD EDITION

NEIL M. COE | PHILIP F. KELLY | HENRY W.C. YEUNG

WILEY Blackwell

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This edition first published 2020
© 2020 John Wiley & Sons Ltd

Edition History

John Wiley & Sons Ltd (1e, 2007), John Wiley & Sons Ltd (2e, 2013)

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Registered Office(s)

John Wiley & Sons, Inc., 111 River Street, Hoboken, NJ 07030, USA

John Wiley & Sons Ltd, The Atrium, Southern Gate, Chichester, West Sussex, PO19 8SQ, UK

Editorial Office

9600 Garsington Road, Oxford, OX4 2DQ, UK

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Library of Congress Cataloging-in-Publication Data

Names: Coe, Neil M., author. | Kelly, Philip F., 1970– author. | Yeung, Henry Wai-Chung, author.

Title: Economic geography : a contemporary introduction / Neil M. Coe, Philip F. Kelly, Henry W.C. Yeung.

Description: Third edition. | Hoboken, NJ : Wiley-Blackwell, 2020. | Includes bibliographical references and index.

Identifiers: LCCN 2019025395 (print) | LCCN 2019025396 (ebook) | ISBN 9781119389552 (paperback) | ISBN 9781119389545 (adobe pdf) | ISBN 9781119389583 (epub)

Subjects: LCSH: Economic geography. | Economic development.

Classification: LCC HF1025 .C73 2020 (print) | LCC HF1025 (ebook) | DDC 330.9–dc23

LC record available at <https://lcn.loc.gov/2019025395>

LC ebook record available at <https://lcn.loc.gov/2019025396>

Cover Design: Wiley

Cover Image: © Jensen/Shutterstock

Set in 10/13pt Sabon by SPi Global, Pondicherry, India

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PREFACE TO THE THIRD EDITION

Since the first edition of this book was published in 2007, some excellent student-oriented overviews of Economic Geography as a field have appeared. We believe, however, that the model developed for this textbook remains distinctive in several ways and we have retained these features in this third edition:

- First, the book is structured on the basis of topical issues that are tackled using a geographical perspective, rather than on the basis of intellectual history or academic debates. We believe this is still the best way to engage students, many of whom come to our courses with a curiosity about the world around them, but not necessarily a commitment to Geography as a discipline, or even any prior knowledge of the field.
- Second, the book is written in what we hope is a clear and engaging style. The writing should be accessible to first or second year university students, and we have tried to avoid overcrowding the text with citations. While the book's chapters are driven by geographical arguments and backed up with real-world examples, we have also tried to limit the empirical data and case studies to useful, rather than exhaustive, amounts of information.
- Third, although this is not a book about the global economy *per se*, we have made a deliberate effort to ensure that it addresses the major issues confronting the global economy today and it draws examples from around the world, reflecting the varied contexts in which the book is used. As such, we make little distinction between Economic Geography and the often-separate subfield of 'Development Geography'.
- Fourth, as the subtitle suggests, the book is deliberately contemporary. In addition to spending relatively little time reflecting on the history of Economic Geography as a field, we have also sought in every chapter to reflect the contemporary economy in which our students are living and working around the world. This has meant that the literature cited is also, for the most part, quite recent – where possible, dating from after 2010.

- Fifth, the book reflects the range of topical and theoretical approaches that exist in contemporary Economic Geography. Instructors will recognize that political-economic and institutional approaches underpin much of the book, but at the same time post-structural thinking and efforts to explore the economic implications of culture and identity are also taken seriously.

In short, this book aims to present a conceptually rich and yet readable introduction to the field of Economic Geography that showcases the different ways in which economic geographers understand economic processes. It is designed to appeal to students who are coming to Economic Geography for the first time, while also offering depth to those more familiar with the field.

Changes in the Third Edition

This edition retains many of the changes introduced for the second edition (including, for example, the chapter on financial geographies). We have, however, made a number of changes:

- We have slightly modified the language used to describe geographical concepts in Chapter 1 (which itself develops an entirely new case study of bottled water). Our geographical concepts are now presented as: spatial patterns; the distinctiveness of place; connections across space; and territorial power. Scale is then introduced as a concept that cuts across these other themes. We have also sought to ensure that these themes thread through all of the subsequent chapters so that students can see how geographical concepts work when applied to many different questions.
- Our chapter on labour, which previously emphasized the strategies and impacts of organized labour (reflecting the origins of Labour Geography as a field), has shifted to focus on the role of migrant workers. We use the increasing dependence on disenfranchised migrant labour around the world to (re)think about the increasing precarity of work in general, the regulation of labour markets and workplaces, new forms of labour organizing, and the migration industry as an economic sector in its own right.
- We have created a new chapter on international organizations, reflecting on the ways in which the global economy and global development are institutionalized and governed. This has two benefits. First, the existing chapter on the state is now able to focus more closely on national state roles and strategies, which integrates literatures on neoliberalism, the developmental state, and ‘varieties of capitalism’. Second, the new chapter allows us to engage with issues of global development more explicitly by examining the institutional forms through which it is fostered.

- We have replaced the second edition's chapter on the environment, which provided a general overview of the commodification of nature, with a new chapter on the economic geographies of global climate change. This chapter retains some features of the old environment chapter, but addresses key areas of concern in relation to climate change. These include: uneven patterns of carbon emissions and economic impacts; programs to control emissions such as taxation and trading schemes; and the geographical implications of a greener or post-carbon economy.
- Two pairs of chapters from the previous edition have been combined. First, the previously separate chapters on gender and ethnicity have been merged into a single chapter on identities, asking the question 'are economic geographies gendered and racialized?' Combining these two themes allows us to address the issue of intersectional identities, reflecting the widely recognized argument that the impacts of embodied identity in workplaces and labour markets are not necessarily separable into distinctly gendered and racialized forms. Second, the previous chapters on retailing and consumption have been brought together to allow us to look at the interplay between the forces that shape the delivery of goods and services and different modes of consumption. These interactions, of course, take on varied forms in different places and territories.
- We have added more coverage of the diverse/community economies literature, reflecting on practices that exist outside the capitalist mainstream. This material appears in numerous chapters, where issues such as informal retailing, Islamic finance, community-based development, and domestic/reproductive labour are discussed. But it is also brought together towards the end of the book in a new chapter (Chapter 14). This allows instructors to end their courses with a reflection on how students might themselves engage in alternative economic practices in their daily lives.
- Finally, data, examples, and references have been extensively updated throughout. Nearly every example and case study has been thoroughly revised or replaced in order to reflect contemporary patterns in the economy at all scales. Where possible, the latest data from the period 2015–2018 have been included. We have also sought to reflect contemporary research themes in the field of Economic Geography, including, for example, evolutionary economic geography, financialization, diverse economies, and feminist political economy.

Audience

The book is designed for introductory courses on Economic Geography in an undergraduate degree programme. The text is written in an accessible way, but some of the processes and ideas that it discusses are inevitably complicated. The ways in which the text is used will therefore depend on instructors' assessments

of their students' background and preparation. Students who already have some familiarity with the concepts and arguments presented in this book could likely use the chapters as their starting point for further exploration of a given topic through articles from the research literature in Economic Geography, including those suggested in the reading notes for each chapter. But for those with little background in Geography (or cognate social sciences), the chapters in this book might be better approached through an initial reading pitched at a popular audience, for instance, from a news magazine or website. In other words, the chapters in this book may be the starting point or the end point, depending on the students involved. The book is designed so that it could serve either purpose.

While the pitch of this book is intended for a particular audience, it is also worth noting that a specific conception of what constitutes Economic Geography is implicit in our selection and treatment of topics. The text is therefore targeted to those instructors who share, or wish to adopt, this approach. A few points are worth making in this regard:

- First, this is a book that explores the multiple scales of economic processes and is not, therefore, focused exclusively on larger processes at global or national scales. For example, we believe that Economic Geography has as much to contribute in thinking about how gender roles in the household play out within the spaces of the urban labour market, as it does in understanding the globalizing organizational forms and production networks of transnational corporations (and so we cover both).
- Second, ours is a largely qualitative vision of the field, in the sense that we do not emphasize formal analytical techniques in the book. Rather than providing exercises in quantitative analysis, we focus instead on stimulating students with critical perspectives and arguments. For example, in thinking about ethnically structured labour markets, we are more interested in inviting students to think about the processes that lie behind such phenomena than in explaining how to demonstrate statistically that such patterns exist. That said, statistical exercises can, of course, be used as supplementary assignments alongside this text.
- Third, we focus on what we see as some of the best of recent scholarship in Economic Geography. Although some classic models and theoretical approaches are covered, our goal is to expose students to the insights that *contemporary* Economic Geography can provide in making sense of the world around them.
- Fourth, we do not seek to establish impervious boundaries between Economic Geography and other cognate fields concerned with social, cultural, and political processes. Our vision of the discipline is a porous one and we take seriously the need to view the economy as embedded in other spheres of life. For example, we see consumption not 'just' as an economic act but also a political engagement through fair trade and other certified products, and as a component of identity formation. In this sense, the book is very much in tune with what geographers have called the 'new economic geography' (not to be

confused with the approaches in Economics that are often given the same label). The audience for this book is, then, among those who share this ecumenical vision of Economic Geography.

Organization of the Book

This book takes the form of a series of linked chapters on topical issues and contemporary debates that draw upon, and showcase, some of the best research in Economic Geography. These issues are drawn from contemporary economic life, which is increasingly constituted at a global scale – from uneven development, climate change, and transnational corporations, to migrant labour and ethnic economies. We see each of these as issues rather than just phenomena, i.e. they are processes to be debated rather than factual realities to be described. Each chapter thus seeks to answer a significant contemporary question that a curious and well-informed reader might reasonably be expected to ask about the world around them.

This, then, is not a conventional text: our aim is to develop well-grounded *arguments* from an Economic Geography perspective, not necessarily to present simplifications of multiple viewpoints or collections of facts and data. We are, however, trying to develop these arguments in straightforward and accessible ways.

The book is organized into five parts:

Part I: Conceptual Foundations – This section introduces the basic building blocks of geographical analysis and core ideas that underpin our understanding of the economy. Chapter 1 examines spatial patterns, the distinctiveness of place, and connections across space and territorial power as core geographical concepts, with scale intersecting across all of them. Chapter 2 explores where the idea of ‘the economy’ comes from historically and some of the common concepts used in economic analysis such as demand, supply, production, markets, and firms. Chapter 3 then mobilizes these geographical and economic concepts into a dynamic and structural account of uneven development in a capitalist economy. Taking one step down from these structural ideas, Chapter 4 introduces the concept of the network to bring together the actors and activities that connect the global economy together.

Part II: Key Economic Actors – Here, we break down the larger systemic processes addressed in Part I and tackle four major components of nearly all economic processes: firms; workers; consumers; and capital. Chapter 5 takes on the transnational corporation. Although firms come in many forms and sizes, the TNC plays a disproportionate role in shaping the global economic landscape and we will ask how the work of organizing global production is done in practice. Chapter 6 examines labour, which also comes in many forms, but here too we focus on its transnational manifestation in the form of migrant workers. Chapter 7 examines consumers and the process of consumption, noting the uneven spatial patterns of consumption, its organization through the changing retail sector, and the role of

place in shaping consumption. In Chapter 8 we turn to capital and examine how the financial sector works, how it has created concentrations of power in financial centres, and how ‘financialization’ is shaping the economic landscape.

Part III: Governing the Economy – This section addresses the ways in which the economy is organized not by the ‘invisible hand’ of the market mechanism, but by institutions that shape and regulate economic actors and processes. Chapter 9 discusses the ways in which the state organizes economic activities, both within and across its borders. The account of the state also notes diverse state forms and strategies across the world, and the varied forms of capitalism associated with them. Chapter 10 takes the discussion to the scale of international organizations and examines how they shape global economic activity. Here, we also turn explicitly to the question of development, asking how programs of global poverty reduction are organized by diverse institutions. Chapter 11 focuses on a very specific form of national and international state involvement in the economy – relating to the mitigation and impacts of global climate change. The chapter goes well beyond state regulation, but a key part of the discussion concerns various emission-reduction strategies and impacts.

Part IV: Social and Cultural Dimensions – The final part of the book explores the blurred line between economic processes and the social and cultural contexts in which they are embedded. Chapter 12 highlights the very social process of economic cluster formation, and the benefits of learning and innovation that result. Chapter 13 asks how economic processes are shaped by the gendered and racialized identities that individuals bring to workplaces, labour markets, and enterprises. In Chapter 14 we examine how individuals and communities can decide to create economic practices that are quite different from the mainstream of market transactions, capitalist firms, waged labour, and private property. In particular, they may have very different motivations and objectives than simply accruing profits. The agency of individual economic actors, and their ability to reshape their economic world, is a prominent feature of the alternative models that we describe.

Part V: Conclusion – In concluding the book, Chapter 15 takes a rather different direction, and focuses on the thinkers, intellectual paradigms, and societal contexts that have shaped the history of Economic Geography. Having deliberately avoided an explicit review of the field for most of the book, here we pull back the curtain, so to speak, for students interested in how Economic Geography has changed over time in response to social and political circumstances.

Pedagogical Strategies

Each chapter in this book follows a similar structure. In most cases the chapter title is worded as a fairly intuitive question, reflecting our attempt to engage with queries that students might have of their own economic worlds. Although the

topic for each chapter also lends itself to coverage of a defined field within Economic Geography, we have deliberately avoided framing chapters in disciplinary terms in this way.

The chapters open with what we call the ‘hook’, which is a (hopefully engaging) contemporary example or issue used to introduce the key theme of the chapter. In the second section we tackle a commonly held myth or misapprehension about the topic at hand (e.g. the nation state is now powerless, or transnational corporations are all-powerful) and illustrate how these myths often rest, in large part, on a non-geographical understanding of the world around us. The main body of each chapter then serves to illustrate the necessity and effectiveness of taking an explicitly geographical approach for understanding different aspects of the economy.

Our aim is to make these arguments in a clearly understandable, lightly referenced, jargon-free manner, drawing on a wide range of examples from across different sectors of the economy, and from around the world. Boxes within the text are labelled as ‘key concepts’, ‘case studies’, and ‘further thinking’, and they offer more detailed elaborations on specific ideas or examples.

The penultimate section of each chapter is designed to add a ‘twist’ to the arguments that have preceded it; or, in other words, to probe somewhat more deeply into the complexity of contemporary economic geographies. Additional nuances and insights are offered in these twists to encourage students to avoid simplistic views of economic processes. Each chapter then concludes with a short summary of the main themes covered.

What lies after the summary is also important. First, for ease of use, the reference list is included on a chapter-by-chapter basis. Second, the reading notes in each chapter guide the student towards what we identify as the most engaging and accessible literature on the topic. Some of these readings identify the sources of well-known case studies we have drawn from the geographical literature, enabling students to ‘flesh out’ the brief summaries offered in the chapter. It is important to note, however, that the references or further readings that are cited are not intended to be comprehensive guides to the literature. There is a great deal of valuable work being done in Economic Geography that is not cited in our chapters. Beyond the academic literature, we also identify some online resources that can be used to supplement the information and arguments in the chapter.

Overall, our intention is to offer an exploration of Economic Geography rich in examples and case studies that can, on the one hand, expose students to economic life and practices in various parts of the world, and, at the same time, introduce concepts that can be ‘put to work’ in their own local contexts. Hence, the text can be integrated with local literature and case studies wherever the book is used.

ACKNOWLEDGEMENTS

Like the two that preceded it, this third edition has been a long time in the making! Throughout the writing process, however, we have been continually motivated by the positive feedback and encouragement of users and readers of the earlier versions. We hope that this new edition meets their expectations, and provides a student-friendly window onto the distinctive perspective that Economic Geography offers on our turbulent world. This third edition has benefitted from the cumulative comments and feedback of innumerable people – proposal reviewers, manuscript reviewers, and both faculty and student users – since we started this journey back in 2003. We would like especially to thank the seven anonymous reviewers who commented on the proposal for this third edition and helped us to sharpen our lines of thinking. We would also like to once again acknowledge our collective debt to Peter Dicken for inspiring us to work together to enhance the accessibility and visibility of Economic Geography.

At Wiley, we have been delighted to return to the supportive stewardship of our first edition editor, Justin Vaughan, for this third instalment. We remain grateful for his long-standing commitment to this project. We also recognize the excellent editorial assistance of Natasha Wu, Daniel Finch, and Merryl Le Roux. Several colleagues gave us permission to reproduce their photos in the book – they are acknowledged at the relevant points in the text, but we thank them collectively here. Finally, we offer a huge thanks to Mrs. Lee Li Kheng who has produced the graphics for this book with real skill and flair. In some cases she has built upon the excellent work of Graham Bowden (University of Manchester) on earlier editions, but in many instances she has created brand new figures to enhance the text.

On an individual level, Neil would like to thank his Geography colleagues of all stripes at the National University of Singapore for their collegiality and for creating such an engaging and supportive environment in which to practice Economic Geography. Graduate students past and present have provided consistent inspiration,

as have an extended network of friends-cum-colleagues in the Economic Geography community worldwide who are too numerous to list here. You know who you are, I hope! Closer to home, I am trying not to read too much into my daughter, Laura, declining to take the economic geography module at university, and my son, Adam, electing to read philosophy, politics, and economics! I continue to treasure the support and distraction that they and my wife Emma provide.

Philip is grateful to colleagues in Toronto and elsewhere who have supported this endeavour, knowingly or unknowingly, along the way. In particular, graduate students and faculty colleagues at York University provide an environment for understanding Economic Geography as a broad, critical, engaged, and vibrant field. Special thanks to my teaching assistants in Economic Geography over the last few years: Kenneth Cardenas, Alana Gennara, Crystal Melville, and Rupi Minhas. I am also pleased to acknowledge the support of the Social Sciences and Humanities Research Council of Canada for grants that have underpinned some of the research and thinking behind this project and thanks to Alicia Filipowich who has administered those grants. Finally, and for everything else: Hayley, Alexander, Jack, and Theo.

Henry has used the first and second editions as the primary text in his GE2202 Economy and Space class for well over a decade now. Over this long period, hundreds of students have consumed the text for inspiration and offered candid and positive feedback. Teaching the ‘final consumer’ with our own intellectual product makes the writing immensely satisfying. Meanwhile, colleagues in the Department of Geography, National University of Singapore, have been most engaging and encouraging, particularly those in the Politics, Economies, And Space (PEAS) group. Back at home, the preparation of this edition has coincided with my two kids, Kay and Lucas, doing Geography in their secondary schools. I do not think they ended up any wiser in economic geography! I could only turn to my wife Weiyu for more sane advice on what not to write in this text. I thank them all.

NC, PK, and HY
Singapore and Toronto
June 2019

PART I

CONCEPTUAL FOUNDATIONS

CHAPTER 1

GEOGRAPHY

How do we think spatially?

Aims

- To introduce the core geographical themes of our analysis: spatial patterns; the distinctiveness of place; connections across space; and territorial power.
- To illustrate these geographical themes through a detailed study of bottled water as a controversial but ubiquitous commodity.

1.1 Introduction: Message in a Bottle

There are a few objects that appear in university classrooms the world over. Laptop computers and smartphones are now standard equipment; a cup of coffee may be perched on the edge of the desk; and, of course, pens and paper are still used by a few traditionalists. Blending into the background scenery of the classroom, or poking out of pouches in backpacks, there will also usually be numerous bottles of water. Some may be reusable metal containers, perhaps emblazoned with a university logo, but many will be made of disposable plastic – bought from a convenience store, supermarket, or vending machine. Much of this water will have been bottled locally, often by the branch operation of a large transnational corporation. Some of it may have been shipped considerable distances – from France, Norway, New Zealand, Fiji, or Canada (see Figure 1.1).



Figure 1.1 Bottled water for sale in a Toronto grocery store: some bottled from local tap water (Nestlé's Pure Life, Coca-Cola's Dasani, and PepsiCo's Aquafina), but also spring water from France, Fiji, Norway, and New Zealand

Source: the authors.

We tend to give little thought to the rise of bottled water in our everyday lives. While we often reflect on the emergence and impact of computer technology, the Internet, and smartphones, we usually ignore the simple plastic water bottle. Yet, like computer hardware and software, bottled water has proliferated as a widespread commodity only within the last generation. The growth rates in bottled water production and sales have been astonishing. In 1970, the average person in the United States consumed just 5.5l of bottled water per year (mostly from large water coolers) (Hawkins and Emel 2014). Throughout the 1970s, 1980s, and even the 1990s, it would have been rare to see a water bottle in a university lecture hall. By 2015, however, US consumption had increased to 138l per person – a 25-fold increase. In 2017, bottled water consumption in the United States exceeded that of carbonated soft drinks for the first time. A similarly dramatic growth in consumption is evident in the United Kingdom, where the total consumption of bottled water grew from 30 million litres in 1980, to 1.4 billion litres in 2000, and 3.2 billion litres by 2016. The UK bottled water business is worth over US\$3 billion per year. Meanwhile, in the Global South, even more dramatic increases have been seen. In China, total bottled water consumption grew from 2.7 billion litres in 1997 to over 77 billion litres in 2015. Globally, it is estimated that the bottled water industry will generate annual sales of US\$280 billion by 2020 (Elmhirst 2016).

These trends reflect a number of processes. In the Global South, including China, there has been a huge expansion of middle-class consumers with disposable income to spend. At the same time, many governments have failed to provide



Figure 1.2 Home or office delivery of bottled water in Guangzhou, China

Source: the authors.

accessible and safe drinking water to their expanding populations. This has led to an increased dependence on bottled water (especially home and office delivery of large-format containers – see Figure 1.2). In the Global North, where incomes were already relatively high, and safe tap water is widely available, the growth of bottled water consumption is related in part to a deepening focus on personal health and fitness. Water is seen as a healthy alternative to sugary soft drinks. In all contexts, packaging technology, and especially the development of the polyethylene terephthalate (PET) plastic bottle in the 1990s, has made bottled water easier and cheaper to transport. In 2016, more than 480 billion plastic drinking bottles were used across the world (for water and other drinks), up from about 300 billion in 2004. If these bottles were placed end to end, they would reach more than halfway to the sun (Laville and Taylor 2017). The expansion of the industry has happened alongside the emergence of large bottled water companies that have the expertise and the capital to invest in producing, distributing, and marketing bottled water products. These include major corporations such as Nestlé, Coca-Cola, Pepsi, and Danone (see Box 1.1).

The bottled water industry provides an example of a rapidly growing sector that revolves around a relatively simple product. As such, it provides a good case study for us to use throughout this chapter as we explore geographical approaches that can be applied to the economy all around us. In Section 1.2, we will examine some of the controversies that have swirled around the growth of bottled water, including questions of environmental impact and economic fairness.

CASE STUDY

Box 1.1 The corporate world of bottled water

There are four major corporate producers of bottled water who dominate many markets around the world:

- The British–Swiss food and drink giant Nestlé produces bottled water in 34 countries and owns brands such as Perrier (France), San Pellegrino (Italy), Poland Spring (USA), Arrowhead (USA), Buxton (UK), and Nestlé Pure Life. In 2016, Nestlé sales of bottled water amounted to about US\$8.8 billion, representing around 11 per cent of global bottled water sales.
- The French food producer Danone owns brands such as Evian, Volvic, and Danone Aqua. Danone's water business recorded around US\$5 billion in global sales in 2016 – the second largest by volume after Nestlé. The company's largest markets in 2016 were China, Indonesia, and France.
- The Coca-Cola company, based in Atlanta, Georgia (United States), owns brands such as Dasani, Glaceau Smart Water, and Glaceau Vitamin Water. In addition, since 2002, Coca-Cola has been the distributor of Danone's brands within North America. In 2016, Dasani was the single largest brand of bottled water in the United States. Mount Franklin, also owned by Coca-Cola, is the single largest brand in Australia.
- PepsiCo, headquartered in Harrison, New York, owns many food and beverage businesses, but its largest revenue source is its North American beverage division, which includes brands such as Aquafina. Aquafina had sales of over US\$1 billion in the United States in 2016 and is produced in 40 bottling locations across the country. Like the other major water bottlers, Aquafina has moved extensively into marketing flavoured, sweetened, and carbonated versions of its basic products.

While these firms are the dominant players in the global bottled water business, their significance varies across different markets. In India, for example, Bisleri, based in Mumbai, dominates the market with a 24 per cent share (India Water Review 2017). The 'own-brand' labels of major supermarkets are also significant players. In the United States and United Kingdom, for example, Canada's Cott Corporation has recently developed a significant market share by acquiring bottled water producers and manufacturing products for retailers such as Safeway and Sainsburys. In the United States, with a 13.1 per cent share of the bottled water market, Cott is just behind Nestlé, Coke, and Pepsi (Stivaros 2017).

These firms have not simply responded to growing awareness about personal health and fitness, but have also driven these trends by advertising the benefits of water consumption and emphasizing the purity of their products. They have had the legal and lobbying resources to gain access to water from municipal supplies or from groundwater aquifers. They also commit a lot of resources to reassuring governments and the public of their concern for environmental sustainability, the healthiness and safety of their products, and their responsible corporate behaviour. This is not surprising. To a great extent, these firms are dependent on how governments respond in terms of granting permission to extract water, regulating the products they are selling, and facilitating the recycling of plastic bottles after use. The firms also support industry associations and lobby groups, such as the International Bottled Water Association (www.bottledwater.org), whose role is to promote the interests of the sector as a whole.

These questions allow us to see that economic processes are also contentious and political processes. Our goal in the rest of the chapter will then be to demonstrate how a geographical approach can provide a systematic and illuminating perspective on these issues of contention. This geographical approach is developed through four questions about space:

- How are economic activities distributed unevenly across space and how do we explain the unevenness of economic life (Section 1.3)?
- How do the unique features of specific places shape the form and development of economic activities (Section 1.4)?
- How are economic activities across space connected together so that what happens in one place profoundly affects what happens in another (Section 1.5)?
- How does power over space, especially in the form of territory controlled by governments ('the state'), influence economic lives and landscapes (Section 1.6)?

1.2 Bottled Water: A Contentious Commodity

The emergence of bottled water as a major consumer product, and as an industry, has been controversial. In recent years, many educational institutions have entirely banned bottled water from their food outlets and vending machines. These bans, and the wider advocacy movements against bottled water, raise several issues, and especially the environmental impacts of bottled water production and consumption, and the economic relationships involved in the industry. In this section, we will unpack these concerns and the ways in which they have been contested by organizations and firms within the bottled water industry.

Environmental Issues

Environmental issues feature prominently in the arguments presented by opponents of bottled water. Where water bottling firms draw their supply from wells and springs, there have been concerns about the exhaustion of groundwater supplies. This has been an issue especially in places where water is taken from small aquifers and may reach volumes that would compete with the needs of local water utilities. Conflicts have been particularly acute where bottlers continue to draw water for profit when supplies are running low. In 2014, California was experiencing a state-wide drought, but bottlers were extracting water from both aquifers and municipal supplies. As Figure 1.3 shows, there were various companies operating across the state, but the case of Ethos Water drew particular attention because of its stated

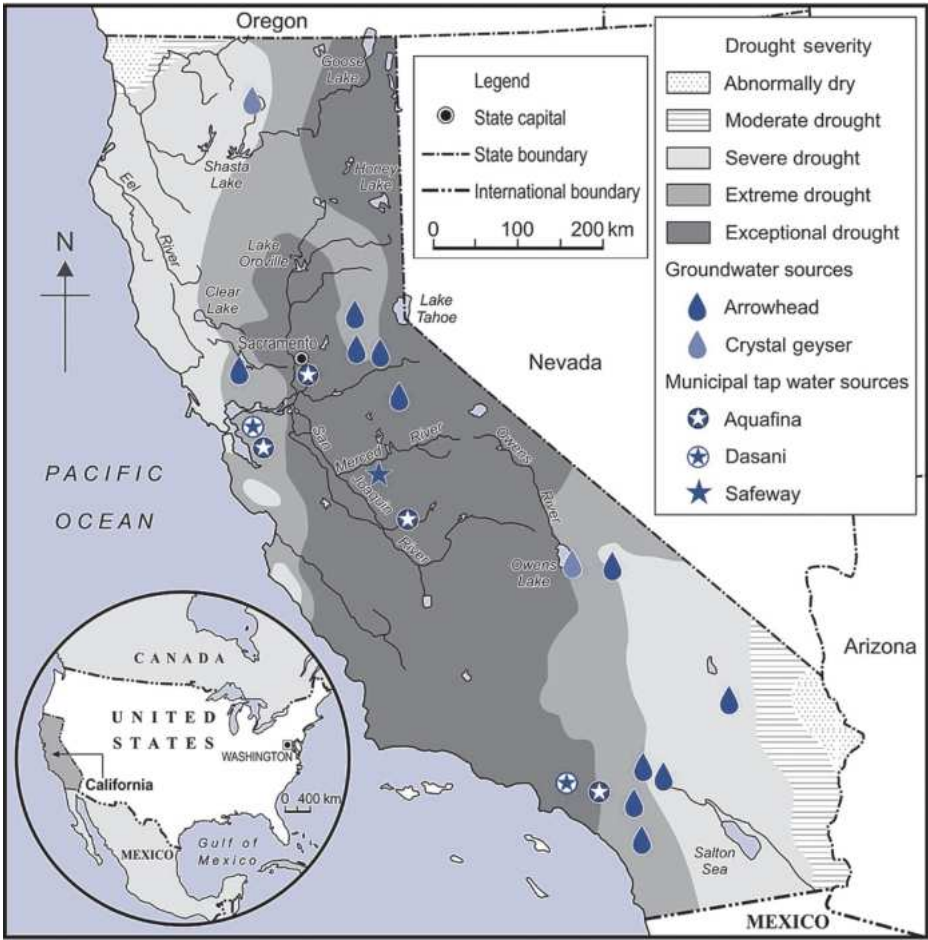


Figure 1.3 Californian drought and water bottling in 2015
Source: based on information from US Drought Monitor/Coca-Cola/Aquafina.

ethical mission to assist in water supply projects around the world through a 5 cent donation from each bottle sold. Founded in 2002 and bought by Starbucks in 2005, the brand was bottled in a plant owned by Safeway supermarket in Merced, California, right in the heart of the state's most drought-stricken region. In California and elsewhere, bottlers have argued that they draw water in full compliance with their agreement with local authorities. Nevertheless, in May 2015, Starbucks quickly announced it would relocate production of Ethos Water to Pennsylvania (Lenzer 2015). Companies have argued that water for bottling represents a tiny fraction (0.02 per cent) of the total groundwater withdrawn in the United States each year. Furthermore, they argue, because a high proportion actually goes to human consumption rather than down a household drain, it is highly efficient.

While water sources form one set of environmental controversies, another concern is the plastic used in bottled water. PET plastic bottles are now standard, but they raise three important concerns. First, the raw material for the bottle is essentially oil, so the manufacturing process involves all of the environmental impacts associated with drilling, processing, and transporting oil in the global petrochemical industry. In one memorable advertising campaign for Brita water filters in 2008, the company pointed out that 'Last year 16 million gallons of oil were consumed to make plastic water bottles'. The caption came with an image of crude oil spilling out of a person's mouth. It is worth noting that this image (and statistic) was so striking that the International Bottled Water Association still refutes it on their website as one of the myths about their product (IWBA 2018).

A further area of environmental concern relates to the transportation of bottled water by road and rail, and the resulting carbon emissions. This compares very unfavourably with the highly efficient system of pipes used to transport municipal water supplies in many countries. One estimate suggests that to produce, bottle, cool, and transport bottled water requires between 1,000 and 2,000 times as much energy as tap water (Gleick 2010). Against this point, the industry argues that most bottled water is sourced relatively locally and long-distance shipments are the exception.

Finally, the disposal of plastic bottles after use contributes to a growing global problem with plastic accumulation in landfills, water systems, and food chains. Although PET bottles are recyclable, rates vary greatly around the world. One report suggests that in 2010, Japan recycled 72 per cent of PET bottles, compared with 48 per cent in Europe and 29 per cent in the United States (McCurry 2011). Producers have responded by increasing the recycled content in their plastic containers, supporting recycling efforts, and achieving efficiencies in packaging design so that less plastic is used in the first place. Coca-Cola, for example, reported in 2017 that it had refilled or recycled the equivalent of 60 per cent of the containers it had put out into circulation (including water and other drinks products) (Coca-Cola Company 2017). Producers also highlight their contributions to environmental causes in the places where their water is produced and consumed, and to philanthropic initiatives around the world.

Economic Fairness

Even the most expensive municipal water supply costs consumers a fraction of the price of bottled water. Some estimates suggest that bottled water sells for between 240 and 10,000 times the cost of tap water, depending on its price point and where it is purchased. This is seen as especially unfair given that several brands of bottled water use tap water as their raw material.

This argument was directed at Coca-Cola's Dasani brand of bottled water when it was first introduced into the United Kingdom in 2004. When British tabloid newspapers learned that Dasani was filtered and treated municipal tap water, headlines included 'Coke sells tap water for 95p' and 'The Real Thing?' This controversy, alongside a contamination scare involving excess levels of a carcinogen called bromate, meant that the company was forced to recall 500,000 bottles and withdraw the brand from the United Kingdom and the rest of Europe. It was 10 years before the company returned with a bottled water product in the United Kingdom (this time under the brand name Glaceau Smartwater). The markup on tap water or groundwater sold in bottles has been a continuing point of contention for activists (Clarke 2007).

More broadly, opponents of bottled water argue that whether the water is from a tap or from the ground, such massive markups represent the extraction of private profit from what is essentially a public resource. In many jurisdictions bottled water companies pay very little (sometimes nothing at all) for the right to draw upon groundwater. Until recently, bottled water firms in Ontario, Canada, were paying the provincial government just C\$3.71 for every million litres of groundwater extracted. After a public outcry about the profits being made from a public resource, this fee was increased by C\$500 in August 2017. Bottled water firms, and industry advocates, tend to accept these small charges on their activities. After all, even this higher charge represents a tiny fraction of 1 cent for every bottle sold. Producers argue that the very large markups discussed by their critics are misleading because they ignore investments made in treatment, testing, and bottling equipment (see, for example, www.bottledwater.org). The companies also point out that bottled water is often far less expensive than some of the estimates suggest, especially when water is bought in bulk at a supermarket.

Although they vary in the details, the contentious issues concerning bottled water have surfaced in many contexts around the world. Local governments need to consider how they will regulate the extraction and sale of their water resources. Schools and universities consider what kinds of products they should allow on their premises. Individual consumers decide whether to buy bottled water or just stick with what comes out of the tap. In each case, some combination of environmental issues and economic justice has been at the heart of the discussion. They serve as a useful reminder that economic life is nearly always contested as lines are drawn between winners and losers (whether they are places, people, or environments).

A key question for us as economic geographers is whether there are ways in which we can apply a geographical perspective to these issues and debates. In particular, can a geographical focus on space provide some analytical clarity for these controversies? We suggest that it can, and the next four sections of this chapter will each take up a geographical approach and examine how it sheds significant light on bottled water controversies.

1.3 Location and Patterns in Space

It is not always obvious that a phenomenon in one location is part of a larger pattern. If you live in a town that has a water bottling facility, it might be easy to assume that this particular economic activity is commonplace. The same is likely true for any form of production or consumption – we tend to normalize whatever we see around us, and we seldom consider how the local economic landscape is part of a very uneven distribution of activities and experiences across space on a global scale. We might also normalize our own economic lifestyles, forgetting that the world is a patchwork of very uneven levels of wealth and patterns of consumption. A geographical approach highlights and questions these uneven spatial distributions of economic activities and processes. It enables us to ask critical questions about why these patterns exist, and who/where is winning and losing within our complex economic system. In this section, we will illustrate this kind of thinking using two examples from the bottled water case study. The first is the distribution of bottled water production in the United States. The second is the distribution of bottled water consumption around the world.

Location in Space

Figure 1.4 shows the distribution of water bottling facilities across the United States, along with population density by state. Perhaps the most striking aspect of this map is how widely distributed these facilities are across the country. This is certainly a very different pattern than we would find for other industries, such as car manufacturing, film production, or software development. By delving into the reasons for this spatial distribution, we can start to understand some of the dynamics driving the bottled water industry.

There are two key factors that determine where bottling plants will be located. The first is the source of water. If a company is bottling natural spring water or groundwater on a large scale, then a specific combination of climatic, geological, and landscape conditions need to be found. This would explain why bottling facilities are sometimes located in parts of the country with very low population densities, such as Montana and Nebraska. More importantly, perhaps, local government approval is needed, which would partly depend on community support. Given that brands of bottled water are especially sensitive to their reputation,

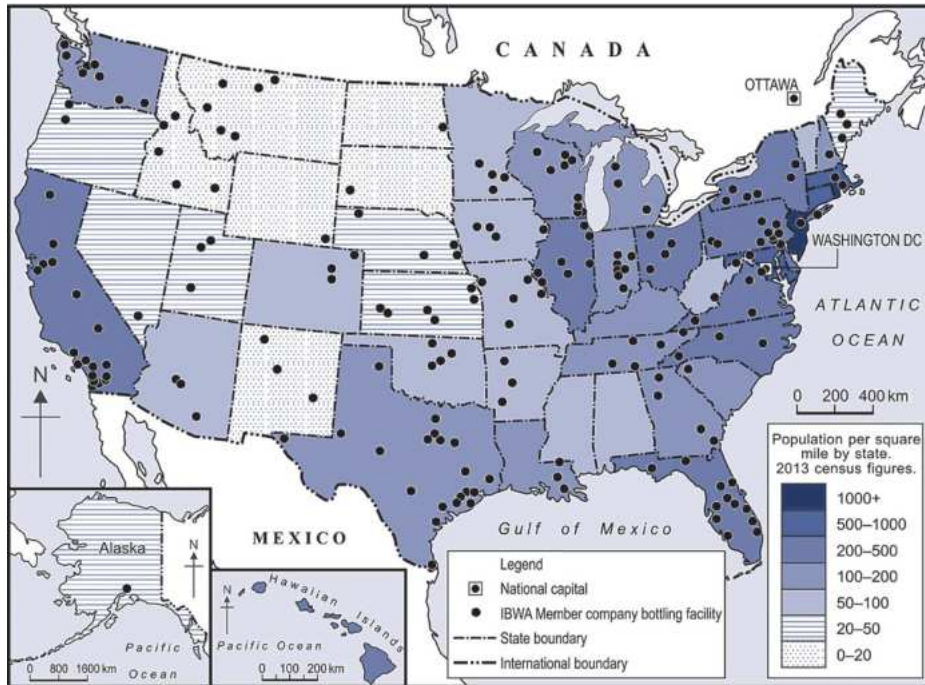


Figure 1.4 US population density and water bottling plants, 2013

Source: adapted from IBWA, <http://www.bottledwater.org/bottled-water-visuals> and Wikipedia, https://en.wikipedia.org/wiki/List_of_U.S._states_and_territories_by_population_density.

a move might be necessitated if problems arise in one location – as we saw earlier with Starbucks relocating its Ethos Water bottling operation to Pennsylvania during the Californian drought.

For many brands of bottled water in the United States, however, the source is municipal tap water rather than groundwater. In these cases, bottling facilities can be located wherever the local water utility is willing to sign a supply contract with a water bottling company. It is then much easier to locate near concentrations of demand such as large urban regions. Bottled water is a bulky and heavy (and therefore expensive) commodity to move around and so there is considerable incentive to locate near major markets. This would explain why there are some concentrations in Figure 1.4 near places of high population density, such as New York City and the Northeastern urban corridor, Chicago in the mid-West, and Los Angeles in Southern California.

It is also interesting to note some of the factors that are probably *not* relevant in water bottling location decisions. For some industries, such as high-end financial services in New York City, finding a highly skilled pool of labour would be a key factor in determining their location. This is not the case for bottled water, as the industry actually employs relatively few people. Only around 14,000 workers

are directly employed in water bottling facilities across the entire United States (Stivaros 2017). Even as production has expanded, the level of employment has remained quite static – reflecting the efficiency of production facilities that are increasingly automated. Water bottlers are also largely free from considering where their suppliers are located. The manufacturer of a complex product, for example in the auto industry, would need to consider the location of a huge range of suppliers and how these components could reach an assembly plant quickly and efficiently. For a mundane commodity like bottled water, there are no such complications because production happens at a single installation. Finally, water bottlers are not responding to local government incentives. A large/high-tech manufacturer might expect to attract some fairly generous tax breaks and other incentives from various levels of government. With relatively few jobs at stake in a water bottling plant, local governments are unlikely to be offering much.

In all of these ways, when we look at the locational decision-making of an economic activity, we can analyze why it happens in some places and not others. We can also identify the factors that are important in this patterning (and those that are not). At a relatively straightforward level, then, we can ask questions about why companies decide to produce goods and services in particular places. While one set of patterns and causes can be identified for bottled water, every sector will be different. Bottled water is a relatively simple commodity, but there are far more considerations at play for activities such as software development, car manufacturing, or professional business services. Unpacking these kinds of locational decisions has been a fundamental part of Economic Geography for decades.

Patterns of Unevenness

The patterns that exist in the economic world around us are, however, much larger than the locational decisions made by private companies. Table 1.1 shows 14 countries, including those with the world's largest per capita consumption of bottled water, or the largest total consumption. There are some intriguing geographical patterns here.

We can see in Table 1.1 an expectedly high level of per capita consumption in some of the world's wealthiest nations, such as the United States and Saudi Arabia. But why, over time, has wealth accumulated in these countries? This is a question that would require us to reach into the histories of colonialism, the geopolitics of power in the contemporary world, the geographical configuration of different global production processes, the location of key resources (e.g. oil), and some of the fundamental processes that underpin capitalism. Later in this book we will delve into these questions, but for now there are some more specific issues that arise in the data.

One surprising pattern in Table 1.1 is the juxtaposition of countries with high per capita consumption of bottled water that have very different levels of income

Table 1.1 Per capita and total consumption of bottled water, selected countries, 2015

	Per capita consumption of bottled water 2015 (litres)	Total consumption of bottled water in 2015 (millions of litres)
Mexico	244.2	30,591
Thailand	203.7	13,718
Italy	177.9	10,887
Germany	142.3	11,736
France	139.3	9,043
United States	138.2	44,436
Belgium-Luxembourg	132.9	1,558
Spain	115.1	5,432
Saudi Arabia	114.7	3,429
United Arab Emirates	112.0	1,073
Indonesia	100.9	25,800
Brazil	99.6	20,280
China	55.4	77,625
India	13.6	17,399

Source: Rodwan (2016). Reproduced with permission of Beverage Marketing Corporation.

and economic development. It is surprising, for example, to see Mexico and Thailand at the top of the list, followed by Italy and Germany. To explain this pattern, we need to understand that there are different reasons for high levels of consumption in different parts of the world. In the Global South, including Mexico and Thailand, much of the bottled water consumption is in large-format containers and provides everyday drinking water. In Mexico, two-thirds of bottled water consumption is through large-format home and office deliveries (Rodwan 2016). In both countries, these levels of consumption reflect their status as middle-income economies with a significant, and rapidly growing, urban middle class. But they also reflect popular mistrust regarding the safety of municipal water supplies, and a lack of access to such a supply in some communities. Thus, several of the arguments laid out in Section 1.2 would have to be modified to reflect the fact that tap water may not, in fact, be a viable alternative in these contexts.

European countries (Italy, Germany, and France), on the other hand, have perfectly safe tap water, but they also have a long tradition of consuming mineral and spring waters that goes back several centuries. It was well-established Italian and French mineral waters (such as Perrier and San Pellegrino) that initially led the surge in bottled water consumption in the 1990s, and they continue to be major premium brands today. High consumption in other wealthier countries, such as

the United States, tends to be more about convenience and moving away from soft drinks because of health concerns. Bottled water, especially since the emergence of lightweight PET bottles, has become a convenient, portable form of ‘personal hydration’ (to use the industry’s preferred terminology). It has also, in some cases, become a status symbol and lifestyle product. This is especially so at the higher end of the market where appeals to exotic locations, the purity of nature, and even medicinal powers are made.

At the same time, the growth in bottled water demand in wealthier markets has slowed significantly, in part because of the controversies described in Section 1.2. We can also note that some wealthy countries such as Sweden (with a per capita consumption of just 10l per person) do not even appear on this list. There, and in other Scandinavian countries, a consciousness around the environmental costs of using disposable plastic bottles has limited their appeal. Of course, all of these explanations are speculative, but they provide some insights into why we might see such geographical patterns of bottled water consumption. Even a very basic economic activity such as this can manifest itself very differently around the world. By mapping out these global patterns of unevenness we can start to ask questions about why the economic landscape is shaped in certain ways.

It is also important to note that these explanations have all been situated at the national scale. If we looked at other scales, we would find more complexities. For example, it would be easy to find wealthy enclaves in the cities of India or China where levels of bottled water consumption are very high. Equally, we could find places in the Global North where bottled water is a necessity, not a choice made for reasons of lifestyle or convenience. For example, First Nations (Indigenous peoples) who are living on reserves in Canada have long faced contaminated water supplies. In late 2016, there were 81 drinking water advisories in 44 First Nations, with bottled water being shipped to them by the Canadian federal government (David Suzuki Foundation 2017). Bottled water is not, therefore, only a luxury commodity – for some in both the Global North and Global South it fulfils a basic need.

1.4 The Uniqueness of Place

In explaining spatial patterns in Section 1.3, it quickly became necessary to discuss particular places and their distinctive characteristics. It was only by acknowledging longstanding French and Italian traditions of drinking mineral water, or by noting the inadequacies of public tap water supply in other places, that we could put forward a nuanced account of the spatial patterns observed. Similarly, in looking at the pattern of bottled water production across the United States, we noted that accessing groundwater relied on a convergence of physical conditions in the natural environment and political conditions in terms of government approvals and community support. These features provide us with the beginnings of an understanding of place.



Figure 1.5 The Perrier production facility in the village of Vergèze, France. The nineteenth-century chateau where the brand originated is in the bottom right of the picture

Source: Perrier.

A place is a unique ensemble of human and physical features on the earth's surface, including environmental conditions, physical and human landscapes, cultural practices, political institutions, social life, and economic activities. Places do not, however, just create themselves internally – they are the product of various relations and flows across space that intersect differently in different places to generate one-of-a-kind outcomes. It is the uniqueness of those outcomes that plays a part in determining where economic activities will 'take place'.

Where do these distinctive features of a place come from? Some are part of the physical environment and owe little to the impacts of human activity. These should not be forgotten as they can matter a great deal in determining the resources that form the basis for a place's economic development. Perrier water, for example, is drawn from a naturally carbonated spring in the Occitanie region of southern France (Figure 1.5). The carbonation results from volcanic gases that are emitted near the surface rocks where springs occur. The product is now artificially carbonated, but both water and carbon dioxide are locally sourced, and the carbonation level reproduces the level found naturally. The distinctive taste of the water is also a product of the unique combination of minerals found in local rock strata.

The physical characteristics of place can sometimes become an important part of a product's branding when it is sold elsewhere. In a sense, the place itself is being marketed. Why else would consumers buy FIJI Water shipped from the island of Viti Levu in the south Pacific? The reason is clear in the marketing material circulated by the company (which is headquartered in Los Angeles):

On a remote Pacific island, 1,600 miles from the nearest continent, equatorial trade winds purify the clouds that begin FIJI® Water's

journey through one of the world's last virgin ecosystems. As tropical rain falls on a pristine rain forest, it filters through layers of volcanic rock, slowly gathering the natural minerals and electrolytes that give FIJI Water its soft, smooth taste. The water collects in a natural artesian aquifer, deep below the Earth's surface, shielded from external elements by confining layers of rock. Natural pressure forces the water towards the surface, where it's bottled at the source, free from human contact until you unscrew the cap. Untouched by man™. Earth's Finest Water®. <http://www.fijiwater.com/company.html>

This quote also draws our attention to the fact that the representation or reputation of a place can sometimes be just as important as its characteristics in reality. A place becomes part of a brand, whether it is the purity of a source of spring water, a pair of Italian shoes, or the cutting-edge innovation of Silicon Valley in California (we will examine the role of place in consumption in more detail in Chapter 7, and in high-tech production in Chapter 12).

While physical environmental properties can form one dimension, a place is also fundamentally shaped by human activity. Forms of government, religious traditions, linguistic groups, norms relating to gender roles, architecture, artistic expression, ways of interacting with other people, levels of wealth and inequalities of wealth, the types of work that people do, the shops, restaurants, bars, and cafes that exist and the things that they sell – these are all human activities that give rise to unique characteristics of particular places, and they may vary greatly between places.

Place-based characteristics help us to understand the politics of water bottling discussed in Section 1.2. For example, the small township of Centre Wellington (population 30,000) in Ontario, Canada, was the site of a controversy over water extraction by Nestlé (see Figure 1.6). In 2016, the township sought to buy a spring water well on a five hectare site in order to secure water supplies for a growing population. The township was outbid by Nestlé, which bought the site as a resource for future business growth to supplement its existing well in Aberfoyle. This and other wells in the region were protested vociferously by a group called Wellington Water Watchers, dedicated to the protection and restoration of local drinking water (wellingtonwaterwatchers.ca).

It would be impossible to understand the degree of opposition that develops in such locations without examining their distinctive environmental, political, cultural, and economic circumstances. A few key place-based features can be highlighted:

- The groundwater sources used by Nestlé are in the Guelph area. This is an area of rapid population growth, including outmigration from nearby Toronto. Availability of groundwater to supply a larger population in the future is a major concern.
- Much of the area is still rural and so there are many households using wells for their domestic water supply, and farms using water for crops. Extraction for

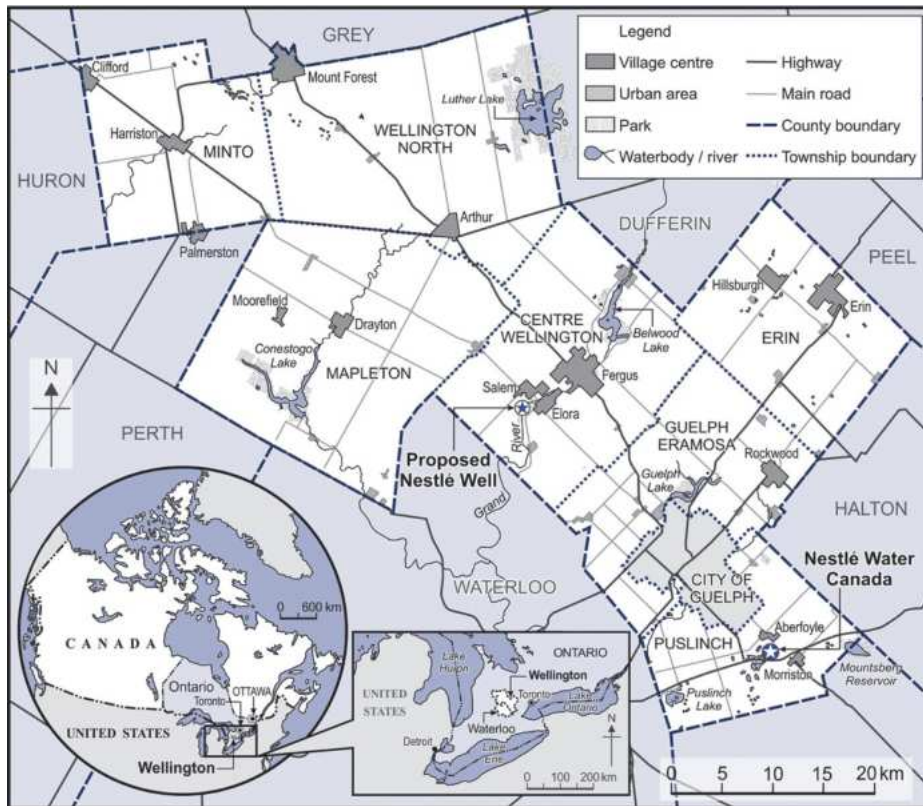


Figure 1.6 Centre Wellington and Wellington County, in Ontario, Canada

bottled water is seen by these groups as a competing claim on a finite resource.

- Much of Ontario, including this area, is the traditional land of Indigenous groups (known as First Nations in Canada) who hold water to be sacred and who have a constitutional right to be consulted in relation to resource extraction projects.
- The local economy is diverse and tied into continental and global high-tech industry, auto manufacturing, and agricultural production. It is not dependent on attracting the modest employment promised by water bottling plants.
- The activist organization (Wellington Water Watchers) was created and sustained because a group of local individuals had the time, resources, education, and connections to pursue a campaign against a large multinational corporation.
- A system of representative democracy exists at both local and provincial levels in which motivated activists can make their voices heard and influence elected officials.

Ultimately, all of these place-based features (and probably many more) contributed to the two-year ban on new permits for bottled water extraction that was

enacted by the government of Ontario in January 2017 (Kassam 2016). The broader point is that it is essential to understand this unique mix of local characteristics in order to explain why a particular economic activity might exist, and why it might be opposed. A geographical approach to examining economic activities promotes exactly this kind of place-based understanding.

While places are unique, they are definitely not created through purely local processes. Every feature of Wellington County in Ontario noted above is a product of a relationship or connectivity with larger processes. Population growth is a product of outmigration from Toronto; the local farming economy is supplying commodity markets at regional, national, and global scales; First Nations are survivors of European colonization and settlement; locally diverse employment might involve commuting to Toronto's financial centre or working in the high technology hub of nearby Waterloo, both deeply integrated into the global economic system; the activism of local groups is explicitly linked to similar struggles elsewhere (the webpage of Wellington Water Watchers contains links to campaigns against Nestlé in Oregon and Pennsylvania in the United States); and, finally, Nestlé itself is the world's largest food and beverage transnational corporation with operations in 189 countries. In all of these ways, then, the place-based characteristics of a small township in Canada are the product of relationships with other places. We therefore need to understand places as created by processes that are external as much as processes that are internal and 'local'. Places, then, can be seen as the 'coming together' of flows across space to create unique intersections in particular locations. This conception of place is what Doreen Massey (1991) called a 'global sense of place'.

It is, however, important to remember that places are not just the outcome of contemporary connections. They are also the result of historical place-making from different periods of time, each layered on top of the period before. This historical layering process is another reason why no two places are alike. We cannot understand the grandeur and wealth of London without acknowledging its role at the heart of a global empire over the last few centuries. Nor can we fully understand Manila or Mumbai without thinking about the ways in which centuries of colonialism shaped their societies, cultures, and economies. Even the most remote village is shaped by these historical connections, and their contemporary consequences, in a most profound way.

Understanding the uniqueness of places is, therefore, complicated. It requires us to think about both historical and contemporary processes and how they have shaped a place, and how the characteristics of a place in the past shaped (without actually *determining*) what it could become in the future. It also requires us to examine not just what the place itself is like, but also the part it plays in larger structures and processes – studying a place is not therefore about studying *just* that place. Furthermore, studying places is about recognizing how diverse factors, from the natural environment, to cultural practices, to economic activities, to political processes are all interconnected. This encounter with the complexities of a specific place is, in many ways, a quintessentially geographical undertaking.

It is also worth pointing out that this geographical approach to the world requires a somewhat different mindset than we might find in other disciplines, and especially Economics (a difference that we will highlight in Chapter 2). Taking a geographical approach to patterns of economic activity requires us to engage with all the complexity and messiness of the real-world places in which we live. This does not mean neglecting the wider forces that shape these activities, but it does mean that we are seeking to understand them as uniquely manifested in real and lived places, rather than as ways of deriving model ‘laws’ or principles. While economists are often seeking universally applicable generalizations (a ‘science’ of economic processes), economic geographers are usually going in a different direction – trying to understand why certain things happen in specific places in the context of all the richness and complexity of that place.

1.5 Connecting Across Space Through Networks

Our next type of spatiality has (again) already been implied in our discussions so far. We could not really discuss the patterning and unevenness of economic landscapes without thinking about how space is connected together. Nor could we understand the distinctiveness of places without thinking about how places are made (and remade) through their relationships with other places. This idea of connection across space, and the creation of networks, is our third form of spatiality. In this section, we will briefly highlight three different types of connection that become apparent in our bottled water case study:

- Linkages created by firms and production networks.
- Waste disposal networks and environmental processes.
- Wider linkages forged by a capitalist world system.

Corporate and Production Networks

The most obvious way in which we need to pay attention to connections in the economic world is through the corporate systems that knit together and organize networks in the global economy. We have already noted that the global bottled water industry has a few dominant players – PepsiCo, Coca-Cola, Nestlé, and Danone (see Box 1.1). But simply identifying these firms and assuming they are all-powerful global capitalists does not tell us very much. We can look much more closely at the ways in which such transnational corporations are structured. In the case of Nestlé, for example, the company is headquartered in Switzerland. About one-third of its shareholders are Swiss and one-third are American (most of the rest are based in Germany, Belgium, the United Kingdom, Canada, and Japan). The majority of Nestlé’s subsidiaries are managed according to global regions, but the bottled water division is run as a global business. Nestlé Waters is

the world's largest producer of bottled water, although this only amounts to 11 per cent of global sales – thus, the company is a long way from being totally dominant. Furthermore, while 18.4 per cent of its sales in 2016 came from international brands like Perrier and San Pellegrino, and 25.7 per cent came from Nestlé's own brands (especially Pure Life), more than half (50.4 per cent) came from local brands that the company owns (Nestlé 2018). This has implications for how this particular business produces a geography of wealth. If sales are largely based on the extraction of a local commodity (water) and profits are transferred to a global headquarters and paid out as dividends to shareholders in North America and Europe, then ultimately its structure represents a redistribution of global wealth, and part of the process that creates the uneven patterns of development noted in Section 1.3.

The distribution of benefits from a transnational corporation is also determined by where they pay taxes. Companies with global operations will use internal accounting mechanisms (called 'transfer pricing') to ensure that profits are declared in the lowest possible tax regime. FIJI Water provides an example of this:

the Fijian subsidiary of FIJI Water sells a 12 litre carton of water for \$4 US dollars to its parent company based in the United States, which then sells the water to distributors for \$13 US dollars. The carton retails in the United States for anywhere from \$20–\$28 US dollars. This arrangement ensures that the Fijian subsidiary generates low profits and largely avoids Fiji's 28 per cent corporate tax rate (Dornan 2010).

Furthermore, companies can also locate ownership of their business in a tax haven to ensure that their tax bill is as low as legally possible. Again, FIJI Water provides an example. Although its water comes from Fiji, and its headquarters is in California, the company is owned by an entity registered in Luxembourg; some of its assets have been transferred to companies in Switzerland; and it has trademarked the word 'FIJI' in the Cayman Islands (Lenzer 2010). The phenomenon of global finance and offshore tax havens will be discussed further in Chapter 8.

The bottled water business is, however, a system of relationships that goes far beyond the companies that create and market the product. A firm like Nestlé or PepsiCo sits within a much larger network of actors and institutions. A major part of the commodity they produce is the plastic water bottle itself. In fact, the bottle, cap, and label are, by far, the largest proportion of the costs involved in production (Bhushan 2006). This ties the bottled water business into an entirely different network of producers in the petrochemical industry, which may have a very different geography. If we look at the PET resin used to make plastic bottles, for example, the world's largest producer, Indorama, is based in Thailand. In 2015, Indorama produced 4.4 million tonnes of PET resin (16 per cent of the global total). In that production network, the plastic bottle is the end product

and is based on oil extraction, refining, shipping, commodity trading, PET resin production, and bottle molding. In some cases, plant material or recycled plastic may form part of the bottle, but most bottles are still the result of the petrochemical industry.

The network of production gets wider still when we start to consider the other players involved. The industry has other suppliers of goods and services such as manufacturers of filtration, purification, and bottling equipment, bankers who lend capital, providers of insurance and legal services, transportation companies, advertising agencies, industry associations, retailers, management consultants and research companies, and many more. Furthermore, as we have seen in Section 1.2, there are others involved in the sector as well. Governments at all levels (from local governments to international organizations like the European Union) play a key role in establishing and enforcing the rules of water extraction, product safety, recycling, and other issues. Labour unions in any of the sectors mentioned above may bargain to determine wages and working conditions. Activist groups seeking to protect their local environments can have a significant impact on the activities of water bottlers. Even schools, colleges, and universities that ban bottled water on their campuses (or conduct research on the sector) are having an impact on the sales and reputations of bottled water producers.

Overall, then, bottled water is a product that results from a complex network of relationships that connect different economic activities across space. In this book, we therefore pay attention to the structure and operations of the transnational corporations that drive such a network (Chapter 5), but also the global structure of production networks (Chapter 4).

Waste Networks and Environmental Processes

So far, we have focused on the network that has the bottled water producer at its centre. Once the plastic bottle is discarded, however, it enters a whole other set of networks that connect places across space (see Figure 1.7). In some cases this might be quite local, as plastic waste is transported to a local recycling facility or landfill. But waste is also a global industry in its own right. This was dramatically highlighted in January 2018 when China implemented a ban on imports of certain waste materials, including PET bottles, mixed paper, and textiles. The Chinese government declared that such waste materials were too often mixed with unrecyclable and even hazardous materials. It was labelled ‘*yang laji*’ or ‘foreign garbage’. The country had previously been the world’s major destination for recyclable plastic waste, especially from the Global North. Ireland, for example, had been sending 95 per cent of its plastic waste to China. In Europe as a whole, 50 per cent of collected and sorted plastic were being exported in 2016, and 85 per cent of those materials were going to China. China’s sudden ban left many countries scrambling to find new places to dump their waste, or exploring new policies to reduce the use of plastics (AFP 2018). This illustrates the extent



Figure 1.7 Plastic bottles, sorted and compressed into bales and ready for recycling

Source: reproduced with permission of Meinrad Riedo/Getty Images.

to which it is not just manufactured products that are embedded in networks that connect global space but also the waste we produce as well. Increasing recognition of the impacts of our consumption practices has prompted alternative forms of consumption that seek to be environmentally sustainable and ethical (see Chapter 14).

The issue of plastic waste also reminds us of another form of connectivity that binds global space together: environmental processes. One example is found in the accumulation of plastic waste in the world's oceans. A United Nations report has suggested that there could be more plastic waste (mainly from single-use items such as bags and bottles) in the world's oceans than fish by 2050 (United Nations 2017). Already, we know that plastic waste is accumulating in food chains that start in rivers and oceans. Fish, shellfish, and seabirds contaminated with plastic have been found across the globe, from Europe, to the Americas, to Asia (Smillie 2017) (see Figure 1.8). In this way, the waste produced by the global bottled water industry is circulating back into global seafood production: two forms of economic activity that, at first glance, seem unconnected, are therefore drawn together through the connectedness of the global environment.

Another, less direct, form of connectivity is to be found in the processes of global climate change. The energy use and carbon emissions involved in the production, transportation, and cooling of bottled water are significant. As noted earlier, they certainly far exceed the energy use involved in delivering piped tap



Figure 1.8 A juvenile albatross sits amid piles of discarded trash that floated ashore including bottles, fishing floats, and even televisions in otherwise pristine Midway Atoll
Source: reproduced with permission of Rick Loomis/Los Angeles Times via Getty Images.

water. In this way, the bottled water industry does its part to contribute negatively to global climate change. This means that those places with higher per capita levels of bottled water consumption (Mexico, Thailand, and Italy) are contributing disproportionately more to global climate change than places with lower per capita levels (India and China) – see Table 1.1. These are some of the complex geographies of global climate change that we will address in Chapter 11.

The impacts of climate change are also geographically complex and they affect the bottled water industry in a variety of ways. In Section 1.2, we noted the controversy over the Starbucks brand of Ethos bottled water during the Californian drought. The water shortages at that time (in 2015) spread across the state, which saw its highest temperatures in 120 years of record-keeping. Climate scientists estimated that climate change made the drought 15–20 per cent worse than natural climate variability. But water shortages can also be a boon for the bottled water industry. In 2018, the city of Cape Town in South Africa declared that it was approaching ‘day zero’ when its water reservoirs would be so low that municipal supplies would be cut off. Cape Town’s water shortage had a variety of causes, but a long run trend towards drier, hotter weather was a critical factor. The announcement of an impending ‘day zero’ led to huge demand for bottled water among wealthier residents and a spike in prices. Supermarkets had to start rationing bottled water purchases and governments were urged to regulate prices (Watts 2018).

The obvious, but often incorrect, assumption is that the bottled water industry exacerbates water shortages through its water extraction practices. In fact, the total extraction of water is very small relative to other uses (such as agriculture). The larger concern is the unnecessary energy used in the industry, which is tied to overall carbon emissions and climate change. Thus, it is through the global climate system that we can see the connections between bottled water consumption in one place and water shortages in another.

A Global Capitalist System

There is a third way in which we can see bottled water as part of a larger, space-connecting system. This is through the system of global capitalism. We will address the geographies of capitalism in more detail in Chapter 3, but there are a few features that are worth pointing out in relation to bottled water. First, capitalism is a system that is fundamentally based on the ownership and use of private property (whether it is land, water, factories, or other assets) to generate profit for the owners of that property. Where an opportunity exists to generate profit by making a public resource (like groundwater) privately owned, then the system will move towards that opportunity. If there is no profit to be made from tap water that is publically available, then the system will find a commodity that can be privately sold (Jaffee and Newman 2013). This is the internal logic of a capitalist system.

Second, in its search for profit, capitalism is inherently innovative in terms of the commodities offered for sale and the processes through which they are made. We saw this in the introduction of PET bottles in the 1990s. We also see it in the creation of new ‘premium’ water products, with impressive claims about their mineral concentrations, vitamin content, or flavour infusions. After visiting a gym in North London, and noting the dizzying array of water products on offer, a British journalist had this to say about bottled water:

Right now, the global bottled water industry is in one of those strange and energetic boom phases where, every week, it seems, a new product finds its way on to the shelves. Not just bland still or sparkling, but some entirely new definition of the element. It is a case of capitalism at its most hyperactive and brazenly inventive: take a freely available substance, dress it up in countless different costumes and then sell it as something new and capable of transforming body, mind, soul (Elmhirst 2016).

This quote nicely captures the inventiveness and dynamism of the capitalist system.

Third, capitalism will always seek out new markets to sell commodities, new sources of raw materials, and less expensive or more efficient labour. If one

market becomes less profitable or more static, then growth must be found by selling elsewhere. If a raw material or any input to the production process can be found less expensively elsewhere, then it will be used. If local labour becomes too expensive, then there will be pressure to either relocate production or to bring in cheaper labour – perhaps foreign migrant workers. This is the logic of survival and profit-maximizing that the system imposes on its participants. In the case of bottled water, not all of these options are available – the product itself is expensive to transport, so moving to a new location of cheap labour or cheaper water is usually not an option. Furthermore, for some products, such as Perrier or FIJI, production is tied to a particular place because of branding. But if bottled water sales are stagnant in North America and Europe because of increasing environmental awareness, then companies will certainly seek to expand into new markets such as India, China, Southeast Asia, Africa, and Latin America. The global footprint of the leading bottled water producers is an outcome of this urge to find new spaces for growth and profit. The bottled water producers identified in Box 1.1 are, therefore, creatures of a capitalist system. The global space in which they operate is, in a sense, connected together as the common terrain of capitalism.

1.6 Defining and Controlling Space Through Territory

Our final conception of space is *territory*. We have already noted that space can be patterned and uneven, that places need to be understood in their unique distinctiveness, and that connections across space can take various forms. One aspect of space that is not quite captured in these other formulations is the way in which it can be carved up and controlled. A segment of space can be bounded and defined in some way and then jurisdiction can be exercised. This combination of demarcation and power creates what we call territory. The primary form of territorial power is exercised by governments, who can exert power in a variety of ways within their jurisdictions. But governments are not the only organizations that have some degree of territorial power. A campus ban on bottled water is an example of territorial power exercised by a university administration. A shopping mall management company that decides not to provide drinking water fountains in order to enhance demand for retailers of bottled drinks is also exercising territorial power.

In this section we will highlight two ways in which territorial power can be exercised and show how this idea of space helps us to make sense of the bottled water business. First, we look at how territorial power creates borders that control flows of commodities, people, money, and information. Second, we will highlight some of the ways in which territorial power is used to shape and manage economic activities within a set of spatial boundaries.

Controlling Flows

The power to control economic flows into and out of a territory sits most clearly with national governments, which have the power to police, guard, and enforce the boundaries of their territory. This means that they can control what moves across those boundaries, including workers, products, and money. Even information can be controlled to some extent, with some governments banning the printed or online content of certain newspapers and magazines.

In the case of bottled water, we have already discussed the assertion of territorial sovereignty by the Chinese government in 2018, resulting in the banning of certain kinds of waste from entering the country. Territorial control over borders might also be imposed through duties or tariffs imposed on imported goods. Imported mineral water, for example, faces no tariffs when imported to Australia or Canada, a 10 per cent duty in China, and a 30 per cent duty in India.

A government's control over border flows also includes the movement of people. If Danone wishes to assign a manager from their headquarters in France to one of their subsidiaries around the world, that person's ability to work will be determined by the host country. Most countries are quite open to foreign managers of this kind as they recognize their presence as necessary to attract investment. The conditions attached to migrant workers lower down the workforce hierarchy, however, are much more stringent. While water bottling plants themselves employ relatively few people, in many countries around the world migrant labour is extensively employed in construction, transportation, and retailing, and is therefore present at many points in the bottled water production network. Such workers are closely monitored and live with fewer rights than permanent residents or citizens in the countries where they work (see Chapter 6).

Shaping and Regulating the Economy

A second form of territorial control involves the power to shape and regulate certain processes within those boundaries. In the case of national states, this power is exercised in many ways – from education and training programs that are run by governments; to laws concerning property, contracts, and employment relations; to welfare, unemployment benefits, and tax policy. In the case of bottled water, governments impose and enforce environmental and food safety standards. Governments also 'own' the natural resource that is been extracted when companies draw groundwater for bottling. A state can therefore set the price of that resource. The case (noted earlier) of the Canadian province of Ontario increasing the fee that it charges to water users is an example, but also a reminder that power over a particular issue within a territory may be exercised by a subnational unit rather than the national government. Moving to an even smaller subnational unit, tap water is often the responsibility of municipal governments, although in some places separate public water utilities or private supply companies exist. Municipal

water supplies are the raw materials for brands such as Dasani and Aquafina in North America. In those cases, they would have a supply agreement with a local city government and its water utility.

The role of governments goes still further. Governments are often major buyers of commodities produced within their jurisdictions. In China, for example, the government-owned China Railway Corporation was a major customer for Tibet 5100 – a company that bottles glacial meltwater from an altitude of 5100 m in Tibet. From 2011 to 2015, the company sold 600 million bottles to the government railway corporation, which then gave free water to its passengers (Liu 2015). In some cases, governments may even own water bottling enterprises. One of the leading bottled water brands in China is C'estbon, produced by the state-owned China Resources company. In Jamaica, the National Water Commission has also discussed establishing its own bottled water brand. Perhaps uniquely for a head of state, Donald Trump has his own brand of bottled water, 'Trump Natural Spring Water', which is served at the President's hotels, restaurants, and golf courses around the world. Governments may thus exercise their territorial power not just through regulating economic activities but also as full participants in certain sectors. We will discuss these and other powers of the state in Chapter 9.

While the ways in which territorial control is exercised will vary across different jurisdictions, it may also shift over time. When a country signs on to a free trade agreement, for example, it is surrendering some of its territorial power – or, perhaps more accurately, shifting it to another scale (see Box 1.2). Thus, the North American Free Trade Agreement between the United States, Canada, and Mexico removes any tariffs on bottled water between the three countries. Meanwhile, membership of the World Trade Organization requires that the three countries give the same tariff-free access to all other importers. Such agreements also often require that the same rights are given to international investors and to local water companies. This is why, in the example described earlier, a multinational such as Nestlé can operate in Canada with the same rights as any Canadian water bottling firm. Finally, in the case of the most deeply integrated free trade zones, such as the European Union, there will be uniform environmental and other regulations across the whole area. In these ways, then, the territorial power of national governments to control their economies is partially surrendered. Chapter 10 develops this point more comprehensively, as we examine the role of international institutions in shaping economic processes.

The issue of local control is often at the core of controversies over water extraction. In the case of the small village of McCloud, California, a movement developed to oppose a proposal by Nestlé to extract spring water for a large bottling plant. The dispute continued from 2003 until the company dropped the proposal in 2009. The key issue at stake for many residents and activists was local control over water resources, and a passionate belief that they should stay under public ownership and management (Jaffee and Newman 2013). There is a strong sense in many such controversies that water is a fundamental part of a

FURTHER THINKING

Box 1.2 Scale

In this chapter, we have addressed different ways of understanding space, but along the way our discussion has ranged from global corporations to tiny villages. In other words, we have been integrating many different *scales*. It is important to think explicitly about what scale means and how it might be important. At least eight scales have been evident in this chapter:

- A *global* scale allows us to understand the environmental processes that link space together, the economic inequities that shape access to safe water, and the scale at which major water bottling corporations operate.
- The *macro-regional* scale usually refers to a group of countries. We have noted, for example, how the European Union shapes environmental, labour, trade, and other issues among its member states.
- A *national* scale is where many aspects of territorial power are exercised but we have also used this scale to study inequality between countries because economic statistics are usually collected nationally.
- The *regional* scale may represent a territorial unit of control, for example, in the case of the Canadian province of Ontario charging water extraction fees.
- The *urban* scale is where many water utilities are based, as in the case of Cape Town. Water is a difficult commodity to transport and so tap water delivery is usually organized at the scale of the city.
- The *local* scale is often where social and environmental movements mobilize opposition to water extraction and bottling. Bottled water bans may also exist locally, for example, on university campuses.
- The *workplace* and the *home* are scales where many of the microprocesses of everyday life are played out. They are the most likely starting points for the global networks of recycled (or discarded) plastic bottles.
- The *body* is a site for understanding increasing demand for bottled water based on concerns about health and fitness. But also, the embodied workers employed in the bottled water industry have gendered, racialized, and other identities that affect their experiences of workplaces and labour markets (an issue taken up in Chapter 13).

These scales are useful frameworks for thinking about economic processes, but there are three further important points to remember. First, scales are *not hierarchical*. It is tempting to assume that larger scales determine what goes on at smaller scales. The economic world is, in fact, more complicated than this. As mentioned in Section 1.6, a global firm like Nestlé can be

stopped by determined local opponents in the small hamlet like McCloud, California. A second point is that economic processes work at *multiple scales simultaneously*. Trying to understand a set of processes at one scale alone will inevitably produce a very incomplete picture of what is happening. The global sales of FIJI water need to be understood through the status enhancement of consuming such a product at the scale of the body, the purity associated with a local source of water on a Pacific island, and a global corporate network that stretches to the firm's headquarters in Los Angeles. The purpose of geographical analysis is not, therefore, to pick the 'correct' scale to focus upon, but rather to keep multiple scales in mind at the same time. Finally, we need to avoid the temptation to see scales as somehow naturally occurring. Each of the scales listed above is humanly created in two senses: on the one hand, a scale such as 'the national' or 'the urban' refers to entities that we have collectively created – they are not naturally occurring phenomena; and, on the other hand, each scale is actively constructed and reconstructed with ongoing changes in our economies and societies – a process called the 'production of scale'. The very possibility of global firms marketing bottled water, for example, is a product of changes in the last few decades that have made possible flows of people, investment, commodities, and information across borders. The scale of our capitalist economy has thus been reworked, and in this sense, scale is constantly being produced.

territory. To lose control of that resource (for example, to a private water bottling corporation, with both water and profits leaving the locality) is to surrender a key part of territorial power that should rightfully reside locally. To fully understand controversies over water bottling it is therefore necessary to understand contestations over territorial power, and how it is exercised at different scales. Box 1.2 elaborates on the concept of scale, which cuts across all of the spatialities discussed in this chapter.

1.7 Summary

There are many popular conceptions about what geographers do. If you are a student of Geography, you will have heard most of them. Geography, it is often assumed, is about maps (knowing where things are located, and how borders are configured), the natural environment (rivers, mountains, volcanoes, glaciers, etc.), and places (going there for field trips, knowing capital cities, etc.). This chapter has shown that these preconceptions of Geography hold elements of truth, but in fact geographical analysis is about much more.

A cornerstone of geographical thinking will always be to ask: Why is an economic phenomenon happening in a particular *location*; how and why it is patterned unevenly across space; and how is that spatial unevenness changing over time? We have tried to capture these and other geographical questions in Figure 1.9. The small triangles, squares, and circles represent economic phenomena – they could be anything from the location of a water bottling factory to the average household income in an area. Why they are located in a particular place, and why they are uneven across space become fundamental questions to ask.

A second key concept is *place*. Places are fashioned out of every possible dimension that differentiates space: the natural environment, landscape, cultural life, political processes, types of work, the things that get produced, consumption patterns, and so on. While place is about local distinctiveness, it is also concerned with the connections and relations creating that place. A contemporary place is also a product of its past, as previous characteristics are layered on top of one another and serve to shape the place as it is now. When studying an economic process in a particular location, then, we will always want to ask: what are the distinctive and unique attributes (both environmental and social) of this place, and how did they come about over time? And, how is this place shaped by its connections with other places? In Figure 1.9, the uniqueness and historically shaped character of places is depicted with stripes – suggesting both historical layering over time, but also giving the impression of a unique ‘bar code’ for any given place.

Our third key geographical approach is to understand how connections across space are created and maintained. These might be corporate connections forged

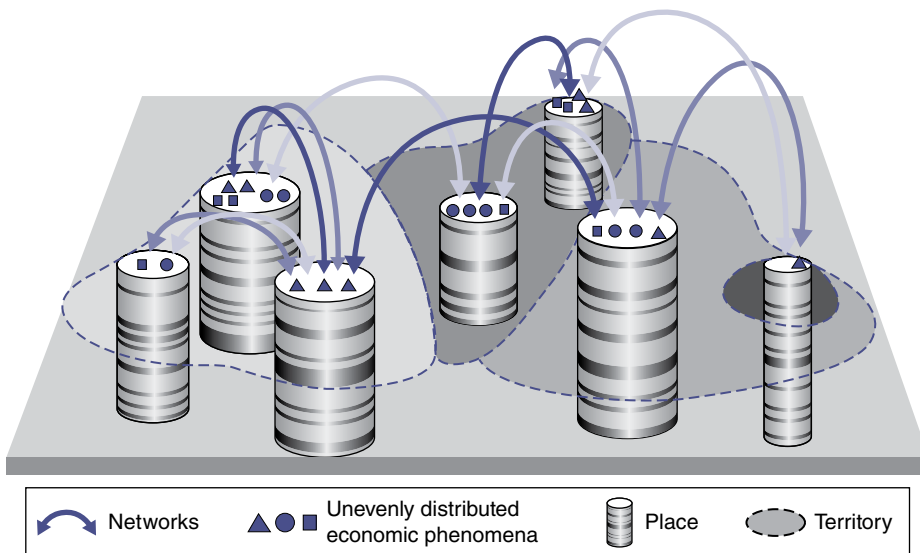


Figure 1.9 Key geographical concepts – uneven patterns, distinctive places, connecting networks, and territorial power

through transnational firms; they might be the wider *network* of connections that contribute to the production of any commodity or service; or, they might be the relationships formed through operating in a wider capitalist system. But it is not just firms and commodities that create connections. The movement of migrants, the sharing of data, and the connections forged within the global environmental system are also parts of this network of connections across space. In Figure 1.9, therefore, places are nodes in a network of relations.

The lines on a map that define the *territories* controlled by states or other entities represent a fourth key element of geographical analysis. But we are less interested in where exactly a border is located than what its effects might be on economic activities within it, or economic flows across it. It is therefore the carving up of space into controlled or managed units that makes territory an important concept. As economic geographers we will always want to ask: How is space being defined, bounded, and controlled; and, how is this process contested? The zones shaded in Figure 1.9 indicate how territory may ‘colour in’ space in this way.

These four dimensions of space will inform each of the chapters in this book. Together they represent a quite distinctive approach to economic life – one that is grounded in the landscapes where we live and work, asking how and why they vary, and how they are connected together. In the next chapter, we suggest that such a geographical approach differs from the dominant perspective on economic processes, which is provided by the field of Economics.

Notes on the references

- Accessible and well-researched studies of the rise of bottled water are provided by Clarke (2007), Gleick (2010), and Hawkins et al. (2015).
- There are various ways of thinking about spatiality, and our typology here is only one of several possibilities. Eric Sheppard (2016) discusses place, scale, networks/connectivity, and socio-spatial positionality. Peter Jackson (2006) uses space and place, scale and connection, proximity and distance, and relational thinking. Bob Jessop et al. (2008) use territory, place, scale, and networks.
- For further introductions to the field of Economic Geography and its scope, see, for example: MacKinnon and Cumbers (2019), Hayter and Patchell (2016), and Barnes and Christophers (2018).

Sample essay questions

- Why is bottled water a controversial commodity?
- Construct an argument in favour of allowing a local water resource to be bottled and sold.

- Explain the concept of (spatial unevenness/place/networked connections across space/territory) and show how it can be illustrated using the case of bottled water.
- Why is it important to understand the concept of scale when we discuss spatiality in economic geography?

Resources for further learning

- Further information about the major multinational bottled water producers can be found on their websites: Nestlé, <https://www.nestle-waters.com/get-to-know-us/key-figures>; Danone, <http://www.danone.com/en/for-all/our-4-business-lines/waters/strategy-key-figures>; Coca-Cola, <http://www.coca-colacompany.com/stories/water>; and PepsiCo, <http://www.aquafina.com/en-US/sustainability.html>.
- Other industry association websites include: <http://www.bottledwatermatters.org>, www.bottledwater.org, <http://www.efbw.org>, and www.naturalhydrationcouncil.org.uk.
- Websites and organizations aligned against bottled water include: www.banthebottle.net, www.polarisinstitute.org, and www.foodandwaterwatch.org.
- The Story of Stuff website has a short video about bottled water: <https://storyofstuff.org/movies/story-of-bottled-water>. The Story of Stuff also has two short documentaries about resistance to Nestlé water bottling operations in California (<https://storyofstuff.org/movies/nestle>) and Oregon (<https://storyofstuff.org/movies/our-water-our-future>).
- Albatross is a documentary film released in 2018 that highlights the impacts of plastic pollution in the world's oceans: www.albatrossthefilm.com.
- The Guardian newspaper has an extensive themed collection on the issue of global plastic production and disposal: <https://www.theguardian.com/environment/plastic>.

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CHAPTER 2

THE ECONOMY

What does it mean?

Aims

- To show that ‘the economy’ is an idea that arose in a particular time and place.
- To introduce the central concepts that are used in understanding economic processes.
- To explore how conventional notions of ‘the economic’ might be expanded.
- To move from a perspective grounded in Economics, to one inspired by Economic Geography.

2.1 Introduction

Econocracy...a society in which political goals are defined in terms of their effect on the economy, which is believed to be a distinct system with its own logic that requires experts to manage it. (Earle et al. 2017: 7)

Although first coined in the 1970s, the notion of ‘econocracy’ received renewed attention in 2017 with the publication of a book entitled *The Econocracy: The Perils of Leaving Economics to the Experts*. On its appearance, the book attracted widespread publicity, and was lauded by a range of experts including Andrew Haldane, Chief Economist of the Bank of England; American critic Noam Chomsky; and the former United Kingdom Secretary of State for Business,

Innovation, and Skills, Vince Cable. Mark Buchanan, an American former editor of leading journals *Nature* and *New Scientist* even commented that ‘this may be the most important economics book of the decade’. In the book, the authors – Joe Earle, Cahal Moran, and Zach Ward-Perkins – argued that an econocracy had become firmly established in the United Kingdom and elsewhere. That diagnosis was based on three characteristics. First, an econocracy is a society in which the realm of politics is dominated by concerns about the effects of policies on ‘the economy’. Second, the economy is assumed to be a distinct system, which can be isolated from the rest of society and analyzed in terms of its own internal logics. Third, maintaining this distinctive system requires a cadre of experts to manage it, turning policymaking into a technical and seemingly apolitical process. The net result is that the economy itself, and the need to sustain it in particular ways, becomes taken for granted. As Earle et al. suggest, ‘the existence of Econocracy is apparent in everyday language. It is commonplace for the media to talk about “the economy” as an entity in itself, and how something will be “good for the economy” or “bad for the economy”. The economy can speed up, slow down, improve, decline, crash or recover, but no matter what it does it must remain at the centre of political attention’ (p. 7).

This is a powerful critique, and will surely resonate with anyone who has lived through an election process that, in most contexts around the globe, is likely to have been dominated by such discussions and the desire of political parties to be seen as credible guardians of ‘the economy’. What makes the book’s arguments and reception arguably even more powerful, however, is that it was penned by three former Economics students who, in 2012, helped form the Post-Crash Economics Society at the University of Manchester. The Society was forged out of concerns with the seeming inability of Economics as an academic discipline and profession to predict the global financial crisis that unfolded in 2007–2008 and to adapt in its aftermath. Manchester quickly became an important node in a wider global network of students, academics, and professionals seeking to ‘rethink’ the economy. A central concern of this movement was the dominance of a certain mainstream view of the economy and how it should be managed. This, in turn, was linked to how Economics was taught in university curricula across the United Kingdom and beyond in ways that were reproducing the econocracy by training new generations of economists within certain very restricted theoretical and methodological parameters.

The econocracy, then, is one way of describing a world in which the economy is seen to be ‘out there’ as a distinctive entity to be studied and managed from a particular perspective. But what, more broadly, does it mean to understand the economy in this way? Why would we collectively choose to separate out particular aspects of our lives and label them ‘economic’? In so doing, what are we excluding? Why does this matter, and in what ways? These are some of the important questions that we will examine in this chapter. Just as Chapter 1 sought to unpack and explain what we mean by geography, this chapter examines the implications of adopting a subject of analysis called ‘the economy’.

The chapter starts in Section 2.2 by considering the conventional ways in which we understand the economy. In particular, we examine how indicators such as gross domestic product (GDP) are used to define and measure all things ‘economic’, and what their use reveals about how we understand what the economy actually is. While GDP treats the economy as a measurable entity, we show in Section 2.3 that this understanding of the economy is a surprisingly recent development. Even in the early twentieth century, just a few generations ago, the notion of an economic sphere implied something quite different. It was during a few crucial years in the mid-twentieth century that the economy, as we know it today, became embedded in the academic and popular imagination. In Section 2.4 we then lay out some of the basic concepts of supply, demand, prices, and markets that are usually assumed to be the fundamental processes of economic life from the perspective of mainstream Economics. Having examined how the economy came about historically and how it is analyzed, we then turn in Section 2.5 to show how much is excluded in our conventional view of the economy. The implication, in short, is that we need to have a less ‘economic’ understanding of the economy and develop an economic geography perspective that recognizes the huge on-the-ground variability and complexity to what we call ‘the economy’. This idea will underpin much of this book, as we explore the economy as an inherently geographical phenomenon. By this we mean the economy is actively produced through the difference spaces, networks, places, and territories that we introduced in Chapter 1, rather than those aspects being simply ‘background noise’ in a world of universal economic processes.

2.2 What ‘Counts’ as the Economy?

‘The economy’ is hard to avoid in contemporary life. Through our daily media diet we are informed about the state of the economy at various geographical scales – the local economy, the national economy, or the global economy. Political leaders describe their plans for the economy and take credit for making it grow. With increasing frequency, gatherings of global leaders take place at which rescuing, saving, or resuscitating the economy is the prime goal. But even beyond the rhetoric of electoral politics, ‘the economy’ is a notion that we constantly face as we digest the daily news. Major events such as terrorist attacks, natural disasters, political tensions, and so on are assessed in relation to their impact upon ‘the economy’. A country’s economy is examined for signs of health or weakness, almost like a patient being diagnosed. Figure 2.1 illustrates this idea: an obese ‘Mr Economy’ is on the weighing scales and looks likely to push up interest rates due to his increasing size.

The collective lack of questioning that exists concerning ‘the economy’ perhaps reflects an assumption that it is such a solid and tangible ‘thing’ that its existence could hardly be in doubt. This sense of a tangible ‘thing’ out there is reinforced by the various ways in which the economy is defined and measured. Most commonly,



Figure 2.1 The economy as an organic entity

Source: John Ditchburn (Ditchy).

this measurement takes the form of GDP, which seeks to calculate the total output of a particular economy over a given time period (usually a year). GDP is most often calculated for national economies, but figures are also sometimes quoted for subnational units, such as states, provinces, or regions, and for supranational entities like the European Union. There are several ways of calculating GDP (Coyle 2014). One method – the value-added or production approach – adds up the total of all the ‘final’ goods and services bought by consumers, and then subtracts the intermediate goods and services that went into their production to avoid double counting them. The income method seeks to aggregate incomes across the major sectors of the economy, for instance, workers’ wages, company profits, rental incomes, and so on. The third common method, and perhaps the most straightforward, is the final demand or expenditure approach which combines all recorded final expenditures on goods and services in a particular territory. This expenditure would include the private consumption expenditure of individuals on goods and services bought on a daily basis (C), the expenditure directed towards investment (I), and the consumption expenditure of governments on supplying hospitals, schools, armed forces, and other services (G). In addition, the calculation would also include money entering the economy from abroad (the value of exports [X] minus the value of imports [M]). In this way, the calculation of GDP can be reduced to a deceptively simple equation:

$$\text{GDP} = C + I + G + (X - M)$$

Calculated in this way, GDP gives us a means of describing the economy as a whole, and in many ways it reflects a popular conception of what constitutes the

economy – a territorially bounded entity that consists of a complex set of wealth-generating processes. GDP figures are undoubtedly of vital importance in the contemporary world. It is crucial, for instance, to have some measure of the total amount of wealth being generated in an economy in order to (i) track how that changes over time (i.e. growth versus decline) and (ii) to be able to compare it with the output of other territories at a given point in time. By graphically representing GDP data for 2017, for instance, Figure 2.2 provides a revealing picture of the global geography of economic activity. Calculating GDP per capita provides another, perhaps even more useful, basis for inter-country comparison. Yet, from the brief discussion above about different ways of calculating GDP, it should already be apparent that such a comparison is far from being a straightforward process. To provide one simple indication, the latest 2008 handbook for the System of National Accounts – the global standard for preparing comparable national GDP statistics – runs to 722 pages!

The difficulties are apparent on at least three levels. First, simply applying the formula above raises a wide range of technical issues. In terms of enabling comparisons across time and space, the figures need to be adjusted for inflation and

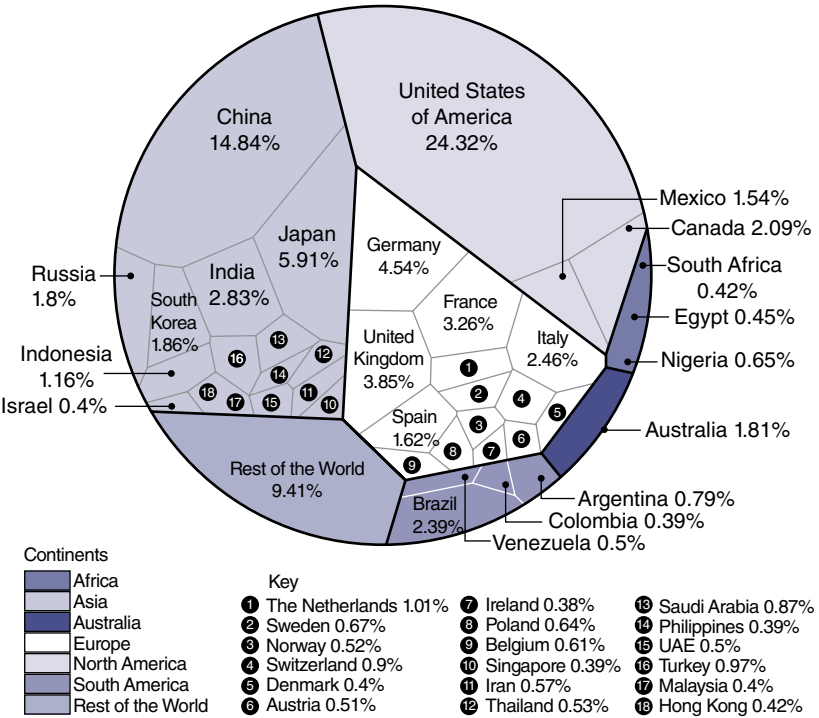


Figure 2.2 The world economy as seen through GDP figures

Source: <https://howmuch.net/articles/the-global-economy-by-gdp> (accessed 29 May 2018).

Reproduced with permission of howmuch.net.

exchange rate differentials, respectively. The notion of Purchasing Power Parity, for example, is designed to adjust for the different costs of living in different territories. In terms of the measurement process itself, there are issues concerning how to incorporate public services paid for by taxation, and how to account for the financial sector. For elements that do not have direct market values, those amounts need to be ‘imputed’ statistically as part of the calculations. More broadly, GDP calculation techniques were created in an earlier era when economies were dominated by the production of manufactured goods, and may be increasingly poorly suited to measuring value creation in economies characterized by intangible services, rapid innovation rates, complex global production systems, and a wide range of free digital platforms (Economist 2016). How do we measure, for instance, the contribution to the wider economy of a ubiquitous free service such as Google?

Second, we need to scrutinize what is and what is not included in the GDP calculation. This moves us beyond the realm of technical issues and starts to reveal wider aspects of what we choose to value (or not) in society. One huge omission is that work done within the home, for instance, in terms of caring, cleaning and catering, is simply not counted because no economic transaction takes place. To accurately measure those contributions would require different modes of data collection such as time-use surveys. Such surveys exist, but are not commonly connected to GDP calculations. As a result, a significant proportion of what individuals spend their time doing – and which is often highly skewed in gender terms – is neglected (a point we will take up in Chapter 13). How the informal economy is incorporated is also highly contentious. When Italy sought to integrate a measure of its informal economy for the first time in 1987, for instance, its economy apparently grew by 20 per cent overnight. Nigeria similarly adjusted its GDP upwards by 89 per cent in 2014. In the same year, GDP figures across the European Union nudged up a few percentage points because of a collective decision to include spending on illegal activities such as drugs and prostitution in GDP for the first time. Where to draw the boundary between formal and informal activities is thus a difficult call; while estimates suggest the United Kingdom’s informal activity is worth one-tenth of the overall economy, in India all but 48 million of its 1.3 billion people fall into the informal sector.

Third, we can ask even wider questions about whether GDP is actually measuring the right thing. It is, by definition, a measure of economic output. But is that really what should concern us most in modern society? What about broader issues such as well-being, happiness, and sustainability? As with domestic work and the informal economy, GDP is unable to effectively value the inherent worth of the environment and its protection. In GDP terms, for instance, spending on both pollution abatement and coal extraction ‘counts’ as economic activity. While some environmental assets may be relatively easy to value, e.g. oil reserves, others are far more complex, e.g. clean air. GDP has thus come under increasing scrutiny over the past decade or so, with broader measures of well-being gaining

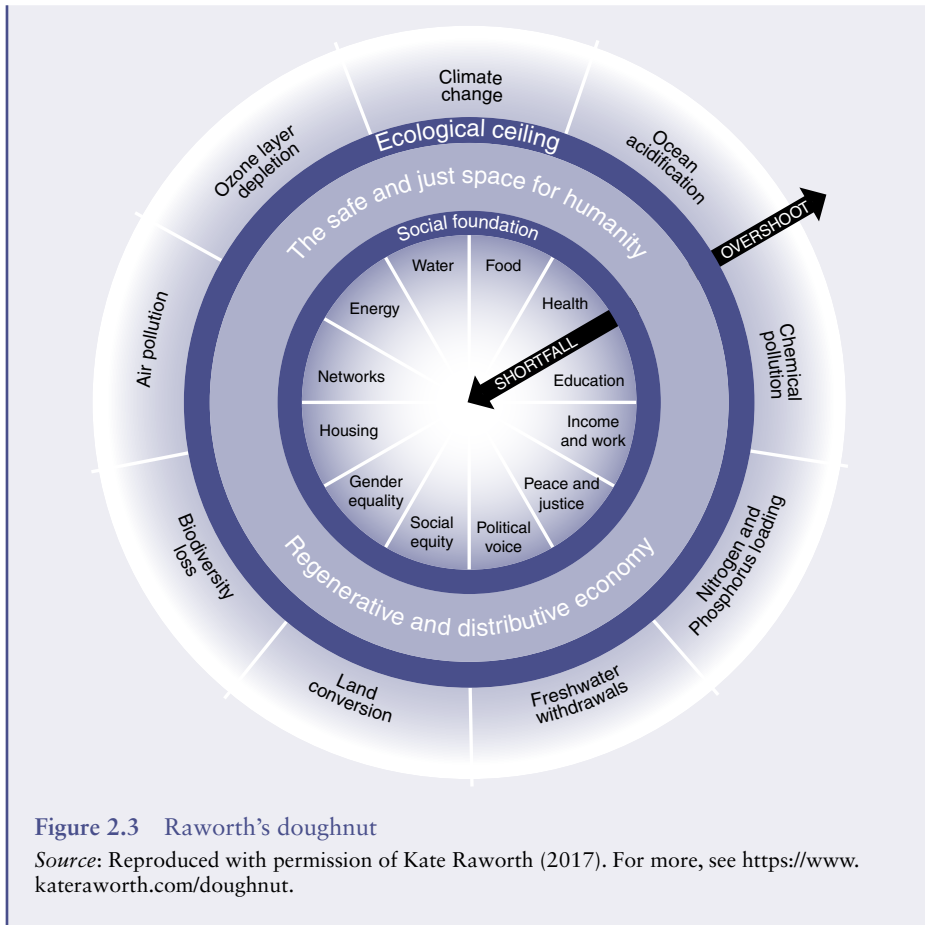
currency, such as the United Nations Development Programme's Human Development Index, the OECD's Better Life Index, and the Economic Well-Being statistics collected in the United Kingdom since 2014. The thinking here, rather than distilling one measure, is to offer a range of different 'dashboard' indicators that present a wider perspective on the 'wealth' of a given society in terms of its economic, social, and environmental sustainability. The notion of 'doughnut economics' represents one intriguing attempt to build on such ideas (see Box 2.1).

CASE STUDY

Box 2.1 Doughnut Economics

Kate Raworth's (2017) book *Doughnut Economics: Seven Ways to Think like a 21st Century Economist* is a bold attempt to reframe economic thinking to address contemporary social and environmental challenges. A self-styled 'renegade' economist based at Oxford University's Environmental Change Institute, Raworth argues that rather than prioritizing GDP growth, we should collectively seek to find the 'sweet spot' between a form of economy that disregards the ecological limits of our planet (e.g. in terms of climate change, pollution, and biodiversity loss) and one that provides the social foundations for all (e.g. in terms of health, education, housing, and equality). This she calls the 'safe and just space for humanity', which, in turn, depends upon a regenerative and distributive economy (see Figure 2.3). Raworth adds six further principles to this basic premise that resonate with our arguments in this chapter and indeed the book more widely:

- Rather than as a self-contained market, the economy should be seen as 'embedded' within other domains, notably the household, the state, and the environmental commons.
- Rather than being populated by rational actors, the economy should be seen as constituted by social beings.
- Rather than being an equilibrium system, the economy should be seen as a complex system with powerful feedback mechanisms.
- Rather than accepting profound inequality, the economy should be seen as a system for redistributing wealth among all participants.
- Rather than assuming the economy will fix the environment, the economy should be designed to regenerate the environmental systems on which it depends.
- Rather than being growth oriented, we should recognize that there are limits to economic growth.



In short, GDP is a social construction. It is an abstract idea, rather than something that is simply waiting ‘out there’ to be measured with the most accurate tools and techniques. Thinking about its calculation reveals inherent assumptions (and even prejudices) about what is worthy of incorporation and measurement. What ‘counts’ as the economy is not an objective technical process, but involves judgements about the validity of different forms of work. It also has real-world implications, because governments and other powerful economic actors make policy and strategy decisions in relation to GDP numbers. Interrogating GDP therefore provides a useful way into the themes of this chapter. However, we now need to ‘back up’ in Sections 2.3 and 2.4 to examine more closely where this idea of the economy as a definable and measurable entity comes from and how the main academic discipline associated with studying that economy, Economics, goes about understanding its internal processes. Only then can we start to think carefully about moving *beyond* the limitations of these dominant conceptions.

2.3 A Brief History of ‘the Economy’

In the English-speaking world of the early eighteenth century, the word ‘economy’ would have referred to the management of a household or a family budget. In some contexts we still use the word in this sense today. When we talk about ‘economizing’, we are usually referring to personal financial budgeting. If we drive an ‘economy’ sized car, or buy an ‘economy’ class air ticket, the implication in each case is that they are smaller and more frugal options.

The eighteenth century, however, was a period of rapid change, and its latter decades in particular marked the beginnings of the Industrial Revolution in England. Before then, when the production and use of goods and services was on a very small scale, there was little need to think about a set of economic processes that exceeded the scale of the family or household. In pre-industrial societies, most agricultural or craft production was for subsistence purposes, perhaps with some surplus paid to a feudal aristocrat or exchanged in local markets. The Industrial Revolution, however, saw Western Europe undergoing significant changes in the nature of production and the social relations that surrounded it. In particular, larger scale agricultural production emerged along with factory-based manufacturing. With production on a much grander scale and increasing levels of work specialization, it was possible to think of a *division of labour* for the first time. This division refers to the ways in which different people carried out different tasks and were thereby dependent on each other for their needs. A *social* division of labour had always existed in some senses. Each village would probably have its own carpenter, blacksmith, butcher, and so on. But the birth of the modern industrial era saw a much greater degree and scale of interdependence and specialization.

It was this division of labour that Adam Smith famously identified in his book *The Wealth of Nations*, published in 1776. Using the example of a factory making pins, Smith showed that through a *technical* division of labour, a group of people specializing in different stages of the manufacturing process could make pins far more quickly and efficiently than an individual craftsman carrying out every stage of the process himself. Smith’s insights were, however, much broader than this. In his writing there was, for the first time, a sense that ‘economy’ concerned something larger than the management of a household. It represented an integrated whole at the scale of a nation – a whole with many individual parts that worked together, albeit unknowingly, to create greater wealth for all. This interdependence was summarized in Smith’s metaphor of the ‘invisible hand’. By seeking only their own enrichment and advancement, individuals unconsciously benefitted society as a whole in the process. In Smith’s words, each individual was ‘led by an invisible hand to promote an end which was no part of his intention’ (1976: 477). Smith’s ideas have since been used to justify a political ideology in which the market mechanism is seen as universally beneficial and the most appropriate way of organizing society in all contexts. This is a rather partial reading of his perspective. At a

broader level, Smith was perceptively identifying the interdependencies that were being created by an emerging modern industrial society. By seeing 'economy' as fostering the wealth of nations rather than the management of households, he was pointing to the development of an integrated 'whole' in which people were participating as economic actors.

The analysis of national production and consumption, which Adam Smith developed, was then known as 'political economy'. It was essentially concerned with the management of resources at a national scale. In Britain, institutions such as the Bank of England and the London Stock Exchange were emerging at about the same time. They provided an organizational basis for understanding economic processes on a larger scale. By the early 1800s, economic processes were understood as matters of national significance and not simply practices of household management. This was a significant step, but it was still some way from the notion of 'the economy' as we use the concept today.

To find the beginnings of 'the economy' being understood as a separate and distinct entity, we have to move forward to the end of the nineteenth century. Until that time, it was political economy in the tradition of Smith, and later in the more radical version developed by Karl Marx writing in the mid-nineteenth century, that generated understandings of collective production, consumption, trade, and wealth in society. The late nineteenth century was, however, a period of profound scientific, technological, and intellectual change. European societies were expanding into colonial territories, large industrial cities were growing rapidly, and great strides were being made in fields such as electrical engineering, medicine, and the natural sciences. It was also during this period that that modern Economics, as a profession and an academic discipline, was being established (Mitchell 1998).

From about the 1870s onwards, economists started to think less in terms of *national* political economy, i.e. the marshalling and management of a country's wealth, and more in terms of *individual* economic decisions and outcomes. These individual economic actions could, in turn, be aggregated together in order to develop an analytical model of how the national economy as a whole would work as a system. It was no coincidence that such thinking emerged at the same time as physics and chemistry were developing scientific models of the natural world. Economists adopted very similar approaches and even used terminology that was borrowed from the physical sciences. Underlying the new field of physics was an understanding of energy as the unifying force that connected all matter and processes in the universe together. Economists found their equivalent in the concept of 'utility' through which anything 'economic' could be measured in terms of its value or its usefulness to individuals. Like energy in physics, utility was assumed to represent a common element in all economic transactions and rendered them comparable and quantifiable. With this assumed basis for a unified understanding of economic processes, individual producers and consumers could be viewed as analogous to the predictable behaviour of atoms and molecules, and the economic

processes they created could be likened to the forces and dynamics studied by physicists. Indeed, the concepts that economists used to understand economic behaviour drew directly on physical processes such as equilibrium, stability, elasticity, inflation, and friction (Mitchell 1998). These kinds of metaphors are still very much in use today by economists and just about everyone else, as discussed in Box 2.2.

FURTHER THINKING

Box 2.2 Metaphors of economy

Metaphors are required any time we need to *reduce* something that is complicated and difficult to *grasp* into a more conceptually manageable *picture*. The fact that the previous sentence contains three (*italicized*) metaphors to make its point illustrates how often we have to resort to them. But these are relatively minor metaphors. Economics employs much bigger conceptual metaphors in trying to make the economy comprehensible. Conventionally, these have involved drawing upon the scientific language and models of physics and biology to re-present economic processes.

Sometimes this draws upon the language of Newtonian physics to conceptualize economic processes as interactions of objects, flows, forces, and waves. Some everyday examples illustrate this point: the market provides a *mechanism* for bringing together buyers and sellers and for allocating resources; the location of raw materials exerts a *gravitational* attraction upon producers; and, distance provides a *frictional* force preventing consumers from shopping in far-off places. Participants in the economy are therefore reduced to rational economic beings, obeying the ‘laws’ of economics, just as atoms obey the laws of physics. More complex understandings of the economy may also resort to physical metaphors, for example, when we talk about economic *cycles* and *waves* of investment.

An even more *fertile* source of metaphors is found in biological processes. To talk of the *health* and *growth* of an economy is to represent it in terms of an organism or body. This metaphor is also found in ideas such as *circulation*, *reproduction*, *herd instincts*, and the *contagion* of economic crises. Larger logics are also represented through biological metaphors, for example, when the market is seen as providing a process of *natural selection* in which only the *fittest* and *strongest* (by implication, the most efficient) will survive, and when crises are understood to *weed out* the least efficient producers. *Development* too is essentially a biological metaphor for understanding growth and change as a natural process, as in the maturing of a human body.

Clearly we cannot do away with metaphors. We will always need them to facilitate our thinking. But we do need to be aware of the implications of understanding economic processes by resorting to these images, as they will inevitably only partially ‘fit’ the context in which they are being applied. Thus, while in some circumstances it will be useful to think about economic actors as law-abiding ‘atoms’, it is easy to see that this will exclude much that is interesting in the economic world. More broadly, by transposing the ‘laws of nature’ onto the social world, we are closing off many possibilities of alternative thinking and alternative economic arrangements. For more on metaphors of economy and their implications, see Barnes (1996) and Kelly (2001).

For these natural science metaphors to be meaningful, it was necessary to make some quite significant assumptions about the behaviour of human economic actors. These assumptions are still largely applied in Economics and are described in more detail in Section 2.5. Essentially, people had to be assumed to behave in a similarly rational and consistent manner in *all* circumstances. This rationality was based on maximizing their own economic rewards (or ‘utility’) that, in turn, could be quantified and counted. Equipped with such assumptions, the economists of the late nineteenth century could start to predict how different stimuli would affect the economic behaviour of individuals that could be aggregated in statistical terms. They began to develop an understanding of the economy as not simply the management of national wealth, but as a system of inputs, outputs, and decisions that occupied the realm of rationality and predictability entirely separate from issues of government, culture, and society. In that sense the seeds of the ‘econocracy’, discussed earlier, were being sown.

Perhaps the most graphic illustration of this new perspective on the economy was provided by the celebrated American economist Irving Fisher. In his doctoral dissertation, completed in 1892, Fisher designed a mechanical model of an economy with an intricate system of water tanks, levers, pipes, pivots, and stoppers. The following year, Fisher actually built the model and used it during his lectures at Yale University for several decades. By adjusting various flows and water levels, Fisher claimed that he had developed a predictive model of an economy that could be used to experiment with, and predict, the effects of various changes in market circumstances such as falling or rising consumer demand and changes in money flow (Gibson-Graham et al. 2013). Figure 2.4 shows the laboratory apparatus that Fisher built in 1925 to replace the first model.

While Fisher continued to experiment with mechanical analogies of the economy, others were developing mathematical models to study the economy as a coherent and logical entity. The 1930s, in particular, saw the emergence of *econometrics* as a field of study in which complex mathematical techniques were used

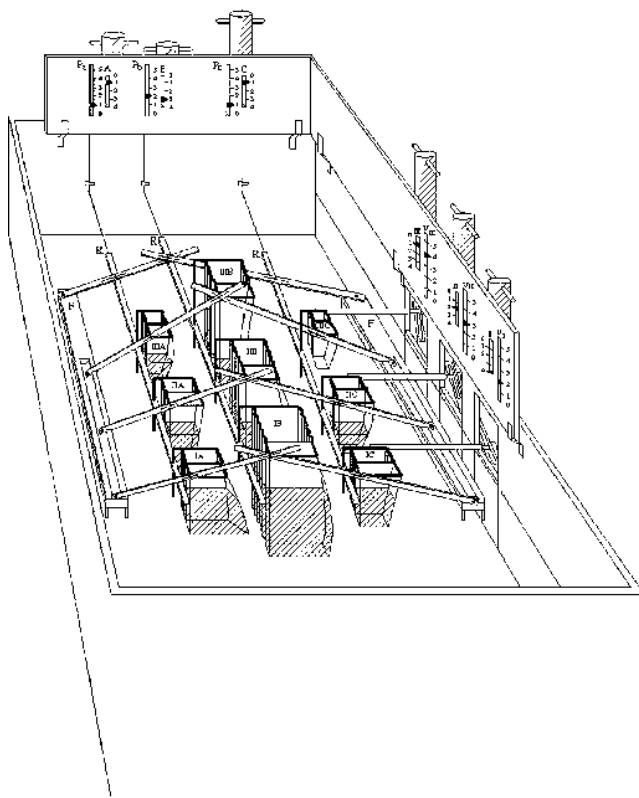


Figure 2.4 Irving Fisher's lecture hall apparatus, simulating the economy, c.1925

Source: Brainard and Scarf (2005), figure 5. Reproduced with permission of John Wiley & Sons.

to capture economic processes. These models were important not just because of their sophistication and the appearance of mathematical scientific rigour that they gave to Economics but also because they enabled economists to go beyond the notion of the economy as a set of mechanical levers, tanks, and pulleys. Models such as those constructed by Fisher could generate ever more complicated depictions of economic processes in the economy, but they were essentially static. They could not handle any kind of expansion in the economy as a whole, nor any kind of external change. What would happen if the water in Fisher's apparatus started to evaporate, or started to leak? Or, if the tanks changed in size and number over time? Or, if some kind of external shock disrupted the apparatus? Such a model could not accommodate these kinds of dynamic changes, but the mathematical versions being developed by the 1930s could analyze this dynamism. Growth and change in the economy *as a whole*, driven by both internal and external forces, could be the subject of analysis for the first time.

While econometrics delivered the analytical tools to study the economy as whole, the notion of national economic management was emerging at the same

time. In his *General Theory of Employment, Interest and Money*, published in 1936, the British economist John Maynard Keynes established the idea that a national economy was a bounded and self-contained entity that could be managed using particular policy tools. These tools included controls over interest rates, price levels, and consumer demand. While Keynes developed his ideas before the Second World War, in a context of depression and unemployment, it was after the War that his ideas really took hold and governments started to engage in the kinds of economic management that he had advocated. For almost three decades from the 1940s until the early 1970s, Keynesianism was the orthodoxy of economic management in the industrialized, non-communist world.

It was, therefore, only by the 1940s that ‘the economy’ as we know it today had really emerged as a popular concept. The idea by that time implied several important features about economic processes:

- First, the economy came to be seen as an *external sphere*, separate from the rest of our lives. Metaphors based on physical or biological processes greatly assisted in this conceptualization. When the economy is imagined as a machine or as an organism, it can be more easily seen as an external force bearing down upon us. In this way, it was possible to think about someone, or someplace, being affected by the economy. Understanding the economy as a machine or organism also enables us to think of its health and robustness – again, an idea that would have seemed quite odd a century ago. The addition of the word ‘the’ to the word ‘economy’ is an important change that indicates this new meaning. While before ‘economy’ was an activity or an attitude, it is now a ‘thing’.
- Second, because of the notion that the economic sphere operates according to its own internal logics, it has become seen as *independent* of social, political, and cultural processes. While political systems, ideologies, and parties might vary across time and space, and while cultures and social practices might also display rich geographical variation, our understanding of the economic realm often presents it as operating according to a separate and universal logic of its own, such as profit or utility maximization.
- Third, the economy, as it emerged in the 1940s, was primarily a concept that focused on the *national* scale. It was the national economy that was analyzed and modelled using the new techniques and approaches developed in the 1930s. It was also in the 1940s that measurements of national economic well-being, such as GDP, were first developed. Imagining the economy as constituted at a national scale allowed the global economy to be organized as an *inter-national* order. The institutions established in the 1940s and which we will discuss more fully in Chapter 10, including the International Monetary Fund and the World Bank, were explicitly coalitions of national governments coming together in order to coordinate their economies.
- Finally, the idea of a national economy as a machine that could be maintained and *managed* by government intervention introduced the notion that continual

economic growth was not only possible, but it was the responsibility of national governments to deliver it. Politicians around the world recognize this and usually see economic growth as their first priority. When they fail to deliver, their critics are often quick to say how they could do it better. This is, however, a relatively novel idea that is a product of the second half of the twentieth century.

We have seen, then, that much of what we take for granted in our notion of the economy is actually a set of ideas that are relatively recent. Out of the Industrial Revolution in Europe there emerged a sense of a national division of labour as a set of economic relations that constituted a sum of many parts. But it was not until the late nineteenth century that the idea of an economy as a regulated organism or mechanism started to emerge. It was as recently as the 1940s that this idea was widely adopted and started to become part of political rhetoric and popular understanding in the public domain.

By examining the historical emergence of the idea of the economy in this way, we have also implicitly made an important point: that there is nothing natural or fundamental about the way in which we understand, measure, and manage the economy. Instead, current ways of thinking are a product of particular historical circumstances in particular places; if many of us do indeed today live in ‘econocracies’, understanding how that came about is vital.

2.4 Basic Economic Processes

We have seen that the economy tends to be treated as an entity that is ‘out there’, and where this perspective comes from historically. In this section, we will examine more closely the mechanisms that are usually assumed to drive economic processes, including demand and supply, firms, production, markets, and prices. Our starting points will be grounded in the mainstream variant of Economics that, as we noted in the introduction, is prevalent in the way the subject is taught to students around the world.

Economics is commonly defined as the study of the allocation of scarce resources. The starting point for economic analysis is usually, then, the existence of **demand** for a product or a service and the process of matching that demand to a supply. Demand could range from fundamental human needs for food, shelter, and clothing to the desire for luxuries such as expensive holidays, fine dining, and art collections. We could, of course, all have the desire for these items. But to have economic relevance, these desires would have to become *effective* demand, i.e. desires of individuals backed up by their ability to pay for them. Demand is not, however, fixed. It will vary depending on the cost of purchasing something and on other factors such as fashion, taste, age, gender, and location. For example, demand for a new electronic device can be created using advertising. It may be coming largely from those in a particular demographic cohort, and it may be

concentrated in certain places where incomes and interest are sufficient. We should also remember that much of the demand for products and services does not come from individual end users, but comes instead from various points within the production system. A piece of heavy machinery might be purchased by a zinc mining company which produces cadmium as a by-product; that cadmium is, in turn, used to make batteries which power mobile robots that clean a hotel lobby. We may, as the final consumers, stay at or visit the hotel, but we are unlikely to directly demand the mining machinery, the cadmium, or the industrial cleaning robot. It is, however, our visit to the hotel that creates the demand for those and many other products.

On the other side of the equation, a process of **supply** must be in place to meet demand, i.e. someone must be willing to provide the product or service. This might be a relatively simple process in which an individual or group of people cook a meal, provide a haircut, or fix a car. Or, it might be a highly complex operation in which thousands of people are involved in designing and manufacturing a sophisticated piece of machinery such as a computer, or providing a complex service such as a credit card payment system. This is where **firms** enter the picture, as organizing units that coordinate the production of almost every conceivable product or service. While firms are often assumed to be motivated purely by an imperative to make as much profit as possible, this may be manifested in varied ways: some may wish to expand market share rather than their immediate profit on each unit produced; others may be seeking to establish or maintain a reputation, even at the expense of lower profitability; while others may forego short-term profitability in order to meet goals on a longer time horizon (e.g. a family business). The goal is always ultimately profitability, but this may not be the immediate imperative upon which a company is acting.

It is also important to note that firms come in many ownership or organizational forms, from single proprietor companies (e.g. a lone web-page designer), to partnerships (e.g. a law firm), to privately held companies (in which ownership rests with an individual or group), to public companies whose shares are bought and sold on stock markets (and whose ownership is often mostly separated from its management). We must also recall that a great deal of consumption and production ranging from healthcare, to education, to policing is conducted by public entities, usually governments. Not-for-profit and charitable organizations also play a significant role, for example, in the provision of private education from kindergarten up to some of the world's most prestigious research universities. The organizers of economic activity are therefore diverse.

Whatever the source of demand and whoever the supplier of a product or service, conventional economic analysis assumes that they will come together in a **market**. In its purest form, a market operates to unite buyers and sellers and to fix a **price** for the product or service. Both demand and supply are sensitive to prices. The higher the price for something, the less we will demand, but the more someone, somewhere will be willing to supply. As prices decrease, demand will go up,

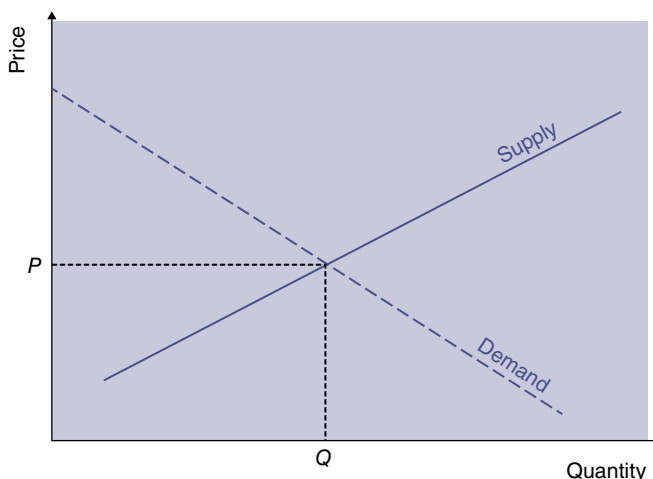


Figure 2.5 The supply and demand curves

but firms will have less incentive to sell a product or service. These tendencies of buyers and sellers can be represented in what is perhaps the most iconic diagram for students of economics – the meeting of demand and supply curves (see Figure 2.5). Where the two lines intersect, then demand and supply have reached **equilibrium** and this is the price that will be set.

The most basic and idealized model of the economic process involves many consumers and many producers coming together in a market. All have complete knowledge of their options in terms of who is available as a buyer or seller and so all are making fully informed decisions. This is a situation known as perfect competition. Perhaps the closest approximation to this scenario would be a fresh produce market in which many vendors are selling fruits and vegetables and many shoppers are examining the wares available (see Figure 2.6a). Buyers in this scenario have many choices, in terms of where to buy their cauliflowers, and whether to substitute okra for carrots. They can see clearly the quality of what is being sold and the price being asked. They may even be able to negotiate for a lower price.

In fact, such a situation rarely exists. In most cases the number of buyers or the number of sellers is restricted and the idealized case of many buyers and many sellers is seldom seen. It is also important to remember that even if there are many suppliers in a marketplace, those buying a product or service may not have complete information about what is out there. The explosion of online platforms such as Ebay and Alibaba over the last two decades has perhaps brought us closer to full awareness of the marketplace (see Figure 2.6b), but many consumers are still limited in their ability to make choices. Here, geography becomes an important factor. For example, a small town with a single grocery store is essentially a monopoly market, even if the Internet allows consumers to see the



Figure 2.6 Many consumers, many sellers (a) in Jodhpur, Rajasthan and (b) online (Alibaba.com being viewed in Hong Kong)

Source: (a) the authors. (b) Reproduced with permission of Aaron Tam/AFP/Getty Images.

price and selection of goods in a city far away. In short, the model of **perfect competition**, that is so often assumed to determine a ‘fair price’ in the marketplace for a product or service, is actually very difficult to find. As the Cambridge Economist Ha-Joon Chang (2010: 1) notes, ‘The free market doesn’t exist. Every market has some rules and boundaries that restrict freedom of choice. A market looks free only because we so unconditionally accept its underlying restrictions

that we fail to see them. How “free” a market is cannot be objectively defined. It is a political definition.’

One market in particular deserves special mention, as it is perhaps the most important market of all – the demand for, and supply of, human labour. Ultimately, all products and services are the result of collective human labour and the prices they fetch in the marketplace are to a large extent determined by how the labour that created them is valued. The usual assumption in economic analysis is that the market for human labour is a competitive process just like any other market. It is also assumed that people are evaluated in this marketplace based on the education, training, and skills that they bring to a production process. In this way, it is their contribution to the efficient delivery of a product or service that determines their value in the form of a wage. The labour market, as we call it, is very complex because it comprises many connected but distinct specializations that come together in a division of labour. While we have already noted the existence of social and technical divisions of labour in Section 2.3, we will see in later chapters there are several other dimensions to divisions of labour relating to geography, gender, and ethnicity.

In markets of all kinds, prices are determined through the use of **money** as a universal measure of value. Although we tend to take for granted the use of money in a system of market exchange, it is in fact a remarkable invention. Currency allows products, services, and people of all kinds and in all places to be held up against a common yardstick. It also allows value to be stored and saved in forms such as coins, notes, and bank balances that otherwise have very little intrinsic value. Not only is money essential to the operation of a market but there is also a market in money itself. Foreign exchange markets determine the price of one currency against another, while credit markets determine the cost of borrowing money, with its price being reflected in rates of interest.

While it is easy to lay out the basic parameters of a market-based economy, the actual operation of the system is, of course, very complicated. This complexity may arise in many ways, for instance:

- Information about prices, products, and services may be imperfect, thereby creating anomalies.
- The market in one set of products may affect the prices of others. A rise in the price of oranges, for example, might cause an increase in the demand for apples, while an increase in the price of oil has an effect on many other products and services. Distortions in markets may also occur when information about a product is misleading.
- New technologies of production, new demand, or new regulations may bring about unexpected shifts in the process through which a price is determined, and may even lead to entirely new sectors. The auto and computer sectors are classic examples of unanticipated new economic sectors of historic importance.
- Uncertainties about the future might cause demand and supply to move in ways that do not reflect current needs and resources.

- In labour markets, there may be difficulties in matching, in the same place and time, the skills and workforce needed, with the producers who are employing them.
- The market for money itself may have effects upon the markets in which money is used as a unit of exchange. The cost and supply of money may be affected by external factors such as foreign traders or government policies.
- Governments and other entities may not demand or supply things based on a self-interested rationality and may therefore distort the ‘perfect’ market. For example, most governments limit the number of mobile phone network providers that can operate in a given market.

All of these complications – and there are surely many others – can to a certain degree be brought within the analytical domain of economists, who have developed highly sophisticated statistical tools of analysis to examine the relationships between movements in prices, wages, interest rates, exchange rates, and other indicators. At the same time, in raising issues such as the uneven geographies of labour markets and the political decisions of governments, we are introducing variables that have not often been convincingly incorporated into economic analyses. In Section 2.5, we will further explore the ways in which the real world often confounds the assumptions of the economists’ models, with the ultimate purpose of foregrounding the need for a *geographical* perspective on the economy.

2.5 From Economics to Economic Geography

In this chapter so far we have seen how the economy was being reimagined in the mid-twentieth century as a separate and identifiable entity. We have also seen that the key process understood to underpin the functioning of the economy was the market mechanism establishing a monetary value for all economic transactions. Economics, as the main academic discipline associated with analyzing ‘the economy’, is now a highly sophisticated field and seeks to accommodate all sorts of complications that arise in market operations. Viewed more broadly, it is also a lot more varied as a discipline than the dominant mainstream might suggest (see Box 2.3). But it still has its limitations when we start to question its boundaries and assumptions, and in what follows we develop three lines of critique that can be levelled, to a greater or lesser extent, at all these approaches and to the mainstream mode that dominates popular and academic discussions in particular. In so doing, our intention is to move towards an economic geographical approach that is more sensitive to real people and places and which therefore might have important things to say. By the end, therefore, our intention is to have reconnected with the themes than ran through Chapter 1.

Beyond Economistic Thinking

First, in scaling up from the individual to look at wider societal patterns of activity, our analysis must look beyond narrowly economistic readings of why people

FURTHER THINKING

Box 2.3 Heterodox economics

We have already noted in this chapter the pre-eminence in both academic and real-world practice of a particular mainstream brand of Economics that closely upholds many problematic assumptions about the economy and how it operates. It is important, however, that we do not construct an overly narrow caricature of Economics, and recognize that the contemporary discipline is a broad and sprawling affair that also contains many heterodox approaches to ‘the economy’ in addition to the dominant mainstream, which is more accurately termed *neoclassical* economics. Table 2.1 introduces some of the most important of these approaches alongside the neoclassical orthodoxy, demonstrating different positions on the nature of ‘the economy’, the role of the individual therein, and what Economics should be about. We could add others to the list, for instance, classical, Austrian, Schumpeterian, or behavioural economics (see Chang 2014, for more detail). These various perspectives have different foci and interests, reflecting different value positions about what is important, and pursuing different research agendas as a result. In some instances, for example, feminist and ecological economics, the interest in gendered economic processes and the natural environment, respectively, may bring Economics closer to our concerns as economic geographers. They all fall short, however, of contributing to the fully fledged geographical perspective that we seek to develop in this book.

act as they do. Importantly, we need to understand that economies are always and unavoidably sociocultural and political/legal formations as much as they are ‘economic’ ones. Much economic analysis usually assumes two things about how people behave individually. The first is that people act through self-interest and therefore seek to maximize their personal benefit, or ‘utility’, in any economic transaction. In other words, they are acting on their own behalf and not out of altruism and sympathy for someone else. The second assumption is that people enter into economic transactions with full knowledge and information about both their own preferences and about the ways in which those preferences can be met. In other words, they can fully assess their own needs and desires in terms of what they are willing to pay or charge for a product or service, *and* they have full access to information about alternative possibilities.

In reality, the decisions people make are far more complicated and ‘irrational’. Indeed, behavioural economics is a small but rapidly growing subfield that has emerged over the last 30 years to study these complexities (see Thaler 2015). Self-interest may be mixed with altruistic concerns, for example, by choosing to

Table 2.1 Different perspectives in economics

Perspective	Humans...	Humans act within...	The economy is...	Economic analysis should...
Neoclassical economics	Optimize	A market context	At equilibrium in the absence of shocks and frictions	Show the efficient allocation of resources such that equilibrium is reached and welfare gains maximized
Marxist economics	Do not have a predetermined nature	A class and historical context	Both volatile and exploitative	Recognize power relations
Keynesian economics	Use rules of thumb	A macroeconomic context	Naturally volatile	Be descriptively realistic
Institutional economics	Exhibit changeable behaviour	An institutional environment that shapes rules and social norms	Dependent on legal and social structures	Focus on relationships between people and institutions
Evolutionary economics	Act 'sensibly' but not optimally	An evolving complex system	Complex: both stable and volatile	Recognize complexity and interdependence
Feminist economics	Exhibit gendered behaviour	A social context	Ambiguous	Recognize more than just 'the economic'
Ecological economics	Ambiguous	A social and environmental context	Embedded in the environment	Recognize environmental constraint

Source: adapted from Earle et al. (2017), exhibit 3.1. Reproduced with permission of Manchester University Press.

reduce personal consumption out of consideration for the effects on the natural environment. The maximization of personal gains may also be called into question where we pay a premium for fair trade products, for example. Even self-knowledge cannot be assumed. While the market mechanism assumes people have a threshold price that they are willing to pay for a product or service, in practice we seldom make such a careful calculation. Knowledge of the full set of options offered by the market is often unrealistic in many contexts.

All of these exceptions could in some ways be incorporated into conventional economic analysis, for example, by inferring an amount for the ‘utility’ that a person derives from being altruistic or ethical, or by looking at collectively determined prices rather than individual willingness to pay. But people also act in ways that cannot be reduced to a calculation of how their personal utility will be maximized. Many consumption and production decisions are based on the symbolic or cultural value that is embodied in a product or based on the habits, norms, traditions, and expectations of their cultural group. Different ethnic groups, for example, might have quite different profiles of demand depending on their cultural background. As we will see in Chapter 7, even regular daily or weekly shopping trips are highly social events shaped by the expectations of families and wider society. On the supply side, companies too might make production decisions that are driven by their traditions or culture rather than purely rational economic calculation (e.g. the preference of German companies for long-term relationships with trade unions).

The wider point here is that the assumption of economic rationality may be less valid than is often believed. Much of the edifice of economic analysis is based on the idea that people are rational economic persons, the so-called *homo economicus*. In other words, they are always trying to behave in ways that maximize their satisfaction, wealth, or enjoyment. In reality, people nearly always fall short of this ideal, and instead exhibit a wide range of different rationalities in the choices they make. They are embedded in wider societal contexts that powerfully shape what is considered to be reasonable or fashionable or morally acceptable. The social acceptability of consuming clothes and goods made from animal fur, for instance, varies hugely geographically. Economic systems, therefore, are rooted in sociocultural influences that undermine a narrow focus on economic factors. Already, then, the geography of the economy starts to become visible, as those influences tend to be associated with particular places, although in today’s interconnected world there is also a networked dimension to these dynamics as we saw in Chapter 1. A decline in demand for fur products in the luxury markets of China and Russia, for instance, will quickly impact upon suppliers in leading fur production regions such as Northern Europe, North America, and Brazil.

At the same time, economies are also political and legal constructions. In many contexts the state may be the *most* powerful force in economic life. As we will see in Chapter 9, the state’s role in the economy is complex and multistranded but here we can simply focus on the rules of the game. Legal and regulatory

frameworks underpin and uphold all forms of market. For instance, when monopoly forces start to become dominant in a particular industry, antitrust legislation may be used to keep the power of market leaders in check. On the other hand, when competitive forces are ascendant, intellectual property laws can have the effect of protecting corporate assets and encouraging investment. Laws of these and indeed many other kinds thus become a ‘leveler’ that helps mitigate certain destabilizing tendencies within economies (Christophers 2016). Yet, decisions by the state on the kinds of legal frameworks to adopt may not be based upon any particular market logic, but rather upon a much broader set of political calculations and national interests. To focus purely on market mechanisms is therefore to miss a great deal of what shapes and drives our economic lives.

In a variety of ways, then, the distinctions between the economic, the cultural, the political, etc., are quite arbitrary. The economy is a complex intersection of sociocultural, political, legal, and ‘economic’ forces, and it is the separation of these dimensions in the social sciences today that is often problematic. It arguably needs to be seen from an *institutional* perspective (cf. Table 2.1) as being produced by the interaction of informal norms and practices, and formal systems of laws and regulations, with ‘economic’ forces. From this perspective, the economy is seen not as an aggregation of rational, individual decisions, but rather an arena of struggle and contestation between different interest groups. As we will see in Chapter 3, the economy inevitably reflects certain *class interests* of powerful actors who seek to shape and manage the economy to their own ends. The net result, in turn, of these intersecting institutions and power struggles is that ‘the economy’ takes on different forms in different places, and geographical variability is the norm. It makes more sense in reality, therefore, to talk about different kinds of interrelated *economies*. Markets, in turn, are far from being standardized forums for exchange between rational economic actors, but rather are complex, geographically embedded phenomena. As Box 2.4 explains, understanding markets is an intellectual project with a long heritage, as scholars have tried to grapple with the rightful place, both morally and analytically, of markets.

FURTHER THINKING

Box 2.4 The place of markets

The idea that markets should be the fundamental organizing principle in society is both widespread and deeply rooted. Starting with the political philosopher Friedrich von Hayek, there has been a body of economic thought that sees markets as both efficient and just. Efficient because, in theory, they allocate resources to the most productive users; and fair because all relationships are reduced to their monetary fundamentals

without attention to tradition, class, caste, gender, ethnicity, and other ‘non-market’ forms of differentiation. These tenets, of efficiency and fairness, form the basis for a set of political beliefs often called neoliberalism, which argues for the expansion of market relations into all aspects of life such as healthcare, welfare, education, social services, etc. Several economic geographers have tracked the rise of neoliberalism into the mainstream of political life around the world (Harvey 2007; Peck 2011).

Another line of thinking takes a different view of markets and is often traced back to the political economist Karl Polanyi. Polanyi argued that markets do not provide a ‘pure’ mechanism that ensures efficiency and fairness, but are instead *embedded* in society. Even those markets that seem to be freely operating must be created by social institutions that are not market-driven. It would, for example, be impossible to imagine the creation of transport and educational systems (upon which markets undoubtedly depend) without some forms of collective coordination and provision by state and non-state actors. However, when ‘the market’ is allowed to dominate society, then it begins to undermine the very institutions that allowed it to exist in the first place. Thus, many would argue that the increasing introduction of a market mechanism into the provision of education, for example, is undermining the need of an advanced market economy for an educated workforce. This leads to what Polanyi calls ‘counter-movements’, wherein individuals and groups in society seek ‘social protection’ from the forces of the market.

More recent work by economic geographers has looked at the processes of *marketization* through which exchange systems are constructed. From this perspective, markets are fragile configurations of people, things, and ‘sociotechnical devices’ (e.g. systems and technologies for measuring the quality of commodities, and storing and transmitting price information) that allow the ownership of commodities to be attributed, prices to be attached to those commodities, and the commodities to then move between a range of actors with a common understanding of their qualities and worth. Far from automatic, assembling a market thus needs a huge amount of hard work that may, in the case of agriculture goods for example, require bringing a wide range of human and non-human actors (e.g. plants, soils, climate, and fertilizers) into temporary alignment. While a Polanyian approach inserts a geographical dimension through the social embeddedness of markets, it tends to do so at the national scale, whereas a marketization framing emphasizes the grounded ‘microgeographies’ of markets and their construction. See Berndt and Boeckler (2012) for more on this general perspective, while Ouma (2015) provides a fascinating case of the construction of global markets for West African tropical fruits.

Beyond Positivist Thinking

The first step, as we have seen, is to embed the economy within a messy real world of culture and politics in which raw economic rationalities play an important, contributory role. The next move we need to make is to reveal the normative assumptions that are inevitably there whenever we seek to study ‘the economy’. As we have seen, the economy is as much an idea as it is a real entity, and as such it is open to a wide variety of interpretations and opinions (Christophers 2017). Normative judgements are about evaluating the state of the world and how it is or ought to be. Mainstream Economics is seemingly concerned with the description and explanation of economic phenomena, through the analysis of facts and cause-and-effect relationships. It purports to be value free and simply about describing the world. Our argument here, however, is that all approaches to ‘the economy’ are infused with value judgements, even if they are not made explicit, and so are normative to a greater or lesser degree. As we saw in the case of GDP calculations, an apparently objective measurement process actually reflects choices about what counts, and what does not, what to measure, what to model, etc. Rather than trying to obscure a normative position, it is better to be clear about the assumptions and worldview that underpin our economic analyses.

To take one particular aspect, a key feature of economic analysis is that, in general, something only counts if it can be counted. The rise of econometrics as the ‘science’ of economic processes and the role of a market based on money as the medium of exchange have meant that a phenomenon has to be quantifiable in order to be included in models of the economy. If an activity takes place outside of the monetarized economy, or if a monetary value cannot readily be assigned to it, then it is not conventionally defined as an economic activity. This can lead to some odd conclusions. For example, if you drive or take a bus to your campus or to a place of work, then you have engaged in an economic act; but if you walk or ride a bicycle, then you have not. In one case, fuel bills and parking costs, or the price of a public transit ticket, have changed hands, but in the latter case the work of walking or cycling has been done outside of the formal monetary economy. Thus, in our accepted ways of understanding the economy, an economic act has not taken place and no value has been produced or added. The conceptual boundaries we tend to place on the economy are therefore rather arbitrary. The ‘economic’, as it is usually understood, does not relate to the nature or purpose of the act being undertaken, but instead to whether or not money changes hands through the price mechanism or the market. As already hinted at in our discussion of GDP, the things that are excluded from the measurable economy often follow a pattern. In particular, unpaid work that is commonly done by women in the home is excluded with the effect that the economy, as commonly understood, is from the outset a gendered concept (we will elaborate on this idea in Chapter 13).

A careful examination of ‘economic’ processes reveals, of course, that a great many take place outside of the formal, quantifiable economy. In addition to household



Figure 2.7 The economic iceberg

Source: Community Economies Collective (2001); drawn by Ken Byrne. Reproduced with permission of Katherine Gibson.

work, these transactions might be based on voluntary work, charitable donations of goods and services, exchange and barter arrangements, and even the underground economy where cash may change hands but not within the measurable economy. These activities have been likened to the submerged portion of an economic iceberg (see Figure 2.7). Production for a market, using cash transactions, and waged labour in a private company, capture only a part of how people actually produce and exchange resources of various kinds in their daily lives. In families, in cooperatives, in neighbourhoods, and in many other settings, people work, share, and exchange in ways that are seldom recognized as formal economic processes. The effect of this neglect is not just to *mis*-count the economy, but also to *dis*-count the work of certain people. The significance, and problems and possibilities of these alternative economies will be considered in more detail in Chapter 14.

The miscounting of economic processes is especially important when it comes to our relationship with the natural world. As we will see in Chapter 11, accelerating processes of climate change, with their acute economic causes and consequences, make clear the implications of this blindness to environmental concerns. The problem is that it is often difficult to assign a quantitative monetary value for the 'services' provided by the natural environment. Where this happens, nature is usually assumed to be outside of economic processes. Yet, nature is absolutely fundamental to economic life. The tourism industry, for instance, often relies on the benefits of 'unspoiled' natural beauty, but the landscape itself remains unquantified

and outside of ‘the economic’. Other kinds of economic activities are also directly dependent on the natural environment for the disposal of waste products, but again the difficulties in quantifying the benefits of this ‘service’ for individual ‘users’ have meant that it is seldom factored into economic analyses. In most parts of the world, it is only in the last 20 years that attempts have been made to put a price on air pollution and greenhouse gases, e.g. through carbon trading and offsetting schemes.

Even more directly, natural resources such as oil, gold, water, and rubber are themselves bought and sold as commodities, and used as inputs in economic processes. Indeed, the economy is itself, in some ways, the process of transforming nature from one form to another, from rubber plantations to car tires, or from buried diamonds into engagement rings. At every turn, then, the economy is also an environmental process – as input, as process, and as impact. While this process does give a monetary value to nature, it is generally based on the present market value that does not reflect the long-run cost of depleting the earth’s resources and life-support systems.

As a result of these silences in economic analysis, we often find a normative assumption that growth is unquestionably a good thing. A growing economy is considered ‘healthy’, ‘robust’, and ‘thriving’. Indeed, a growing economy is considered a necessity such that new people, new resources, new efficiencies, new products, and new wealth are all constantly needed. It would be unthinkable in most countries for a politician to mount an election campaign based on the idea that the economy is ‘grown up’ enough or efficient enough already. But the separation of a ‘healthy’ economy from its environmental consequences means that we often fail to take into account the full implications of a growing economy. If more people use their cars rather than walking, then the economy has grown, but the environmental, health, and social consequences are far from positive. Even more bizarrely, if more people get involved in car accidents, resulting in repair bills, medical expenses, and so on, then again the economy registers growth, even if the social consequences are entirely negative.

The dependence of economic analysis on the quantifiability of economic transactions is therefore a major limitation. In upholding such a perspective, one is not neutrally analyzing the ‘reality’ of the world, but rather enacting a series of assumptions about what constitutes the contemporary economy. We live, however, in a complex world that is more-than-capitalist and more-than-economic, and as such we need to develop perspectives that recognize the inherent diversity of economies. In deciding where to draw boundaries around ‘the economy’ and how to study it, we are inevitably making normative judgements.

Beyond Universality

So far we have taken two big steps outside the constraints of a straightforward economics perspective, moving beyond economistic thinking to see ‘the economy’ as an institutionalized formation with sociocultural and political dimensions,

and moving beyond an apparently neutral framework to reveal the normative values that unavoidably underpin our attempts to analyze ‘economic’ processes. The third argument, which clearly intersects with these preceding elements and reconnects us to the concerns of Chapter 1, is to move beyond the apparent universality of economics to recognize the fundamental geographic variability of economies. The ‘laws’ of economics simply do not operate in the same way in all places at all times.

As Eric Sheppard (2016) describes, in most mainstream economic analyses, geography is taken to be an *exogenous* factor. That is to say, it exists outside the realm of models based on market exchanges. He uses examples from two different bodies of research to illustrate this. First, in the work of Columbia University economist Jeffrey Sachs (2005), geography is treated as ‘first nature’, or the physical world of climate, mountains, rivers, and oceans. In such analyses, this physical geography is seen as a backdrop that is entirely external to societies and economies. Measures of that environment can then be intersected with measures of the economy, because they are seen as being independent variables. So, for example, a researcher might seek to investigate the impact of latitude or access to oceans on rates of GDP growth. Another variant of this approach is to instead emphasize the importance of *political* geography, with the prosperity, for instance, of temperate colonies as compared to tropical colonies being explained by the differing nature of the colonial regimes that were installed in those contexts (Acemoglu and Robinson 2012). Again, variations in wealth and poverty are related to the inherited characteristics of places, rather than being produced through the nature of the economy itself. The analysis is about barriers to entering the world market, rather than the global system actually creating and reinforcing inequities. Another subfield of Economics research, geographical economics, again keeps geography as an exogenous variable but this time from a ‘second nature’ perspective. It seeks to explain the agglomeration of population and economic activity across a hypothetical homogenous space due to progressive falls in transport costs (Krugman 1996). Geography is thus brought into the model as a distance that needs to be covered to enable economic exchanges to take place – thereby minimizing ‘trade costs’ – and nothing more.

As should already be evident, the economic geography approach that we are espousing in this book has a much more active role in mind for geography. It is not external to the economy; rather it is completely *integral* to it. The economy can only work through geography, making and remaking places as it does so. Here, we need to invoke the concepts introduced in Chapter 1. Looking at the uneven patterning of economic activity across *space* is usually merely the beginning of our analyses, and rarely an end in itself. Thinking about the intersecting social, cultural, political, and legal dimensions we introduced above, it is easy to see why ‘the economy’ takes on very different characteristics in different *places*, at times right down the local neighbourhood or household level. The continued importance of the state as an economic entity underpins why economies are also

highly distinctive at the provincial, national, and macro-regional levels due to the elements of control that it exerts over its *territory*. While economics tends to view such territorial units as bounded and homogenous, however, an economic geographical perspective foregrounds how the *networks* and connectivity between places matter in a causal sense. Such interdependencies are not, as economic framings such as ‘free trade’ suggest, mutually beneficial for the places that they connect, but are instead always reflective of the power relations that produce uneven geographies of economic activity at different spatial *scales*. Chapter 3 will explore how such patterns of uneven development are an inherent part of global capitalism.

2.6 Summary

In this chapter we have critically examined some of the most cherished assumptions that are employed when economic issues are discussed either in the popular media or in academic analysis. Starting out from the provocative notion of ‘econocracy’, we have seen that ‘the economy’ is not such a natural and unproblematic concept as we might at first assume. It is, first of all, a notion that is of relatively recent origin and one that emerged in a particular historical and geographical context. This illustrates a wider point noted in the chapter. Rather than tending towards an ever more complete understanding of how the world works, knowledge in the social sciences is a product of its time and place. What makes sense when we discuss the economy now is a reflection of the circumstances in which we find ourselves. A few generations ago, the concept had different connotations, and perhaps a few generations from now its meaning will have shifted again. We used an analysis of an apparently straightforward measure, GDP, to highlight some of the issues at stake in terms of defining and measuring economies.

We have also examined some of the fundamental ideas that are used to analyze and understand the economy – markets, prices, demand, supply, and so on. With increasing sophistication, economists claim to be able to model and predict these processes. Yet, if we limit ourselves to formal economic processes and to the dimensions of life that are quantifiable, then we arrive at a very partial understanding of how the economic world really works. The final section of this chapter therefore explored some of the ways in which we need to broaden our understanding of economic processes. Our economic lives go beyond those processes that are quantifiable in monetary terms. They also spill over into all other forms of human activity such as social, cultural, and political practices. These other spheres might be considered as influences on the economy, or they might be seen as affected by the economy, but too often the idea that they are entirely separate still remains. Economic processes are very much embedded in other forms of human and/or environmental interaction, which gives them a rich geographical dimension that needs to be understood. That geographical dimension, we have

argued, is not a simple backdrop or mere analytical complication but is instead integral to how economies are made and remade.

Notes on the references

- NEON et al. (2018) is a fascinating attempt to profile public understandings of ‘the economy’ through in-depth qualitative research, and also to think about the kinds of metaphors that might be mobilized to enable progressive change within the economic system.
- A 2009 report commissioned by the French government amid dissatisfaction with GDP as the most commonly used indicator of development provides an excellent discussion of the issues involved in measuring human progress. The commission was led by Nobel Laureates Joseph Stiglitz and Amartya Sen and the French economist Jean-Paul Fitoussi. Available at: <http://ec.europa.eu/eurostat/documents/118025/118123/Fitoussi+Commission+report>.
- The title of Diane Coyle’s *GDP: A Brief but Affectionate History* says it all; the book is an engaging and entertaining read.
- Although written some time ago, Timothy Mitchell’s (1998, 2002) excellent studies tracing the emergence of the economy as a concept, and examining the consequences of development discourse in Egypt, remain extremely insightful.
- Sheppard (2016) argues cogently for the need to view the global economy from a geographical perspective, using the limits of prevailing approaches in Economics as his starting point.
- Partha Dasgupta (2007) provides a very readable introduction to the thinking of Economics, and Chapter 4 explains the working of the market mechanism in particular. Similarly, Ha-Joon Chang (2010, 2014) also offers two highly engaging introductions to Economics and some of its limitations.
- As a follow-up to the book *The Econocracy*, which was introduced at the start of the chapter, Fischer et al. (2018) is a short edited book designed to provide accessible introductions to nine schools of thought in Economics beyond the dominant neoclassical paradigm.

Sample essay questions

- Explain how, and why, the meaning of ‘the economy’ has changed over time.
- When we discuss ‘the economy’, what activities of production, exchange, or consumption are usually included and excluded?
- Is it possible to understand economic processes without also understanding other dimensions of human society and the natural environment?
- Outline the assumptions of a conventional Economics approach to economic processes, and show how a geographical approach might challenge them.

Further learning resources

- The History of Economic Thought (HET) website provides some excellent materials on key economic thinkers and concepts: <http://www.hetwebsite.net/het>.
- <http://hdr.undp.org/en/content/human-development-index-hdi>: The United Nations Development Programme calculates a Human Development Index that provides an alternative measure of progress beyond the narrow confines of GDP; the OECD's Better Life Index has a similar goal in terms of assessing broader well-being: www.oecdbetterlifeindex.org.
- www.ineteconomics.org: The Institute for New Economic Thinking was established in 2009 with a \$50 million donation from financier and philanthropist George Soros, and 'is dedicated to the rigorous pursuit of innovative economic theories and methods that address society's most pressing concerns'.
- www.visualcapitalist.com: this engaging site 'creates and curates' a wide range of visualizations and infographics on economic topics.
- www.rethinkeconomics.org: a network of students, academics, and professionals that emerged after the 2008 global financial crisis, and in particular from 2012 onwards, with the aim of 'building a better economics in society and the classroom'. See also: www.post-crasheconomics.com

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CHAPTER 3

DYNAMICS OF CAPITALISM

Why is economic growth so uneven?

Aims

- To understand the fundamentals of capitalism as an economic system.
- To think structurally and systematically about capitalism and its uneven development processes.
- To explore the integral role of space in capitalism.
- To analyze different scales of capitalist geographies.

3.1 Introduction

As little as 40 years ago, China's Pearl River Delta (PRD) was essentially a rural area. Its subsequent transformation, however, has been spectacular. The PRD now hosts nine major mainland cities in addition to the special administrative zones of Hong Kong and Macau (see Figure 3.1). Two of those cities – Guangzhou and Shenzhen – are both home to over 10 million people. With more than 66 million residents in 2017 in total, the PRD has been designated by the World Bank as the world's largest megacity, rivalling France and the United Kingdom in population terms. Its gross domestic product (GDP) of over \$1.2 trillion puts it on a par with Russia, Australia, or Spain, and exceeds that of Indonesia, which has four times the population. In terms of trade levels, the region is only exceeded by the United States and Germany. The region attracts one-fifth of China's inward foreign direct

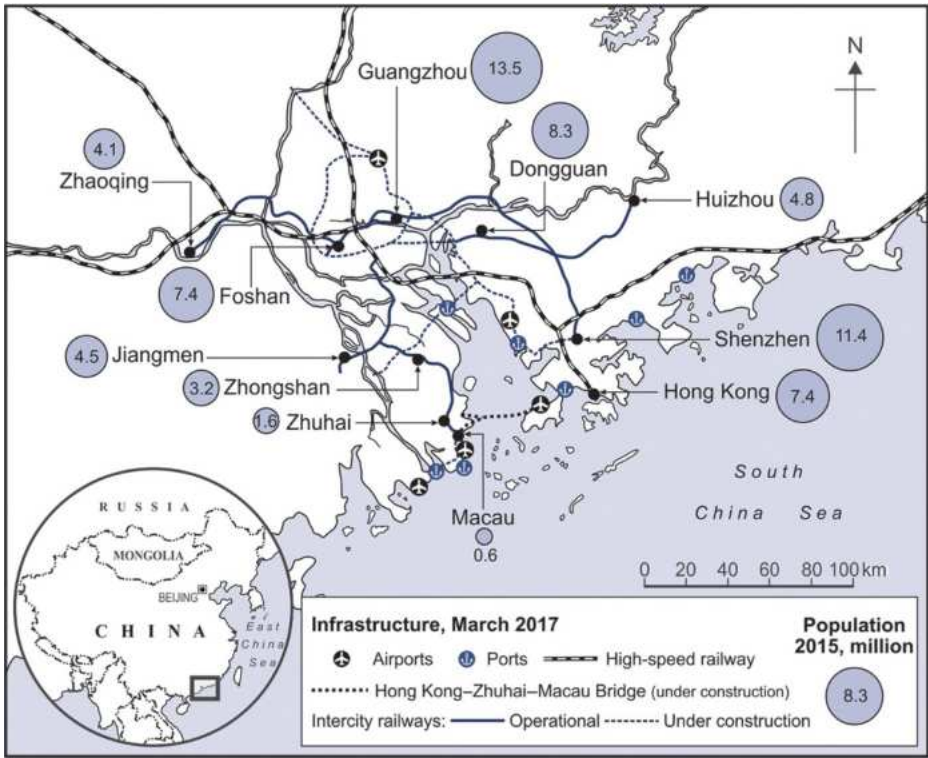


Figure 3.1 China’s Pearl River Delta region

Source: based on data from European Commission; Harvard University; InvestHK; CEIC; Wind Info.

investment (totalling over \$1 trillion since 1980), and accounts for over 10 per cent of its GDP and 25 per cent of its exports. All this in a region that accounts for less than 1 per cent of China’s land area and 5 per cent of its population (data from Economist 2017).

While the rise of China’s coastal provinces since the economic reforms of the 1980s and 1990s has been well chronicled, the PRD in particular has emerged as a world manufacturing hub of unparalleled global significance. The region itself is starting to face challenges, however, with in-migration rates slowing and labour costs rising, and certain labour-intensive forms of activity relocating to inland provinces and lower cost countries in Southeast Asia (e.g. Cambodia and Vietnam). In response, the PRD is seeking to evolve beyond manufacturing into an innovation hub, with some success. Shenzhen is already home to tech giants such as Huawei and Tencent; in late 2016, Apple announced plans to develop a research facility in the city, and by the same year, Shenzhen and Guangzhou alone accounted for half of China’s international patent applications.

While the PRD’s economic rise is undisputable, zooming out to look at China as a whole reveals a very uneven country in terms of per capita wealth

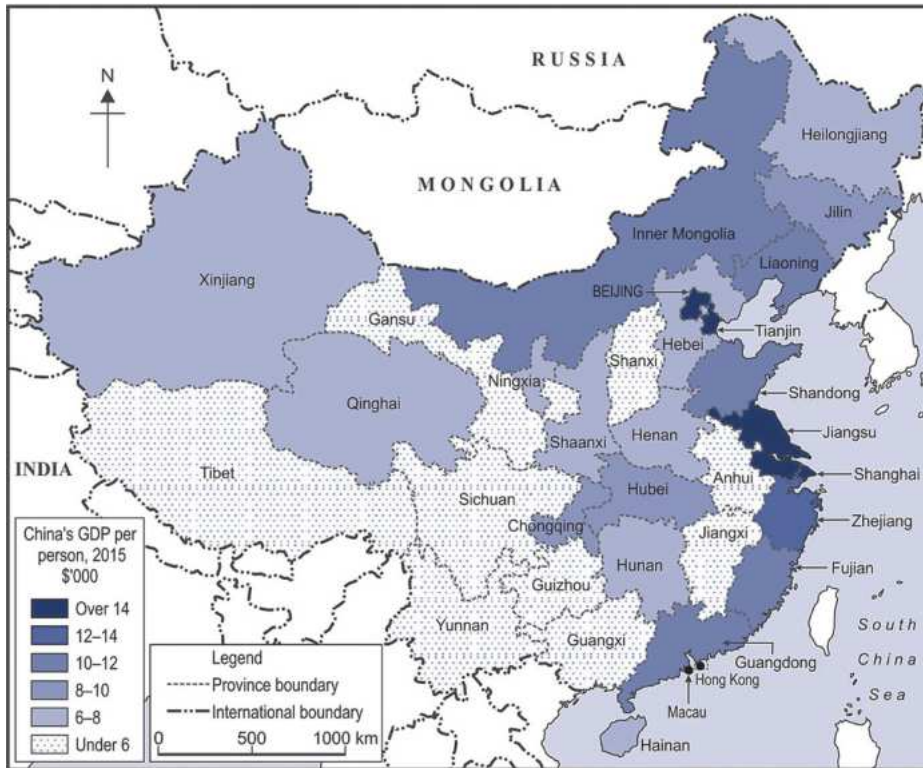


Figure 3.2 Uneven regional development in China

Source: based on data from CEIC and World Bank.

at the provincial level (see Figure 3.2). As introduced in Chapter 1, there is a very clear patterning of levels of economic activity across the territory of China. While the PRD shows up strongly (Guangdong Province) along with other coastal provinces such as Fujian and Zhejiang, Shanghai is actually the richest province with a wealth level five times that of the poorest Gansu, which has a similar population size. The map is somewhat more complex than a simple coastal/non-coastal pattern, however. It picks up the impacts of the production relocation to Chongqing and Hubei, and some inland provinces such as Inner Mongolia have benefitted from huge levels of government investment and demand for their mineral resources. But overall the pattern seems quite clear cut and entrenched, despite huge government efforts to try and spread the benefits of growth (Economist 2016a).

Three broader points can be taken from this example. First, while the transformation of the PRD and coastal China more generally has been perhaps unprecedented in its scale and speed, in this chapter we want to argue that rather being seen an unusual and exceptional, the rapid emergence of new productive spaces

within the global economy is actually entirely normal and has been occurring for at least two hundred years. Second, these have to be understood as dynamic and connected processes: *dynamic* in the sense, for instance, that the PRD economy is already seeking to evolve in a context of rising costs and inter-place competition for investment; and *connected* in the way that the PRD's fortunes are unavoidably linked to developments elsewhere, for instance, in terms of former industrial areas across North America and Western Europe that have struggled to compete with China's manufacturing industries. Third, it is important to think about these processes at different spatial scales. Zooming out from the PRD to China gives a different perspective, showing the underdevelopment of inland provinces that has accompanied the development of the coast (in part due to the migration of huge numbers of young productive workers from the former to the latter). We could also zoom in to look at smaller spatial scales within the PRD, and would undoubtedly find pockets of poverty and underdevelopment in an apparently booming megacity region.

This chapter, then, provides an important conceptual foundation for thinking about why the economic landscape at different geographical scales seems to be continuously changing. Our common sense tells us that the economic system in which we live, work, and play does not seem to be static and permanent; in fact, it is characterized by ups and downs across different times and places. This chapter will suggest that such dynamics of change are closely related to the way in which our economic system is organized. It is not the outcome of 'natural' forces (e.g. the environment) or 'invisible' hands (e.g. the market). Chapter 2 has alluded to some common features of an economy as conceived in conventional Economics. Here, we further examine the economic system often known as capitalism, and show how its attempt to accumulate wealth simultaneously creates uneven development across space and through time.

The chapter starts with a view of uneven development that sees it as either the result of natural (i.e. environmental) endowments, or as a starting condition that market forces will even out over time (Section 3.2). In many ways, this corresponds to the popular perception of why some places are richer and more developed than others. In Section 3.3, we construct an alternative view using ideas drawn from geographical political economy. We explore the dynamics and mechanisms that produce uneven development in the capitalist system in particular – the system of wealth production and distribution that now prevails in all but a few communist states such as Cuba and North Korea (and even there, to a certain degree). Having established these fundamental mechanisms, we then look at how the capitalist imperative has produced peculiar geographical outcomes, and how particular places and scales are incorporated into the shifting landscape of capitalism (Section 3.4). Finally, we consider in Section 3.5 the extent to which the fortunes of particular places are determined by how they 'plug-in' to the global capitalist system, or whether they contain dynamics that can drive development from the 'inside-out'.

3.2 Uneven Development – Naturally!

A common approach to the unevenness of economic development is to see it as a natural state of affairs – natural either because of the uneven geographical distribution of the bounty of nature (for example, oil fields can only be where oil is located), or because growth has to start somewhere and, under the right conditions, it will naturally spread. Both of these views are very much evident in contemporary debates about why economic development is spatially and socially uneven.

At first glance, the notion that human societies are uneven because nature is uneven is a rather tempting explanation. After all, the Industrial Revolution was initiated in the towns of Northern England that had the appropriate endowments of water, coal, iron ore, and other raw materials in the second half of the eighteenth century. Today, nature has bestowed upon countries such as Australia, Canada, Russia, Sweden, and the United States an immense bounty of mineral, agricultural, and forest resources. There seems to be a case for using environmental factors to explain economic development outcomes – a line of thinking that can be termed ‘environmental determinism’.

But if the list of examples is expanded, this argument for environmental determinism begins to unravel. Indonesia has a remarkable array of mining, agricultural, and forest resources, and yet its 258 million people enjoyed a per capita income of just over US\$5,400 in 2015 (after adjustments are made for purchasing power differences). In neighbouring Singapore, a tiny island city-state with no natural resources at all, the per capita income was around US\$78,200. Japan also has negligible oil, gas, or mineral resources, and relatively little arable land, and yet it too manages to exceed Indonesia’s income almost seven-fold. Conversely, in 2016, Nigeria sat atop proven crude oil reserves estimated at 37.5 billion barrels (the 10th largest reserve in the world), and yet its 182 million people had only half of Indonesia’s per capita income, and about 30 per cent of them lived in severe poverty (UNDP 2016). A territory replete with industrial raw materials is not, then, enough to guarantee the economic well-being of a nation’s population – indeed there is little correlation between a list of the world’s wealthiest nations and a list of those with the greatest resource endowments. Clearly we have to look for other explanations of uneven development.

A second set of arguments starts not with the causes of unevenness, but with its presumed levelling out over time through processes of development that spread wealth across societies and spaces. This has been a key argument of the mainstream approaches to economic development we introduced in Chapter 2 over the last 50 years. While intellectual fashions have changed, the argument has remained essentially the same: that all economies can develop if they adopt appropriate policies and strategies, and that uneven development is merely a temporary condition that will, naturally, be overcome. One of the earliest manifestations of this perspective was in modernization theory – a school of economic thinking prevalent in the 1950s and the 1960s that saw largely cultural and

institutional barriers to development in the ‘Third World’ (i.e. developing countries). Impoverished economies would develop towards the Western model of industrial production, a modern democratic society and high mass consumption, if they first established certain preconditions. In early versions of the theory, developed by American economic historian Walt Rostow in 1960, these conditions included high savings and investment rates, and the removal of cultural resistance to modern science and industrial production. Such models implied that economic development will tend towards an equilibrium pattern in which differences will be smoothed out over time.

More recent incarnations of this kind of economic thinking about development are found in the strong emphasis by powerful global institutions such as the International Monetary Fund (IMF), the World Bank, and the World Trade Organisation on the role of free markets in generating wealth and development (see Chapter 10 for more discussion on these institutions and their policies). What remains constant, however, is the notion that underdevelopment is an aberration – a problem that will be naturally fixed, if the capitalist system is allowed to operate fully. We will now turn our attention to the fundamentals of such a capitalist system in order to explore an alternative and more critical view – one that sees unevenness rather than market equilibrium as the normal state of affairs under capitalism, and suggests that any attempt to eradicate unevenness requires changes to the capitalist system itself.

3.3 Fundamentals of the Capitalist System

The conventional explanations of economic development in Section 3.2 are both deficient in one important respect. None of them actually seeks to explain *how* wealth is created, focusing instead on explanations for either relative differences in wealth between regions and countries (i.e. the resource endowment approach) or how these differences might be evened out over time (i.e. modernization theory). Taking one step backwards we can instead think about the fundamental process through which wealth is generated. To do this, we need to consider the concept of value and the ways in which it is created and distributed in a system, or structure, of economic relationships.

Value Creation and Structures of Economic Life

Economic relationships involve the creation and distribution of value. Value is defined as either the benefit we get from having or consuming something (‘use value’), or the monetary worth of a good or a service traded in the market economy (‘exchange value’). The creation of value is central to the question of economic development, and uneven development is a reflection of either a relative lack of the physical or organizational resources needed to create value (as in

the explanations in Section 3.2), or a failure to capture and/or retain that value in the hands of the person, the household, or the community that created it. Ultimately, though, value is always created by people, i.e. living human beings who are engaged in labour processes that make or transform a product (which may be a physical good or an intangible service).

There are, however, many ways of structuring the economic relationships of value creation. Peasant economies involve subsistence production so that value is almost entirely retained within the household; feudal economies involve the payment of tribute to a landlord; cooperative or collectivized economies involve sharing the value created in productive activities among the group; and capitalism, the system of economic organization that dominates our world today, involves the creation of value in waged labour processes, and the private ownership of property and assets. In identifying these different systems, we are thinking about the *structures* that shape economic processes.

Thinking structurally is a rather difficult thing to do, because it involves going behind the everyday processes that we participate in, and asking instead about the underlying logic of how our economic relationships are organized. But by considering the deeper ways in which our economic system is structured, we can start to discover its logics and fundamental features. This does not mean that we have some kind of grand theory that will explain every economic phenomenon around us, or predict future events, but it does mean that we can understand the imperatives that generally drive the system in which we live. Perhaps most importantly, thinking structurally implies going beyond the motivations or experiences of an individual person or firm participating in a system, and thinking about what motivates the system as a whole.

Examining the structural characteristics of a capitalist economy, we can see that it is a system in which a relatively small group of people own the tangible or intangible assets that are necessary for production and value creation. These owners of the ‘means of production’ are termed ‘capitalists’, and they buy labour power from workers in order to execute the production process. Both the inputs and outputs of the production process, and the labour power that participates in it, are bought and sold through a market mechanism. Having established these structural foundations of a capitalist system, we can now examine its workings in more detail.

Driving Capitalism: Profit, Exploitation, and Creative Destruction

There are three fundamental logics that drive contemporary capitalism:

- Capitalism is profit-oriented.
- Growth in value rests on the exploitation of labour in the production process.
- Capitalism is necessarily dynamic in technological and organizational terms.

First, the entire capitalist system is based on the incentive to profit from economic transactions. To maintain profit, it is necessary for capitalism as a system to grow continually. Without growth, profits decline. If new opportunities for profit are not constantly created, then existing profits will be whittled away through competition. We can elaborate on this point by looking at exactly how profit gets created and distributed in a capitalist system. A capitalist creates profit by extracting surplus value from an employee, which is the amount of value that the worker produces in excess of what they are paid. The price of labour will tend towards the amount needed to keep a worker clothed, fed, housed, and raising children (future workers!) – an amount that will vary across different places and historical eras. There will, of course, also be variation across different types and sectors of work, but for the system as a whole, it will be the income necessary to sustain and reproduce the workforce that defines the average wage.

The capitalist (employer) makes a profit by selling the commodity that is produced. He or she is able to keep the difference between the market value of whatever was produced by labour on the one hand, and the wages of labour on the other. In everyday terms, the former represents revenue and the latter the total cost (bearing in mind all costs – materials and non-materials – are subsumed in this approach under the value of labour). This phenomenon of surplus value extraction is the second fundamental logic of capitalism, known as exploitation. This exploitation is only possible because the capitalist owns the means of production – machinery, land, raw materials, intellectual property, and so on. Private ownership rights, therefore, are a critical precondition for modern capitalism. At its core, capitalism is thus about a structural relationship between different social classes – a capitalist class that owns the means of production, and a working class that owns the labour they ‘sell’ to the capitalist. Wealth is generated through the extraction of surplus value, and this wealth accumulates with those who employ workers.

This is, of course, a very simplified picture of the reality of everyday life in contemporary capitalism. Today some employees (such as bankers, managers, accountants, lawyers, engineers, doctors, and software specialists) are paid exceptionally high salaries, and we would hesitate to label them as ‘exploited’. The ownership of firms (or the means of production) is often far more complicated today than it has been in the past. Most large enterprises are now owned by diverse shareholders, partnership arrangements are used in many professions, and every employee with a pension plan is effectively benefitting from shares that their pension fund owns. The distinction between employers and employees, or between classes, is thus often difficult to establish. Nevertheless, if our purpose is to identify the broad structural processes of a capitalist system (rather than categorizing every person into a specific class), the class relationship between capitalists and workers is an important and useful starting point.

The third fundamental logic of capitalism is its immense dynamism and creativity. The possibilities for accumulating more and more profit mean that system-

wide incentives exist to create new products, new markets, new raw materials, new ways of organizing the production process, and new ways of saving on the cost of everything. This does not necessarily mean that every capitalist enterprise is buzzing with creativity and fresh thinking. But in a competitive environment, it is the entrepreneurs and innovators that the system will reward, while those who fail to innovate will be outcompeted. Only profitable firms will survive and provide the sources of growth in a capitalist system. There is therefore a fundamental logic or urge in capitalism towards ‘creative destruction’, a term famously coined by the Austrian economist Joseph Schumpeter to describe the capitalist process of generating new growth through the destruction of old products, processes, and markets and the creation of new ones.

Indeed, driven by new information technologies, the *rate* of capitalist innovation has seemingly been increasing over the last 40 years or so. For some commentators, these changes have heralded a wholesale shift from the mass production system known as *Fordism* to a *post-Fordist* era. Fordism is shorthand for a range of industrial practices first associated with the workplace innovations of the American automobile manufacturer Henry Ford in Detroit, Michigan, during the early twentieth century. It offers a highly standardized system of manufacturing parts and components through machines strategically arranged in the most efficient sequence to manufacture a product, and linked together by a moving conveyor belt – the assembly line. This production system is, in turn, underpinned by a distinctive division of labour in which unskilled workers execute simple, repetitive tasks and skilled technical and managerial workers undertake higher order functions such as research, design, or finance. Since the 1970s, Fordism has been augmented by new modes of production, the chief characteristic of which is production *flexibility*. At the heart of this enhanced flexibility is the use of information technologies in machines and more sophisticated control over the production process. Rather than engaging solely in mass production, firms are now able to make a wide variety of products for different market niches without compromising the cost savings traditionally associated with large volume production. These same technologies also facilitate the rapid development and production of new ranges of products. Contemporary developments such as 3D printing, the Internet of Things, and smart factories – sometimes subsumed under the term ‘Industry 4.0’ – are therefore symptomatic of capitalism’s ceaseless search for more efficient and profitable ways of producing goods and services.

Contradictions, Crises, and Recovery in the Capitalist System

The approaches to economic relations outlined in Section 3.2 saw growth and development as spreading outwards and ultimately tending towards equilibrium and evenness. However, a structural assessment of the capitalist system could lead to quite different conclusions. By looking further into the fundamental characteristics of the system that were just identified, we can see contradictions. These

contradictions imply that crises, disequilibrium, and unevenness in the system may in fact be the norm, not the exception.

The first fundamental contradiction of capitalism is in its internal imperative for growth and profit. While growth increases the price of labour as wages are pushed upwards, a drive for profit requires that labour costs be minimized. This is a tension that is inherent in capitalism. One way of dealing with this problem is a 'technological fix' whereby competing capitalist firms try to find technological ways of making their production more cost-efficient than their competitors. For these reasons, capitalists will try to push wages down or, where applicable and cost-effective, to invest in machinery and other technological innovations in order to replace workers with machines. For individual capitalists and managers of enterprises, this is a rational thing to do. The result of labour-saving machinery is a reserve army of labour (not necessarily in the same country) that is brought in and out of the workforce and always keeps wages low. There will always be someone who is unemployed and will take a job at a lower wage than the incumbent.

But if wages are kept low and people are kept out of work, where will the demand for the products come from? Workers are always producing more for the capitalists than they earn, so the aggregate demand can never keep pace with the growing supply of products – this is the second contradiction of capitalism. In short, workers do not make enough money to provide sufficient demand for the goods they have produced. Across the whole system, the economy is driven to what is termed a 'crisis of over-accumulation'. Capitalists have more products than they can sell, or idle machinery that cannot be used to full capacity because there is insufficient market demand for their products. Idle capital and idle labour are found in the same place at the same time, with no apparent way of bringing them together for socially useful purposes. Wealth is accumulated, but on the basis of exploited workers who now cannot afford to buy all of the products they create.

Because of this structural tendency, the capitalist system is prone to crisis and instability. There are ways of forestalling it – such as selling to overseas markets, pressing down wages, or further investing in labour-saving machinery. But crisis is only delayed, not avoided; its tendencies are merely moved around. Therefore, capitalism contains within itself a recurring contradiction. It is not hard to find examples where wealth and surplus exist side by side with shortage and need. Indeed booms and busts appear to be common cyclical occurrences. Over the course of the twentieth century, a number of business cycles saw the wealth of national and regional economies grow or decline. Understanding the logic of the capitalist system puts those crises in a rather different perspective than the usual interpretations found in Economics. Instead of being occasional hiccups, or unpredictable storms, that hit the economy from the outside, they are in fact inherent to the capitalist system itself.

How, then, has the capitalist system managed to get beyond crises in some cases, and to contain, absorb, or delay crises in ways that do not bring about its

own downfall? Here we are thinking at the level of structures explained earlier rather than the level of particular capitalists or firms for whom crises may still be individually disastrous, leading to bankruptcy and unemployment. We can focus on four ways in which the capitalist system as a whole might restore the conditions for profitability (Harvey 1982, 2010):

- *Devaluation*: This process involves the destruction of value in the system: money is devalued by inflation; labour is devalued by unemployment (for example, when an important industry leaves a place); and productive capacity is devalued, in fact literally destroyed, by wars and military encounters. Recreating value gets the system moving, and capital circulating, once again, but not of course without significant political, social, and environmental costs.
- *Macroeconomic management*: This involves devising ways of bringing together idle over-accumulated capital and idle labour. It might, for instance, involve legislation that curbs excessive labour exploitation by establishing certain standards in working conditions and minimum wage levels. This helps to ensure that demand in the economy is maintained, and can be conceptualized as part of a broader process of ‘regulation’ (see Box 3.1).

KEY CONCEPT

Box 3.1 Regulation theory and Fordism

Regulation Theory was first developed in the 1970s and the 1980s by a group of French scholars, including Michel Aglietta, Robert Boyer, and Alain Lipietz. They used the word *regulation* in a broader sense than its usual meaning in English, where it is largely limited to a set of rules or procedures for governing action. In the French sense, regulation refers to the wider set of institutions, practices, norms, and habits that emerge to provide for periods of stability in the capitalist system. This mode of regulation involves both state and private sector actors, and when successful, it can foster a period of sustained capitalist growth and expansion. Essentially, the *mode of regulation* works by seeking compromises in the inherent tensions and contradictions that exist in the capitalist system. Historical periods of stability, known as *regimes of accumulation* do, however, eventually end in crisis and a new mode of regulation must be discovered.

These ideas allow us to develop a broader reading of Fordism than simply as a production system associated with assembly line technologies. As a regime of accumulation, Fordism signifies a society-wide model of economic growth that was prevalent in North America and Western Europe – and therefore is sometimes known as Atlantic Fordism – in the period stretching from the end of the Second World War until the early 1970s. This was a

period of strong economic growth in those regions associated not only with mass production and the emergence of large, vertically integrated corporations but also particular sets of national institutional and political conditions that gave it stability and sought to manage its inherent limitations. In its most developed form, this comprised both the macroeconomic management associated with Keynesian policies and the social support mechanisms of the welfare state. It was also underpinned by a social contract, brokered by the state, in which firms and labour unions sought to link annual wage increases to the productivity gains achieved through mass production techniques, with the result that workers had sufficient income to sustain mass consumption. These national agreements were supported by new post-war supranational organizations such as the IMF and World Bank that helped create a relatively stable global economy. The limits to the system became apparent in the early 1970s, however, when falling levels of profits, increased global competition, and rising oil prices initiated a period of intense economic restructuring, broadly labelled as the crisis of Fordism, during which the previously stable relations between firms, governments and labour unions unravelled. This heralded the arrival of the *post-Fordist* era. While the Fordist production system still exists in many sectors and places, the associated sociopolitical system has been progressively dismantled, particularly in the United States and United Kingdom, since the late 1970s. For a case study of these shifts in the UK context, see Tickell and Peck (1995).

- *Temporal displacement of capital*: This involves switching resources to meet future needs rather than current ones – for example, by investing in new public infrastructure (such as the New Deal strategy adopted by the Roosevelt administration in the United States during the 1930s), or by using over-accumulated capital as loans and thereby intensifying future production, and hence its crisis tendencies, but averting a crisis in the present.
- *Spatial displacement of capital*: This involves opening up new spaces for capitalist production, new markets, or new sources of raw materials. Rather than expanding the time horizon of the capitalist system using credit or loans, the spatial horizons of the system are expanded. This might mean the development of entirely new production sites in newly industrializing parts of the world or the recreation or rejuvenation of old spaces.

This last form of crisis-avoidance is particularly geographical in nature and of most interest to us here in our discussion of uneven development. It demonstrates the ways in which capitalism needs space in order to function and the process through which the system values and then devalues different spaces according to its structural needs at a given point in time.

Controlling the Global Capitalist System: Geopolitics and Domination

Our account so far has generally presented capitalism as a purely economic system. That is not the case. Capitalism is always and unavoidably a *political-economic* system that has developed through the involvement of political actors, most notably the state, which are not somehow outside its boundaries. It has never existed as an independent economic system that states have then sought to bring under control through the kinds of crisis management strategies just described. The final step in building our understanding of capitalism, therefore, is to recognize the geopolitical conditions and relations of domination and control that have always underpinned it.

As a system of production, capitalism is sustained through political-economic arrangements premised on unequal exchange relationships between core countries/regions and peripheries, and the ways in which value gets concentrated in some places and not others. Until around 60 years ago, the processes that determined how ‘developing’ countries were paid for their resources were shaped by the unequal power structures of colonialism. By taking over territories through military force, European, American, and Japanese colonialists asserted their ability to capture resources and establish the prices that would be paid for them. In this way, a much greater component of the value created was located in the countries of the colonizers than in those of the colonized. For instance, in his epic account of the global cotton industry – the first truly global capitalist industry – historian Sven Beckert (2015) describes the state-managed system of ‘war capitalism’ that was forcibly established by the British and other colonial powers in the nineteenth century in order to bring together the labour, capital, cotton, textiles, machinery, and markets necessary to both drive growth at home and dominate global trade. By relabelling an era that is often described as mercantile (i.e. trading) capitalism, he lays bare the military and coercive dimensions of the early phases of global capitalist development.

In most of the world, the formal colonialism that took hold throughout the nineteenth century has dissipated, but power in the contemporary global economy is still wielded by dominant states. It is not just capitalists who determine what economic activities will take place, where they will happen, and on whose terms. The wealthier nation-states of North America and Europe (in particular, the so-called G8 group of countries) have been so dominant, financially and militarily, that they have had ample opportunities to dictate the terms upon which less powerful countries will engage with them economically (see also Chapter 10). It is in this context, and amidst talk of a global rebalancing of geopolitical power, that the rise of China as a dominant political and economic force in the early twenty-first century has attracted such widespread attention.

This uneven state power might be used to force peripheries to open up their economies to the activities of core-based corporations, to expose their domestic markets to imported products, to allow outsiders to operate in their financial markets, to

export their natural resources while importing higher value-added goods and services, to permit environmental degradation, to limit labour rights and working conditions, or to privatize common property resources such as genetic material and natural environments. Self-interest among local elites in such places may, in turn, motivate them to collaborate and collude in this process. The implication is that we see crises of accumulation averted not just through the intensification of the capitalist production process but also through the geographical expansion of capitalist processes into formerly communally or socially owned spheres – for example, common property resources, citizenship rights, or national assets. The possession of communal resources (e.g. oil and gas) is transferred from local communities to global traders who concentrate their corporate wealth elsewhere. This process, through which collective resources are appropriated by private interests, has been described as *accumulation by dispossession* (Harvey 2003). These processes of dispossession are advanced by the unequal relationships between capitalist states, often through direct negotiations between governments (e.g. trade agreements) or through multi-lateral arrangements (e.g. the structural adjustment programmes imposed by the IMF, described in Box 10.2). This new form of political–economic domination has been dubbed the *New Imperialism* (Harvey 2003).

In sum, both this and the previous subsection on crises have started to demonstrate how geography is fundamental and inherent to the successful operation of the capitalist system, rather than simply being a backdrop. We now explore this argument in more detail.

3.4 The Spaces and Scales of Uneven Geographical Development

Since the beginning of the Industrial Revolution, the capitalist global economy has been constantly in flux. With each era, the capitalist system has created production facilities, infrastructure, and even whole landscapes that have suited its needs at a given point in time. Whether it was the watermills of the eighteenth century, the cotton mills of the nineteenth century, the industrial suburbs of the mid-twentieth century, or the new office zones of the present (for example, in China in Figure 3.3), we can see how capitalism creates landscapes that match its changing requirements.

Geographers Michael Storper and Richard Walker (1989: 141) call these spaces ‘territorial production complexes’ – with various kinds of complexes representing the outcomes of 250 years of industrialization. They identify four spatial forms of such complexes that have emerged historically:

- Regional complexes such as the manufacturing belts across the American Northeast, German cities along the Rhine and Ruhr river valleys, or the Osaka–Nagoya–Tokyo belt of southern Japan.



Figure 3.3 A landscape of contemporary capitalism in China: the Shenzhen skyline

Source: Qilai Shen/Bloomberg via Getty Images.

- Clusters of towns such as the textile region of North Carolina or the metal-working towns of the Connecticut Valley.
- City-satellite systems such as the textile towns scattered around Boston or Manchester in the nineteenth century, or the mining towns of the Mother Lode and Nevada centred on San Francisco after 1849 (or Calgary in Canada and Linfen in China today).
- Large cities or metropolises such as Greater London or Baltimore that contain a number of industries and their specialized districts.

While this list focuses on industrial areas, it is useful to add that there are other kinds of economic landscapes such as agricultural belts (e.g. the Great Plains of North America) and services-oriented landscapes (e.g. the Gold Coast in Australia or Las Vegas, Nevada). In general, capitalism's restless urge to expand leads to the production of new territorial complexes and, as more places have become incorporated, industrialization has become pervasive on a planetary scale.

These territorial production complexes are not, however, static. As the system continues to grow and change, certain landscapes become outdated, unprofitable, and inhibiting. They become impediments to future growth and must be devalued to make way for a new round of growth and exploitation. A fundamental feature of capitalism is therefore its constant search for a geographical solution for its crisis of over-accumulation – what might be called a *spatial fix* (Harvey 1982).

The idea of a spatial fix has an interesting implication: capitalism’s inherent tensions relate to more than just the processes of capital circulation and accumulation we have already discussed. There is a further set of internal tensions that are related to the spaces, and especially built environments, that capitalism creates at any given moment in time. However up-to-date and state-of-the-art a landscape of production might be when it is created, it is always destined to become redundant and outdated as the dynamic system moves forward. In short, the capitalist system is faced with a contradiction that is rooted in its own dynamism, namely that as soon as it creates the landscape that will ensure profitability at a given moment, the process of making that landscape obsolete immediately begins.

A good metaphor for representing this inherently expansionary geographical process of capitalism is to be found in a game of playing cards, whereby different players represent different places or regions in the capitalist space economy (see Figure 3.4). This economic–geographical process is captured in a concept known as the *spatial division of labour* (Massey 1995). Each round of investment is

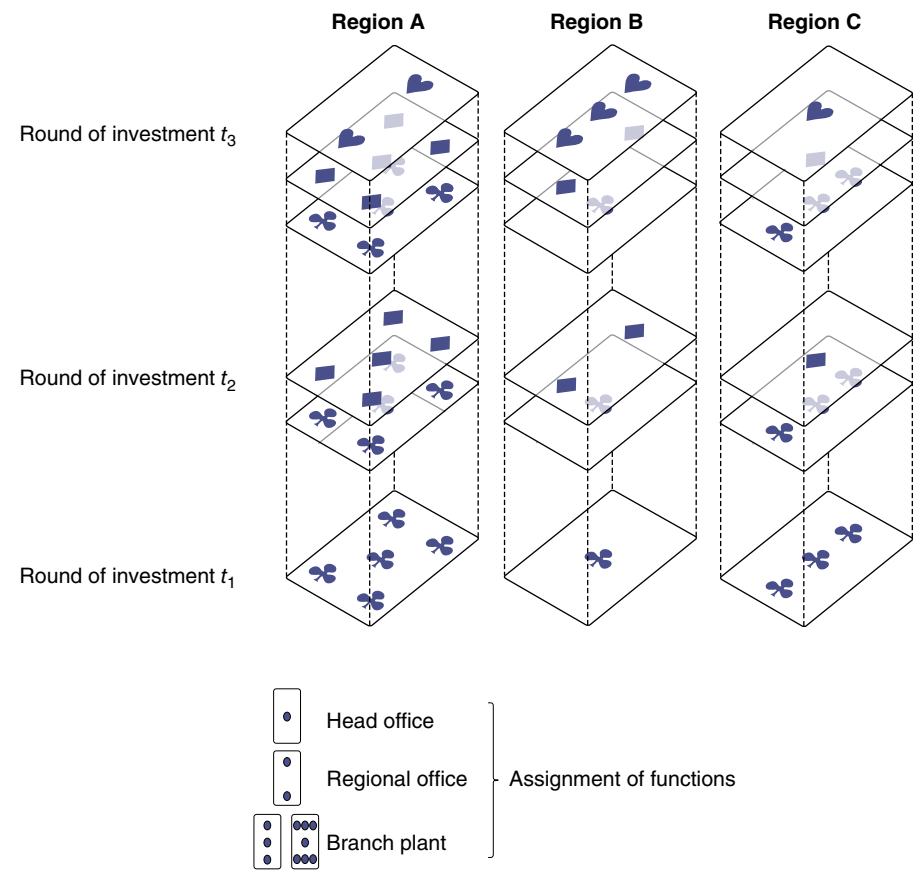


Figure 3.4 Spatial divisions of labour

Source: adapted from Gregory (1989), figure 1.4.2. Reproduced with permission of Red Globe Press.

represented in a different suit, with different places being dealt a card of different value (reflecting its position in the spatial division of labour). The characteristics of a place (the hand of cards being held) can then be seen as the product of past rounds of growth or decline, when the place was inserted into the spatial division of labour in a particular way. This metaphor also illustrates how a place can rise or decline over time in its importance. What it cannot capture, however, is the way in which cards already in a hand can affect the new card that will be dealt, which is, of course, a critical feature of the system we have described.

When a particular place becomes the 'territorial production complex' for a new round of growth and investment in the ongoing dynamism of the capitalist system, it does not just develop the new transport infrastructure, technology, institutions, housing, and workplaces that are appropriate to that epoch. It also contributes to the emergence of an evolving set of social relations. Steel towns, for example, like Sheffield in the United Kingdom, Pittsburgh in the United States, Hamilton in Canada, or Kitakyushu in Japan, developed working class cultures that valued manual work, prized a collective working class identity through trade union organizations, and were based on male-oriented cultural institutions, such as working men's clubs and professional sports teams. Gender relations were, at least in the past, based upon the assumption of a male breadwinner in each household and a role for women based on domestic work, and possibly the generation of a secondary income. There was, then, a distinctive set of social relations that emerged in association with a particular industrial sector: public institutions, gender relations, masculine and feminine identities, and class politics. The same could be said for mill towns, mining towns, export processing zones, high-tech districts, downtowns, and suburbs. Their economic and sociocultural relations do not determine each other, but they are inseparably interconnected.

A further implication of the emergence of social relations associated with particular industries is that future investment decisions may be made based upon these relations. When, for example, Japanese auto manufacturers started to locate production facilities in North America in the 1980s, they sought a workforce that was flexible and open to the particular forms of work organization favoured by Japanese employers. This meant seeking people who were not steeped in big-city, heavily unionized workforces with long industrial legacies. One option was to locate in small rural towns – places close to highways and air transport infrastructure, but without any historical legacy of industrial development and thus unionization. In other cases, though, industrial towns might be preferred where a period of decline had 'broken' the union movement, or where labour had been devalued to the point that its collective ability to make demands was much diminished (see also Chapter 6). Hence, Nissan's manufacturing plant near Sunderland, a former mining and shipbuilding town in the Northeast of England, established entirely new work practices, but did so in a town desperate for new investment and jobs. Similarly, the former textile town of Greenville, South Carolina, has been rejuvenated since the 1994 opening of the huge BMW plant at nearby Spartanburg.

In order to understand the development over time of a particular place or region, we thus need to understand not just the present nature of the economy but also its historical and geographical background – the previous layering of rounds of investment. Once the social and cultural lives of people living in particular places are added into the analysis, we begin to see not just the systemic logics of uneven development under capitalism but also its human consequences, as ways of life are, in turn, created and dismantled over time. Just as capitalism must create physical forms, it must also engage in a process of creative destruction to break out of social formations as it grows and changes. New growth will often not arrive until old social norms have been broken down. Old industrial areas with strong working class traditions will not see new growth until after a significant period of decline that has broken the strength of unions and other embedded institutions and practices. This suggests that a core geographical process in capitalism may take the form of a ‘see-saw’ of uneven development, in which some places are sites of rapid investment and growth while others decline (Smith 1984). Development in one area (e.g. industrialization in China) or region (e.g. Silicon Valley) is impossible without simultaneous underdevelopment in another area (e.g. decline in older manufacturing regions). But over time, the see-saw can swing back again so that older spaces are recreated as sites of new investment. This process of capitalist restructuring helps us understand why we find continuous shifts of economic activity at different geographical scales from the global to the local.

At a global scale, the shift of development from one continent to another has been dramatic in recent years. The most striking of these global shifts has been the rise of East and Southeast Asia as macro-regions of rapid growth due to substantial investment in manufacturing industry. A first wave of development occurred in East Asia in Hong Kong, Singapore, South Korea, and Taiwan, and a second slightly later wave in countries such as Malaysia and Thailand. This came to be known in the 1970s as the *New International Division of Labour* because labour-intensive manufacturing activities were increasingly shifting from developed countries to such rapidly industrializing economies (see also Box 5.4). Over the last two decades, it has been the rise of China as an industrial power that has captured popular attention, though rising labour costs in its coastal provinces mean that some labour-intensive forms of manufacturing are being relocated to countries such as Cambodia and Vietnam (see Figure 3.5). Importantly, these global shifts should be seen as not only about productive capacity but also buying power. Arguably the single-most important ongoing shift in the geography of the global economy relates to the rapidly expanding consumption of Asia’s middle classes (see Box 3.2). Factory Asia, it seems, has laid the foundations for massive shifts in consumption at the global scale (in Chapter 4 we will consider the corporate organizational forms that underpin these processes).

The same pattern of economic–geographical restructuring occurs at the subnational regional scale as new territorial production complexes emerge in different parts of a country. As old industrial regions in Western Europe and North America



Figure 3.5 Waves of industrialization in East, Southeast, and South Asia, 1950–present

Source: the authors.

succumbed to competition from Newly Industrialized Economies (in Asia in particular), places such as the Rust Belt of the United States, Northern England, and the Ruhr Valley in Germany fell into decline. Their factories, infrastructure, and towns were seen as anachronistic relics of the past, as were their labour forces. Meanwhile, new growth zones were developed in the American South, West London and the Southeast of England, Paris in France, California in the United States, and Baden Württemberg in Germany. Figure 3.6 graphically illustrates this process in the United States. Over the course of economic crisis years in the 1970s, manufacturing employment dramatically declined in Northeastern states while growth occurred simultaneously in the South and the West (Peet 1983). Moving to a more contemporary perspective (see Figure 3.7), the intra-national wealth variations that result from these restructuring processes can be quite profound, with the New York conurbation alone accounting for 10 per cent of national output, and the top 20 cities for over 50 per cent. As we noted in this chapter's

CASE STUDY

Box 3.2 Asia’s Growing Middle Class

The global geographies of consumption are changing as profound shifts in wealth and spending power are seeing Asia emerge as the key arena for consumption within the global system. While the global middle class was historically dominated by the triad of Europe, North America, and Japan, the 1970s and 1980s saw significant middle classes emerge in newly industrializing economies such as South Korea, Brazil, Mexico, and Argentina. Since the 1990s, however, there has been massive expansion in the middle classes in China, India, and other Asian emerging economies, and the rate of growth is increasing. The key driver is economic growth and associated shifts in income levels. If the middle class is defined broadly as those on an income of between \$11 and \$110 per day (an annual income range of US\$4,015–\$40,150), and projecting forward to 2030 on that basis, the locus of the global middle class will continue to shift decisively towards Asia (see Table 3.1). Initially measured this way at 1.8 billion in 2009, it is estimated that the global middle class will expand from 3.0 to 5.4 billion people over the period 2015–2030, with 89 per cent of this growth being accounted for by Asia. At the same time, the share of middle-class consumers in North America and Europe is projected to fall from 35 per cent of the world total in 2015 to 21 per cent in 2030, while the Asia-Pacific’s share will expand from 46 to 65 per cent. In terms of actual spending power, it is estimated that North America and Europe will fall from 49 to 30 per cent of the global total, with the Asia-Pacific region rising from 36 to 57 per cent. Within these shifts, two countries dominate, with China and India expected to account

Table 3.1 Asia’s burgeoning middle class?

Region	2015		2030	
North America	335	11%	354	7%
Europe	724	24%	733	14%
Central and South America	285	9%	335	6%
Asia Pacific	1,380	46%	3,492	65%
Sub-Saharan Africa	114	4%	212	4%
Middle East and North Africa	192	6%	285	5%
World	3,030	100%	5,412	100%

Source: Kharas (2017), table 2. Adapted from Brookings Institution. Figures in millions.

for almost 39 per cent of the global middle class by 2030 (data from Kharas 2017). Another estimate suggests that China's number of middle-class households will have expanded from 5 to 275 million over the period 2000–2020 (Economist 2016b). These growth rates are startling and unparalleled in human history.

The geography of consumer demand, then, is shifting inexorably towards Asia. There are two important implications of these global market shifts. First, there has been steady growth in so-called 'South–South' trade, as flows of trade, investment, and aid between emerging economies have intensified. As part of this dynamic, leading emerging economy businesses are increasingly turning their attention to the domestic market as opposed to exports. Second, transnational corporations from the mature economies of North America, Western Europe, and Japan are no longer seeing leading Asian markets simply as sources of labour and bases for export production, but rather as populations able to afford a wide range of consumer goods. By 2011, for example, China had already become the world's single largest market for televisions, mobile phones, personal computers, and automobiles.

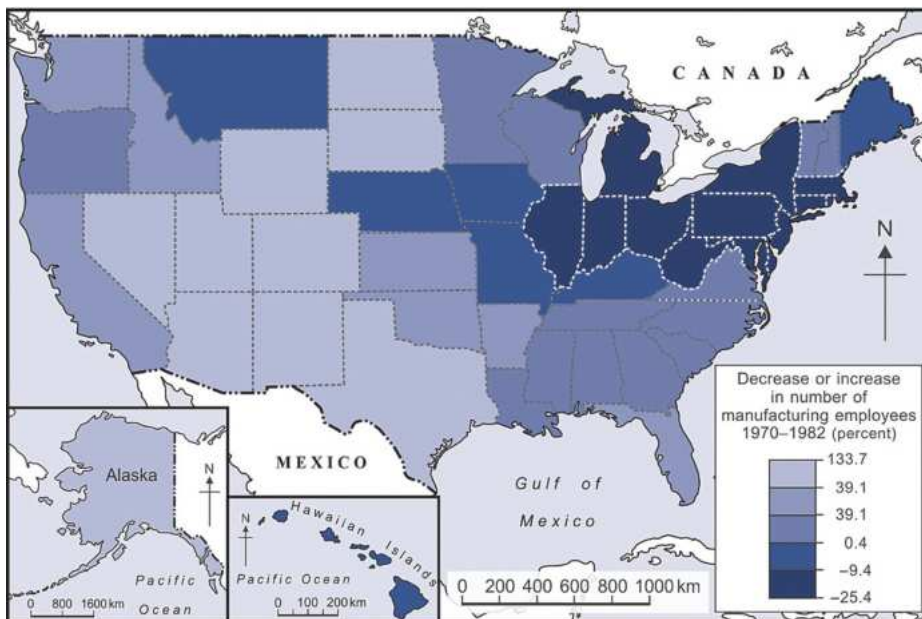


Figure 3.6 Industrial restructuring during the 1970s in the United States

Source: redrawn from Peet (1983), figure 9. Reproduced with permission of Taylor and Francis.

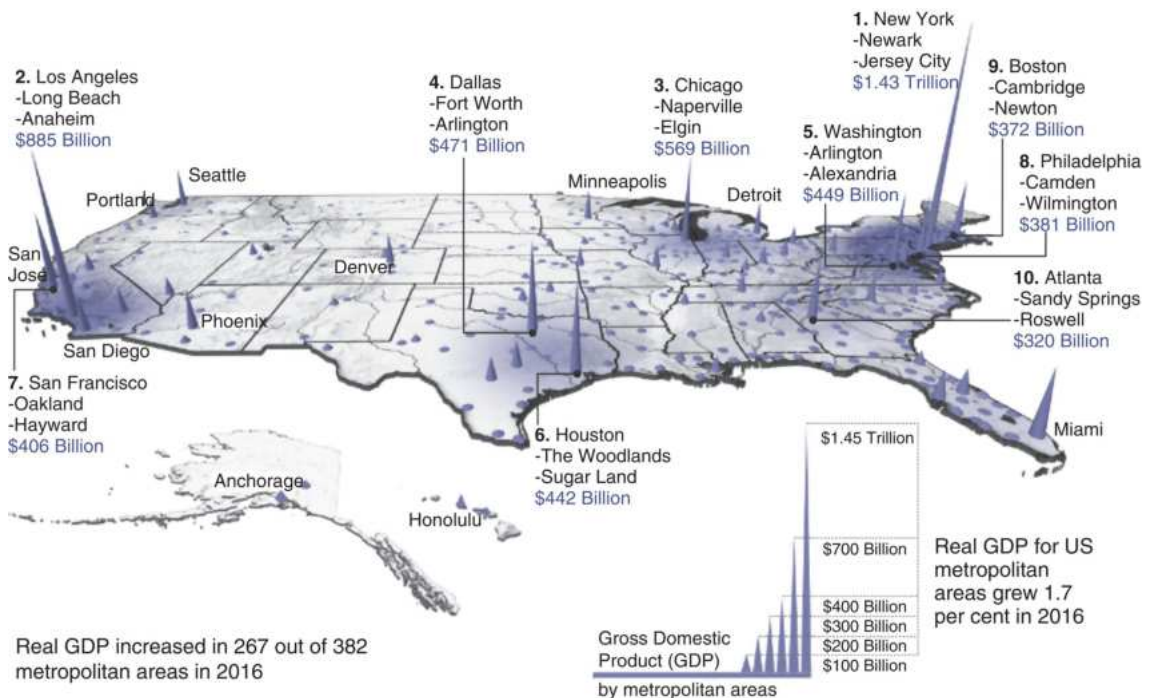


Figure 3.7 The uneven economic landscape of US cities, by GDP, in 2016

Source: <https://howmuch.net/articles/gdp-by-metro-2017> (accessed 2 March 2018). Reproduced with permission of howmuch.net.

introduction, these shifts are also playing out more recently in newly industrializing economies such as China, where rising costs in the coastal provinces have seen significant levels of production move inland to cities such as Wuhan (Hubei Province) and Chongqing.

Moving to the urban scale, neighbourhoods and buildings can be erected as the vanguard of economic growth. In the nineteenth century, industrial towns in England grew up around the processing of natural resources such as cotton, tea, and rubber brought in by ship from distant colonies. In the early and mid-twentieth century, large-scale manufacturing of clothing, prepared foods, and consumer goods (e.g. automobiles and electrical devices) formed the mainstay of urban economies in Western Europe and North America. In specific places, it was not just industrial landscapes that reflected these times. The small brick row houses of older industrial cities occupied by factory workers relatively close to their places of employment were the manifestation of a particular period of capitalist growth on the residential landscape. By the 1950s, industrial suburbs were being built to house the workforce, reflecting the growing use of private vehicles. Looking at the changing housing stock of any large contemporary city in an industrialized economy is, in fact, an interesting exercise in economic archaeology, as it reveals the built forms that were needed in any given period of economic growth: from the medieval alleyways of central London built in earlier centuries, just wide enough for a horse and cart, to the car-clogged twentieth-century free-ways of Los Angeles and Toronto.

As the imperatives of capitalist growth changed over time, many of these landscapes became redundant (see Figure 3.8), perhaps to be rediscovered at a later date when, thoroughly devalued, they could once again be used, except for very different purposes. In some industrial cities of Europe and North America, for example, garment factories made idle and derelict when production moved offshore in the 1960s and 1970s are now being renovated. They are prized as studio, office, or even living space by young professionals in growing industries such as graphic design, computer animation, and internet consulting. These previously poor and depressed neighbourhoods may become the home of wealthy professionals – an urban regeneration process commonly known as *gentrification*. In this way, a devalued space of industrial capitalism has been revalued in a new era of post-industrial capitalism.

An example is provided by Liverpool in Northwest England. Liverpool grew in the nineteenth century due to its importance as a seafaring centre and as a point of transshipment for cargoes from all over the world. Liverpool's docks then processed some 40 per cent of the world's trade, making it a leading world city. Its prosperity reflected its appropriateness for a particular era of capitalist growth: mechanical cotton spinning had developed in nearby Manchester, and steamship technology linked the city with the world. From the 1960s onwards, however, container ships began to increase massively in size, requiring larger and deeper ports. Air travel took the place of ocean liners around the same time, and the products of the textile



Figure 3.8 Abandoned residential buildings in Detroit, USA

Source: Charles Ommanney/Getty Images and Mira Oberman/AFP/Getty Images.

industries in Lancashire and the region around Liverpool were replaced with imports from abroad, particularly Hong Kong and Southeast Asian countries. Liverpool as a built environment designed to service capitalism at a given point in time became anachronistic. The city was not just outdated in relation to newer technologies of industrial production and transportation; its whole ‘set-up’ was an impediment to harnessing their growth potential in a changing global economy. For much of the second half of the twentieth century, Liverpool was a city in economic decline. After it has been devalued, however, the infrastructure of the past can be revalued in another era. Hence, the derelict docklands of Liverpool have been being refurbished to house new art galleries, tourist attractions, and apartments (see Figure 3.9). Today, similar to several other older cities in Northern England, Liverpool prides itself as being a newly regenerated business and cultural centre.



Figure 3.9 Post-industrial redevelopment of the Liverpool waterfront

Source: the authors.

3.5 Can Places and Regions Chart Their Own Futures?

Uneven development, then, is an inherent and ongoing part of capitalist dynamics, and plays out restlessly at different spatial scales. While many social science disciplines have an abiding interest in studying such dynamics at the *national* scale, economic geography – in line with human geography more generally – has for over a century sought to explore such patterns at the level of the subnational *region*. But are there limits to the structural thinking we have outlined in this chapter when it comes to explaining the fluctuating fortunes of such regions? Put simply, from a purely structural perspective, the economic trajectories of regions are determined by how they plug into capitalist processes organized at wider spatial scales, such as the national or the global, in what might be called an ‘outside-in’ perspective. As we have described, the physical and social assets of regions make them suitable for certain forms of production at certain points in time but, over longer periods, their viability may fade and capital moves on in search of a new spatial fix.

This is a powerful line of analysis, no doubt, but it is not the whole story. It was a persuasive narrative at the time when the Fordist mode of production was ascendant, and when ‘core’ regions housing the headquarters and research functions of large multi-plant firms could be contrasted with ‘peripheral’ regions hosting branch plant functions (as described in the case of the United Kingdom by Massey (1995)). Since the 1990s, however, and in line with the advent of post-Fordist ways of working, economic geographers have become increasingly interested in the potential of regions to mobilize *place-based dynamics* as they seek to chart their own development paths. The wider structural context still matters of

course, but more emphasis should perhaps be placed on local factors as part of an ‘inside-out’ perspective. These local dynamics may relate, for instance, to groups of similar firms that are able to reduce business costs and drive innovation through local exchanges of knowledge and workers. They may also be underpinned by the emergence of distinctive institutional conditions (or ‘ways of doing business’) that relate to local legal frameworks but also, just as importantly, to place-based norms and conventions (see more in Chapter 12). Such a perspective is distinctive from more structural accounts in two important ways. First, in focusing on institutions and knowledge dynamics, the more sociocultural aspects of capitalist development are highlighted alongside the political–economic dimensions that have tended to dominate in this chapter. Second, notions of capitalist competition are balanced by an emphasis on cooperation between economic actors.

A closely related set of questions that have preoccupied economic geographers in recent years concerns explaining regional trajectories of growth and decline (see Figure 3.10). In particular, a brand of *evolutionary* economic geography (EEG) has developed to tackle these issues (see Box 3.3, for more). There are three useful ideas that we can take from this work. First, the simple idea that ‘history matters’ in determining regional trajectories is encapsulated in the notion of *path dependence*, which describes how future paths are always and unavoidably influenced by past ones (Martin and Sunley 2006). Earlier, for instance, we discussed how regions with a high level of coordinated union activity might be excluded from subsequent investment rounds. Path dependence is often closely associated

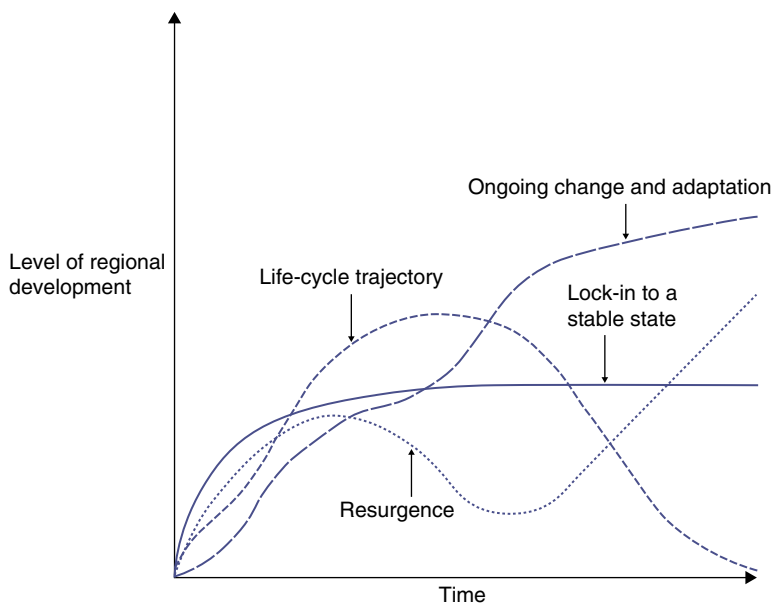


Figure 3.10 Trajectories of regional development

Source: adapted from Martin (2010), figure 2. Reproduced with permission of Taylor and Francis.

FURTHER THINKING

Box 3.3 Evolutionary Economic Geography (EEG)

The use of evolutionary terminology in economic geography is far from new. Ideas such as cumulative causation and the product-life cycle, for instance, have been in circulation for several decades. A distinct EEG approach, however, has really started to emerge in the last 15 years through a sustained engagement with the ideas of evolutionary economics. Evolutionary economics seeks to challenge certain aspects of mainstream economics, and in particular its insistence that economic systems tend towards a balanced equilibrium. Moving beyond the biological metaphors we discussed in Box 2.2, here biology is used to provide an analytical foundation for understanding economic change and the workings of markets by applying Darwinian notions such as variety, selection, inheritance, retention, and adaptation. In turn, economic geographers have seen the potential of these ideas for explaining shifting patterns of uneven development, which are viewed as the outcome of geographically specific processes rather than universal economic logics. EEG has in particular sought to adapt key concepts from evolutionary economics such as path-dependence (current events are shaped by past decisions) and lock-in (certain choices are hard to reverse) to explain the trajectories of local and regional economies. The central focus is on the organizational practices or *routines* through which firms operate. These routines develop in highly place-specific ways, and cannot easily be transferred across space due to their high knowledge content. Mobilizing these insights, EEG work has made important contributions in several areas: explaining how clusters form and evolve; exploring the nature of proximity and how knowledge can be selectively transmitted across space through networks of different kinds; and probing the extent to which regional growth is driven by the interaction of firms in distinct yet related industries across which routines can be shared. We will explore these ideas in more detail in Chapter 12. For more on EEG, see Boschma and Frenken (2018).

with the idea of ‘lock-in’, which describes how regions can over time become inflexible and reliant upon particular industries, technologies, and ways of doing things, meaning that they are unable to adapt to new opportunities and technological shifts. The strong economic and social ties that may build up within a region and help it develop may thus, over time, turn into a hindrance and start to restrict its development. In a famous analysis, Grabher (1993) used these ideas to interpret the decline of Germany’s Ruhr region in the 1970s and 1980s, after many decades as an economy based on heavy manufacturing industries.

Second, we can, in turn, think about regional *path creation*. How, in other words, can regions escape the ‘straitjacket’ of path dependence and lock-in and renew or alter their development trajectory (see Figure 3.10, again)? While some previously industrialized regions such as the rustbelt of the United States and parts of northern England have seemingly been left behind by subsequent investment waves, there are many other examples of regions that have been able to reinvent themselves and ride the crest of different growth cycles. Southern California provides one such case and is discussed in Box 3.4. Different scenarios may underpin this ability to escape lock-in and sustain growth (Martin 2010). As noted above, it may be that new technologies and forms of knowledge can be created within the region and drive growth in an inside-out manner. A region may be able to ‘capture’ new technologies from elsewhere and using them to drive growth. It may likewise be adept at transferring certain key technologies from declining industries and using them to launch new growth sectors. Or, a region may continually be able to reinvent and adapt its core industry to sustain growth (e.g. German auto-making regions).

CASE STUDY

Box 3.4 Dynamic California

Why is it that some regions can seemingly renew their economy continuously, whereas other regions find it hard to bounce back once they have gone into decline? Here we will use the example of California’s highly dynamic economy to advance two interlinked answers: (i) some regions are better than others at creating new growth opportunities due to their ‘factor endowments’ of people, technology, capital, and natural resources; (ii) in turn, these attributes are most effective if they are well embedded in extra-regional (national or global) networks of migration, investment, and technology that can drive new growth opportunities. Wider geopolitical conditions also play an important role. From its origin as an agricultural region to the high technology sectors of the present, California has been well positioned to take advantage of new waves of growth in each era.

The discovery of gold in northern California in 1848 brought a frenzy of economic activity to a previously sparsely populated territory as prospectors and merchants arrived in large numbers and agricultural activities were expanded to feed a growing population centred around San Francisco. The completion of a transcontinental railroad in 1869 permitted Californian farmers to export their increasingly bountiful food crops to eastern states and the rest of the world. The westward flow of migrants, the opening up of new agricultural land, the development of growing urban centres (San Francisco and Los Angeles), and the connections created by the railroad

enabled the production of new spaces for American capitalism in the late nineteenth and early twentieth centuries. But just as California was booming, devaluation was also going on. The workers that planted, harvested, and processed California's crops were often migrant labourers, many from the Dust Bowl states of Oklahoma, Texas, and Arkansas in the 1930s, others from China or the Philippines, who could barely eke out an existence in an economy dominated by California's farmers and agro-food corporations.

A new spatial fix was therefore necessary, and wider geopolitical conditions provided it. In the 1920s and the 1930s, aerospace emerged as a new industry and California became a major centre for building and testing aircraft. World War Two sparked massive federal government expenditures in this sector and the state's manufacturing output tripled in the early 1940s. When a new round of defence-related investment arrived, driven primarily by the Cold War of the 1940s–1980s, California's existing aerospace corporations were poised to move into missile and satellite production. Perhaps more than anywhere else in the United States, California bore witness to the economic growth potential (unevenly distributed) that follows the destructive devaluation of warfare in an era dominated by geopolitical concerns.

Meanwhile, capitalist growth in California not only depended on the geopolitics of warfare but also benefitted enormously from the state's dominant role in the globalization of culture and technology. The movie industry had emerged as a major sector in Los Angeles, which trumped New York in film-making by the 1920s. Today, Los Angeles is closely associated with innovations in cultural industries and Hollywood is synonymous with the production of blockbuster motion pictures for global audiences. Since the 1960s, California has also led the world in globalizing its technologies, as aerospace and other defence-related expenditures have laid the seedbed for an innovative electronics and computer industry in California. Silicon Valley, south of San Francisco, emerged as the iconic territorial production complex of contemporary high-tech capitalism (see more in Chapter 12). Hosting such powerful corporations as Intel, Apple, Google, and Facebook, the driving forces behind the personal computer and information technology revolution of recent decades, Silicon Valley remains the global epicentre of high-tech industries. For more on California, see Walker (2010), Walker and Lodha (2013), and Storper et al. (2015).

Third, it is also useful to think in terms of regional *resilience*. Since the global economic crisis that started in 2008, there has been increased interest in the kinds of regions that have been best able to withstand challenging broader economic conditions or specific economic 'shocks' (Martin and Sunley 2015). Resilience has been used as a shorthand term for capturing the characteristics of such regions.

This can be thought of in different ways. It could capture the ability of a region to ‘bounce back’ to its pre-shock path. It could concern the ability of a regional economy to ‘absorb’ a particular shock without being completely derailed from its initial path; or it might be about the ability of regions to anticipate shocks or to adjust their trajectories to new post-shock conditions. There may be many local sources of resilience, relating to industrial structure, financial conditions, labour market factors, and governance considerations. These ideas can be used to explain, for instance, the divergent trajectories of towns such as Cambridge and Swansea in the United Kingdom since the 1960s. While Cambridge has been able to use its own internal entrepreneurial resources to sustain a high-tech innovation growth model, Swansea has had to rely on a much more fragile mode of development focused on attracting inward investment from foreign electronics firms (Simmie and Martin 2010).

3.6 Summary

We started this chapter with a vivid example of the unevenness of capitalist development. From that starting point, our focus on value and its creation and distribution led us to consider the fundamental structural processes underlying a capitalist economy – how value is created, how it is circulated, and the contradictions that exist in such a system. The result was an understanding that unevenness is not an accidental by-product of natural resource endowments, nor is it something that our economic system automatically levels out over time. Instead, spatial unevenness is quite fundamental to the workings of the capitalist system and something we should expect to continue. The varied patterns of economic activity that we introduced in Chapter 1 are thus the norm. If unevenness did not exist, we might expect that the see-saw of capitalist development would create it. In other words, uneven development is both a cause and an outcome of capitalist growth.

Sections 3.4 and 3.5 examined the diverse geographies of capitalism arising from its systemic tendencies. Here, we showed different forms and scales of spatial fix in capitalism’s relentless drive for profits and avoidance of accumulation crises. New territorial production complexes are continuously developed and older regions and towns experience dramatic restructuring and transformations. These capitalist imperatives and shifts also play out at different spatial scales, from the global all the way to the local and even in the household, as the social formations of one era become redundant in the next. We also started to think about how we might describe and explain the different trajectories that regional economies take over time as their economic fortunes fluctuate. In Chapter 4, we move on to consider further how these trajectories of regions and territories do not evolve independently, but rather are interconnected through relations of control and dependency, relations that are increasingly organized at the global scale. In short, we consider the *production networks* that now provide the key organizational infrastructure of the global economy.

Notes on the references

- The single-most important figure in the development of geographical approaches to studying the structure of capitalism has undoubtedly been David Harvey (1982, 2006, 2010, 2015). For an introduction to, and retrospective on, his monumental work, see Castree and Gregory (2006). Neil Smith's (1984) *Uneven Development* and Doreen Massey's (1995) *Spatial Divisions of Labour* are two other timeless classics.
- For state-of-the-art reflections at what was probably the peak of interest in Marxist theory in geography, see chapters by Peet and Thrift, Smith, and Lovering in the edited volumes by Peet and Thrift (1989). For more recent reviews of such a geographical political economy, see Sheppard (2016) and the chapters by Mann, Glassman, Smith, and Yeung in Barnes et al. (2012).
- For case studies of regional economic restructuring, see Coe and Jones (2010), McCann (2016), and Martin et al. (2016) on the United Kingdom, Pickles et al. (2016) on Central and Eastern Europe, Storper et al. (2015) on the United States, Werner (2016) on the Caribbean, and Gao et al. (2017), Yang (2017), and Zhu and Pickles (2014) on production relocation within China.
- For a geographical review of theories related to international development, see Peet and Hartwick (2015).

Sample essay questions

- Explain the key differences between conventional accounts of uneven development and a geographical political economy approach.
- Why is space so integral to the survival of capitalism as an economic system?
- How does geographical scale help us to interpret processes of uneven development?
- Using a specific example, describe the ways in which a particular era of capitalist production became imprinted upon the landscape and social characteristics of a particular place.

Resources for further learning

- Several Marxist scholars maintain extensive and informative websites with excellent introductions to the field. See, for example, David Harvey's website: davidharvey.org; Erik Olin Wright's website at the University of Wisconsin: <https://ssc.wisc.edu/~wright>; and Bertell Ollman's site at New York University: www.nyu.edu/projects/ollman/index.php.
- International organizations such as the United Nations and World Bank have extensive websites containing studies of developing areas. See, for example,

the UN Millennium Project www.millennium-project.org, and the World Bank's open data page: data.worldbank.org.

- www.dannydorling.org: Danny Dorling is one of human geography's leading public intellectuals and a prolific writer on social and spatial inequalities under capitalism, and why they matter. For other good sources on inequality, see: inequality.org and inequality.stanford.edu.
- This Utrecht University website showcases over a decade's worth of research under the banner of Evolutionary Economic Geography: <http://econ.geo.uu.nl/peeg/peeg.html>.

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CHAPTER 4

NETWORKS

How is the world economy interconnected?

Aims

- To demonstrate how commonly used commodities are delivered through an interconnected system of producers, intermediaries, and service providers.
- To introduce production networks and their basic components as core concepts to explain the operation of these systems.
- To appreciate the role of these networks in connecting different places and economies.
- To recognize the possibilities for different ways of organizing these networks.

4.1 Introduction

On 1 August 2017, the seemingly ubiquitous iPhone exceeded more than 1.2 billion units sold worldwide just one decade after its first release on 29 June 2007. Apple Inc.'s CEO went as far as touting the smartphone as one of the most 'important, world-changing and successful products in history'. In the United States alone, the iPhone had a 44 per cent share of the smartphone market of over 200 million subscribers, making it the single largest market for iPhones. Through these smartphones, many tens of millions of users in the United States and worldwide can perform an ever-expanding range of communications, networking, and consumption functions almost instantly.

Not many iPhone consumers, however, will be fully aware that much of the actual production of these increasingly essential devices is located in places far away from the United States, and organized through a process involving many kinds of people (e.g. from corporate executives to migrant workers), firms (e.g. from Apple's competitors to suppliers and distributors), and institutions (e.g. from telecommunications regulators to industry associations). Designed by Apple in its Cupertino headquarters in California, the iPhone is made up of hundreds of parts and components manufactured by many different producers in various Asian countries and finally assembled into an iPhone by Taiwan's Foxconn in its mega-factories located in China's Shenzhen and Zhengzhou. Overall, while smartphones of all brands are sold worldwide and billions of users are connected through using them, their manufacturing production remains primarily located in East and Southeast Asia.

This story about the iPhone is telling not just because of the technological transformations it has heralded over the past 10 years, but more importantly because of three distinctive spatial patterns of *networks* and *interconnectedness* that are embodied in its worldwide production and consumption. First, the geography of smartphone production can be highly complicated. If we look at the country of final assembly indicated on the back of a smartphone, we would likely find China or Vietnam. While there are clear geographical advantages for locating the final assembly of smartphone production in these low-cost countries, most of the valuable parts and components in these smartphones (e.g. chips and display panels) are often made in places outside China or Vietnam and imported into these countries for final assembly. In short, looking at the 'Made in China' or 'Made in Vietnam' label on the back of your smartphone will tell you very little about the actual economic value created and received by the different workers and localities involved in its production. Moreover, there is no easy geographical matching of where things are made and where they are consumed. As with many other consumer goods today, smartphones that pass through many different places in the course of their production and are often consumed in entirely different regions and territories.

Second, there is a high degree of interdependency between places involved in the global production and consumption of these smartphones due to the emergence of sophisticated production methods (e.g. the use of common or shared parts in different models) and the diversity in consumer behaviour (e.g. preferences for prices, aesthetics, and functionality). As the 'ingredients' of these devices travel from one factory to another and the final products eventually get delivered to different consumers for use, each smartphone literally connects the fortunes of many different people, places, and economies worldwide – from the research scientists and marketing gurus in Silicon Valley and the key component makers in Taiwan and Singapore, to the factory managers and workers in China and Vietnam, and the local delivery drivers and salespersons in your smartphone retail outlets. These different places are interwoven into a multi-scalar system

comprising activities at different spatial scales, from local consumption to regional distribution channels, national regulation of telecommunications, and global organization of production.

Third, many different kinds of networks are involved in the production, distribution, and consumption of smartphones. Producers of smartphones do business with their suppliers and thus engage in *corporate networks*. Business executives in these firms move around the world to look after their production facilities, to develop new products, and to maximize the sales of their products in different end markets. These *people networks*, however, involve more than just executives. They also entail an army of workers across the vast number of factories and retail outlets. In countries such as China and Vietnam, many of these factory workers are migrants from other parts of the same country. As parts and components move from one factory to another, the transactions involved are funded by huge amounts of capital underpinned by sophisticated *financial networks* that are often located in major financial centres of the world. Producers need to raise capital and/or borrow from banks to fund their production in different locations worldwide. To make sure these smartphones reach you, producers also need to meet the regulatory requirements established by different *institutional networks* to ensure, for instance, product safety and telecommunications standards.

In this chapter, we use the idea of *networks* to describe these evolving spatial patterns of production, distribution, and consumption that resemble complex webs of interconnections on a global scale. Complementing the previous chapter's structural perspective of seeing the world economy as driven by generalized capitalist logics of uneven development, here we want to identify the *actors* and *activities* that make up these networks and to show how interconnections between them (i.e. workers, consumers, firms, and institutions in different places) are produced. In reality, these interconnections can be messy and hard to uncover and describe. But this inherent messiness and complexity does not mean that these networks do not matter. Quite the contrary – we argue that these networks of producers, institutions, and consumers constitute the crucial links that underpin the economic world in which we live. By breaking down production networks into their constituent corporate, people, financial, and institutional actors, we can reveal the underlying geographies and power relations of these connections within the world economy.

There are four main sections in the chapter. First, we consider how capitalism as a system hides the connections or power relations inherent to particular things or commodities, and reveal the implications of this concealment (Section 4.2). Second, using coffee as a running example, we explore in detail the nature of the networks that underpin the production of commodities, revealing how they vary in terms of their structure, geography, coordination, and institutional context (Section 4.3). Third, we look at the role of logistics in ensuring the smooth running of these networks and the distribution of goods and services to final consumers (Section 4.4). Fourth, we explore the potential interconnections between different production networks and, in particular, how waste products may be used as starting points for

new production networks (Section 4.5). Where individual production networks begin and end is perhaps not as obvious as it first appears.

4.2 The Missing Relations Between Producers and Consumers?

Let us begin by identifying the social relations of production that we do not directly observe or know about because they are often hidden or obscured in the things or commodities that we consume (e.g. smartphones). As explained in Chapters 2 and 3, capitalism can be thought of as a *commodity* exchange system. A commodity is simply something useful that enters the market and is available for purchase at a price. However, commodities are much more than just material things, such as books, food, or smartphones. In the contemporary world, more and more areas of our everyday life have become caught up in processes of *commodification*. Domains as varied as culture (e.g. music, museums, and galleries), religion (e.g. celebrity preachers), knowledge (e.g. MBAs and intellectual property rights), the environment (e.g. carbon credits), war (e.g. private armies and ammunitions), and the human body (e.g. trade in human organs or genetic materials) have become commodified and thus subject to the vagaries of the market mechanism.

While commodities are central to the capitalist system, at the same time they may serve to hide important dimensions of how they are produced and brought to us. The *exchange value* of a commodity – the price – is often indicative of how the commodity was created: the cost of the human labour and skills/knowledge that went into its production, the costs of machinery, buildings, electricity, trucks, and so on that were required, and the profits extracted at various points in the process. Yet, the simple price tag itself reveals nothing of the production process the commodity has undergone and the necessary social relations that connect this production to the commodity's eventual customer or user. As a result, consumers in the capitalist system are largely ignorant of the geographical origins and histories of the commodities that they consume.

The purchase of a standardized commodity through monetary relations generally serves to *disconnect* producers and consumers, encouraging an abdication of responsibility on the part of consumers for the terms and conditions under which the commodity was made. The consumer can simply benefit from the *use value* of whatever they have purchased – that is, the usefulness of a particular product to an individual. This poses profound challenges to both conscientious consumers who actively want to know the history (and geographical origin) of the commodities they consume, and economic geographers who want to understand interconnections and interdependencies within the world economy. In reality, even just buying a McDonald's Big Breakfast or drinking a cup of latte in a Starbucks café makes the consumer complicit, albeit unknowingly in many cases, in complex webs of connections across the globe (see Box 4.1).

CASE STUDY

Box 4.1 Coffee, cafés, and connections

Founded in Seattle, Washington's famous Pike Place Market in 1971, Starbucks has become the largest chain of coffeehouses worldwide. As of October 2016, Starbucks directly operated 7,880 stores in the United States and another 4,831 stores across more than 70 countries. It licensed another 12,374 stores throughout these countries, employed 254,000 people worldwide, and was serving millions of customers each day (<https://www.starbucks.com>, accessed 14 September 2017). The company offers a range of over 30 coffees and teas in addition to a wide variety of snacks and other beverages. Through its marketing and store information strategies, Starbucks endeavours to create a 'knowledgeable' culture of coffee drinking in its cafés. The corporate website, for example, has an extensive Coffee Education area, several pages of which describe and contrast the coffees from Latin America, Africa, and Southeast Asia (under the heading *Find Your Perfect Coffee*), and it used to market its coffee with the motto, 'Geography Is a Flavor' (Figure 4.1). Elsewhere on the website, individual whole bean coffees are described with clear references to their tropical country of origin (e.g. Kenya, East Timor, Ethiopia, and Vietnam), replete with colourful maps and evocative descriptions of the places of cultivation. Vietnam Da Lat, for example, was described as 'a rare offering – only our second Starbucks Reserve® coffee from Vietnam... a coffee every bit as distinctive as the land from which it came'. The strategy is clearly to turn coffee drinking from a routine activity into a more meaningful consumption process involving certain kinds of knowledge about coffee as a commodity with a particular history and geography.

However, it is possible to offer a more critical reading of this sophisticated marketing strategy. The information on offer in Starbucks presents a highly partial interpretation of coffee and its spatially dispersed production process. As a commodity, coffee also has many other less palatable stories to tell. For instance, the structures of domination and exploitation inherent in today's global coffee industry – and indeed their colonial origins – are entirely overlooked. The story of the global coffee industry over much of the last two decades has been one of rising production and falling prices, and as a result, increasingly marginal working and living conditions for millions of farmers and farm workers in a range of poor tropical countries, many of which are highly dependent on coffee exports (which make up over 50 per cent of Ethiopia's total exports, for example). Over the same time period, the leading coffee roasters (e.g. JAB and Nestlé) and retailers (e.g. Starbucks and McCafé) that dominate the global industry have been able to maintain healthy profit



Figure 4.1 Geography is a flavour at Starbucks

Source: reproduced with permission of Clive Agnew.

margins on their coffee products. In short, Starbucks offers a highly selective and romanticized reading of the global coffee industry in its literature and store displays. We will return to these ideas later in the chapter.

Of course, there are *some* commodities we consume that are much more localized, e.g. buying your fish at a quayside or fruit at a local farmers' market or having your hair cut in an independent salon. In this way, our separation from the production of the commodity is minimized and our relationships with producers are more direct and connected. Still, for most things and services, our relationships with producers are stretched over greater distances across different places and scales.

Moreover, the *images* we receive about commodities in our everyday life may actively serve to conceal further or misrepresent the origins and social relations of those commodities. Advertising – a significant economic sector its own right – is extremely important and influential here. Through the creation of various images, advertisers seek to establish time- and place-specific meanings for particular goods and services that may be a far cry from the realities of their production. Think, for example, of advertisements for gold jewellery in developed-country

markets. Through skilfully combining pictures and words, these advertisements tend to emphasize certain personalized values and emotions that are associated with the products: love, passion, romance, commitment, and so on (for an engaging attempt to destabilize and subvert advertisements and their central messages, see www.adbusters.org).

Curiously, in some cases, places of origin are constructed in certain ways to make the products more appealing and positive (Pike 2015). Many upmarket consumers are willing to pay more for products made in places well known to them as being associated with high-quality goods, for instance, Swiss watches, Italian clothing, French wines, Belgian chocolates, German cars, and Japanese digital cameras. Product packaging often displays images and labels that give a caricatured view of their places of origin. For instance, coffee beans are regularly packaged and labelled to emphasize their ‘exotic’ tropical origins (e.g. Starbuck’s Ethiopia Bitta Farm or East Timor Tatamailau brands), effacing the poverty levels of these severely underdeveloped countries that try to tussle with leading coffee brands for the ownership of their national names. Equally, Italian clothing manufacturers are increasingly reliant on cheap temporary workers from China to churn out their ‘Made in Italy’ fashion products (Lan 2015). Advertising and branding, then, act as powerful forces further accentuating the disconnection of producers from consumers.

By now, the significance of commodities and their social relations of production in connecting the world economy should be clearer. It alludes to the fact that even the most mundane and everyday acts of consumption tie us into webs of connections with the ‘distant strangers’ whose labour went into these commodities. Commodities, then, need to be thought of as much more than just their immediate market and use values. Instead, every commodity should be seen as a bundle of social relations of production, or, put another way, as representative of the whole system of connections between different groups of people that have enabled the consumer to make a purchase. In this way, the working conditions and gender relations that underlie commodity production – and that may be unacceptable to certain consumers – can be revealed, challenged, and, eventually, improved (see also Chapter 14). In the contemporary era, this is increasingly about revealing interdependencies of production and consumption at the *global* scale, and encompasses commodities from relatively perishable foodstuffs through to high-tech goods such as smartphones and automobiles.

4.3 Production Networks: Connecting Distant Places and Economies

How then do we bring together all the diverse actors and activities underlying the global production of everyday commodities such as a cup of coffee, a T-shirt, or a smartphone? We begin with a simple conceptualization of the different stages

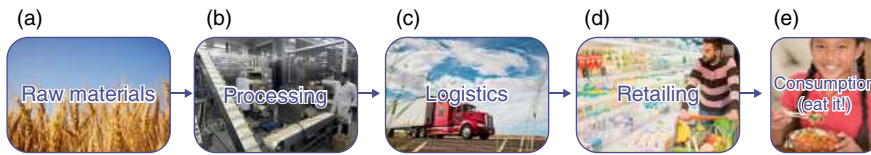


Figure 4.2 The basic commodity chain of our breakfast

Source: from left to right: © ZoneCreative/iStockphoto; © IP Galanternik D.U./iStockphoto; © Doug Berry/iStockphoto; © 645974116/Shutterstock; © Monkey Business Images/Shutterstock.

of production as a *commodity chain* before we expand this conception into a *production network* comprising different actors located in different places and economies. Figure 4.2 outlines a much simplified commodity chain for breakfast cereal, illustrating the transformation of initial raw materials into final outputs in the form of consumable foodstuffs. These outputs are then brought to us through such services as logistics and retailing. In more complex ways, this transformation includes core activities (e.g. production, marketing, delivery, and services) and support activities (e.g. merchandising, technology, finance, human resources, and overall infrastructure). The commodity chain, then, is not simply about manufacturing processes: many of the inputs to the chain and many of the final commodities produced will take the form of intangible services.

In producing a tangible product (such as a smartphone) or a service (a student loan or credit card), we need to put *actors* and *their activities* into these commodity chains and ask *who* actually is involved in their production. Very often, there are many different firms that take care of the various corporate activities involved in each of different stages in a commodity chain. Their inter-firm relationships are linked together in complex webs or *networks* of interactions, rather than a sequential chain with each stage adding value to the process of production of the goods or services in question. In Economic Geography, the *global production networks* (GPN) perspective (see Box 4.2) explains how organizing the global production of a consumer product such as a pair of sports shoes or a smartphone is far from a simple process. Organizationally fragmented and spatially dispersed production networks constitute a new form of economic structure that increasingly drives the complex global economy and its uneven developmental outcomes (Coe and Yeung 2015).

The global production and consumption of *coffee* – a recurrent commodity in this chapter – offers a good example of such a production network comprising global brand-name retailers such as Starbucks and a large number of other actors. Further to the geographies of coffee beans explained in Box 4.1, Table 4.1 shows how the market value (price traded) of a bag of soluble coffee is derived and the costs and profits encountered by various producers (e.g. farmers) and intermediaries (e.g. traders). It is clear that very substantial differences in the value derived from this production network exist between a coffee bean farmer (producer)

KEY CONCEPT

Box 4.2 From global commodity chains and global value chains to global production networks

In the mid-1990s, global commodity chains (GCC) emerged as a new conceptual category for understanding the changing spatial organization of production and consumption in the contemporary world economy. Each GCC was deemed to have four interrelated dimensions: input–output structure (what goes in and comes out), geography (where it happens), governance (who controls what part of the chain), and institutional context (the role of governments, labour organizations, and so on). From the early 2000s onwards, the GCC approach evolved into the global value chains (GVC) perspective that focuses on how inter-firm power relations in these chains can be driven by different technological standards and product complexities. The GCC and GVC frameworks, which bring together scholars from economic sociology, development studies, and industry studies, have provided a crucial starting point for the development of the GPN framework in Economic Geography. The GPN framework is explicitly concerned with key questions of *which* actors take charge of organizing production networks, *how* they do so in different industries and localities, and what are the implications for *where* economic value is created and captured. By drawing actors such as firms and non-firm institutions into a common analytical framework, the GPN analysis seeks to provide a more dynamic conceptual framework for analyzing global production and uneven development at multiple spatial scales.

What, though, are GPNs? How are they organized, and how do they emerge? A very brief summary is useful here. Since the 1960s, firms from industrialized economies have increasingly been taking production activity across borders, i.e. setting up overseas factories in low-cost countries. Through this process of internationalization, they have become transnational corporations (TNCs; see full elaboration in Chapter 5). Over time, these TNCs do not want to continue making everything themselves because costs go up or other firms can do a better job of producing certain goods or services. As a result, they increasingly rely on other firms to supply them with many parts and services. These TNCs also work with other actors and institutions, such as labour and financial organizations and industry associations. As TNCs become much more global in their scale and scope of operations, their networks are also more global in nature, leading to the emergence of GPNs. A GPN is thus defined as a network system coordinated and controlled by a global lead firm that involves a vast network of overseas affiliates, strategic partners, key customers, and non-firm institutions. These lead firms are key shapers of the global economy; they are market leaders in terms of their brand-names, technology, products/services, and marketing capabilities. For an updated GPN approach (dubbed GPN 2.0), see Coe and Yeung (2015) and Yeung (2018).

Table 4.1 The coffee production network: who gains most in Uganda, 2011?

Actors	Farmers	Trader of raw beans	Trader of semi-processed beans	Exporter (graded beans)	Roaster	Retailers of ground coffee	Coffee shop (brewer)
Revenues per kg	0.42	0.64	1.07	2.14	10.70	32.09	171.16
Total operation cost per kg	0.37	0.53	0.75	1.23	6.42	19.26	86.01
Gross value added (GVA) per kg	0.05	0.11	0.32	0.91	4.28	12.83	85.15

Note: Original currency in UGX, converted into US\$ at 2011 exchange rate of US\$1 to UGX2,337.

Source: adapted from UNDP (2013, table 3.1: 18).

who sells to a trader for \$0.42 per kg of raw beans, and a retailer or a coffee shop who sells to end consumers, respectively, for \$32 and \$171 per kg of ground coffee. More specifically, roasters, retailers, and coffee shops capture the vast chunk of the gross value added or profits in the coffee production network. How do we make sense of these enormous differences in value creation and capture within a coffee production network? Who holds the most power in this network and how is it governed?

Understanding this wide range and role of actors involved in a particular coffee production network, characterized by its unique *input–output structure*, is simply the first step towards developing a good understanding of commodities and their production processes. However, there are three further important dimensions to all production networks that we will now consider in turn: their *geography*; the way in which they are coordinated and controlled, that is, their *governance*; and the way in which local, national, and international conditions and policies shape the various actors in the networks – their *institutional frameworks*.

Geographical Structures

In very simple terms, the geography of a production network can range from being *concentrated* in one particular place (e.g. gourmet cheese or champagne) to being widely *dispersed* across a wide range of localities (e.g. smartphones or computers). As the earlier discussion of smartphones and coffee makes vividly clear, it is hard to identify a production network in the contemporary global economy that is not international to at least some degree, even if it is just seen in the sourcing of one or two inputs or in a limited export market for the final good/service. Many bring together an extensive range of international connections. This geographical reach is important not only because it determines precisely which actors are connected together across the world economy but also in revealing the unequal geographical distribution of economic value, and associated economic development benefits, between different places and territories enrolled into the network. As we saw in Chapter 3, the location of high value-adding activities (research, design, marketing, and so on) in key cities is particularly important in the spatial inequality engendered through these production networks.

We can make five further points about the geographical structures of production networks. First, in general, the *geographical complexity* of production networks is increasing, enabled by a range of developments in transport, communication, and process technologies. We can now source our daily goods from a much greater range of geographical origins than was the case previously. Second, the geographic configurations of production networks are becoming *more dynamic* and liable to rapid change. This flexibility is derived both from the use of certain space-shrinking technologies (e.g. massive improvements in

transport and communications systems) and from new organizational forms that enable the fast spatial switching of productive capacity. In particular, this flexibility comes from the increased use of *external* outsourcing, subcontracting, and strategic alliance relationships that allow firms to switch contracts between different firms and places without incurring the costs of moving production themselves (see more in Chapter 5). Third, and relatedly, understanding the geography of production networks is not as simple as locating each production activity in a particular place or country. By virtue of their role in connecting actors in different places and territories, production networks also reveal the dynamics of *inter-place competition* (Phelps 2017). Firms in different localities may be vying for market share at different entry points or seeking to ‘plug-in’ to production networks. In other words, different localities involved in a production network may engage in competitive upgrading strategies to protect market shares and profitability (see Box 4.3). In developing countries such as Brazil, China, and India, localities that are home to firms successfully pursuing such upgrading strategies often experience rapid economic growth and positive development outcomes.

KEY CONCEPT

Box 4.3 Upgrading strategies: how to do better through participation in production networks

Firms and actors (e.g. employees and investors) in different localities can do better over time if they participate in segments of production networks that offer more durable work and/or higher economic returns. But to achieve such a position, these firms and actors have to improve their capabilities and efficiencies through a dynamic process known as upgrading. Upgrading refers to the potential for firms, or groups of firms, to improve their relative position within the network as a whole. It is useful to distinguish between four different types of upgrading (Humphrey and Schmitz 2004):

- *Process upgrading*: Improving production efficiency by either reorganizing the production process or introducing superior technologies. For example, a car or electronic manufacturer might introduce robot technology to speed up its assembly lines.
- *Product upgrading*: Moving into making more sophisticated products or services. For example, a basic food-processing firm might start making prepared frozen meals, or a financial firm might offer new kinds of insurance products.

- *Functional upgrading*: Acquiring new roles in the network (and/or abandoning existing functions) in order to increase the overall skill content and level of ‘value added’ of the activities undertaken. An electronics manufacturer, for example, might move from simple assembly work subcontracted by original equipment manufacturers (OEM) to develop original design manufacturing (ODM) capabilities or even own-brand manufacturing (OBM) of its products (see more in Chapter 5).
- *Inter-sectoral upgrading*: Using the knowledge derived from participating in the production network of a particular sector to move into different sectors. For example, a firm might leverage on its experience of making apparel (manufacturing) to enter into fashion retailing (services) to capture more value from its production.

At the level of the individual firm, successful upgrading strategies can transform the fortunes of its owners and workers. When a sufficient number of such success cases occur in a particular place and regional economy, a large-scale industrial transformation may occur. Indeed, this form of successful upgrading through ‘plugging into’ GPNs lays behind the emergence of the newly industrializing economies of East Asia from the 1970s onwards (see also Chapter 9). The electronics industries of Taiwan and South Korea, for example, have benefitted from all four kinds of upgrading processes to develop from a subcontracting base for foreign-owned electronics assembly into one of the world’s leading centres for designing and producing new computer and information and communications technologies (ICT) in the global economy (Yeung 2016). For many other developing countries, facilitating upgrading across a wide range of sectors remains a key policy concern, as they seek to gain a greater share of the spoils of GPNs for clusters of local firms.

Fourth, it is important to re-emphasize that production networks are not just a feature of agricultural and manufacturing sectors but are also central in many *service sectors*. For example, many service firms now find it advantageous to out-source routine data processing and software programming functions to other firms located in overseas sites – India, the Philippines, Mauritius, Jamaica, and Trinidad and Tobago are prime examples – where there is relatively low-cost labour. Fifth, and finally, we need to connect these ideas about the geographical extensiveness and complexity of production networks with the arguments about the geographical *clustering* of economic activity (see Chapter 12 for more on this). Some kinds of interactions within production networks will take place within the same locality, due to, for example, the intensity of transactions or the importance of place-specific knowledge to the activity in question. For these ‘nodes’ in the

larger mosaic of economic landscapes, production networks are often the organizational forms that connect firms, workers, and other economic agents in these clusters with their counterparts elsewhere in the world economy. These inter-cluster connections can be critical to the upgrading and further development of local production and innovation capacities (e.g. the intense flows of people, capital, and knowledge between the two clusters of Silicon Valley in California and the Hsinchu Science-Based Industrial Park in Taiwan).

Understanding the input–output and geographical structures of a production network is undoubtedly important, but still leaves questions of control and power relations unanswered. Think of McDonald’s or Wal-Mart or Apple or Samsung. *Who* controls the organizational structure and nature of their GPNs? *Who* decides where inputs are purchased from, and where final goods and services are sold? *Who* shapes the restless geographies of production networks? This brings us on to the important issue of governance.

Governance Processes

To understand better the governance of production networks, we need to focus on firms as the key economic agent in capitalism. So far we have seen how production networks are constituted by a mix of different actors and their linkages and a combination of near and distant connections. In most cases, however, the network will have a primary coordinator or a lead firm driving the system as a whole. In taking this initial step of differentiating firms on the basis of their roles and functions in a production network, we can identify in Table 4.2 a variety of firms, namely lead firms, strategic partners, specialized suppliers (industry-specific or multi/cross-industrial), and generic suppliers. Each production network necessarily entails the central role of one significant *lead firm*, and its organizational coordination and control and geographical configuration of a sufficient number of its own subsidiaries (intra-firm network connections), its strategic partners and suppliers (inter-firm networks), and other government and non-government institutions (extra-firm networks). A lead firm’s industrial position can be measured in terms of its market power (e.g. revenue or market share) or its product definition power (e.g. branding, technology, or knowhow). A firm involved in multiple industries may play different functional roles, for example, being a lead firm in one industry (e.g. Intel in semiconductors) and a supplier in another (e.g. Intel in notebook computers).

Global lead firms exist in most manufacturing, service, and resource industries. In the manufacturing sector, and through their *intra-firm subsidiaries* in different locations, global lead firms often specialize in the upstream activities of R&D and downstream activities of branding, marketing, and post-sale services. These lead firms are commonly engaged in OEM and OBM. While they continue to engage in high-value manufacturing activities and services (e.g. branding and marketing), global lead firms are increasingly compelled to outsource a large portion of their

Table 4.2 Firms as actors in global production networks

GPN actors	Role	Value activity	Examples in manufacturing	Examples in service industries
Lead firms	Coordination and control	Product and market definition	Apple and Samsung (ICT); Toyota (automobiles)	HSBC (banking); Singapore Airlines (transport)
Strategic partners	Partial or complete solutions to lead firms	Co-design and development in manufacturing or advanced services	Hon Hai or Flextronics (ICT); ZF and Continental (automobiles)	IBM Banking (banking); Boeing or Airbus (transport)
Specialized suppliers (industry-specific)	Dedicated supplies to support lead firms and/or their partners	High-value modules, components, or products	Intel (ICT); Delphi and Denso (automobiles)	Microsoft (ICT); Fidelity or Schroders (banking); Amadeus (transport)
Specialized suppliers (multi-industrial)	Critical supplies to lead firms or partners	Cross-industrial intermediate goods or services	DHL (ICT); Panasonic Automotive (automobiles)	DHL (banking); Panasonic Avionics (transport)
Generic suppliers	Arm's length providers of supplies	Standardized and low-value products or services	Plastics in ICT and automobile manufacturing	Cleaning in banking and transport services

Source: adapted from Yeung and Coe (2015, table 3). Reproduced with permission of Taylor and Francis.

product categories to suppliers or other firms that are external manufacturers providing partial or complete manufacturing solutions. This has led to the proliferation of horizontal or *inter-firm* production networks. In most global industries, for instance, ICT, apparel, toys, and footwear, large contract manufacturers have emerged to offer both technological solutions and massive economies of scale and scope to their lead firm customers. In many cases, these independent manufacturers have graduated from their earlier role as low-cost OEM suppliers to become increasingly involved in ODM, offering partial or complete design and manufacturing services to OEM lead firms.

In the automobile and electronics industries, a lead firm may bring together material inputs from specialized suppliers (e.g. key modules and core components) and generic suppliers (e.g. plastic parts) to produce finished or intermediate goods (e.g. semiconductors). Leading producers or assemblers such as Toyota and Volkswagen coordinate production systems involving literally thousands of subsidiaries and different tiers of subcontractor firms dotted around the world, as well as extensive global systems of distributors and dealers. Because of technological and strategic concerns, these lead firms prefer to undertake essential segments of the production process themselves in order to exercise greater control over the quality and delivery of their products to customers. This delivery and distribution may involve other firms such as logistics and retail service providers. As the manufacturers of these products, lead firms are subject to intense lobbying and other interventions from state and non-state actors (see Chapters 9 and 10).

In the service industries, major banks, for example, are lead firms that draw upon material and intangible inputs from their specialized suppliers (e.g. computer hardware and information systems) to offer financial products and services to their corporate customers and individual consumers. In this governance model, we tend to focus primarily on the lead firm and its forward and backward linkages with specialized suppliers and key customers. In wholesale and retail sectors, however, we can identify very large and powerful global buyers as lead firms driving their own production networks worldwide. These global buyers tend to be found in industries where large retailers (such as Wal-Mart, Tesco, Carrefour, and IKEA) and brand-name merchandisers (such as Adidas, Nike, and The Gap) play the central role in establishing and controlling the GPNs of their commodities, usually located in export-oriented developing world countries. These retailers and brand-name merchandisers are collectively known as lead firm *buyers* because they source or buy their manufactured commodities from specialized suppliers (i.e. manufacturing producers) all over the world.

It is thus important to note that buyers in these production networks are *not* final consumers, but retailers, merchandisers, and wholesalers who bring these commodities to final consumers. This form of buyer-led production networks is common in labour-intensive consumer goods sectors, such as clothing, footwear, toys, and handicrafts. Production is generally carried out through multi-tiered layers of subcontractors and suppliers that make finished goods subject to the

specifications of powerful lead firm buyers. Profits in these networks are derived from the bringing together of design, sales, marketing, and financial expertise, allowing the retailers and merchandisers to connect overseas factories with the main consumer markets. Hence, control is enacted through the ability of these large lead firm buyers to shape mass consumption patterns through strong brand-names and meet this demand through global sourcing strategies from their suppliers/producers (see the example of the coffee production network and Starbucks in Box 4.1). These production networks are characterized by lead firm buyers who have the power and capacity to dictate the production terms and even standards of their suppliers/producers.

In these more labour-intensive industries, the behaviour of lead firm buyers has crucial implications for our understanding of production (mal)practices and working conditions in many of their suppliers located in different countries and territories. Armed with direct access to millions of consumers, large lead firm buyers such as Wal-Mart and Nike can achieve huge economies of scale in their global sourcing of apparel manufactured in developing countries. Price competition in the lower end of this industry is particularly intense due to its relatively low capital and technology requirements and thus low barriers to entry. This tendency towards a ‘race to the bottom’ among low-cost suppliers creates an environment for breeding working conditions that are unacceptably difficult or dangerous, commonly known as *sweatshops*. While the history of such sweatshops can be traced back to the Industrial Revolution in the nineteenth century, their global manifestations today are a consequence of the emergence of these production networks driven by lead firm buyers. For example, Wal-Mart, The Gap, and Nike have at various times come under intense criticism from activists and the mainstream media for their links to overseas suppliers in Africa and East and Southeast Asia where sweatshop conditions could be found. Understanding the geographical and organizational dynamics of these GPNs enables us to identify better these lead firm–supplier relationships and their impact on not just the prices and choices for final consumers but also the ‘distant strangers’ whose labour makes affordable the commodities on the shelves of global retail giants. As many of these sweatshops tend to employ young female workers and are located in developing countries, apparel GPNs offer an extremely valuable window for us to understand gender relations in the entire network, from designer clothing targeting young and affluent female consumers to mass production employing tens of thousands of female workers (see more in Chapter 6).

Institutional Contexts

The governance of production networks is a highly dynamic affair. Its nature does not depend only on the sector or industry in question but also on the precise array of places and territories that are connected together by these networks. This is because every node in the network is connected to, and shaped by, the

institutional context in which it is situated or embedded. In reality, the intersections between production networks and their institutional contexts are many and varied. These institutional contexts may be related to international rules and agreements, host country government regulations and preferences, industry-wide standardization and requirements, or even third-party monitoring activity.

We need to discern between different institutional contexts in two ways to make sense of this complexity. First, we can distinguish between *formal* and *informal* institutional frameworks. The former relates to the rules and regulations that determine how economic activity is undertaken in particular places (e.g. trade policy, tax policy, incentive schemes, and health and safety/environmental regulations), while the latter describes less tangible, place-specific *ways-of-doing business* that relate to the entrepreneurial and political cultures of particular places. Second, it is useful to think about how institutional context is important at different *spatial scales*. At the subnational scale, local and regional governments may implement a range of policies to try and promote certain kinds of economic development in the locality (such as tax holidays for firms that undertake more research and development, and minimum wage legislation to protect local workers). At the national scale, states still wield a huge range of policy measures to try and promote, and steer, economic growth within their boundaries (see Chapter 9 for more).

At the macro-regional scale, a variety of regional blocs have considerable influence on trade and investment flows within their jurisdiction (see Chapter 10). At the global scale, institutions such as the World Trade Organization (WTO) and the International Monetary Fund (IMF) shape the rules of the game for global trading and financial relationships. Even a relatively simple production network for foodstuff or apparel, then, will crosscut and connect a wide range of multi-scalar institutional contexts because it involves not just firms and economic actors but also other non-firm actors responsible for the regulation, coordination, and control of the network. A banana production network linking Ecuador and France, for example, may be affected by the corporate strategies of French and American banana importers, Ecuadorian and French economic policies, the rules and regulations of the Andean Common Market and the European Union, WTO rules and regulations, in addition to any more localized policy initiatives within the two countries. In St. Lucia, a small Caribbean island state with a population of about 165,000, two-thirds of its 10,000 banana farmers lost their revenue when its traditional export market, the United Kingdom, had to surrender its preferential trade arrangement with St. Lucia in August 2005. This took place because US-controlled banana companies such as Chiquita filed complaints with the WTO against the British trade preference for its former colony and the WTO ruled in Chiquita's favour. Since then, St. Lucia's banana industry has suffered a terminal decline due to severe competition from other lower cost banana producers in Latin America. Its share in the UK conventional banana market decreased from 40 per cent in the early 1990s to less than 10 per cent in the mid-2010s (<https://www.theguardian.com>, accessed on 16 September 2017).

We can further illustrate the profound impacts that changing institutional contexts can have on production networks by returning to the example of the coffee industry. Coffee is overwhelmingly grown in tropical, developing world countries with just four countries alone accounting for 70 per cent of global production in 2016: Brazil (34 per cent), Vietnam (19 per cent), Colombia (9 per cent), and Indonesia (8 per cent). The commodity provides a livelihood for some 25 million coffee-farming families around the world. However, the vast majority of that coffee (worth over \$100 billion in retail sales each year) has historically been consumed in developed countries, with the United States and the European Union leading the way (see Figure 4.3, where it is also possible to detect a growing trend of coffee consumption among the emerging middle classes of countries across Asia and elsewhere). The changing institutional context for the coffee production network can be considered at both the global and national scales. At the *global* scale, since 1962, the international trading of coffee has been governed by a successive series of seven International Coffee Agreements (ICAs), the most recent of which was finalized in September 2007 (and came into force in February 2011). They are managed by the International Coffee Organization (ICO), the main intergovernmental organization set up in London in 1963 under the auspices of the United Nations and constituted by representatives of some 43 coffee exporting and seven importing countries (<http://www.ico.org>, accessed on 14 September 2017).

At the *national* scale, many exporting countries historically established coffee marketing boards. These were government institutions that controlled markets and monitored quality within producing countries and acted as a link or an intermediary to exporters and international traders (Figure 4.4). For the millions of individual farmers and growers, these national coffee boards provided an important buffer between themselves and international markets. On 4 July 1989, however, the quota and controls provisions in the 1983 ICA were suspended in the face of rising production levels and low-cost competition from non-member exporting countries, most notably Vietnam (who only joined the ICO in 2001). Coffee prices thus were at record lows during the 1990–1992 period. For example, exports of Robusta coffee grown in the central highlands of Vietnam expanded dramatically during the 1990s – rising from just 100,000 tons in 1990 to 1 million tons by 2005 and 1.7 million tons by 2016 – creating an oversupply in the global market and putting severe downward pressure on prices.

The ending of the ICA quota regime has dramatically altered the balance of power in the coffee production network, as the now liberalized, market-based coffee trade regime has led to lower and more volatile coffee prices (e.g. declining from a high of \$2.31 per pound in April 2011 to \$1.28 per pound in August 2017). Since the early 1990s, bargaining power has been concentrated in the hands of consuming-country firms, and in particular a small group of brand-name roasters and instant coffee manufacturers. The domination by these actors is in large part a simple story of concentrated market power and economies of scale: in 2015/2016,

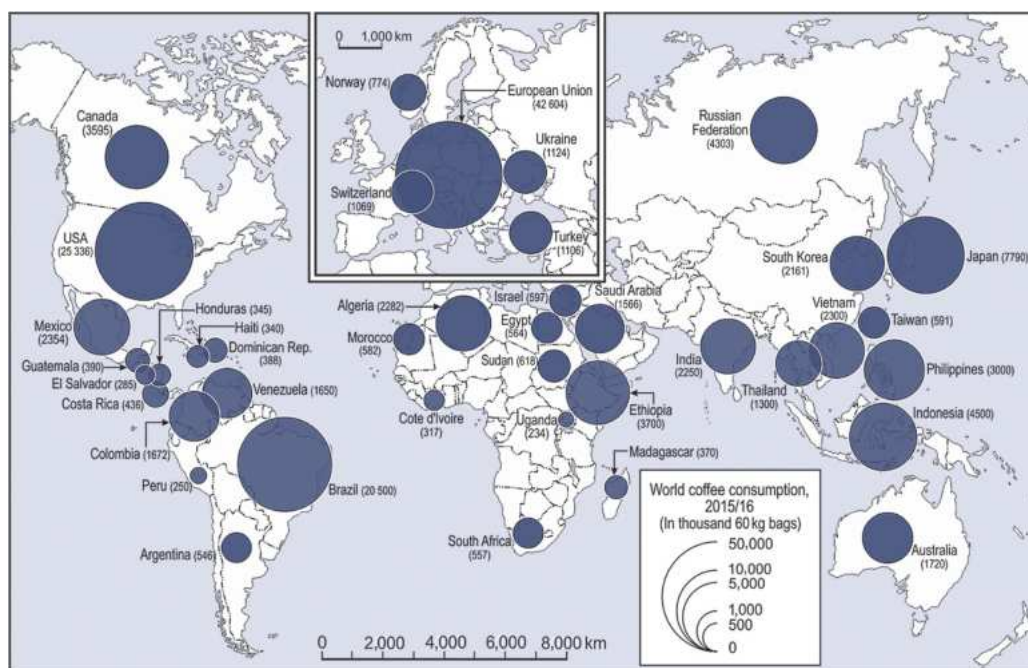


Figure 4.3 The global map of coffee consumption, 2016

Source: created using data from www.ico.org, accessed 14 September 2017.

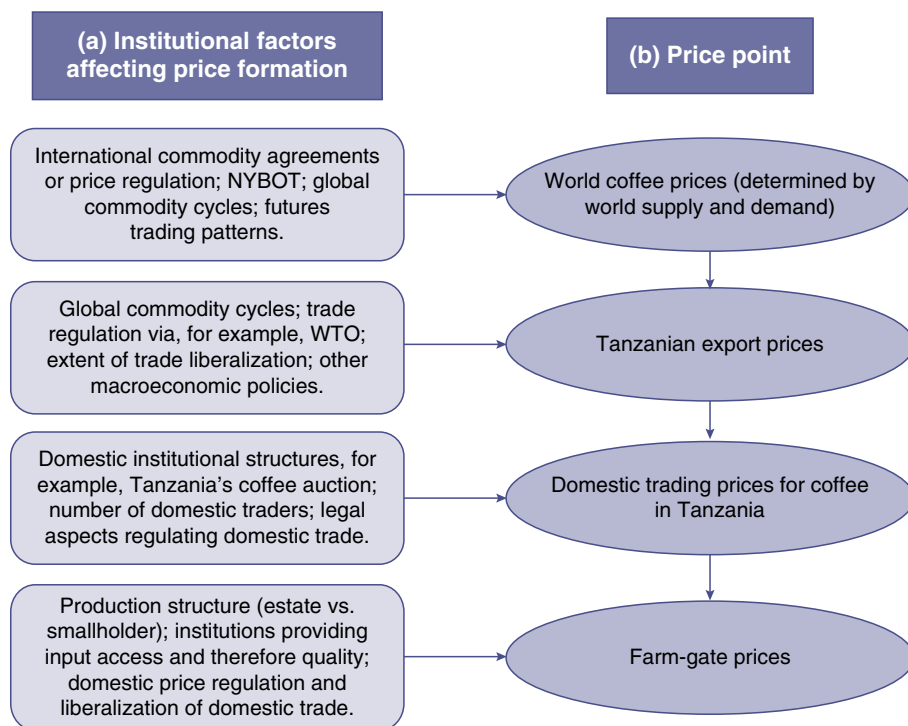


Figure 4.4 The coffee production network – the changing institutional framework in Tanzania

Source: adapted from Bargawi and Newman (2017), figure 1. Reproduced with permission of Taylor and Francis.

while 80 per cent of the world's coffee was produced by over 25 million small farm holders, 60 per cent of coffee trading and 40 per cent of coffee products were controlled, respectively, by 8 traders and 10 roasters. Meanwhile, large coffee roasters and beverage manufacturing firms are increasingly applying stringent quality standards that have implications all the way down to the farmers in their production networks. It has been estimated that the percentage of income from the coffee network that is retained in the developed markets has gone up, while the proportion of income accrued by growers has declined (see also Table 4.1).

At the same time, the national coffee marketing boards in the exporting countries have either been eliminated or have retreated into a restricted overseeing role that has left them marginalized within coffee production networks (Figure 4.4). Buyer-grower relationships are now essentially 'arms-length' market connections, with prices being set by international commodity markets such as the Intercontinental Exchange in New York, the London International Financial Futures and Options Exchange, the Singapore Commodity Exchange (Robusta), the Commodities & Futures Exchange (BM&F) in Brazil (Arabica), and the Tokyo Grain Exchange (Arabica and Robusta). As a result of these changes to the interlinked international and national institutional contexts,

millions of coffee smallholders and farmers worldwide are left open to the full brunt of the global coffee market and its fluctuating prices. At its worst, this can lead to a situation where farmers receive less for their crop than it actually costs them to produce it. The example of coffee clearly shows how changing institutional frameworks can significantly affect all three of the other basic dimensions of a production network, namely the input–output structure (e.g. the bypassing of coffee marketing boards in exporting countries), geographical structure (e.g. the rapid growth of production in new producing countries such as Vietnam), and governance (e.g. the accumulation of power with roasting/processing firms from developed countries).

Overall, this section of the chapter has shown how production networks are organizational platforms that link distant producers and consumers together, within certain institutional contexts, across the world economy. The precise form taken by individual production networks varies greatly – both within and between different sectors of the economy – in terms of their structure, geography, governance, and institutional context. Understanding this variability and complexity empowers us in at least two ways. First, it is a vital step towards identifying the different *winners* and *losers* in the interconnected world economy. Such an understanding is crucial not just because it is about corporate entities such as lead firms and big buyers. Even more importantly, it is also about the people who work for these firms and the conditions under which they labour. Second, a fuller appreciation of GPNs can enable us to *change* how these networks function and how they are regulated/governed. We will look, for instance, at ethical consumption movements in Chapter 14.

4.4 Bringing Commodities Together: The Logistics Revolution

As the world economy becomes more interconnected through production networks generating vast ranges of commodities in different sectors, it becomes imperative for us to learn a bit more about *how* material inputs and commodities are moved from one place to another and from one organizational unit (e.g. factories) to another unit further along in the network (e.g. retail outlets). The role of logistics in facilitating the reorganization of economic activities on a global scale is critical here. Using powerful combinations of transportation and communications technologies to connect together globally dispersed elements of production networks has become strategically significant to both producers and consumers. *Logistics* refers to the process of planning, implementing, and managing the movement and storage of raw materials, components, and finished goods from the point of origin to the point of consumption. It encompasses a wide range of tasks, including shipping, planning, warehousing, inventory management, export documentation, and customs clearance. Crucially, it is not purely about the movement of goods but also involves the collection and

processing of knowledge about the distribution system. The growing level of integration and management of these services across the whole production network is described by some commentators as heralding a *logistics revolution*.

This revolution has involved bringing together the new transport and communications technologies with new process technologies that allow for enhanced speed, flexibility, and reliability in logistics provision. A broad shift has occurred from systems based on large stockpiles of components and products and infrequent deliveries to *lean distribution* systems based on the flexible delivery of smaller volumes of goods. In addition to the rise of containerized transportation, technological advances in four interrelated areas underpin these lean distribution systems:

- *Transportation terminals*: Significant technological changes have seen new terminals constructed that can operate at very high levels of turnover. Better handling facilities have led to significant improvements in throughput, and port facilities are also increasingly supported by inland terminals (e.g. the Prem Nagar Dry Port in Lahore, Pakistan) connected by high-capacity corridors.
- *Distribution centres*: Contemporary distribution centres (DCs) do not hold inventory for long and are characterized by very rapid turnover of goods. They are designed for throughput and have specialized loading and unloading bays and sorting equipment. The aggressive use of cross-docking, for example, allows goods to be brought in, selected, repacked, and dispatched to stores with limited, if any, time in inventory. Some of the constituent technologies of DCs are high-speed conveyors with advanced routing and switching capabilities, reliable/accurate laser scanning, and powerful software/IT systems.
- *Electronic Data Interchange (EDI)*: Integrated IT systems and common software platforms across the supply network allow the instantaneous and secure transmission of large quantities of data concerning sales, product specifications, orders, invoices, shipment tracking, and the like. Increasingly, however, the Internet has become the standardized platform through which such information is exchanged. Tight control is maintained through the use of bar codes and radio frequency identification devices (RFID) tags that allow materials to be tracked and traced throughout the production network.
- *E-commerce*: The advent of the Internet has initiated changes to logistics as part of a wider shift towards e-commerce. Both business-to-business and business-to-consumer relationships have been reworked with the rise of new kinds of electronic marketplaces and intermediaries such as Amazon, eBay, and Alibaba. Physical logistics infrastructures have not, however, become less important as a result; instead, a wide range of different approaches to fulfilling e-commerce orders have developed. Particularly challenging is the timely fulfilment of low-volume, high-frequency deliveries to customers' homes. To give one example, while some grocery retailers fulfil online orders direct from their DCs and warehouses, others prefer to collect products from their store shelves before delivering them (see more in Chapter 7).

Overall, and looking across these different technologies, what is apparent is that effective logistics provision necessitates a mastery of both *real* and *virtual* space.

Given the complexity of contemporary logistical requirements – and in particular the necessity of reliable, small, fast, and frequent shipments using both air and ground capacity – most large firms outsource such activities to dedicated service providers (Coe 2014; Gregson et al. 2017). Moreover, they often ask for a seamless and integrated service across many countries. Logistics providers connect these lead firms with their strategic partners, global suppliers, and final consumers by offering efficient, speedy, and flexible services to cover major activities in their entire production networks, such as production operation, information and inventory management, and just-in-time delivery. These logistics services certainly go beyond just supply chain management because logistics providers increasingly engage in what is known as ‘backward’ integration by helping lead firms establish and/or relocate their production operations and manufacturing facilities. Meanwhile, some logistics providers integrate ‘forward’ to reach out to final consumers on behalf of global lead firms and their strategic partners. These providers intermediate between lead firm demands for high quality and efficient distribution services and their strategic partners’ high speed and high-volume production arrangements. Logistics providers are thereby becoming more embedded in entire production networks spearheaded by global lead firms and are developing longer-term cooperative relationships that connect together these lead firms and their strategic partners and global suppliers in different places and territories.

Two sectoral examples of production networks are illustrative of the importance of highly efficient and integrated logistics systems. First, fast and efficient air cargo services are absolutely critical in moving components, part-assembled products, and finished goods through the complex electronics production networks of East and Southeast Asia. These services include not only the airport-to-airport carriage of goods but also a variety of land-based operations including the transport of products to and from airports and the management of warehouses adjacent to airports to maintain timely and efficient air transportation. For example, Qualcomm is the world’s leading supplier of mobile communications chips and processors in smartphones and shipped over 818 million such chipsets worth over \$15 billion to manufacturers of wireless devices in 2016 (<https://www.qualcomm.com>, accessed on 13 September 2017). Though these chipsets are typically manufactured by its specialized semiconductor suppliers in Taiwan, Qualcomm has chosen Singapore’s Changi Airport logistics hub to host its global centre for stocking and distributing these chipsets. Holding more than \$1 billion worth of chipset inventory, its Changi Airport centre works closely with its long-time logistics service provider DB Schenker to ship by air its MSM chipsets and Snapdragon processors to the manufacturing locations of its key customers such as Samsung, Apple, Huawei, Lenovo, and Xiaomi in China or other Asian destinations (e.g. Vietnam).

Second, temperature-controlled logistics operations are crucial to international trade in a variety of horticultural sectors such as fresh fruit, vegetables, and cut

flowers. These integrated cool chains utilize refrigerated warehouses and trucks to allow transport of perishable goods across thousands of miles in line with international quality and safety standards. The Swiss group logistics group Kuehne+Nagel, for example, uses refrigerated trucks, RFID technology, and a cold storage facility at Nairobi airport to ensure that cut flowers are shipped from Kenya to Amsterdam and other European destinations in perfect condition within 24 hours of being picked.

As a result, today's leading logistics firms have come a long way from their roots as basic road haulage and air/sea freight businesses, developing into complex, full-service TNCs. Large global operators have emerged through ongoing processes of merger and acquisition within the industry as firms have sought to achieve the necessary scale and scope to serve global clients. Three of the world's leading logistics firms are profiled in Table 4.3. The scale of the companies is immediately obvious: with several hundred thousand employees, bases in over 200 countries, thousands of operating facilities and turnovers in the tens of billions of dollars, by many measures they are among the world's largest companies. Also notable are their extensive transport fleets: in 2008 FedEx, for example, was operating 654 planes and over 80,000 land vehicles in moving 7.5 million

Table 4.3 The world's leading logistical providers – key facts and figures in 2016

	DHL	FedEx	UPS
Headquarters	Bonn, Germany	Memphis, Tennessee	Atlanta, Georgia
Revenue (US\$ billion)	68.5	60.3	60.9
Employees	508,036	400,000	434,000
Aircraft	>250	657	657
Vehicles	NA	160,000	114,000
Average daily shipments (in millions)	NA	13	19.1
Sorting/handling facilities (million sq. ft.)	248	40	35
Countries	220+	220+	200+
Facilities (offices, depots, etc.)	4,500+	4,000+	2,000+
Key divisions	DHL Express DHL Global Forwarding, Freight DHL Supply Chain	FedEx Express FedEx Ground FedEx Freight FedEx Services	UPS (Packages) UPS Freight UPS Supply Chain Solutions

Source: corporate websites and annual reports.

packages daily. By 2016, it had operated slightly more planes but it had doubled its land vehicles to 160,000 and moved almost double the number of packages daily (13 million). All three firms have different divisions reflecting the key business areas of packages, freight forwarding, and supply chain management services. As outsourcing trends continue, some logistics providers are taking over manufacturing-related tasks such as packaging, labelling, and inventory control; some have even started to carry out light assembly work for large customers, for example, in the consumer electronics industry.

Other logistical and supply chain service providers are also playing increasingly important roles in facilitating the global reach of production networks. One good example is Hong Kong-based Li & Fung Group, which offers a powerful combination of intermediary and logistics services to its clients in consumer products. Founded as a trading company in Guangzhou, China, in 1906, it is a provider of end-to-end supply chain solutions to major brands and retailers that encompass product design and development, raw material sourcing, factory selection, production management and quality control, in-country logistics, global freight management, and e-logistics. In 2016, the group generated \$16.8 billion in revenues from activities in its 250 offices and DCs located in 40 countries that employ over 21,000 staff and coordinated a sourcing network of over 15,000 suppliers (www.lifung.com, accessed 14 September 2017). While Li & Fung is a broadly based trading, distribution, and retail group, the lion's share of activity is accounted for by its export trading arm, Li & Fung Limited, which manages the entire supply chain for global brands (e.g. Disney, Levi Strauss, and Reebok) and retailers (e.g. Wal-Mart), with a particular specialty in footwear and apparel. As the brand-name apparel firms have increasingly given up their in-house manufacturing facilities and sourced instead from these large suppliers, the demand for supplier capabilities has grown much larger and more complex. They hence need the intermediary and logistics services of Li & Fung. Since the 2010s, however, the retail sector in the United States and Europe has experienced a long cyclical downturn. With the resurgence of internet retailers such as Amazon and the rise of fast-fashion retailers such as Zara, more and more of Li & Fung's customers prefer to work directly with factories in China and elsewhere in Asia, thereby reducing the need for such intermediaries.

4.5 Where Does a Production Network End? From Waste to Commodities Again

Our discussion has so far assumed a neat structure of production networks such that inputs, materials, actors, and institutions in these networks can be clearly identified and regulated. It is important to question, however, this understanding of a production network. The purchase and primary use of a commodity is often

seen to be the end point of a production network. While this assumption provides useful boundaries to our analysis, in reality many production networks are interconnected – the end point of one production network may well be the beginning of another. This circularity and interconnectedness of different production networks becomes much more obvious when we examine waste and/or the recycling of materials (e.g. smartphones as e-waste or coffee grounds as fertilizers). In general, processes of waste disposal and recycling have received little attention in academic studies and the popular media, and are assumed to be the final stage in a linear and sequential chain of commodity production. More recent research by economic geographers, however, has shown how processes of disposal and recycling can serve at the starting point for new production networks as materials move through complex circuits of use and reuse.

Two examples will be drawn upon here, both involving Bangladesh in South Asia where three-quarters of the world's merchant ships are dismantled and recycled as raw materials for industrial production. Each year, more than 800 large ships are sold by ship owners worldwide for \$1 to \$4 million each to cash buyers for dismantling and recycling. In the mid-2010s, an estimated value of US\$1.5 billion worth of ships was annually imported to Bangladesh for such recycling activity. Sitakunda Beach, a 20km stretch of shoreline just north of Chittagong, Bangladesh, is the world's largest ship-breaking centre (see Figure 4.5). Thousands of men working for over 30 ship-breaking yards literally take large ships apart piece by piece. There may be 20–25 ships being dismantled along this stretch of coast at any one time. The furnishings, fittings, and furniture are stripped out and then the ship itself is broken up, with the resulting plates and metal bars being taken to the nearby rerolling mills. In 2016, Chittagong recycled 230 ships, accounting for over 25 per cent of all 860 ships scrapped in the world. Its production networks generated 10 million tonnes of steel and provided up to 60 per cent

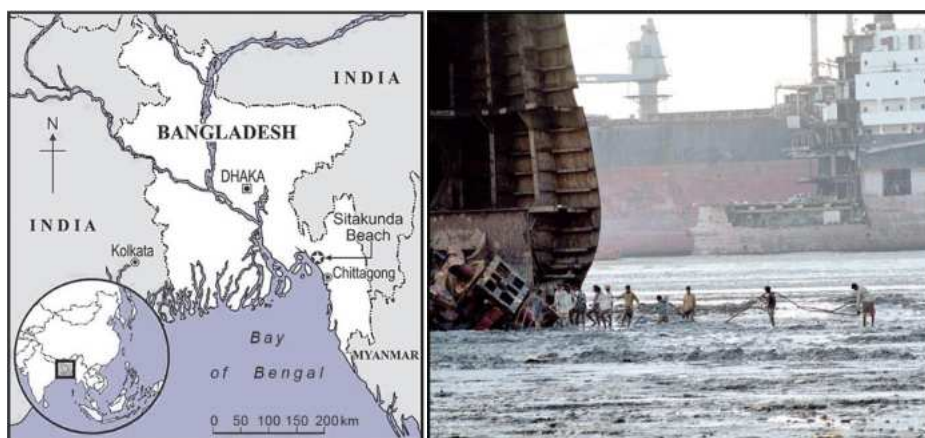


Figure 4.5 Shipbreaking in Chittagong, Bangladesh

Source: author's map; Photo reproduced with permission of Majority World/UIG via Getty Images.

of all the steel used in Bangladesh (<https://www.theguardian.com>, accessed on 3 January 2018).

This, though, is not the end of the story, but rather the beginning of others. For example, the steel is used in the reinforcing rods for the concrete being poured on building sites across the country, and the motors, boilers, and compressors are reconditioned and used in the export garment sector. The ship furniture is repaired, reconditioned, and renovated by over 70 furniture units in the town of Bhatiary on the Dhaka–Chittagong highway, in an industry employing an estimated 10,000 workers. This furniture then takes on a new life as a desirable commodity for the emerging middle classes of Chittagong and other Bangladeshi cities, accounting for up to 40 per cent of all reconditioned household goods sold in the country. The breaking up of the ship effectively serves as the starting point for a plethora of new production networks emanating outwards from the beach at Sitakunda. It also compensates for the lack of sufficient indigenous production in these commodities in Bangladesh, e.g. steel, furniture, paint, electrical equipment, and lubricants.

A similar story can be told about electronic waste, with an estimated 120,000 urban poor in Dhaka city being involved in the capture and creation of value from unwanted electronics products. Recycling can recover 95 per cent of the useful materials from a computer and 45 per cent of the materials in computer monitors. Money can be generated by a range of different processes including resale, refurbishing, remanufacturing, repair, and dismantling. In terms of remanufacturing, for example, old computer monitors can be converted into low-cost television sets and video game monitors. Even simply dismantling an old computer monitor and selling the constituent parts can generate profits of 20–100 per cent. Once again, the recycling of electronic waste marks the start of a new round of commodity stories and journeys. What both these examples serve to illustrate is that we perhaps need to reconsider the notion of the end point of a production network not simply as ‘waste’, but to think in more sophisticated ways about the ongoing transformations of materials in the different overlapping production networks that underpin the various products that we consume.

4.6 Summary

As an economic system, capitalism serves to conceal the intense connections between distant producers and consumers that underpin its worldwide operation. While labels may reveal the country of origin of a particular product, they tell us little about the working conditions under which it was produced. In this chapter, we have seen how the notion of production networks allows us to chart the geographical journeys taken by commodities, as they are transformed from initial raw materials and ideas into finished products and services, thereby serving to connect distant producers and consumers. The precise nature of the

journey taken will vary tremendously from commodity to commodity. Each and every commodity and its production network are delineated by a particular set of interrelated value-adding activities, a distinct spatial pattern, different combinations of modes of governance, and varying institutional contexts. Production networks are thus important – and inherently geographical – *organizational features* of the contemporary world economy; they are the hidden social relations that connect different places and territories and enable capitalism to extend its global reach. Conceptually, the GPN is an important integrative idea that allows us to reveal the interconnections between the many actors – TNCs, workers, consumers, capitalists, states, and environments – that we will consider in depth in Parts II and III of this book.

Careful analysis opens up the potential for understanding the nature and operation of those production networks. In this chapter, we have reviewed examples of the key actors and activities that constitute these networks, their distinctive geographical structures, their governance processes, and their institutional contexts. While lead firms are the key actors driving most GPNs, we have also recognized the importance of non-firm institutions and also network intermediaries such as trading companies and logistics service providers in putting together producers and their distant consumers in different places and markets. Finally, we have explored the difficulty of delineating when and where exactly a production network ends. When we consider the waste products from one particular network, we can reveal how they provide the material inputs for new production networks.

Overall, this chapter tells us how critical it is to understand the organization of production networks in order to appreciate how the fluctuating fortunes of particular places are often intimately connected to uncontrollable events in other distant places. In short, this network understanding helps us to see better the spatial flows and connections within the world economy. In Chapter 5 we move on to consider in more detail how global lead firms such as TNCs organize their networks and thereby shape the geography and operation of contemporary capitalist production systems.

Notes on the references

- Gereffi (1994) and Gereffi et al. (2005) are two seminal statements on the global commodity/value chain perspective. See Coe and Yeung (2015) for geographical critiques and Neilson et al. (2015) for an integrative discussion of scholarship on GVCs and GPNs.
- Coe and Yeung (2015) offer a comprehensive theory of GPNs and Yeung (2016) illustrates empirically how this theory can explain industrial transformation in East Asia. On the wider importance of production networks in economic geography research, see recent reviews in Coe (2012) and Yeung (2018).
- For debates on global outsourcing, see Dicken (2015) and Peck (2017). Phelps (2017) offers an interesting interpretation of the role of intermediation in the creation of ‘inter-places’ through actors in GPNs.

- For recent studies of industrial upgrading, see Barrientos et al. (2016), Liu (2017), and Pipkin and Fuentes (2017).
- For more details on production networks in different industries, see Bridge and Bradshaw (2017) for oil and gas, Ouma (2015), Bargawi and Newman (2017) and Havice and Campling (2017) for agro-food, Pickles et al. (2016) and Werner (2016) for apparel, and Horner and Murphy (2018), Pavlínek and Žížalová (2016), and Yang (2017) for automotive, pharmaceuticals, and electronics.
- For recent work on recycling in economic geography, see Gregson and Crang (2015), Lepawsky et al. (2017), Inverardi-Ferri (2018), and Lepawsky (2018).

Sample essay questions

- How does a production network approach enable us to (re)connect distant producers and consumers in an interdependent world economy?
- How and why are production networks governed in different ways?
- In what ways might the institutional contexts of a production network affect its structure and operation?
- What difference does logistics make to the nature and operation of production networks?
- When and where does a production network end?

Resources for further learning

- <http://www.globalvaluechains.org>: This site contains a wealth of conceptual and empirical material on GVCs.
- <http://gpn.nus.edu.sg>: The official website of the Global Production Networks Centre of the National University of Singapore.
- <https://www.sourcemap.com>: An open-source site that literally allows users to map supply chains and production networks for different products.
- <https://www.oecd.org/dev/global-value-chains.htm>: The Organisation for Economic Co-operation and Development (OECD) website contains good resources and material for the study of GVCs and GPNs in different industries and countries.
- <http://www.unido.org>: The United Nations Industrial Development Organization (UNIDO) website also offers a wide range of data and reports on different production networks and the potential they offer for economic development in different localities.
- <http://www.ico.org>: The website of the International Coffee Organization provides a range of information and statistics on the global coffee industry, and, in particular, its evolving regulatory structures.
- <http://www.shipbreakingplatform.org>: The website of a non-governmental coalition of 19 environmental, human rights, and labour rights organizations monitoring the dangerous pollution and unsafe working conditions in shipbreaking.

- <http://followthethings.com>: This website provides the good collection of the various news stories, documentary films, and artworks showing the hidden ingredients in our coffee, T-shirts, phones, and countless other commodities.

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PART II

KEY ECONOMIC ACTORS

CHAPTER 5

TRANSNATIONAL CORPORATIONS

How do they keep it all together?

Aims

- To question the claim that transnational corporations can easily control and manage their worldwide operations.
- To understand how these firms organize complex economic activities across the world economy.
- To explore the variety of organizational forms used by transnational corporations.
- To appreciate the various risks inherent to the global reach of these large firms.

5.1 Introduction

Founded on 28 May 1937 in Berlin, Germany, Volkswagen had the support of Adolf Hitler to manufacture what he called ‘people’s cars’ (or *Volkswagens* in German). Its now iconic Volkswagen Beetle was originally designed by Ferdinand Porsche, whose family-controlled firm Porsche Automobil is the largest shareholder of Volkswagen today. From its humble origins in making ‘people’s cars’, Volkswagen has grown into a multi-brand transnational corporation (TNC) that had become the world’s largest automobile firm by revenue in 2016, overtaking Japan’s Toyota. Its range of 12 brands includes many famous automobile names, such as Audi, Bentley, Bugatti, Lamborghini, and, of course, Porsche.

With worldwide revenue of €217 billion, total assets of €410 billion, and 626,715 employees in 2016, it now operates 120 production facilities across 20 European countries and a further 11 countries in the Americas, Asia, and Africa (<https://www.volkswagenag.com>, accessed on 8 January 2018). These impressive facts and figures about Volkswagen as a leading automotive TNC, however, mask the enormous complexity and potential risks inherent in its everyday management of these highly globalized operations.

In the same year as it became the world's largest automobile firm by revenue (2016), Volkswagen faced an unprecedented crisis of its own making. In what is commonly dubbed the 'diesel dupe' scandal, and which ran from late 2015 to 2017, Volkswagen was sued on 4 January 2016 for breaching the Clean Air Act by the United States Department of Justice on behalf of its Environmental Protection Agency (EPA). On 28 June 2016, Volkswagen reached a partial settlement agreement of \$14.7 billion in the United States that included a \$10 billion programme to buy back cars from consumers at pre-crisis prices. The crisis started when the EPA found software in the diesel engines of many Volkswagen cars that had operated as a 'defeat device' to pass the stricter and more rigorously enforced emissions laws in the United States. While the EPA had already opened an investigation into Volkswagen as early as May 2014, Volkswagen admitted the software irregularities only in November 2015. This scandal resulted in a recall of over 10 million of its diesel cars worldwide, including about half a million in the United States alone. On 11 January 2017, the Department of Justice charged six Volkswagen executives for allegedly involvement in the emissions cover-up since at least 2007. These were the former heads or senior executives of engine development, after-treatment, and quality and safety supervision. Volkswagen pleaded guilty and paid another \$4.3 billion to settle with several US federal agencies.

Volkswagen's 'diesel dupe' scandal vividly illustrates the enormous organizational complexity and operating risks confronting today's transnational corporations (TNCs) when they expand and operate internationally. The lack of adequate management supervision and control systems over its diesel engine development and quality inspection executives in Germany was the most fundamental lapse in this entire crisis. While these executives knowingly installed the 'defeat device' software to their diesel engines, investigations by the US federal agencies and Volkswagen's internal probe did not identify any wrongdoing at the top management level. It is clear that as the Volkswagen group expanded rapidly in the 2010s, its top management began to lose sight of its internal operational processes, reporting and control systems, and emissions testing practices. While the origin of this scandal was in Volkswagen's home country – Germany, it took the federal agencies of another country, the United States, to uncover and prosecute successfully various criminal offences. What we have here, then, is a case of a global firm finding it increasingly difficult to control and coordinate adequately its constituent elements (some not even directly owned) in different continents and regions, with potentially disastrous consequences. More broadly, though, many firms do

successfully coordinate their complex worldwide operations, some with hundreds of thousands of employees and turnovers the size of small national economies. How do they do it? How do most TNCs keep it all together?

This chapter adopts an economic–geographical perspective to describe and explain the spatial organization of these TNCs and their worldwide activities. A TNC is simply a business firm that controls and coordinates its own and/or other firms' activity in more than one country. This control and coordination is possible because a TNC owns its subsidiaries abroad or because it is a large buyer of outputs from foreign firms that serve as its suppliers. Through this perspective discussed in Chapter 1, we examine the *spatial patterns* of TNC activities. By their very nature, TNCs operate across national boundaries. As noted in Chapter 4, their transnational activities tend to be organized around *production networks* that span and connect different *places* and *territories*. Our focus on the TNC is deliberate because of its enormous corporate power, capacity for switching activity from one place to another, and extensive global reach.

The chapter has five main sections. Section 5.2 questions the false claim that global corporations are truly global in their reach. We argue that TNCs are often deeply local entities in the sense that they are constantly looking for new ways of organizing production in different places and territories in order to stay ahead of their competitors. In Section 5.3, we revisit briefly the nature of production networks in relation to different forms of organizing TNCs. The section reinforces our understanding of the diverse structures and organization of production networks introduced in Chapter 4. Illustrated with empirical cases from different manufacturing and service industries, Sections 5.4 and 5.5 seek to explain the internal and external divisions of labour in which TNCs are heavily involved. Section 5.6 considers the different risks and vulnerabilities faced by TNCs in globalizing their activities.

5.2 The Myth of Being Everywhere, Effortlessly

On its global website in mid-2011, Hongkong and Shanghai Banking Corporation (HSBC) claimed categorically that it was 'the world's local bank' (www.hsbc.com, accessed on 29 July 2011). As shown in Figure 5.1, HSBC's motto of a global bank having a local presence everywhere was central to a rebranding exercise that had started as early as in 2002 and remains today as one of the great success stories of modern marketing. HSBC's brand was consistently ranked as the number one financial services brand by industry bodies. Headquartered in London, HSBC was then one of the world's top five largest banking and financial services groups and the most globalized among them. Despite its origins as a British bank founded in Hong Kong and Shanghai in 1865 to finance the growing trade between China and Europe, HSBC had developed into a global corporation that seemingly operated in almost every corner of the global economy. HSBC's global reach is not just



Figure 5.1 HSBC – ‘The world’s local bank’

Source: reproduced with permission of REUTERS/Bobby Yip.

a matter of its geographical locations, however. More importantly, it gives substance to the myth of the *global corporation* that operates the same way everywhere. In this myth, there is no compelling reason why a TNC should be different in its organizational makeup or corporate behaviour in different places and geographical contexts. After all, TNCs are supposed to respond merely to competitive signals and cost changes in global markets. They are popularly conceived as having the managerial and organizational power to control and command easily their worldwide operations from one central corporate headquarters.

To many protagonists of this myth, TNCs are and operate the same everywhere. For over three decades now, well-known business gurus and consultants have denounced any possible influence of particular places on the formation and behaviour of TNCs. For instance, in his 2016 *Connectography: Mapping the Future of Global Civilization*, ‘global strategist’ Parag Khanna depicts a ‘borderless world’ driven by what he calls ‘metanationals’ – effectively stateless firms having legal headquarters in one country, corporate management in another, financial assets in a third, and administrative staff spread over many more. He concludes his polemical book by asserting that ‘there are no greater stakes than in the question of moving from a nations-borders world to a flow-friction world. We need a more borderless world... Borders are not the antidote to risk and uncertainty; more connections are. But if we want to enjoy the benefits of a borderless world, we have to build it first. Our fate hangs in the balance’ (Khanna 2016: 391).

Meanwhile, the media often celebrates the global convergence in corporate practices as a natural phenomenon. The central tenet of this popular myth is fairly simple: *global* competition drives *global* firms to become more and more alike in their *global* business practices and corporate organization. These ideas are also

circulated through the leading business schools at which managers are often trained (e.g. Wharton, Stanford, or INSEAD) and through the ideas of top management consultants that executives often use for strategic planning and decision-making (e.g. McKinsey, Boston Consulting, or Bain). For TNCs from different regions and countries, there is supposedly no holding back the tide of globalization; any irregular or idiosyncratic business and organizational practices will be erased by market pressures. In short, only a standardized and efficient form of business organization will survive global competition. From this globalist perspective, HSBC is expected to be no different from Citibank, Nike must be similar to Adidas, Samsung should operate like Apple, Toyota should resemble Ford, Amazon is like Alibaba, Huawei copies Ericsson, and so on.

This interpretation of TNCs is not inconsequential as it leads to all kinds of misleading conceptions about what TNCs do and how they organize their business operations on a worldwide basis. Often, this myth of the global corporation is underpinned by a false impression of its apparently enormous financial capital, massive productive capacity, huge levels of employment, and privileged access to technology and knowledge. In reality, most TNCs are indeed significant corporations that have the necessary capital to fund their international expansion. Their huge financial muscle often allows them to bargain hard with host country governments and global suppliers and to outcompete most, if not all, local competitors in host markets. Apple Inc., for example, famously hoarded a record \$261.5 billion in cash in July 2017, up from \$121 billion in 2012 (<http://investor.apple.com>, accessed on 19 September 2017) – and as such had more readily available cash than the governments of many reasonably sized countries. In developing countries that are desperately looking for ways to industrialize their economies, the dependence on TNCs for job creation means that TNCs have substantial corporate power to negotiate and bargain with these developing countries, particularly those characterized by weak or failed states (see Chapter 9). As TNCs gain experience through globalization, they develop relatively more sophisticated marketing and distribution know-how and technological activities in different host countries.

Upon closer inspection, however, the notion of the effortless global reach of TNCs does not really withstand scrutiny. Worldwide presence does not necessarily mean that organizing on a global basis is easy or the same everywhere. On the contrary, as TNCs become more globalized, they face greater difficulties in holding everything together within a single corporate entity, as the Volkswagen case aptly shows. TNCs not only need to configure carefully their functions and roles in order to adapt to different local economies and places, an idea known as ‘placing firms’ (Dicken 2000) and well exemplified in HSBC’s branding as ‘the world’s local bank’. Rather, their entry into diverse host markets also necessitates the design, implementation, and ongoing management of different organizational forms and processes, as we will see later in this chapter. To recover its major losses during the 2008/2009 global financial crisis, even HSBC was compelled to scale back its global operations by closing branches in several countries and

withdrawing from some key emerging economies. In late 2011, it underwent another major rebranding exercise and phased out its iconic motto because it could no longer legitimately claim to be ‘the world’s local bank’ with these closures and withdrawals. By the time of completing its sale of Brazilian business to Banco Bradesco in July 2016, HSBC had around ‘only’ 4,400 offices in 70 countries worldwide – a substantial decline from 7,500 offices in 87 countries five years earlier. Its former global head of marketing admitted that its earlier branding ‘became something that didn’t position us in the way in which was truthful about the nature of our business. We weren’t “the world’s local bank”. We didn’t have branches in places like Thailand anymore and so it sort of is slightly disingenuous to sort of claim to be it’ (<https://www.cnbc.com>, accessed on 19 September 2017).

The changing fortunes of HSBC illustrate well the myth of the global corporation being everywhere effortlessly in a world economy characterized by immense uncertainty and volatility. To make sense of the diversity of TNCs and their operations and to avoid falling prey to the polemical ‘borderless world’ discourse, we must seek answers to the following three highly important and yet interrelated questions:

- How do TNCs organize their diverse activities in different parts of the world? This helps us understand the spatial patterns and territorial dimensions of their activities and the role of these activities in connecting different places in the world economy.
- How do TNCs engage and interact with other firms when they operate internationally? This informs us about the role of TNCs as network builders who connect diverse actors and economies.
- How do TNCs keep everything together in the face of different risks and vulnerabilities? This brings us to the geographical concerns with place-specific disruptions and multi-scalar events that can impact severely on TNCs.

5.3 The Changing Organization of TNCs

To begin, it is useful to understand briefly the emergence of TNCs over time. While TNCs, as we define them, did exist in the era prior to World War Two or even earlier during the era of European empires (e.g. the British and Dutch East India Companies), their global significance and geographical reach have grown significantly with the onset of what is generally known as ‘internationalization’ since the 1960s. Most of today’s TNCs started as domestic firms headquartered in particular places of origin (e.g. Nike in Beaverton, Oregon; Alibaba in Hangzhou, China; or BHP Billiton in Broken Hill, Australia). Their businesses and operations used to be entirely domestic or home-based in terms of market orientation and geographical location. As their businesses grew over time and/or they gained experience through exports to international markets, these firms began to establish operations outside their home countries in search of new markets (e.g. consumers

or other firms), lower production costs (e.g. labour or land), or strategic assets or resources (e.g. technology, knowhow, or material inputs). Some of them also engaged with foreign firms to supply them specific products or services. In operating abroad through their own subsidiaries or foreign suppliers, these domestic firms became *transnational* corporations.

In the contemporary era, some domestic firms can become TNCs almost overnight when they market their products worldwide through technology-mediated platforms, such as e-commerce and internet-based trading. We can think of these as ‘born global’ corporations (e.g. eBay, Amazon, Alibaba, or Airbnb in their early days). Either way, today’s world economy is characterized by the presence of a large number of TNCs. In fact, the annual *World Investment Report* published by the United Nations Conference on Trade and Development (UNCTAD) regularly estimates that more than half of today’s world trade is conducted among the affiliates and subsidiaries of these TNCs. Indeed, more than 80 per cent of world trade takes place through global production networks (GPNs) coordinated by these TNCs, known as global lead firms in Chapter 4, and their enormous range of partners, suppliers, customers, and so on (<http://unctad.org>, accessed on 8 January 2018). However, not all firms involved in GPNs are TNCs. Some of them, such as generic suppliers or local customers, remain as domestic firms serving global lead firms by supplying to, or buying products or services from, their subsidiaries or partners in the same home countries – in short, these domestic firms do not operate across borders as *transnational* entities. By virtue of their role in controlling and coordinating GPNs, all global lead firms are necessarily TNCs. But not all TNCs must be involved in GPNs; some of them operate solely outside their home countries in search of market or resources (Coe and Yeung 2015; Dicken 2015).

More importantly, this globalization of domestic firms to become today’s TNCs is facilitated by *changing organizational practices* that enable domestic firms to develop new ways of engaging in international production. As shown earlier, the popular debate in the media on the global corporation has generally assumed that all value-added economic activities are conducted by the *same* TNC and its worldwide subsidiaries. But as we have detailed in Chapter 4, there are many kinds of firms and non-firm actors in a GPN (see Table 4.2) – some are TNCs (e.g. lead firms and strategic partners), while others may just be domestic firms (e.g. generic suppliers and local customers). In short, there are different ways in which a global lead firm (TNC) can organize its production network. These organizational practices can have major implications for understanding a particular TNC and the geography of its transnational operations.

For example, what if a TNC is only directly involved in some parts of the production network through *intra-firm* activities and develops *inter-firm* contractual relationships with other firms as part of a wider economic system? A distinction should therefore be made between at least two types of transactions in a typical production network:

- *Internalized transactions*: These are value-added activities that occur within the legal and organizational boundaries of a particular TNC. We use the term ‘hierarchy’ to describe these *intra-TNC* transactions as they are subject to the internal governance system of the TNC. For example, when Samsung Electronics’ mobile communications division ‘buys’ display panels, microprocessors, or memory chips from Samsung Electronics’ own semiconductor division, this is an internalized transaction within Samsung Electronics and it is not necessarily subject to the open market mechanism of price competition. This internalized transaction is also more likely to be subject to decisions made by the corporate headquarters.
- *Externalized transactions*: These are business relationships that exist between independent firms, some of which may be TNCs. We describe these *inter-firm* relationships as ‘markets’ because they are subject to pressures of price competition and other factors beyond the control system of a particular firm. For example, when Apple buys lithium batteries for its iPhones from its suppliers in China (e.g. ATL) or South Korea (e.g. LG Chem), this transaction is market-based, and both Apple–ATL and Apple–LG Chem are considered to have engaged in inter-firm transactions.

At this point, it might be useful to provide a fuller example of these two competing and yet very different TNCs – Apple Inc. and Samsung Electronics – and the geography of their highly intertwined GPNs for iPhones and Galaxy smartphones. First of all, Apple has a completely different approach from Samsung in organizing its iPhone production network (more details in Yeung 2016, chapters 4 and 5). While Apple is no doubt a giant TNC, it specializes in the research and development (R&D), marketing, and retail elements, leaving all manufacturing activities to its strategic partners and key suppliers that are often TNCs in their own right. In Figure 5.2, we list many of these key suppliers, including Samsung that supplies many crucial components and Taiwan’s Foxconn that assembles most of the iPhones in their mega factories in Shenzhen and Zhengzhou, China. The entire manufacturing segment of iPhones’ GPN can therefore be described as taking place through *inter-firm* transactions between Apple, as the lead firm, and its key worldwide suppliers from the United States, Europe, and East Asia.

On the contrary, Samsung is heavily involved in the in-house R&D, marketing, retail, and even most of the manufacturing of its Galaxy smartphones. Within Samsung Electronics, as much as 51 per cent or \$72 billion worth of all the display panels, processors, and memory chips made by its semiconductors division in 2016 went to the manufacturing divisions of its own mobile phone and consumer electronic operations. Its affiliates such as Samsung SDI, Samsung SDS, and Samsung Electro-Mechanics supply a wide range of key components that go into each Galaxy smartphone, from batteries to casing and mechanical parts. Samsung puts these parts together in its own mega-factories in Vietnam and China. Much

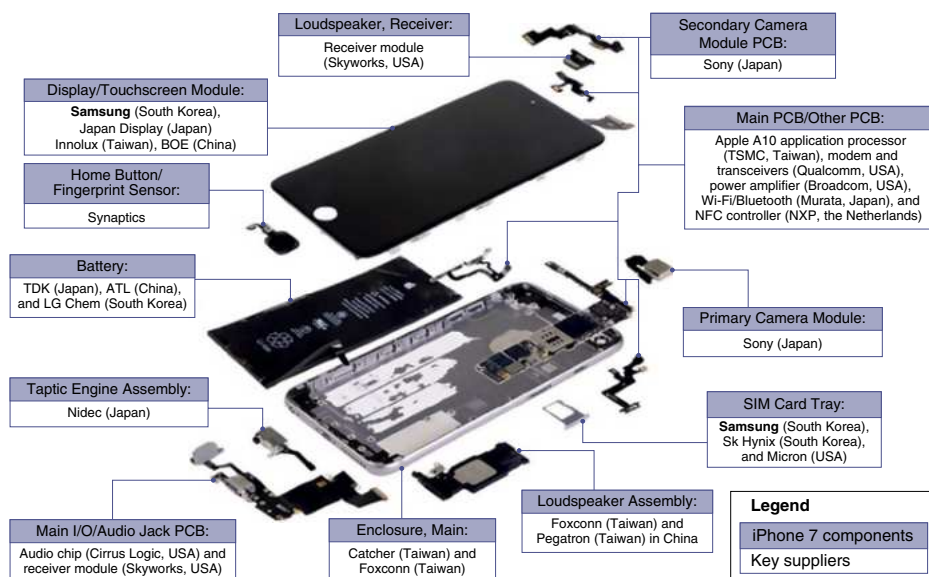


Figure 5.2 Apple iPhone 7 – its components and key suppliers

Source: based on teardown data on www.ifixit.com and IHS Custom Research for GPN@NUS, October 2016.

of the manufacturing of Samsung's Galaxy smartphones can therefore be deemed to take place through *intra-firm* transactions.

To sum up, there are many ways of organizing the production network of a particular product or service. Each TNC may be involved in many such products and/or services that can be analyzed through the GPN framework (see Chapter 4). In Sections 5.4 and 5.5, we look in turn at these different kinds of network relationships internal and external to the TNC.

5.4 Organizing Transnational Economic Activities 1 – Intra-firm Relationships

Based on the notion of the production network as a conceptual building block connecting different places and regions in the world economy (Chapter 4), we will now explore how TNCs *actually* organize their economic functions and divisions of labour internally (drawing extensively on the ideas in Dicken 2015, chapter 5). We argue that the internal organizational structure of TNCs often varies according to the different corporate strategies being pursued and their distinctive corporate cultures (see Box 5.1). To support our argument, we draw on different examples from both manufacturing and service sectors, and pay special attention to the role of geography in shaping diverse organizational formations.

KEY CONCEPT

Box 5.1 Corporate cultures

One of the principal differences between TNCs even from the same country of origin is the distinctive, firm-specific practices and behavioural norms that can be broadly conceptualized as *corporate cultures*. To go beyond the 'black box' or homogenizing conception of the TNC often found in mainstream economics and the media (see Section 5.2), we need to understand corporate cultures in two ways. First, we can consider how TNCs differ from each other because of their corporate cultures. For example, even among what most consumers consider to be similar retail giants, such as Wal-Mart and Costco in the United States, there are significant differences in the ways they treat their employees and customers (Ungar 2013). Second, we can open up the TNC by viewing it as an organization that is internally heterogeneous and contested by different intra-firm interest groups. These groups and actors enjoy varying degrees of power and access to resources, thus representing different subcultures within a TNC. It is worth noting that TNCs are becoming increasingly interested in understanding themselves in

terms of cultural and subcultural practices. Indeed, as self-knowledge becomes ever more critical in managing across borders, we can expect greater importance to be attached to the understanding of how corporate cultures and subcultures influence learning and competitive outcomes in today's TNCs. We can see corporate culture operating in four ways (see further in Schoenberger 1997; Fuller and Phelps 2018):

- *Ways of thinking*: This refers to the ways in which thinking in a particular company is directed, focused, or constrained.
- *Material practices*: When ways of thinking are converted into action, corporate culture is manifested in everyday business practices. In short, this relates to what a firm should be doing, and how it should be doing it.
- *Social relationships*: Implicit in ways of thinking and material practices are the relationships that exist within a firm between its various employees. These relationships form the social glue that holds a company together and enable a complex division of labour to work successfully.
- *Power relations*: The final dimension of corporate culture concerns the ways in which power is distributed and wielded within a company. Obviously any firm, even the smallest enterprise with just a few employees, has a hierarchy comprising those who make decisions and those who mostly just follow directives or prescribed work patterns. In a large firm, these power relations are complex and may comprise long chains of command. But the way in which power is allocated and exercised will vary across different firms.

The exact internal divisions of labour within TNC networks are often the combined results of organizational/technological forces and location-specific factors. Different parts of the TNC may have different locational needs, and their geographical outcomes have to be considered on a case-by-case basis. Generally, three main kinds of TNC organizational units can be discerned:

- *Corporate and regional headquarters*: These are the nerve centres of TNCs where important strategies are formulated and decisions are made. These decisions apply to a wide range of corporate functions such as finance and investment decisions, market R&D, product choice and market specialization, human resource development, and so on.
- *Research and development (R&D) facilities*: These activities are found in both manufacturing and service TNCs. R&D facilities encompass activities such as product or service development, new process knowhow and technologies, operational research, and the like. They provide important knowledge and expertise to keep the TNC competitive in the global marketplace.

- *Transnational operating units*: These units cover a wide range of activities from manufacturing plants and facilities to sales and marketing offices, fulfilment centres, and aftersales service centres.

We can use the example of BMW, a world-leading automotive TNC, to illustrate the complex spatial organization of intra-TNC networks (see Figure 5.3). First, *corporate headquarters* play a highly important role as the apex of management and financial control, and the processor and transmitter of market and production information within the TNC. Such corporate functions thus require a strategic location in major cities that provide access to high-quality external services (e.g. management consulting or advertising), and the presence of skilled labour and excellent infrastructural and communications support. BMW has been headquartered in Munich, the third largest city and a major business and financial centre in Germany, since its founding in March 1916 (<https://www.bmwgroup.com>, accessed on 8 January 2018). The ‘four cylinder’ BMW Group HQ building in Figure 5.4 was first opened on 18 May 1973 and has since become an iconic Munich landmark.

Second, the location of *R&D facilities* can be highly critical to the success of TNCs because of the importance of continuously developing new products and/or services. Yet, despite decades of partial internationalization of R&D activity, the most significant R&D activities of global lead firms tend to remain in their home countries (e.g. Apple in California’s Cupertino and Samsung in South Korea’s

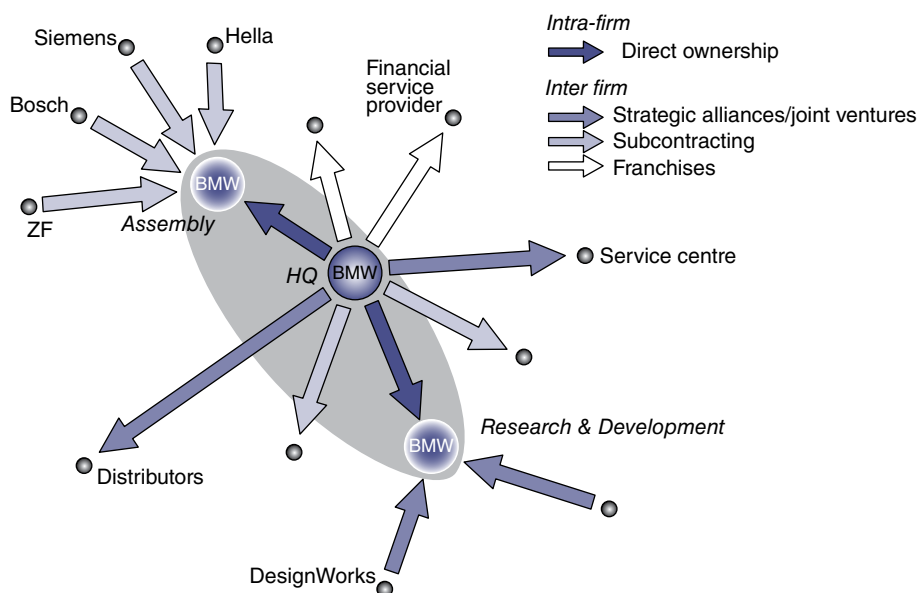


Figure 5.3 Different forms of organizing transnational operations

Source: the authors.



Figure 5.4 The BMW Group Headquarters tower in Munich, Germany

Suwon). Different types of R&D activities have significantly different locational requirements, however. In general, there are three main types of R&D activities:

- *Internationally integrated R&D lab*: This centre normally supplies the core technologies and knowledge for the entire TNC's operations worldwide. It is the brain behind a TNC's innovative products and/or services that sustain its competitive advantage and business success.
- *Locally integrated R&D lab*: These laboratories apply the fundamental technologies and knowledge developed in the internationally integrated R&D lab in order to develop innovative new products for the host market in which the lab is located. Such labs are oriented towards local market and regulatory requirements that are not necessarily found in other markets (e.g. many R&D centres of TNCs in China and India).
- *Support lab*: This is the lowest level of R&D facility and is primarily concerned with adapting parent company technologies for the local market and providing technical backup for its local manufacturing operations (e.g. most TNC labs in developing countries).

In the case of BMW, the most important R&D centres for the group's innovation, technology, and automotive IT research continue to be located in, or near to,

its Munich headquarters. It has also established other R&D labs such as DesignWorks studios in California and Shanghai to engage in creative work and consultancy services. A Tokyo lab supports the group's R&D efforts by tapping into the technological and innovative environment of Japanese automotive lead firms and develops products and features specific to Japan. In April 2012, BMW opened two innovation centres under one roof in Shanghai – a DesignWorks studio and a Connected Drive lab – in anticipation of Asia's role as the most rapidly growing and influential market for its group products. What is clear in the case of BMW is that there are different R&D locational patterns for different market orientations. The firm's Munich-based R&D activities cater to the global market, whereas its California, Shanghai, and Tokyo centres have more specific local/regional market and regulatory orientations.

Third, the most spatially mobile part of a TNC's GPN is often its *production operations* (with respect to either tangible products or services). Drawing upon Dicken (2015, chapter 5) in Figure 5.5, we highlight four main ways of organizing transnational production units among TNCs. Each cell in the figure represents a geographical unit, such as a country. The *globally concentrated production* mode in Figure 5.5a applies to some resource extraction and manufacturing industries. It does not generally work well for service industries, as services are much harder to export. An exception, for example, may be advanced producer services that can be exported through experts being sent from corporate head offices to serve clients worldwide (e.g. business consulting or legal practices). In this mode, a TNC can exercise tight control of its subsidiaries and tends to follow a spatial pattern of geographical concentration or clustering (see Chapter 12). Most TNCs start with this strategy in their early years, when they are likely to locate all production in their home countries and export to the rest of the world. Today, for example, we still find that Lexus' high-end models are entirely manufactured in Japan's Chūbu and Kyūshū regions and Ferrari's sports cars in Italy's Maranello, from where they are exported to the rest of the world. We can also think of the production of Bordeaux or Napa wines that is located in their home regions, respectively, in France and California.

The *host-market production* structure in Figure 5.5b is preferred where there are considerable barriers to trade in host countries, meaning that exports may not be the most efficient channel to reach host markets. In service industries, the demand for a local presence and/or regulatory requirements also explains why service TNCs, ranging from professional services (e.g. law and accounting) to consumer services (e.g. retailing and hotels), often set up operations in each host market. In this case, centralized corporate control of local subsidiaries and operations is likely to be rather difficult since considerable autonomy needs to be granted to each national unit or even regional units (such as HSBC in Asia vs. HSBC in the United States). This is because each operation in the host country is predominantly local in its business orientation and very sensitive to local demand. No sales occur across national boundaries as products and services are highly

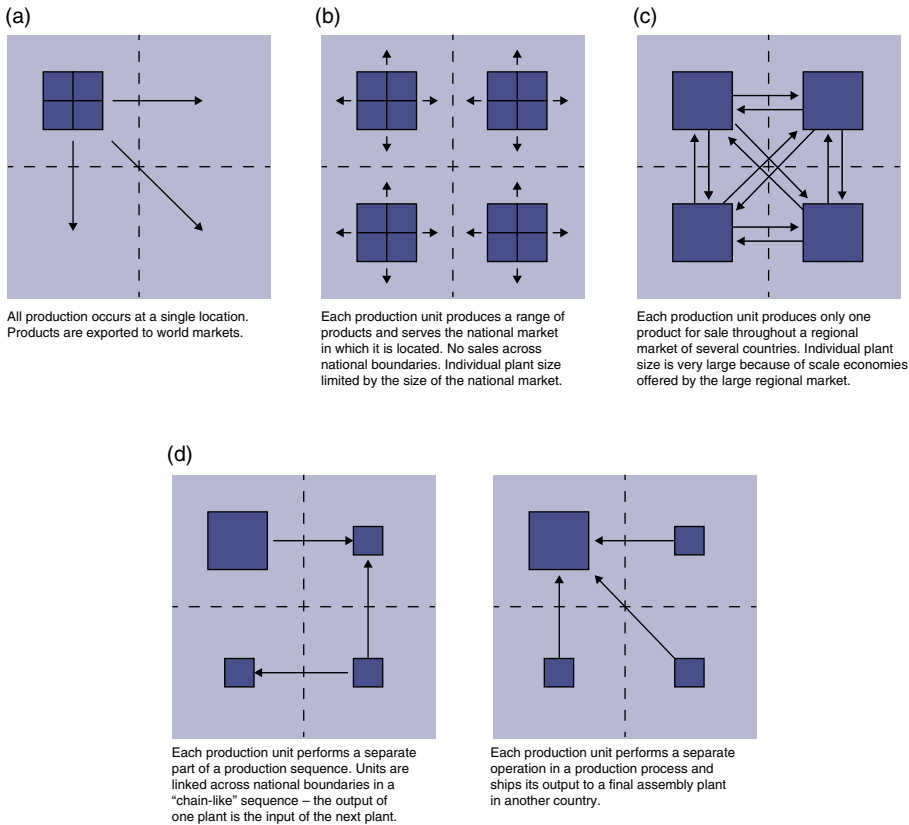


Figure 5.5 Spatial organization of transnational production units. (a) Globally concentrated production. (b) Host-market production. (c) Product-specialization for a global or regional market. (d) Transnational vertical integration

Source: Dicken (2015, figure 5.17). Reproduced with permission of Sage Publications.

customized to the tastes and preferences of local markets. In the food and beverage industries, such a host-market oriented production arrangement also tends to be prevalent. Coca-Cola, for example, operates a global system of more than 900 bottling and manufacturing facilities worldwide in 2017, comprising its own bottling operations in 17 countries and another 250 bottling franchises and partners (<http://www.coca-colacompany.com>, accessed on 8 January 2018).

The mode of *product specialization for a global or regional market* in Figure 5.5c tends to be applicable mainly to manufacturing industries – for example, the electronics, automobile, machinery, and petrochemical industries. As product mandates are given to production units within large territorial regions known as ‘macro-regions’ (e.g. Europe, the Americas, and East Asia), a great deal of autonomy rests with these operations supplying global or macro-regional markets. Hewlett-Packard’s regional headquarters in Singapore, for example, coordinates the global mandate for all HP printers. Its design and engineering teams

based in Singapore have a long history of excellence in designing and developing industry-leading imaging and printing products. After its split from HP Inc. in 2015, HP Enterprise upgraded its regional operations in Singapore in late 2017 to become the new Asia-Pacific and Japan headquarters. It planned to invest \$140 million over the period 2017–2022 to bring its facilities in Singapore – R&D, supply chain and logistics, marketing and sales offices, an Innovation Centre, and a 10,677 square foot Customer Experience Centre – into a single location to facilitate partnership and collaboration (<http://www.businesstimes.com.sg>, accessed on 24 September 2017).

Finally, the *transnational vertical integration* model in Figure 5.5d is the most developed and coordinated organizational structure, although it is very demanding in terms of management expertise and control in order to ensure that production responsibilities are well specified and coordinated across the TNC's global operations. Japan's Sony and Sharp, for example, have developed extensive production networks for their LED and OLED televisions that span Japan (core components), China (assembly and testing), and many Southeast Asian countries (modular components and subassembly; see Edgington and Hayter 2013). One of the main advantages of this transnational production mode is to exploit spatial variations in production costs. A TNC can establish offshore production for some of the more labour-intensive manufacturing operations. For example, many American TNCs in the electrical, electronics, automobile, textiles, and apparel industries have set up assembly operations in the *maquiladoras* in Mexico (see Box 5.2) to take advantage of the latter's lower production costs and tax exemptions under the North American Free Trade Agreement (NAFTA; see Chapter 10). As assembly work represents the most labour intensive and the least technologically sophisticated part of the production network, it can be easily transferred to low-cost locations. However, assembly operations in these overseas subsidiaries often have little autonomy to develop new products or market strategies. Instead, they tend to have to follow strictly the production plans set by the corporate headquarters.

In reality, we should note that these four organizational structures are ideal-typical modes of transnational production. The same TNC may use one or more ways of configuring its worldwide operations (see Box 5.3 for the BMW case). As a whole, even though the automotive industry depends on a large number of independent parts and component suppliers that may be large TNCs in their own right (e.g. Bosch, Continental, Delphi, Denso, Lear, and ZF in Table 4.2), major automobile manufacturers continue to organize their transnational production networks with a great deal of *vertical integration* of intra-firm activities in which the parent TNC, a global lead firm, directly owns and controls most of its operations within the GPN. Compared to other modern industries such as electronics and consumer products (e.g. apparel and shoes), tightly coordinated and controlled intra-firm networks are common within the automotive industry. This occurs despite the extensive use of independent suppliers by major automobile manufacturers through *inter-firm* relationships, the theme of Section 5.5.

CASE STUDY

Box 5.2 Transnational production in the maquiladoras of northern Mexico

The term *maquiladora* refers to an assembly plant in northern Mexico that manufactures export goods for the US market. They were instituted by the Mexican government in 1964 after it had started the Border Industrialization Program in 1961 to try and tackle the severe economic and social problems of the towns along the Mexico–US border. Under the auspices of the NAFTA, which was driven primarily by American interests and came into effect in 1994, US firms manufacturing in the *maquiladoras* can benefit from much cheaper labour costs in Mexico, virtually nonexistent taxes and custom fees, and less stringent environmental regulations. The *maquiladoras* have thus become offshore factory spaces for American firms and TNCs from other countries (such as Japan, Western Europe, and later, South Korea and Taiwan) selling into the US market. For instance, in January 2017, Mexico welcomed Japan's JFE-Steel, a provider of galvanized steel for the automotive sector, as the one thousandth Japanese investment project in Mexico.

The NAFTA deal has arguably benefitted American consumers and firms far more than low-wage workers in Mexico. *Maquiladoras* are prevalent in Mexican cities such as Tijuana, Ciudad Juarez, and Matamoros that lie directly across the border from the US cities of San Diego (California), El Paso (Texas), and Brownsville (Texas). Factories in the *maquiladoras* primarily produce electronic equipment, automobile parts, clothing, plastics, furniture, and appliances. In 2017, the employment in these *maquiladoras* across Mexico was close to 2.7 million. In Tijuana alone, more than 206,000 people were employed in some 600 plants. In Ciudad Juarez, the number of *maquiladoras* rose to 327 in February 2017 and there was even a labour shortage of an estimated 30,000 workers in 2016. Labour-intensive assembly work remains the cornerstone of employment in *maquiladoras*. Some *maquiladoras* might be considered sweatshops, employing young women for as little as 50 cents an hour, for up to 10 hours a day, 6 days a week. Many of these women are forced to live in shantytowns that lack electricity and water surrounding the factory cities. The future of the *maquiladoras* remains unclear, but it is tightly tied to both the strength of the US market and the evolving nature of the NAFTA framework. In 2018, at the initiation of US President Donald Trump's administration, a 'NAFTA 2.0' version called the United States–Mexico–Canada Agreement was negotiated, containing, for instance, measures to incentivize the domestic production of cars (data from <http://www.sandiegouniontribune.com> and <https://www.washingtonpost.com>, accessed on 21 September 2017).

CASE STUDY

Box 5.3 BMW’s multiple structures of transnational production

BMW has moved a long way from a vertically integrated production network based in Munich during its early days. It has now developed a highly sophisticated GPN comprising 31 production and assembly facilities in 14 countries spanning different regions in the Americas, European Union, and East and Southeast Asia (see Figure 5.6). While its plants in Germany’s federal states of Bavaria (Dingolfing and Munich) and Saxony (Leipzig) continue to manufacture the full range of BMW cars for the entire European Union market and beyond (Figure 5.5c), BMW has full production plants in the United Kingdom to serve its right-hand-drive market (Figure 5.5b) and to produce all Rolls-Royce models for the world markets (Figure 5.5a). It has also established full-scale, local production plants in the United States (Spartanburg) and South Africa (Rosslyn) to serve both continents. BMW’s key parts and components manufacturing takes place in its supplier and innovation park in Wackersdorf in Eastern Bavaria, Germany.

More specifically, BMW’s assembly operations in East and Southeast Asia resemble the transnational vertical integration mode in Figure 5.5d. In this mode of transnational production, its core parts and components are pro-

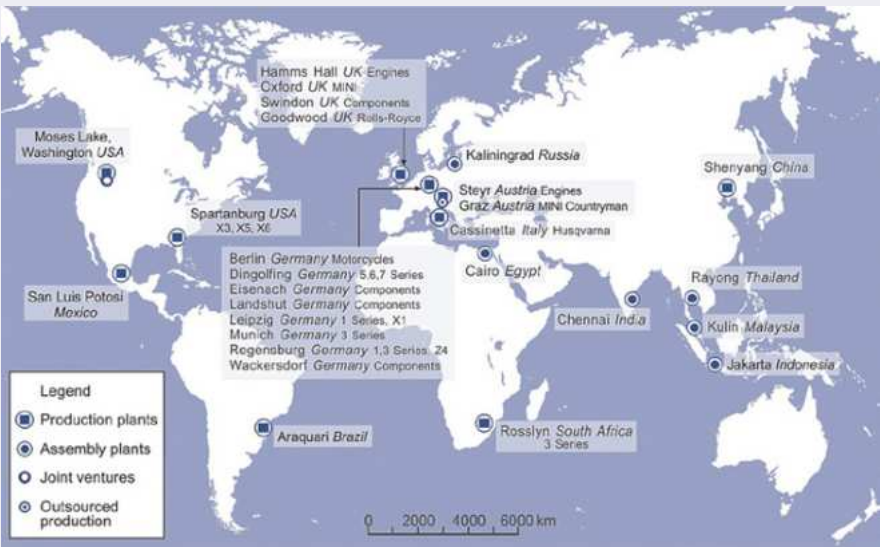


Figure 5.6 BMW’s global production networks

Source: courtesy of BMW.

duced in Germany and shipped to its plants in Asia for assembling with some local parts and components provided by either local firms or foreign suppliers that have followed BMW to these overseas assembly locations. Starting its first assembly production in 2000, the Rayong plant in Thailand became the first and only BMW plant worldwide in 2016 to assemble all three brands – BMW, Mini, and BMW Motorrad – for the Southeast Asian market. In China, BMW has operated an assembly plant in Dadong, Shenyang, with its joint venture partner (Brilliance China Automotive Holdings) since May 2004 to serve the rapidly growing Chinese market. Its experience in China represents a gradual shift from a transnational vertical integration mode (Figure 5.5d) to a host-market production model (Figure 5.5b) (all data from <http://www.bmwgroup-plants.com>, accessed on 8 January 2018).

5.5 Organizing Transnational Economic Activities 2 – Inter-firm Relationships

As products and services become increasingly sophisticated in their design, production, and marketing and sales, few TNCs today can do everything by themselves. A BMW sedan is made up of at least 20,000 parts, a HP notebook computer can be broken down into a few thousand parts, the iPhone shown in Figure 5.2 or a Galaxy smartphone has a few hundred components, and even an ordinary Nike sports shoe has at least 10–20 parts. In the service sector, an advertising project requires creative talents, financial consultants, technologists, public relations experts, and clerical workers among many others. Running a hotel business may bring together property owners, international hotel management companies (e.g. Marriott and Hilton), independent food and beverage operators, service suppliers, and so on. In short, most TNCs are simultaneously controlling their own intra-firm networks of foreign subsidiaries and affiliates at the same time as managing a dense web of inter-firm networks of independent contractors, suppliers, business partners, and strategic allies. When these intra-firm networks overlap with inter-firm networks in different geographical contexts, we can imagine each TNC as being part of a complex *network* of organizational relationships (see Figure 5.3 again).

In this section, we focus on three main modes of *inter-firm* relationships that lie somewhere between market (buying goods and services from independent firms) and hierarchy (intra-firm relations):

- Subcontracting and outsourcing
- Strategic alliances and joint ventures
- Franchising and cooperative agreements

Our focus on these three forms reflects both their significance in organizing TNC activities and in contributing to international trade and investment patterns. Here, we are interested in the various strategies and governance mechanisms through which TNCs engage in these inter-firm relationships. Our discussion focuses primarily on the international dimensions of these relationships. As in Section 5.4, we draw upon different empirical examples to illustrate our discussion.

International Subcontracting

Subcontracting (also known as outsourcing) involves engaging independent firms to produce goods or services specifically for the principal firm. When this subcontracting activity is given to supplier firms located abroad, it is known as *international subcontracting* or ‘offshoring’. There are two main types of international subcontracting: commercial and industrial. *Commercial* subcontracting occurs when the principal firm (the buyer) subcontracts most, and perhaps all, production to another firm (the supplier) in another country. At the beginning, the buyer may supply product specifications in what is called an original equipment manufacturing (OEM) arrangement so that the finished products are exactly the same as if the buyer (i.e. the original equipment manufacturer) had produced them. Over time, the supplier may learn and develop new technology and expertise so that it can improve its value-added activity by engaging in some original design manufacturing (ODM) for its customers. In this latter mode of commercial subcontracting, the supplier will discuss product specifications with the OEM buyer and design and make the product in question to meet those technological and marketing requirements. For OEM buyers that subcontract their entire production, they will specialize in R&D, brand management, and the marketing and/or retailing of products bearing their brand-name (e.g. Apple and The Gap).

This mode of international commercial subcontracting is most common in today’s electronics industry, particularly the manufacturing of personal computers, consumer electronics, and household appliances which are generally no longer manufactured by global lead firms mentioned in Table 4.2 whose brand-names appear on the product. Instead, a large group of independent contract manufacturers or electronics manufacturing service (EMS) providers are designing, manufacturing, and sometimes distributing for these brand-name TNCs. These independent subcontractors are mostly based in newly industrialized economies and emerging developing countries in East Asia, whereas the brand-name TNCs are still mostly from advanced industrialized economies.

Take the example of notebook or laptop personal computers. Table 5.1 reveals that in 2015, the top-seven global brand-name TNCs were subcontracting the production of large proportions of their notebook products through outsourcing agreements with leading Taiwanese ODM manufacturers such as Quanta, Compal, and Wistron. These three relatively unknown Taiwanese ODM manufacturers alone accounted for some 64 per cent of the total worldwide notebook

Table 5.1 Subcontracting of the world's top notebook brand-name companies to top-three ODM firms from Taiwan, 2015

Global lead firms in notebook PCs	Lenovo	Hewlett- Packard	Dell	Apple	ASUS	Acer	Toshiba	Top-7 total
2015 Shipment (million units)	36.3	35.0	21.9	17.9	15.4	13.7	6.8	147.0
Market share (%)	20.4	19.6	12.3	10.1	8.7	7.7	3.8	82.5
In-house production (%)	53.1	2.1	0.0	0.0	0.0	0.0	6.9	13.9
ODM1 (%) – Quanta	14.3	27.5	17.3	74.9	18.1	30.2	17.7	27.3
ODM2 (%) – Compal	15.2	9.5	59.0	0.0	26.0	34.2	2.8	20.9
ODM3 (%) – Wistron	11.7	26.7	19.1	0.0	12.1	26.6	0.0	15.8
Top three share (%)	41.2	63.6	95.4	74.9	56.2	91.0	20.5	64.0

Source: data from IHS Custom Research for GPN@NUS, October 2016.

shipments of 147 million units by these seven brand-name TNCs. These figures included notebooks manufactured by Taiwanese ODM-owned production facilities in China's Chengdu (Dell, Lenovo), Chongqing (HP and ASUS), Kunshan (HP, Lenovo), Shanghai (Apple), Xiamen (Dell), and Wuhan (Dell). In 2016, the revenue of these top-three ODMs was, respectively, \$29.6 billion (Quanta), \$25.3 billion (Compal), and \$20.4 billion (Wistron). As Taiwan is rapidly emerging as the world's leading centre of electronics manufacturing, the same phenomenon of subcontracting to Taiwanese companies is occurring with electronics products such as tablet computers, computer monitors, flat panel and LED televisions, mobile telephone handsets, and Internet of Things (IoT) devices.

To illustrate how this international commercial subcontracting works, we can look at the example of a customized Apple notebook computer (Yeung 2016: 99–101; see also Dedrick et al. 2010 for a case study of the HP nc6230). A customer in the United States or France may order the latest model of Apple's MacBook or MacBook Pro via Apple's website or through a retail channel (e.g. a local distributor). This order will be received by Apple Inc., the brand-name lead firm, which has subcontracted the notebook production to a system manufacturer or ODM provider in Taiwan (e.g. Quanta, Pegatron, or Hon Hai Precision). Upon receiving its daily order from Apple and other brand-name customers, Taiwan's Quanta will regularly place orders of parts and components with its key suppliers, such as Intel

(central processing units), AMD (graphics processing units), Qualcomm or Broadcom (WLAN communications chips), Seagate or Samsung (hard disks or solid state drives), Micron or SK Hynix (memory chips), Delta (power supplies), LG or Samsung (display panels), Catcher (unibody metal casings), and so on.

Many of these critical parts and components are manufactured outside China, in plants and factories owned and operated by these TNC suppliers (e.g. Intel in the United States or Ireland; Micron in the United States or Singapore; LG, Samsung, and SK Hynix in South Korea; and Delta in Thailand) or by their foundry semiconductor manufacturers (e.g. GlobalFoundries for AMD in Germany, Singapore, or the United States; TSMC and UMC for Qualcomm or Broadcom in Taiwan and Singapore). As Quanta has already moved its entire notebook manufacturing facilities to Kunshan, Shanghai, Chongqing, and elsewhere in China, it will ask its key suppliers to ship parts and components directly to its warehouse and assembly plants in Kunshan and Shanghai (see Gao et al. 2017 and Yang 2017 for the case of notebook manufacturing in Chongqing). Once the customized MacBook or MacBook Pro is assembled in China, it will be sent via express service to the customer in the United States, France, or elsewhere. Typically, this process – from the initial order by the consumer to receipt of the finished product – takes no more than seven days within the Asia-Pacific region and 14 days worldwide. This manufacturing system is a form of the highly integrated production shown in Figure 5.5d: in short, the Apple MacBook/MacBook Pro embodies a complex geography of global production and inter-firm trade of parts and components spanning many different locations in the world economy.

Unlike commercial subcontracting, *industrial* subcontracting takes place when the suppliers carry out only OEM production on behalf of its key customers – that is, manufacturing only. Industrial subcontractors do not engage in ODM and other value-added services (e.g. logistics and distribution) on behalf of their customers. In the footwear industry, such a mode of outsourcing activity by TNCs is very common. Nike's industrial subcontracting practices provide a well-known example. Headquartered in Beaverton, Oregon, the company focuses on the design, R&D, marketing, and retailing of sports products. It is the world's largest and leading athletic brand, with revenue of \$34.4 billion in 2016–2017. Apart from manufacturing its Air-Sole cushioning materials and components in two wholly owned facilities in Beaverton, Oregon, and St. Charles, Missouri, Nike outsources all the production of its thousands of products to contract factories worldwide: as of August 2017, Nike had contracts with 565 factories in 42 countries that employed 1 million workers (all data from <http://manufacturingmap.nikeinc.com>, accessed on 22 September 2017).

Nike's global success and unique international outsourcing model has come under sustained scrutiny over the past two decades from the media and civil society activists concerned about sweatshop and child labour. NGOs and other activists targeted Nike in particular for three reasons: complaints and exposés had highlighted poor working conditions for workers in its suppliers' factories; its

high profitability and thus the apparent affordability of implementing improvements; and its ‘demonstration effect’ as an industry leader. As a result, in 2005, Nike became the first TNC in its industry to disclose its list of contract factories in the United States and worldwide. Asian factories have been a particular focus of attention (Lund-Thomsen and Coe 2013). By August 2017, Vietnam’s share of Nike’s industrial subcontracting had expanded substantially and it hosted 78 of Nike’s supplier factories, that employing 38 per cent of its global workforce. This compares to shares of second and third largest host countries of Indonesia (39 factories and 192,387 workers) and China (142 factories with 185,572 workers).

The *geographical implications* of the above two forms of international subcontracting are highly variegated and dynamic over time. First, international subcontracting may lead to the development of highly localized manufacturing clusters in developed economies (see full discussion in Chapter 12). Second, it has led to the development of enclaves of export-oriented production in developing countries – a geographical phenomenon described in Box 5.4 as the new international division of labour (NIDL). These export enclaves or satellite production clusters host labour-intensive manufacturing activity that forms an integral part of the GPNs of most TNCs (Phelps 2017). Third, extensive macro-regional integration can take place if the production networks of TNCs span different countries within the same region and yet strong inter-firm relationships serve as the thread to stitch together different places within the region. This geographical process of macro-regional economic integration works in relation to the presence of TNC production networks in North America, the European Union, and Southeast Asia (see more in Chapter 10). Finally, the dynamics of outsourcing in GPNs can change over time. Recent advancements in production technologies (e.g. greater use of robots and artificial intelligence), energy production (e.g. lower electricity cost), and logistics support (e.g. reduced global shipping and freight costs for relocation) have allowed for the possibility of what might be termed ‘reshoring’ – the relocation of *some* manufacturing activities from foreign suppliers or subsidiaries back to home countries.

Strategic Alliances and Joint Ventures

Apart from subcontracting, inter-firm networks can also be formed when TNCs engage in strategic alliances and joint ventures with other firms. These two organizational forms are different from mergers and acquisitions (M&As). Firms participating in strategic alliances or joint ventures do not experience ownership change and thus remain independent of the alliance or joint venture partner. In contrast, firms in M&As necessarily undergo ownership change. Some well-known merged TNCs are Royal Dutch Shell (oil), BHP (formerly BHP Billiton, mining), Fiat-Chrysler (automobiles), GlaxoSmithKline (pharmaceuticals), Unilever (consumer products), Time Warner (media and entertainment), and PricewaterhouseCoopers (PwC) and KPMG (accounting).

KEY CONCEPT

Box 5.4 Transnational corporations and the new international division of labour

During the nineteenth century, the world economy was dominated by the industrialized economies of Western Europe and the United States that specialized in the manufacturing of goods on the basis of raw materials extracted from developing countries. Supported by imperialism and colonial relations, this ‘traditional’ or ‘old’ form of international division of labour prevailed until at least the 1960s. From the 1960s onwards, and with the onset of the internationalization of production, a NIDL supposedly started to emerge in which certain developing countries took on new roles within the world economy through the investment strategies of TNCs. The NIDL thesis described the establishment by European, North American, and Japanese TNCs of a system of GPNs based on establishing labour-intensive export platforms in so-called newly industrializing economies (NIEs). The NIDL theory, proposed most explicitly by Fröbel et al. (1980) in their original study of apparel manufacturing, argued that falling rates of profitability in manufacturing production in core countries were combining with market saturation and underconsumption as market growth lagged behind productivity increases. In response, TNCs used their global reach to relocate production from the industrial core to low-cost production sites in the NIEs; the manufactured goods were then in turn exported back to core markets from the offshore branch plants. Crucially, the system depended on new ICT and process technologies that allowed the breaking down of production into different parts, thereby creating tasks that often could use young and female semiskilled or unskilled workers in the periphery. While the more capital-intensive parts of production processes continued to be located in advanced industrialized economies, NIEs across South America, Eastern Europe, Africa, and Asia became bases for labour-intensive phases of manufacturing. The appearance of designated export processing zones (EPZs), often offering a range of tax incentives, from the 1960s onwards were the most obvious physical manifestation of the emerging NIDL. The reality of the world economy today, however, reflects overlapping divisions of labour, some of which are newer than others. The geographies of these divisions of labour are necessarily more complicated than the simple core-periphery model underlying the NIDL thesis. To give one example, the rise of GPNs driven or heavily shaped by Asian TNCs challenges such a simple reading. For more details, see Starosta (2016) and Haberly and Wójcik (2017).

In some fiercely competitive industries, firms tend to engage in a very specific type of inter-firm collaboration: *strategic alliances*. Only some business activities are involved in these function-specific strategic alliances, and no new equity capital will be involved. This cooperative approach to competition can be thought of as ‘coopetition’, a mix of cooperation and competition. In the semiconductor and pharmaceutical industries, for example, strategic alliances are common because of intense competition, the high costs of R&D and new product development, and the rapid rate of technological change. These pressures raise the investment stakes in these two industries beyond the financial means of any individual TNC. For example, a new semiconductor wafer or chip-making fab or a new drug development could easily cost over \$2 billion in 2017. Cooperation through strategic alliances becomes the most effective means of competing on a global basis. Many of the TNCs in these strategic alliances are mutual competitors in some product segments and allies in other. In semiconductors, several major semiconductor firms have entered into strategic alliances with leading automobile firms to develop autonomous car technologies (e.g. Tesla–NVIDIA alliance in 2016 and BMW–Intel–Mobileye in 2017).

In service industries, function-specific strategic alliances are also common. Most major airlines, for example, tend to participate in one of the following strategic alliances: Star Alliance, Oneworld, and SkyTeam. Through these alliances, participating airlines can, for example, enjoy code-sharing in their computer reservation systems that allows for cross-loading of passengers and thus reduces the excess capacity of any individual airline. Founded in 1997, the Star Alliance network is the world’s leading airline alliance, with the highest number of member airlines, daily flights, destinations, and countries flown to (www.staralliance.com, accessed on 8 January 2018). The basic idea of Star Alliance is complementarity in operations, connections, and global reach. By sharing codes and customer loads, the 28 members of Star Alliance can offer their 690 million passengers the convenience and possibility of global connectivity, a smooth travel experience, and access to over 1,300 airports in some 191 countries. The combined revenue of member airlines reached \$174 billion in November 2016. Another benefit of this strategic alliance is that it affords antitrust immunity to its member airlines in markets that are subject to anti-monopoly regulation (e.g. United Airlines in the United States). Apart from convenience in booking, studies have shown that cooperation among member airlines in Star Alliance could lead to up to 27 per cent reduction in inter-airline ticketing fares.

In the retail industry, Wal-Mart, already the world’s largest retailer and with its own buying office in China, decided on 28 January 2010 to enter into a strategic alliance with Hong Kong-based Li & Fung (see Section 4.4) in order to tap into the latter’s global sourcing expertise to cut costs, improve quality, and spread its own global exposure. As part of its global sourcing consolidation, Wal-Mart bought about \$2 billion worth of goods in the first year through a new sourcing unit known as Direct Sourcing Group (DSG), established by Li & Fung and

dedicated to servicing Wal-Mart's global sourcing needs. While Li & Fung had been supplying Wal-Mart as a wholesaler, this was its first direct-sourcing deal for the global giant. In this strategic alliance between a global giant and one of the world's largest supply chain managers, both parties benefit from economies of scale in global sourcing and firm-specific expertise: Wal-Mart in retailing (see also Chapter 7) and Li & Fung in sourcing and logistics (Chapter 4.4). In June 2016, Wal-Mart entered into another strategic alliance with JD.com, China's largest e-commerce company by revenue, in order to serve better Chinese consumers through a powerful combination of JD.com's E-commerce and Wal-Mart's retail capabilities. In August 2017, Wal-Mart announced a strategic alliance with Google to redefine and improve the buying experience for consumers around the world and to challenge Amazon's massive dominance in the e-commerce market (all data from <http://news.walmart.com>, <http://www.reuters.com>, <https://www.nytimes.com>, accessed on 22 September 2017).

When two or more firms decide to establish a separate corporate entity for a specific purpose, equity *joint ventures* are often the organizational outcome. Here, partners need to invest new equity capital in the joint venture. Sometimes, a partner may use other assets (e.g. land or goodwill) to substitute for capital investment and this is known as a cooperative joint venture. As joint ventures are formed for partners to share financial risks, to benefit from inter-firm synergy, and to develop new products or markets, they are a popular form of inter-firm relationship that can be found in most industries. In some developing countries, however, government regulations requiring a minimum shareholding to be held by host-country citizens or firms further promotes the use of equity or cooperative joint ventures as the preferred entry mode for foreign TNCs. Clearly, many automotive TNCs engage in joint ventures with each other. As noted in Box 5.3, BMW's manufacturing operation in Shenyang, China, is a joint venture between the BMW Group and Brilliance China Automotive Holdings Ltd., and produces vehicles solely for the China market. In South America, Africa, Eastern Europe, and Southeast Asia, equity joint ventures are also very common among foreign automobile manufacturers seeking to develop new markets.

Just like international subcontracting, the geographical implications of international strategic alliances and joint ventures are manifold. We are witnessing the rise of project-based teamwork in many industries in which strategic alliances occur. As face-to-face interaction within these project teams tends to take place between cities and science hubs located in different countries, certain kinds of *places* become more strongly interconnected in the world economy to the exclusion of others. For example, in the semiconductor industry there are intense transnational flows and interactions between Taiwan's Hsinchu and California's Silicon Valley (see case studies in Yeung 2016, chapter 5). As most of the activities in these alliances and ventures concern high-value-added projects, places hosting these activities become more prosperous and competitive (e.g. R&D clusters in Europe and North America). Spatial uneven development is often exacerbated.

Franchising and Cooperative Agreements

Franchising refers to an organizational form in which the TNC owner of a registered trademark or intellectual property rights agrees to let a franchisee (often outside the home country) use that trademark or rights provided that the franchisee follows the guidelines and requirements laid down by the TNC. There is thus an inter-firm relationship established between the franchisor (a TNC) and the franchisee (a local firm or another TNC). Franchising is particularly common in service industries oriented towards final consumers. Familiar examples are Burger King, KFC, and McDonald's fast-food restaurants (see Figure 5.7), Subway sandwich and Starbucks coffee outlets, 7-Eleven and Circle K convenience stores, Anytime Fitness outlets, GNC vitamin and supplement stores, and InterContinental, Crowne Plaza, and Holiday Inn hotels. We are all aware of the global presence of these registered trademarks because of the extent to which these TNCs have used franchising as a preferred method of internationalization. Their outlets in many countries are *not* necessarily owned by these TNCs, but rather are often operated by local franchisees.

This form of inter-firm network is particularly popular in the consumer service sector for two key reasons. First, most service TNCs may not have sufficient



Figure 5.7 Fast-food franchise chains in the Caribbean

Source: the authors.

capital or may not want to incur the substantial costs of expanding into many markets at the same time. This often occurs in the retail and fast-food industries. Second, some service TNCs may not want to be exposed to risks arising from unfamiliarity with local cultures, social relations, and the practices of local customers. Franchising provides a convenient and lower-cost alternative for service TNCs to have a local presence through their franchisees, who are likely to be local entrepreneurs familiar with host-country markets.

Moreover, cooperative agreements encompass a wide range of inter-firm relationships that range from licensing agreements to non-equity forms of cooperation. These agreements can be found in both manufacturing and service industries. In the manufacturing sector, a TNC may decide to license out its patented technology in return for royalty payments. For example, through owning the DVD format patents, Philips (the Netherlands), Sony (Japan), Pioneer (Japan), and LG (South Korea) will receive royalties for every DVD player manufactured by their licensees (<http://www.ip.philips.com>, accessed on 22 September 2017). In service industries, for example the hotel sector, two firms may come together to form a cooperative agreement for training activities, combining their training teams to offer human resource development programs to their combined employees. Each can reap the benefits of the combined human resource practices of both hotels.

Through both franchising and cooperative agreements, TNCs can rapidly internationalize their market presence and promote the consumption of their products and/or services in these host markets (see Chapter 7 for more on consumption). In the retail and restaurant business, the global presence of certain restaurant outlets (e.g. McDonald's and KFC) and consumer products (e.g. Coca-Cola) has often been taken as a direct evidence for the globalization of economic activity, known variously as 'McDonaldization' or 'Coca-Colonization'. The global presence of TNC activities leads us to an obvious question: Are there any risks that may limit the spatial reach of these giant corporations?

5.6 The Risks of Global Presence

Driven by the competitive dynamics of global capitalism, lead firms and their suppliers are confronted with a greater sense of uncertainty and unpredictability in a world economy characterized by rapid technological shifts, massive production fragmentation and international outsourcing, and the rise of new markets and competitors. As production networks integrate more and more localities and economies into these competitive dynamics, the sort of capitalist 'see-saw' we discussed in Chapter 3 operates through these production networks and thus impacts on all localities and territories, albeit in highly uneven and sometimes unpredictable ways. Managing these challenges requires a fuller understanding of changing risk circumstances associated with global interconnectedness and the worldwide presence of TNCs. Here, we examine how specific elements of this uncertainty and unpredictability are manifested in different forms of risk confronting TNCs and their GPNs. Risks are essentially uncertain conditions that can

be estimated, calculated, and therefore managed through mitigation strategies. While clearly firms cannot know unknowable conditions in advance (uncertainty), some conditions have a certain chance of occurrence (risk) and firms can mitigate them by doing something about it. The impact of such risk on different actors varies, however, and the geography of this impact is also highly variable across the different locations and regions 'plugged into' specific GPNs.

We identify in Table 5.2 five forms of risks that can impact severely on TNCs' global reach: economic, product, regulatory, labour, and environmental. In an interconnected world economy, risk is generally produced not by an individual actor (e.g. a firm) and is therefore a collective behaviour that affects a large number of actors, localities, and economies. A risky condition in one place can be transmitted through these networks and its effects can have a much broader geographical scope (more places affected) and longer temporal dimension (enduring effects). Geographically, these risks can spread across the entire range of geographically dispersed actors involved in a particular production network. *Economic risks* are perhaps the most visible in this interdependent world economy. Major shifts in technologies and financial crises can profoundly impact on existing production networks and localities involved in them. The rise and fall of RIM's BlackBerry and Nokia in the smartphone sector, for example, has huge implications for their employees and governments in respective localities and regions in Canada and Finland. Their market decline has led to reduction of employment, shutting down of R&D facilities and factories, and loss of tax revenue in their home regions. These effects are also spread to their production networks throughout the world.

Product risks can be associated with poor quality or safety standards of commodities and can influence producers and consumers worldwide for a long period of time. As increasing level of foodstuffs are sourced internationally, a major product hazard can lead to serious consumer panics or shortages in a large number of localities and territories that in turn impact severely on the revenue and profitability of TNCs specializing in these products. Moreover, *regulatory risks* often affect all actors in the same industry but can still be very disruptive to actors in localities far away from the territories affected by the regulation. The most common regulatory risks are those directives issued by national and international authorities that directly affect production networks, such as the prohibition of specific material inputs (e.g. chemicals) or practices (e.g. child labour) or protectionist trade policies. These often lead to substantial restructuring or termination of existing production network arrangements that impact both TNCs and their suppliers.

Finally, *labour* and *environmental risks* are perhaps better understood because of massive attention to them by the media and civic society organizations (see Chapters 6 and 11). These risks are generally more potent and damaging, respectively, in labour-intensive industries (e.g. apparel and toys) and in resource-extractive industries (e.g. mining and oil and gas). Yet, in industries characterized by tightly integrated just-in-time production networks (e.g. automotive), such risks associated with labour activism or unexpected natural disasters can be even more substantial for TNCs and their dependent suppliers.

Table 5.2 Different forms of risk associated with TNCs and their global production networks

Form	Nature	Effects on TNCs	Recent examples
Economic risk	Systemic shifts in markets – new technologies and innovations, changing demand, financial disruptions, exchange rate fluctuations, and so on	Loss of competitive position in cost and/or market leadership; reduction in financial returns and profitability; lower income and structural volatility to localities and regions	Decline of Canada's RIM (BlackBerry) and Finland's Nokia in smartphone devices, 2013
Product risk	Quality, safety, branding, and efficiency considerations	Negative views of goods or services by consumers and customers; greater demand for corporate social responsibility	The bankruptcy of Takata in June 2017 due to its faulty car airbag problem since 2008
Regulatory risk	Political, public-to-private governance, and changing standards and norms	Disruption or termination of global production, existing industrial practices, and organizational arrangements	EU's tough regulation of genetically modified organisms (GMOs) since 2003 and impact on GM crop growers (e.g. Monsanto's MON810 maize)
Labour risk	Struggles over working conditions and employment practices	Resistance and industrial action by employees; disruptions to global production and employment prospects; and potentially greater reputational risk	Strikes in Foxconn's plants in China, maker of Apple's iPhones, due to workers demanding for better terms and working conditions, 2012–2013
Environmental risk	Natural hazards or human-made disasters	Accentuating the above four forms of risk and their causal effects	Hurricanes Harvey and Maria in August–September 2017 and their disruptive impact on American farmers and global supply chains in food products

Source: adapted from Yeung and Coe (2015, table 2). Reproduced with permission of Taylor and Francis.

5.7 Summary

This chapter has systematically examined the TNC, traditionally something of a ‘black box’ in mainstream economics and a form of economic actor that shapes our everyday life in very important and perhaps underappreciated ways. We can usefully understand the TNC as a system of both internal (intra-firm) and external (inter-firm) production networks. Interpreting TNCs in this way has several advantages. First, it allows us to appreciate the great variety and diversity in the global organization of production networks orchestrated by leading TNCs. Our analysis has demonstrated various ways in which these intra- and inter-firm networks can be organized. These range from wholly owned subsidiaries and affiliates in intra-firm networks to international subcontracting, joint ventures, and strategic alliances through inter-firm networks. Second, it shows how different places and territories are connected through globally extensive production networks that operate across different national and macro-regional formations.

With this great diversity in organizational forms, geographies of transnational production, and active stakeholders, can the TNC really keep everything together? This chapter has argued that effective globalization is not easy or even natural for the TNC, as the opening case of Volkswagen illustrates so well. To set up extensive worldwide operations requires the TNC to maintain organizational control in challenging conditions and to take seriously the geographical differences that exist in political, economic, and social-cultural realms. As TNCs globalize into different macro-regions of the world economy, these geographical differences are further accentuated to produce greater organizational challenges and problems of maintaining legitimacy, alternatively known as the ‘liability of foreignness’ (i.e. foreign firms face more problems in host countries). This in turn increases the vulnerability of TNCs to a wide range of potential risks such as industrial action, sabotage, consumer boycotts, punitive regulation, financial exposure, product failures, and logistical bottlenecks. Many of these risks not only are increasing in tandem with global reach but are also beyond the control of any individual TNC. In Chapter 6, we will discuss how labour and its global mobility can reshape a world economy dominated by major TNCs.

Notes on the references

- Dicken (2015) offers the most authoritative account of TNCs as shapers and movers in the global economy from an economic-geographical perspective. See Beugelsdijk et al. (2010), Iammarino and McCann (2013), and Yeung (2018) for comparisons of how researchers in economic geography and international business studies view TNCs from different perspectives. Haberly and Wójcik (2017) and Fuller and Phelps (2018) offer two recent reinterpretations of the agency of TNCs in GPNs.

- For debates on global outsourcing in both manufacturing and services and the role of locational consulting firms, see Peck (2017), Phelps (2017), and Phelps and Wood (2018a, 2018b). See Yeung (2016) for a much more detailed account of Apple and Samsung's intertwined GPNs, and Vanchan et al. (2018) on recent manufacturing reshoring in GPNs back to the United States and the United Kingdom.
- For an excellent historical–geographical study of the early globalization initiatives of US TNCs between 1890 and 1927, in particular, Singer Manufacturing Company, see Domosh (2010). For some recent geographical studies of TNCs, see Wójcik and Camilleri (2015) and Karreman et al. (2017) for China's TNCs, Edgington and Hayter (2013) for Japanese TNCs, and Ascani et al. (2016) and Slangen (2016) for European TNCs.

Sample essay questions

- Why do TNCs organize transnational activities differently across different industries and host regions?
- What is the distinctive role of geography in the global configuration of TNC production networks?
- What factors may lie behind a TNC's decision to engage in inter-firm relationships?
- What are GPNs and what role do TNCs play in coordinating such GPNs?
- What are the risks that may limit the global reach of TNCs?

Resources for further learning

- <http://unctad.org>: The World Investment Report website contains the most accurate data and comprehensive analysis on the global reach of TNCs.
- <http://www.globaljustice.org.uk>: This website of Global Justice Now, a UK-based NGO, offers regular analysis of the power of global corporations among the world's top 100 largest economic entities.
- <http://www.pcic.merage.uci.edu>: The Personal Computing Industry Center at the University of California, Irvine, conducts some of the best research into the globalized ICT industry, including detail case studies of many lead firms in that industry and their transnational activities.
- <http://www.csr-asia.com>: This website provides excellent insights into TNCs and their corporate social responsibility issues in Asia.
- <https://globalexchange.org>: This website offers a bottom-up view of advancing people's globalization. It has a very interesting section on 'legacy campaigns' that include global economic justice and fair trade and sweat free.

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CHAPTER 6

LABOUR

Are migrant workers the new normal?

Aims

- To understand how migrant labour is part of a wider set of changes in the nature of work and labour markets.
- To explore the role of the territorial state and the ‘migration industry’ in shaping migration experiences.
- To consider how the growth of migrant labour has presented challenges for traditional forms of labour organizing.
- To examine the impacts of migrant labour in the places where they work and the places they come from.

6.1 Introduction

The sun-drenched skyscrapers of Dubai are an iconic image of wealth and rapid development in the contemporary global economy. The city features the spectacle of a dense, high-rise skyline against the backdrop of a desert landscape. Even in the adjacent warm waters of the Persian Gulf, new islands have been artificially created to accommodate developments for those rich enough to participate in the city’s property boom. Oil and gas, which were the original foundations of the emirate’s wealth, now account for a very small proportion of its economy. Instead, in addition to a globally significant port and airport, and financial and IT sectors

that service the Gulf region, the city depends on high-end tourism and retail for its economic foundations. Its shopping malls, condominiums, hotels, and resorts cater to a high-end market. Dubai, it seems, has become synonymous with wealth and luxury.

Behind the opulent landscapes, however, Dubai’s population tells a more interesting story. The city had just under 3 million residents in 2017 – representing about one-third of the total population of the United Arab Emirates (UAE), in which Dubai is one of seven emirates. What that figure does not reveal is that less than 10 per cent of Dubai’s people are actually citizens of the UAE. While Dubai has around 250,000 citizens, a further 2.7 million people live there temporarily. Citizens of the UAE tend to work for the government, while nearly all private sector jobs are held by migrants. A few of these are the rich and the famous (Hollywood stars, business tycoons, etc.) who have property or business interests in Dubai. A larger number are managers and professionals working in manufacturing, shipping, banking, and other sectors. The vast majority, however, are labouring in construction, domestic service, retail, and other sectors where low-paid employment is found. Thus, while the landscape of luxury is what Dubai has become known for, it is a landscape that has been built, maintained, and staffed by a huge migrant workforce (Buckley 2013). As Figure 6.1 shows, the largest

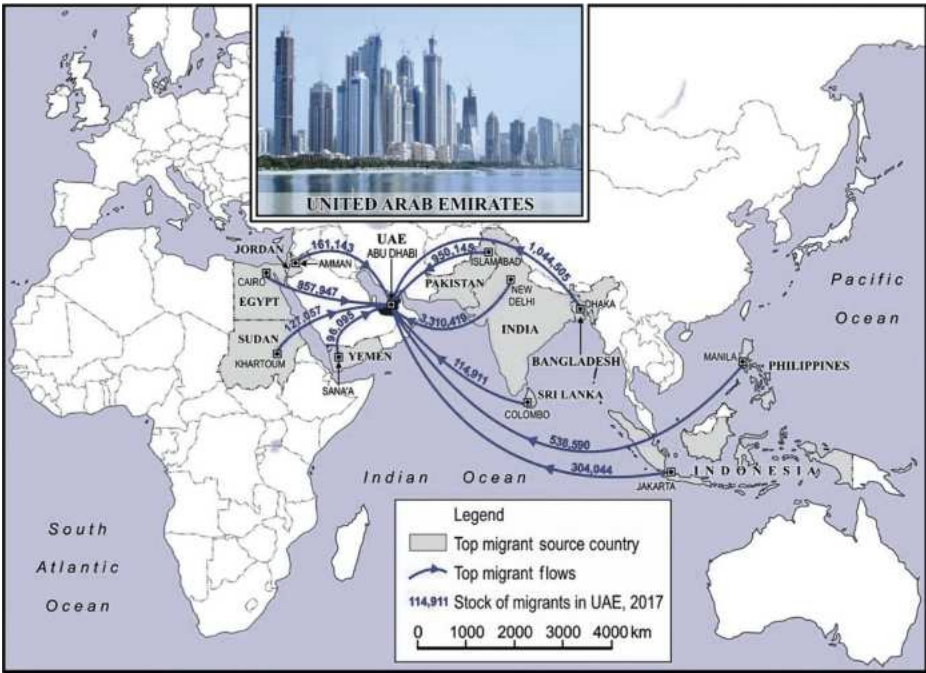


Figure 6.1 The United Arab Emirates and its major sources of migrant workers
Source: the authors.

source country for these migrant workers is India, but many are also coming from elsewhere in South Asia, from Southeast Asia (the Philippines and Indonesia), and from the Gulf, Middle East, or Africa.

While Dubai is unusual in the extent of its dependence on migrant labour, it is part of a global pattern that is widespread. Increasingly, migrant labour is becoming a 'normal' part of the functioning of economies. In a global city like London, this is perhaps unsurprising (Wills et al. 2010). London has a long colonial history that connected it with Africa, the Caribbean, and South Asia. More recently, labour mobility within the European Union (EU) added new streams of migrants. London's status as a global financial, trading, entertainment, and educational centre has also brought newcomers from around the world. The result is that about 38 per cent of Greater London's workforce was born outside the United Kingdom (PWC and London First 2017). A similar story can be told for many other cities. Singapore, Sydney, Los Angeles, Toronto, and Paris all have comparable proportions of migrants in their labour markets. Nor is a dependence on migrant labour necessarily restricted to big cities. Smaller towns in many countries have seen an increasing number of migrant workers arriving. Agriculture is also often dependent on migrant labour. In the case of British horticulture, for example, a 2017 survey by the National Farmers Union found that 99 per cent of seasonal workers recruited through employment agencies were from the EU (two-thirds of them from just two countries – Romania and Bulgaria) (ONS 2018).

The use of migrant labour is not always popular, especially in places where locals feel that their livelihood is threatened by newcomers. We start this chapter, in Section 6.2, by examining some of these views, which have become more prevalent in recent years. We also make the key point that rather than being the cause of negative changes in the world of work, the use of migrant labour is actually a symptom of deteriorating conditions. One popular view of migrant labour is that it represents a loss of territorial control by the state. In Section 6.3 we push back on this view by noting how closely the state controls the movement and the rights of various categories of migrant workers around the world. Here, we also make the point that large-scale patterns of migration are clearly based on unevenness in levels of income and development, and they display distinctive geographical patterns around the world. Section 6.4 then examines the economic roles and impact of migrant labour in specific places. In particular, we will consider the kinds of economic activity that migrants make possible in their destinations, their impact on labour markets, and the implications of migrant workers for processes of labour control and discipline. Section 6.5 then turns to consider the effects on migrants' places of origin, which in some cases are deeply impacted by the money they send home. While many migrants may be disadvantaged, they are not helpless victims, and in Section 6.6 we look at the ways in which the rights of migrant workers have been collectively asserted. Finally, Section 6.7 notes the ways in which labour migration is not simply the product of individual decisions. Rather, it is embedded in the work of both public and private organizations that facilitate

(and profit from) the movement of people. While migrant labour is the focus throughout this chapter, it also provides a window on the ways in which the world of work is changing more generally – from the quality of jobs available, to forms of labour activism, to the organization of labour markets. In each case, labour migrants and their experiences are symptomatic of broader changes that are underway.

6.2 Are Migrants the Problem?

It is not difficult to find public rhetoric that blames migrants for all manner of economic ailments. Several themes are repeated in many places around the world. One concerns the idea that ‘free’ flows of migrants are causing governments to lose control of their borders. In this view, the ability of the state to regulate its own territory and its own labour markets is being undermined (issues discussed further in Chapter 9). This was a prominent line of argument for proponents of Brexit (the UK’s exit from the EU). A typical example can be seen in Figure 6.2, which shows a poster used by the UK Independence Party in 2014, with the slogan ‘No border, no control’. An escalator ride up the White Cliffs of Dover implies easy entry to Britain for migrants from Europe in particular. As we will see in Section 6.3, however, border crossing by migrants is still very much controlled



Figure 6.2 UK Independence Party (UKIP) campaign poster from European elections, 2014

Source: reproduced with permission of In Pictures Ltd/Corbis via Getty Images.

and regulated by the state, which creates the circumstances under which most migrants can move.

A second theme in popular narratives around migrants is that they represent a drain on the economic resources of the host countries because of their claims on social welfare systems, unemployment benefits, and healthcare services. This is a question that requires some place-specific analysis depending on the regimes of social welfare and services in a given location. In Sweden, for example, generous welfare provisions, alongside prohibitions on working, mean that refugees in particular do indeed draw significantly on the resources of the state. But in contexts such as Singapore, where a large population of migrant workers have no access to the welfare benefits of being a citizen, there is very little impact by migrants on state expenditures. This is, however, a complex question that requires attention to impacts across time (including the economic impacts of the children of immigrants) and across different geographical scales. In the United States, for example, an exhaustive report by the National Academies of Science, Engineering, and Medicine found that the mix of taxes paid, and the services used, by first-generation immigrants was different at the federal and state levels (NASEM 2017). Federally, an immigrant population contributes positively to tax revenues, but locally their impact is slightly negative because young immigrant families tend to use locally funded public school systems. They also tend to pay less in taxes because they are earning less. As we will see in Section 6.4, low pay for migrant labour, whether they are temporary workers or permanent immigrants, is a recurring theme around the world.

A third argument against migration has been based on the idea that migrants will take jobs from those who are locals in a particular place. Again, this is a view that has been articulated by anti-immigrant political movements, especially in Europe and North America. This kind of rhetoric has intensified in many countries, especially after the economic crisis of 2007–2008 and the programs of government austerity that followed. Whether migrants do take jobs from local residents is a difficult question, however, as it requires us to know whether those jobs would have existed without migrants willing to take them, and whether local residents would have been willing to take them in the absence of migrants. Again, the answer to this question is place-dependent. In the extensive study of the United States noted earlier, it was concluded that immigrants have very little impact on the employment of local native-born populations (NASEM 2017). The only impact found was on the number of hours worked by local teenagers and the employment rate of prior immigrants. In other words, immigrants are only competing with very specific parts (or segments) of the labour market. Nevertheless, the notion that migrants are to blame for economic problems has been an appealing one, especially to those who have been left without jobs, upward mobility, or economic security in a changing labour market.

A final popular idea about migrants is that they undercut local wages and working conditions because of their willingness to work for less. There is some

evidence that this does indeed happen, but only in very specific ways and, again, careful attention to geographical scale is needed. In the United States, the impacts of migrant workers on wages tend to be on specific low-skilled jobs located in the segments of the labour market where migrants are competing for work. Whether it is agriculture, retail, hospitality, construction, or caregiving, migrant workers do keep wages down, but for the wider labour market there is little impact on earnings (NASEM 2017). The same is true in many other countries, especially where temporary migrant workers can only work in the job specified by their visa. Moving up to the scale of the economy as a whole, however, the impact of migrants is nearly always positive, because they are usually specifically selected to fill essential roles in the workforce and create profitability and competitiveness for their employers. Furthermore, the cost of their education and training has been borne elsewhere so they arrive as fully prepared workers whom the host society did not have to raise, educate, and train. Perhaps most importantly, as outsiders, migrants tend to be less able to assert their rights as workers, or to push for better working conditions. In this way, they provide a compliant and cooperative workforce for their employers, who may find them more manageable than their local counterparts. As we will see in Section 6.4, selectively hiring migrants represents one important way in which control over labour is exerted in the workplace.

Analyzing how migrants really affect the places and labour markets in which they work is one way of answering the question posed in this section: ‘Are migrants the problem?’ Another response to migrant-blaming rhetoric, however, is to point out that migrants are a symptom of deteriorating working conditions rather than a cause. The increasing use of migrant employees, especially in low-paid work, is part of a much wider trend that has seen labour markets changing. Here, we can note several key changes:

- *Precarious employment:* In the Global North, the second half of the twentieth century saw the emergence of a ‘standard employment relationship’. Such employment included: relatively good wages; permanent fulltime work; predictability regarding the hours and shifts to be worked; attention to health and safety at work; public healthcare or private health insurance; pensions and other benefits; and union representation and protection. To be sure, many were excluded from this form of employment (including women, immigrants, and most people outside the Global North), but it was the aspirational standard nevertheless. It is now a standard that has become increasingly scarce. Precarious employment, with less stability and security, and fewer benefits, has become more and more widespread.
- *Subcontracting and agency work:* A second trend has concerned the relationship between employers and employees. Increasingly, employers in the public and private sectors are contracting work out to other companies. Cleaners in government offices, for example, might once have been government employees, but are now far more likely to be employed by a private firm contracted

to provide those services. The same applies in the private sector workplaces, where an ‘employee’ may actually be supplied on a short-term basis by a temporary employment agency. In its most extreme form, this kind of employment can involve picking up ‘day labourers’ from a parking lot or street corner and taking them to a work site with no relationship or contract at all.

- *Deepening inequality*: We are increasingly seeing an ‘hour glass’ labour market – so-called because the top and bottom ends have expanded, but the middle is being squeezed. As secure employment has declined, more and more workers live at the bottom end of the labour market on low pay, sometimes working multiple jobs. At the same time, the top end of the labour market has brought rich rewards to those who occupy its highest positions. The result has been a deepening inequality in societies around the world.
- *Automation and mechanization*: Part of the reason for the disappearing middle of the labour market is that automation, mechanization, and (in some cases) artificial intelligence are replacing the skilled work that once dominated factories, offices, farms, and other workplaces. Even in the service sector, in which human contact has been the norm, we are already seeing self-check-in at airports, self-checkout in shops, and online banking. Driverless taxis may be a reality in the near future. All of these advances have created highly paid jobs in computer software and hardware, but they have eliminated many steady middle-class jobs.
- *Expanding care work*: One type of job that cannot (easily) be automated is care work with children and the elderly. As dual incomes have become a necessity (and so both parents are likely to be working), a large childcare workforce is needed. As many societies are aging, an eldercare workforce is required as well. The result is an expanding number of paid domestic workers and caregivers, many of them migrant women. Much of this work happens inside an employer’s home and is usually exempt from any workplace rules and regulations.
- *Globalization of production*: Technology has made it possible for companies to locate (or subcontract) parts of their operation to places that offer lower costs and a more flexible workforce. As noted in Chapter 3, factory jobs were the first to go, as garments, electronics, and other items could be produced elsewhere and shipped onwards to markets. With the revolution in information and communications technologies in the last two decades, this can now happen for a wider range of production processes. The result is that services from software development and graphic design, to medical transcription and call centres, can all be relocated to distant locations, while still serving clients in (especially) North America and Europe. In this case, it is not so much that jobs are disappearing, but they are certainly relocating.

All of these labour market trends need to be understood as unevenly manifested across global space. While they may be recognizable in Minneapolis or

Manchester, the situation is quite different in Mumbai or Manila. In the older industrial regions of the Global North, jobs have been lost, precarity has increased, and inequality has deepened. For other parts of the world, especially in the Global South, people may have gained access to new forms of employment, but they do not come with any of the benefits or security that once characterized the standard employment relationship.

Where do migrants fit into this picture? If these trends represent the undermining of decent work, then being a migrant is one further form of disenfranchisement as a worker. In fact, it is precisely because migrants often have fewer rights and expectations that they are the ones that have to put up with these new working conditions. As a team of geographers studying migrant labour in London put it: 'While subcontracting is now the world's paradigmatic form of employment across the world, the migrant is the world's paradigmatic worker' (Wills et al. 2010: 6). Migrants are not, however, all the same and it is important to recognize the wide variation in their circumstances. We can therefore now turn to the differentiated ways in which migrant experiences are constructed by the territorial power of the state.

6.3 Territorial Power and Migrant Types

The territorial power of the state means that labour migrants come in many varieties. Through different migration programs, the state can define who legally belongs (and who does not) within a given territory. It can also assign different rights to those with different degrees of belonging. These rights include the right to work, the right to stay, to the right be accompanied by family members, and the right to benefit from different types of collective services such as health and education. In this section, we identify a continuum of migrant labour types, starting with the most privileged and moving towards those with very few rights.

Elite Migrants

Mobility comes most easily for those at the highest ends of the income distribution and at top levels of management in international firms. Elite labour migration has expanded dramatically over the last few decades as part of the broader dynamics of globalization. A small minority of very wealthy individuals may hold assets such as homes and businesses in several countries and may structure their lives in order to avoid higher tax rates in certain places. Global mobility for such individuals is very easy and they may exert considerable influence over government policy in several jurisdictions. In the United Kingdom, for example, visas, tax structures, and the regulation of the financial sector have been carefully configured to meet the needs of very wealthy and highly mobile individuals, in the hope that they will remain based in London (Beaverstock and Hall 2012). More

commonly, however, elite migration is the result of organized overseas assignments within transnational corporations or direct recruitment from a global pool of talent. Growing sectors such as finance and technology have tended to benefit from government provisions that permit the easy recruitment of international talent. In the United States, for example, H-1B visas are designed for ‘specialty occupations’ that involve high skill levels. A limit of 85,000 H-1B visas is issued every year, with many going to technology firms and IT services companies. The holders of visas of this kind, whether in the United States or elsewhere, tend to be among the more privileged labour migrants, with the right to bring their families and often a pathway to permanent settlement as well.

Economic Immigration Programs

A further group of international migrants are selected based on their credentials and skills according to the needs of the local labour market. Several countries have active and longstanding programs of selecting immigrants in this way. Since the late 1960s, Canada and the United States have both had immigration schemes based on an assessment of potential immigrants’ economic contributions. While the schemes have changed over the years, they have generally given ‘points’ for an applicant’s levels of education, professional credentials, work experience, language fluency, age, and family connections with the destination. While these programs sit alongside other schemes that allow for family reunification and refugee settlement, they ensure that immigration is heavily geared towards the country’s demographic and labour needs. This orientation has become even more explicit in recent years with an ‘expression of interest’ model in Australia and New Zealand (later adopted in Canada). The model gives pre-approval to a pool of immigration applicants and then allows employers to pick specific individuals out of that pool. The result is an immigration program that is not simply oriented to the long-run labour market needs of an economy, but also to the specific and immediate requirements of employers. Immigrants in such selection schemes arrive as fully fledged permanent residents of the territories in which they are accepted, and they have nearly all the same rights as locally born people. As we will see in Section 6.4, however, they may find that fully utilizing their qualifications is difficult if these credentials are not recognized by professional licensing bodies. They may also face barriers because of linguistic and cultural fluency, limited social networks to help them find work, and broader discrimination (see Chapter 13). This means that although permanent immigrants are relatively privileged, and usually they will eventually hold full citizenship in their host societies, they still face barriers to full economic participation.

Skilled Return Migration

Another relatively privileged category of migrant worker involves those who study, work, and live abroad and then return to their ‘home’ country. Many governments have now established agencies whose purpose is to engage with their

diaspora populations overseas and to encourage those with important skills or investment capital to return. Jamaica, for example, has a population of just over 2.8 million, but a further 1 million Jamaicans live overseas, mainly in the United States, Canada, and the United Kingdom (World Bank 2018a). After deciding that their diaspora could be a valuable source of skills and capital, the Jamaican state has developed various initiatives to facilitate return migration since the 1990s (Mullings 2011). A Returning Residents Facilitation Unit (now called the Jamaicans Overseas Department) was created, and a Charter for Long Term Returning Residents was established. The Charter provided overseas Jamaicans with various privileges including duty-free importation of their belongings, travel subsidies, and long-term residency (even if their original citizenship had been revoked). The success of the Jamaica program has been limited, but in other contexts, and especially China, Taiwan, and India, returning migrants have played a significant role in economic development, especially in the technology sector (Kenney et al. 2013). Even if they do not have specific agencies like Jamaica, governments have been keen to attract such migrants with privileged treatment, including dual citizenship, tax incentives, and relocation subsidies.

Internal Migrants

We have so far focused on international migration, but territorial control over migrants' rights and privileges can also operate at other spatial scales. China has an estimated 200 million internal migrants who have mostly moved from inland rural areas to cities on the Southern and Eastern coast. Relatively few of these workers, however, have become officially recognized as full residents of the cities where they work. Since the 1960s, China has had a system of residency permits, called *hukou*, which determines legitimate residency in a given place. Possessing a *hukou* provides access to a wide range of government services such as public health insurance, state pensions, subsidized housing, employment in state-owned firms, and attending public schools. Since the 1990s, local governments, rather than the central government in Beijing, have controlled access to the *hukou*, which means that cities can, in a sense, operate their own internal 'immigration' program. While obtaining a *hukou* to a city like Shanghai is difficult, many migrant workers are issued temporary residence permits, which offer fewer rights and must be renewed after a defined period (Johnson 2017). This serves to limit pressure on urban public services and ensures that those arriving are mostly restricted to workers who are needed to perform economic roles. In this particular example, we can see how the use of territorial power to create a 'border' can operate at an urban scale, and not just nationally.

Moving above the national scale, labour mobility in the EU takes us to a macro-regional scale. A key element of European integration has been the mobility of workers across the member states of the EU. Labour mobility across Europe has a long history, going back to the late 1960s between some countries in Western

Europe. For several decades, though, the numbers involved were relatively small – differences in earnings were insufficient to motivate large-scale movement, and the difficulties of working in a different cultural and linguistic environment meant that few opted to exercise their right to work in another European country. Major economies, such as Germany, France, and the United Kingdom did, however, have significant numbers of migrant workers, but they arrived under guest worker programs. This began to change in 2004, when the EU expanded its membership to include 10 additional countries, most of which had been part of the Eastern European communist bloc (the Czech Republic, Estonia, Cyprus, Latvia, Lithuania, Hungary, Malta, Poland, Slovenia, and Slovakia). In 2007, Bulgaria and Romania were also added and then Croatia in 2013. These new additions included struggling economies and large numbers of workers therefore sought employment in higher-income parts of Europe. It is estimated, for example, that just over 4 per cent of the total population of Romania and Bulgaria moved to other European countries after their accession in 2007 (Fic et al. 2011).

Not all EU countries made their labour markets immediately accessible to new EU members. The United Kingdom allowed full mobility rights after 2004, resulting in a large inflow of workers. The number of Polish citizens, for example, in the United Kingdom increased from around 40,000 prior to Poland's accession in 2004, to over 500,000 by 2008. Other countries, notably Germany, delayed full access to new EU members, resulting in an uneven pattern across Europe of territorial accessibility for migrants. By 2011, however, labour mobility existed across the EU for all citizens of the 2004 accession countries. During the transitional period, host countries were able to restrict access to benefits and public services, but EU citizens are now able to access all services, provided they are working or looking for work. The process of European integration has thus been a complex one, but clearly there is now a macro-regional scale of territorial control over migration, and the process of creating and administering borders is no longer simply a national affair.

Temporary Foreign Workers

Temporary foreign workers (also called contract workers or guest workers) are individuals permitted to work in a country where they do not have a permanent right to reside. Such workers have fewer rights than citizens of the countries in which they are working. It is worth thinking carefully about what their precarious citizenship status means for their employment and their lives. They might face a threat of deportation, nonrenewal, or blacklisting from future contracts if they engage in any activities of which their employer disapproves. Their visa is usually quite restrictive and allows them to work only for a specified employer at a specified job. In this way, employers are supplied with a reliable workforce that cannot hop to another job if they find that their pay, working conditions, or treatment are unsatisfactory. In most cases, they are not allowed to bring family members with

them. If they work in a location such as a farm, mine, plantation, or even a home, their personal mobility may be restricted. They very seldom have any pathway towards permanent residence in the societies where they work, even after many years of service. All of these conditions leave workers with a quite different relationship to their employers than those with full rights of residency and citizenship. Perhaps the most significant dimension of their precarious status, however, is that they can be sent home once they are no longer needed. This means that an employer can maintain a numerically flexible workforce that can expand and contract in line with demand. On a longer time scale, when temporary foreign workers become too sick or too old to work, they can also be sent home. Just as their upbringing and education was not a burden to the host society in which they are working, nor will they be a burden in their old age once they have stopped being economically productive.

Many countries now have specific programs that admit and regulate temporary foreign workers and these programs have expanded greatly in recent years. In Singapore, for example, the non-resident workforce has expanded from less than one-sixth of the workforce in 1990 to more than one-third by 2017 (see Figure 6.3). Among 1.4 million foreign workers in 2017, almost 400,000 held either an ‘Employment Pass’ or ‘S pass’ which meant they fell within more privileged categories (closer to the ‘elite’ migrants described above). Almost 1 million others were temporary workers, including 247,000 domestic workers and 285,000 construction workers (Singapore Ministry of Manpower 2018). Most foreign workers came either from neighbouring Indonesia or Malaysia, or from elsewhere in Asia, especially Bangladesh, the Philippines, Sri Lanka, and China (Ye 2016).

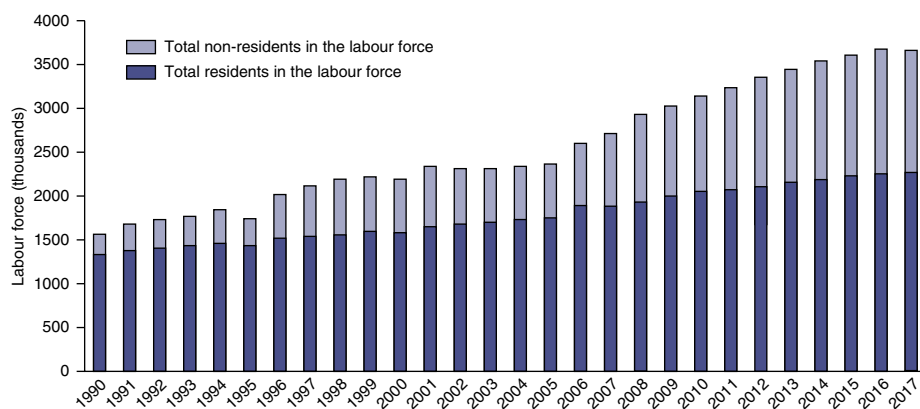


Figure 6.3 Residents and non-residents in Singapore's labour force, 1990–2017

Source: <http://www.tablebuilder.singstat.gov.sg/publicfacing/mainMenu.action>, accessed 19 May 2018. Reproduced with permission of Department of Statistics, Singapore.

Undocumented Migrants

The most marginalized among all migrant workers are those that live and work without legal status. Such people have not necessarily crossed borders illegally (although that is often how they are depicted in the media). Many people become illegal because a visa is not renewed, or a visa is conditional upon a particular job that the migrant has lost, or an asylum claim is denied, or an educational program ends but the student stays on. Whatever the cause of their illegal status, such workers are extremely vulnerable because they live under the constant threat of deportation. Even basic workplace regulations concerning health and safety, wages, and benefits can be flouted by employers. Such workers effectively have fewer rights than any other kind of worker as they cannot risk an encounter with local authorities. Yet, they are often integral and essential participants in the labour force. In the United States, in 2015, around 8 million workers, or 5 per cent of the labour force, were estimated to be unauthorized migrants (Krogstad et al. 2017). Of these, two-thirds had lived in the country for more than a decade, clearly suggesting their essential role in, and long-term contributions to, the economy in fields such as farming, construction, and hospitality. Just over half came from Mexico, but significant numbers were also from Central America and Asia.

The complex map of migration regulation, with various states allowing uneven access to their territories and differentiated rights for migrants who arrive, has created a global geography of migration channels and ‘hotspots’. Figure 6.4 shows some of the most well-travelled migration channels between specific countries. A few important patterns can be seen in the data. The largest international migration flow, by far, is from Mexico into the United States. Other flows are between neighbours (Russia and Ukraine; Afghanistan and Pakistan); between sites of slow economic growth and rapid expansion (e.g. India to UAE); between areas of low income and higher income (India to the United States); or away from places of conflict (Vietnam to the United States; and more recently, from Syria to surrounding countries). The specific channels that emerge often reflect colonial and geopolitical histories (for example, Algeria to France). A lot of migration, however, is not from the South to the North, but is within the Global South (for example, Myanmar to Thailand). Finally, it is worth noting that India is both a top source and a top destination for migrants – reminding us that there is a hierarchy of migration processes underway that might involve several of the categories of migrants outlined above.

6.4 Migrant Labour and Places of Settlement

We have seen the impact that territorial control can have on the ability of individuals to make their lives across borders. We now turn to ask, in this and the next section, what effect migrant labour has on the places where they settle and the

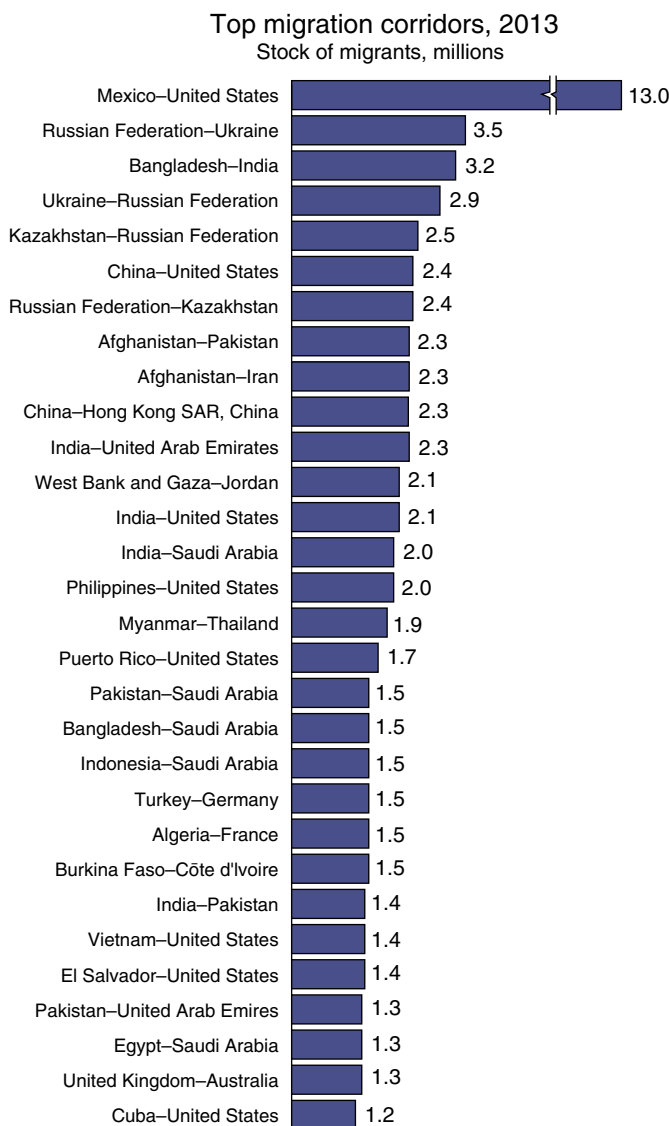


Figure 6.4 Top global migration corridors (in millions) 2013

Source: based on World Bank (2016). Licensed under CCBY 3.0.

places they come from. Given that their numbers are so much greater, here we will focus on the impacts of low-waged migrant workers rather than those at the top end of the labour market.

In places where migrant workers are extensively employed, they can have a significant impact on economic activity in a variety of ways. Here we will focus on four issues: the role of migrant labour in enabling certain economic activities to take place; the numerical flexibility of migrant labour forces; the role of

domestic workers in facilitating female participation in the waged labour force; and the impacts of migrants on wages. In each of these ways, migrant workers transform the places where they are employed.

The first impact of migrant labour is that, in some places, their availability allows certain kinds of production or economic activity that would not otherwise happen. This is usually because of the low cost and numerical flexibility that migrants provide to employers. Migrant workers can be employed for as long as they are needed and then sent home when they are no longer required. In the case of Dubai, as noted earlier, most construction workers come from South Asia, especially India and Bangladesh. Amid a construction boom from 2004 to 2008, the number of migrant construction workers grew from just over 800,000 to almost 2 million (de Bel-Air 2018). After the financial crisis of 2008, almost 600,000 workers were sent home, but by 2016, the numbers had rebounded to about 1.6 million. It is no exaggeration to say that the economy of Dubai, as a place, was built by migrant labour.

There are also many instances in the agricultural sector where production is possible precisely because low-cost migrant labour is available. The case of Burmese migrant workers in Northern Thailand provides an example (Latt and Roth 2015). The region around the Thai city of Chiang Mai has several Royal Development Projects – agricultural projects that were first initiated in the 1970s and 1980s with the support of the Thai government and several international development agencies. The projects were originally designed as a way of asserting territorial control by the Thai government (in areas occupied by ethnically distinct ‘hill tribes’) and as a means of providing alternatives to opium cultivation. The projects have promoted commercially valuable vegetable crops, including cabbage, carrots, lettuce, spinach, and broccoli, as well as various fruits and flowers. In total, more than 140 types of vegetables are grown by about 80,000 people in 300 villages. Since the mid-1990s, the Thai government has sought to encourage intensification of production in these projects, with more crops planted each year and continuous weeding. With many rural youth in Northern Thailand heading to the city for factory or office employment, these increased agricultural labour requirements could not have been met without a large local migrant population of ethnic minority Shan people who have crossed the border (illegally) from Burma/Myanmar (see Figure 6.5). It is estimated that around 300,000 Shan have crossed into Thailand since the mid-1990s, often fleeing violence in their home villages (Latt and Roth 2015). At a national scale in Thailand, the Shan are framed as illegal economic migrants and a social nuisance. This means they are regularly harassed by the police and live under the constant threat of deportation. They therefore have little choice other than to work hard without complaint. At the local scale, the farmers who employ them have a quite different view – they see them as cooperative, hardworking, and skilled agriculturalists. Without the Shan, the intensifying landscape of agricultural production would not be possible. While the details will vary, many agricultural regions around the world have similar



Figure 6.5 A Shan migrant worker applies pesticides on a farm near Chiang Mai in Northern Thailand

Source: reproduced with permission of Sai Latt.

stories to tell – a vulnerable migrant labour force that makes intensive cash crop production both possible and profitable.

A second impact of migrant workers is in the domestic sphere of reproductive labour (such as cooking, cleaning, and childcare). Household and caregiving work have long been reasons for female migration. As with other forms of labour migration, the pattern of movement usually tracks global inequalities in income and employment opportunities. Some of the most significant flows are from Mexico, Latin America, and the Caribbean into the United States, and from South Asia (India, Bangladesh, and Sri Lanka) and Southeast Asia (the Philippines, Indonesia, and Burma/Myanmar) into oil-rich Gulf countries or pockets of urban wealth elsewhere in Asia (such as Singapore and Hong Kong). The International Labour Organization (ILO) estimates that there are 67 million domestic workers across the world, and that 80 per cent of them are women. This means that 1 in 25 female workers worldwide is a domestic worker. Furthermore, the ILO estimates that one in five domestic workers (over 13 million) is an international migrant. The increasing prevalence of migrant domestic work reflects the fact that women are participating in the paid workforce in greater numbers (as we will see in Chapter 13). At the same time, governments in many parts of the world have not expanded childcare and eldercare services in proportion to societal needs. This has created demand for domestic workers to fulfil the home-based roles that were once mainly done by unpaid women (as wives, mothers, and daughters). The process has been facilitated by the creation of formal temporary migration programs that specifically provide work visas for child/elder care workers, au pairs,

or domestic helpers. Meanwhile, the dynamics of uneven development at a global scale have left no shortage of women from source countries in need of work. Cultural norms that would once have prohibited women from migrating for work have changed rapidly. Now, it is not just acceptable, but often considered a necessity. In this way, migrant caregivers enable the labour force participation of professional women in distant places around the world.

A third feature of migrant workers is the extent to which they can be controlled and disciplined because of their precarious status in the host economy. Labour control is a perennial problem for employers. Ideally, employers would wish for workers who demand as little as possible, work with skill and intensity, and who stay in their jobs for as long as they are needed. This 'ideal' worker is, of course, difficult to find, and so a variety of mechanisms operate to discipline workers to ensure their compliance. These mechanisms can be quite direct (e.g. no work, no pay) but also fairly indirect (e.g. when young people are raised to believe that their job defines their identity). Put together in specific places, such mechanisms form a local labour control regime (see Box 6.1).

The use of migrant workers is a common strategy to achieve control over a workforce. There are a variety of reasons why migrant workers might be easier to control. In the case of illegal migrants, such as the Shan farm workers in Thailand described earlier, it is because they are always vulnerable to deportation if they take any complaints to the local authorities. But even in the case of formal temporary foreign worker programs, several aspects of migrant workers' lives make them very compliant and controllable. We can use the example of Canada's Seasonal Agricultural Workers Program (SAWP) to illustrate this.

The SAWP was first created in 1966 as a way of bringing international migrant workers to Canada for the planting, cultivating, and harvest seasons (up to eight months of the year), and then sending them back home for the remaining months. It has been used especially in the southern agricultural belt of the province of Ontario, where workers cultivate tobacco, fruits, vegetables, and other horticultural crops such as ginseng. The number of farmworkers arriving each year has increased over the last decade, from just under 30,000 in 2007, to around 50,000 by 2017. The program is administered by the Canadian federal government and workers are recruited based on bilateral (that is, government to government) agreements with Mexico, Jamaica, and several other Caribbean countries. There are several aspects of the SAWP that serve to create a well-disciplined and hardworking labour force. Workers arriving in Canada under a SAWP visa are locked into a contract with a particular employer for a specific type of work. Unlike a local employee, it is very difficult for foreign workers to seek a new employer if they are dissatisfied with their conditions or treatment. Farmworkers are also not permitted to form labour unions in Ontario. Migrants therefore have few options if they face abuse, overwork, or poor living or working conditions. Furthermore, while migrants may have certain rights according to employment standards legislation or health and safety rules, it is very difficult in practical terms for them to assert their rights. This

KEY CONCEPT

Box 6.1 Local labour control regimes and unfree labour

Scholars in Labour Studies have focused on the mechanisms of labour control that exist in the workplace. We can identify three distinct forms of control in the workplace. ‘Simple control’ refers to the use of direct power in the form of face-to-face surveillance and coercion, or the use of quotas and targets with penalties for failure to comply. ‘Technical control’ is where technology dictates the intensity of the work process. A mechanized factory production line, or the pace of a planting machine in a field, for example, determine the rate at which a worker must fulfil a task. Finally, ‘bureaucratic control’ involves a set of rules governing the workplace that create incentives for compliance – for example, through the prospect of pay increases, bonuses, or promotion.

Since the 1990s, geographers have added a much greater attention to the ways in which space is involved in the process of labour control. In a classic formulation, Andrew Jonas (1996) used the term ‘local labour control regime’ to describe the various place-based (but multi-scalar) mechanisms through which labour is socialized, regulated, and disciplined. Importantly, this idea extends beyond the workplace to incorporate issues such as housing, leisure activities, household relations (including gender identities), education, training, healthcare, and welfare. It also includes national regimes of labour control, covering the regulation of unions, bargaining, and contracts. Putting all of these together, the local labour control regime includes the worker, household, firm, civil society, and state institutions to form a unique, place-specific set of relations that integrate workers into a production system and ensure their cooperation and compliance.

More recently, labour geographers have employed the idea of ‘unfree’ labour to recognize that there are circumstances where the labour market is far from being a neutral meeting of buyers and sellers of labour (as is often assumed to be the case under a capitalist system). Rather, labour may be subjected to various forms and degrees of unfreedom based on coercion, violence, trafficking, or migration regimes (McGrath 2013; Strauss and McGrath 2017).

might be because of linguistic barriers, unfamiliarity with rules, institutions and procedures, and because of the perceived risk of being deported. Perhaps most importantly, because they come to Canada for eight months of the year, they are dependent on being ‘named’ by their employer on a list of recruits for the following year (Bridi 2013). Stepping out of line is a sure way of being blacklisted. SAWP workers are specifically selected to ensure that they have dependent family members

back home. This in itself is a disciplinary mechanism as it ensures that migrants will work hard to provide for these dependents and will be careful not to jeopardize their employment. While working, they are usually housed in dormitories or bunkhouses on farm properties that are often quite remote from the nearest town, or from any public transportation service. The result is that the workers have very little opportunity to interact, organize, or integrate into their host society in any way (Reid-Musson 2017).

While these mechanisms are described for a particular group of agricultural workers in Canada, variations on these themes could apply anywhere in the world – to factory workers, domestic helpers, plantation labourers, and many others. In short, migrant workers face a variety of disciplinary mechanisms that are different from local citizens. The geographies involved in their work are key – from their conditional right to work across territorial borders, to the intimate relations in their place of work, to their connections across space to dependent family members. For all of these reasons, the use of migrants becomes a part of a local labour control regime.

6.5 Migrant Labour and Places of Origin

So far, we have discussed labour migration in terms of its implications for the places where migrants work. It is important to note, however, that labour migration also has important impacts on the places where migrants come from. A geographical approach demands that we pay close attention to relationships that are forged across space and to the ways in which places are shaped by connections with other places. Undoubtedly, the most relevant economic dimension is the money sent back to family members by migrant workers, known as remittances. There has been a phenomenal increase in the size of remittance flows around the world in recent years. In 2000, global remittance inflows to all countries amounted to US\$116 billion. By 2017, this had increased to US\$613 billion. Of that latest figure, US\$457 billion was flowing to low- and middle-income countries (World Bank 2018b). These flows of capital to the developing world have become very substantial inputs into national economies. As Figure 6.6 shows, total global remittances to the developing world were three times the level of official development assistance, higher and more stable than debt and portfolio investment flows, and almost as high as foreign direct investment by firms operating overseas.

Figure 6.7 shows that the countries receiving the highest levels of remittances are generally low- and middle-income countries, with India, China, the Philippines, and Mexico topping the list. Among these countries, the Philippines is the most dependent on remittances, which account for about 10 per cent of GDP. In smaller economies, however, the level of dependence can be much higher, as Figure 6.7 also shows. In Nepal's case, for example, remittances account for more than a quarter of the economy. Most of the US\$6.9 billion in remittances sent in 2017

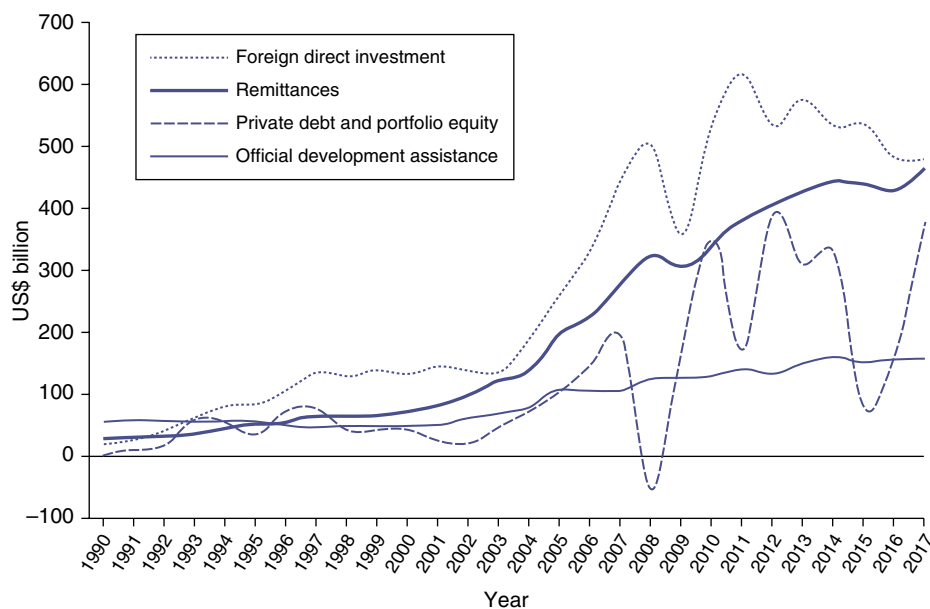


Figure 6.6 Remittance flows to low- and middle-income countries, compared to other global capital flows

Source: World Bank (2018b). Licensed under CCBY 3.0.

came from Nepalis working in India and the Gulf States. Saudi Arabia and Qatar together accounted for more than half of the total. For Haiti on the other hand, with nearly one-third of its economy based on remittances, 60 per cent of the US\$2.5 billion sent home in 2017 was from the United States (World Bank 2018a).

While there is little disagreement about the growth and size of remittances, there are widely differing views on the benefits of remittance flows for migrant sources areas. One optimistic view sees valuable development potential, and has been promoted by international organizations like the World Bank. Funds sent as remittances can have a variety of positive impacts. At the national scale, remittances can fuel everyday consumption, finance new businesses or provide capital to expand existing ones, and support the value of a country's currency (thereby making imports less expensive). At the household scale, as direct support to a family, remittances are viewed as being immune to capture by corrupt practices or political agendas. In other words, they go directly to people who need them. Remittances also provide some degree of immunity from unpredictable business cycles and economic crises, especially when a country's diaspora of migrant workers and emigrants is located in diverse economic sectors and locations around the world. A close look at Figure 6.6 reveals that during the global financial crisis of 2008, various forms of capital flowing to the developing world declined steeply, but remittances were much more stable. Within receiving countries, studies have shown direct improvements in quality of life among households that receive

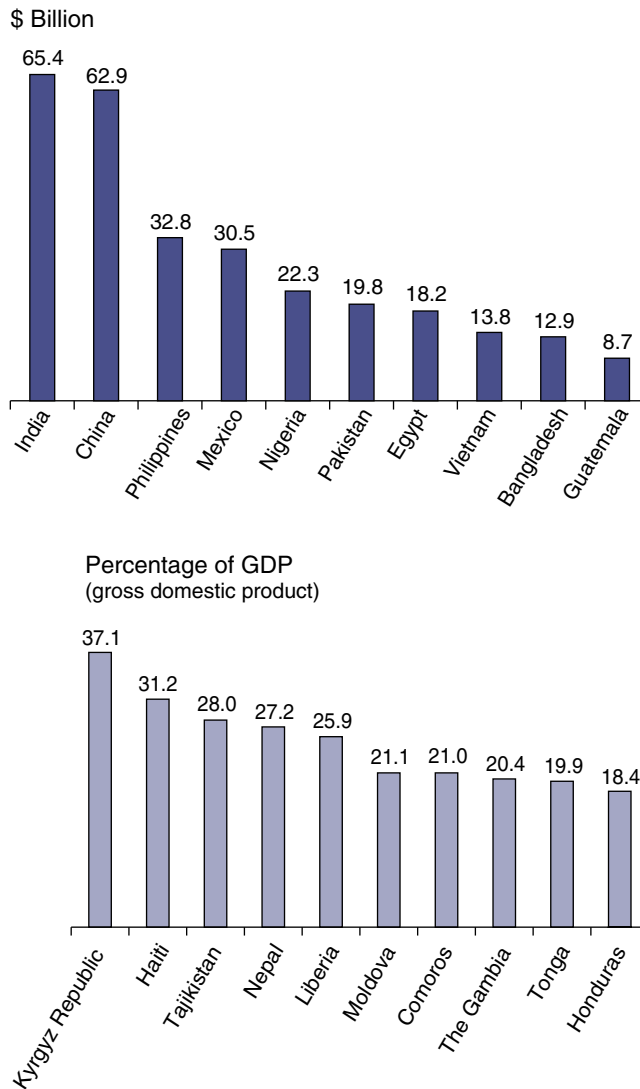


Figure 6.7 Top remittance-receiving countries, and countries with highest dependence on remittances, 2017

Source: World Bank (2018b). Licensed under CC BY 3.0.

remittances, including indicators such as infant mortality rates, life expectancy, and access to health services. Remittances can therefore lift families out of vulnerability, but they can also provide a safety net against sudden hardships created by natural disasters or epidemics. When the world's strongest ever recorded storm (Typhoon Haiyan) hit the Philippines in 2013, for example, remittances from Filipinos around the world in the following three months increased by US\$600 million compared to the same months in the previous year (Su and Mangada

2018). For all of these reasons, there has been great optimism over the developmental role of remittances sent home by labour migrants overseas. Policy discussions, at institutions such as the World Bank, have therefore tended to focus on decreasing the cost of remittance transactions so that migrants are encouraged to send more.

Another, more pessimistic, view lays out the problems that arise from a remittance-based development strategy. First, there is debate over whether remittances generate productive activities that will sustain long-term livelihoods, or just fund short-term consumption. Where money is spent on consumption, rather than investments in productive activities, families may not experience long-term improvements in their economic circumstances once a migrant returns. Second, many have expressed concern over the loss of talent ('brain drain') that could have been used in the home economy and is often underused abroad. Public services may also suffer – if, for example, nurses are tempted to work overseas in large numbers. Productive workers may also be lost if non-migrants who are receiving remittances from a family member decide that they no longer need to participate in the labour market. Third, it is clear in most contexts that the opportunity to migrate is very unevenly distributed. This might be because migration flows are selective by gender or age, but it might also be because the poorest segments of society (or the poorest regions of a country) generally do not have the resources to migrate, especially where air tickets, recruiter fees, and other costs are incurred. The result is that remittances may actually increase income inequality in sending communities. Fourth, remittances can have inflationary impacts on the costs of land, housing, schooling, and other everyday expenses in sending areas. Prices start to reflect the buying power of migrants and their families, placing essential items out of reach for non-migrant families. Finally, migrant labour overseas creates a very human set of costs as families are separated and children grow up without their parents – costs that are difficult to include in any economic accounting of migration as a development strategy.

The impact of migration on places of settlement is, therefore, just as complex a question as the impact on the places where migrants work. What is clear, however, is that places are transformed by these impacts, these costs and benefits are unevenly felt, and they are highly specific to particular places.

6.6 Organizing Migrant Labour

So far, we have focused on labour migrants as individuals who are used by a larger economic system – as an input to the production of goods or services. We can now turn to consider the ways in which workers collectively organize themselves within, and sometimes resist, the economic system in which they work. The collective ability of labour to act on its own behalf – to display 'agency' – has been a fundamental concern of Labour Geography, a field that first emerged in the 1990s (see Box 6.2).

FURTHER THINKING

Box 6.2 Labour Geography

Labour Geography emerged as a field in the 1990s, arguing that the collective action of labour could play a significant and powerful role in determining the geography of capitalism. One of its key proponents, Andrew Herod, showed how unions in the American manufacturing and port industries had actively shaped the economic landscape (Herod 2001). A focus on unions and their strategies has been one of several subsequent threads in the field of Labour Geography. In particular, the ways in which unions organize across space and ‘jump scale’ to meet the spatial scale at which employers are operating has been an especially prominent theme. A second thread has been the study of how local labour markets are created and sustained by a wide range of institutions. This line of thinking argues that the labour market is (like most other markets) far from being a free and unfettered meeting of buyers and sellers. Instead, it is deeply embedded in social institutions of various kinds (e.g. governments, unions, civil society, families, and cultures) that determine how the market will work, and who the winners and losers will be. The local labour control regimes discussed in Box 6.1 are one element of this thread in Labour Geography. A third theme in Labour Geography has arisen more recently as researchers have examined the role of labour in global production networks. Here, the focus is on how the governance and regulation of production networks might affect the rights of workers and their share of the value produced (e.g. Coe 2013). Finally, a fourth issue addressed by labour geographers has been the ways in which labour processes in the workplace are fundamentally shaped by the gendered and racialized identities of workers themselves (see Chapter 13). Here, workers are recognized as more than just units of labour – instead, they are embodied human beings whose experience is linked to other aspects of their identities. In this branch of Labour Geography, the work of Linda McDowell (e.g. 2009) has been especially influential.

The traditional face of labour organizing has been the union. Since the nineteenth century, labour unions have sought to bind workers together within a workplace, a company, and even a whole economic sector in order to have a collective voice for negotiations with the managers and owners. The rate of union membership has declined in many countries in recent years. Table 6.1 shows the union density (the percentage of all employees who are union members) in selected countries around the world. Two patterns are clear. One is that the level of union membership is highly uneven across different countries, reflecting labour histories,

Table 6.1 Union density (%) in selected countries 2000/2001 to 2014/2015

Country	2000/2001	2014/2015
Argentina	42.0	27.7
Australia	24.7	15.0
Canada	30.1	28.6
France	8.0	7.9
Germany	24.6	17.6
Italy	34.4	35.7
Japan	21.5	17.3
Korea	11.4	10.1
United Kingdom	29.8	24.7
United States	12.9	10.6

Source: compiled from OECD (2018) and ILO (2018).

government policies, and the structure of their economies. Even in closely integrated economies such as Canada and the United States, the difference is stark (and largely attributable to high levels of public sector unionization in Canada). Secondly, even in just 14–15 years, union membership has dropped dramatically in many countries, with Argentina, Australia, and Germany seeing particularly steep declines.

There are many reasons why union membership rates have declined, but the labour market shifts listed earlier in this chapter have played a major role. Trends such as subcontracting, globalizing production, and home-based work have all reduced the number of traditionally unionized jobs or made them harder to organize. Neoliberal policies that undermine the ability of unions to organize have also played a role. In the United States, for example, more than half of all states now have so-called ‘Right to Work’ legislation that inhibits union organizing (Peck 2016).

In this context, the rapidly increasing use of migrant labour presents a further set of challenges to the collective organizing of workers. In many cases, it is simply illegal for temporary migrant workers to join a union. But union organizing may also be hindered by ethnic and linguistic differences and by the dispersed workplaces (such as farms and homes) in which migrants are employed. New strategies of labour organizing have been developed in response. Here we will identify three of those strategies: community alliance building; social movement unionism; and workers’ centres.

The first strategy involves unions reaching out to other community groups in order to organize and bargain for workers. A classic example of this strategy is the Justice for Janitors (JfJ) campaign in the United States. Organizing cleaners, security guards, and others working in the building services sector has always been a challenge for trade unions. Having migrated from all over the world, employees often work at night in isolation and they may have language barriers and feel that

they have little in common with each other. They may also be part-time and temporary employees with other jobs to go to after they finish their shift.

The JfJ campaign was started in Denver and Los Angeles in the 1980s by the Service Employees International Union (SEIU). Faced with a declining union membership among office cleaners and healthcare workers in Los Angeles, the union reached out to immigrant communities (especially Latin Americans, who dominated the janitorial jobs) that were not well represented among union organizers. Other community organizations such as churches, local politicians, schools, and colleges also became involved. JfJ coupled these collaborations with creative media campaigns to raise awareness of the hard and essential work done by janitors and the poor pay and working conditions they endured. With a local coalition in place, the union was able to organize workers across all downtown office buildings so that various cleaning companies could not outbid each other on local contracts by undercutting wages. The results in Los Angeles were impressive. Between the mid-1980s and the mid-1990s, unionization among downtown LA office cleaners increased from around 10 per cent to around 90 per cent (Savage 2006). The next move by the SEIU was to organize all of the local janitors' unions into a statewide branch of the union, thereby creating a powerful force to negotiate with the increasingly large companies employing cleaners. Jumping to even larger scales, the JfJ model has spread globally (Aguiar and Ryan 2009). This example highlights two key geographical elements of contemporary labour organizing. The first is the need to move upwards from the workplace to the larger scales at which employers are operating. The second is that place-based local alliances built by the union – often called community unionism – are critical so that the struggles of low-paid janitors are not simply theirs alone.

A second new model for organizing involves building campaigns for more generalized improvements in pay and working conditions that apply to all workers. In this way, migrants and other workers who are hard to reach or difficult to organize can benefit even if their own workplaces are not unionized. Minimum wages, for example, are usually set by national or subnational governments. In the United States and Canada, a broad alliance of unions (including the SEIU), community organizations, anti-racism groups, religious congregations, and others have come together to advocate for increases to the minimum wage through the 'Fight for \$15' – referring to a \$15 per hour wage (Tapia et al. 2017). The Fight for \$15 began in 2012 among fast food workers in New York City but quickly spread and a \$15 minimum has been adopted in numerous states, cities, and employers across the United States.

A similar, and even more ambitious, campaign involves demands for a 'Living Wage'. The idea of a living wage originated in Baltimore in the 1990s, but has been pursued with particular vigour in London since 2001 (Wills and Linneker 2014). The campaign sought to establish a carefully calculated and locally appropriate wage level that would reflect the income needed to pay for a basket of

goods and services, including food, clothing, housing, transport, and childcare. In London, the movement started with The East London Communities Organisation (TELCO), and then spread to other parts of the city under the umbrella of London Citizens. This broad coalition included community organizations and service providers, charities, immigrant advocacy groups, labour unions, faith-based congregations, public and private sector employers, and educational institutions. Geographers at Queen Mary, University of London, were closely involved in this activism (Chakraborty 2018). The initial goal was to ensure that workers employed by firms with contracts from local governments would be paid the living wage, but this expanded to cover many other private sector employers. What is especially interesting here is that this struggle for better working conditions is not based on negotiations between a group of workers and a specific employer. Instead, it is part of a wider social movement to mobilize for all workers in a particular place.

A third model involves creating workers' centres that provide services for low-wage and precarious employees, especially where their status as temporary or undocumented migrants, or recent immigrants, makes them vulnerable. Such centres are often partly funded or supported by unions, but do not operate in the traditional union model. Instead, they provide a wide range of advice, services, and advocacy that often goes well beyond workplace issues. Workers' centres exist in many contexts around the world. One example is found in Chicago, where migrants without legal authorization to work or live in the United States represent a particularly vulnerable group. A recent estimate suggests that the undocumented population in Chicago and its surrounding county numbers just over 300,000, with over 80 per cent originating in Latin America (Chicago Tribune 2017). The Guadalupe Center was established by a group of Mexican women in the mid-1980s, and serves around 12,000 people annually (Martin 2014). The centre provides services such as informal child care (important for workers on unpredictable schedules), healthcare education, translation, family counselling, clothing exchanges, literacy programs, and a food pantry. What is striking about this list is that these services do not relate directly to workplace issues but instead to the everyday survival (or 'social reproduction') of workers and their families. In this example, then, we see the mandate of labour organizing expanding to workers who are not unionized and to issues that extend far beyond the workplace. In other contexts, this has included advocacy around housing rights and affordability, access to health and education, toxic environments, immigration and citizenship pathways, or police harassment. Their concern, then, is with broader issues of living in urban spaces.

Together, the community unionism of JfJ, the place-based fight for a living wage, and the emergence of workers' centres all exemplify new directions for labour organizing. The increasing use of non-unionized migrant labour has pushed traditional unions towards these new strategies, all of which are rooted in urban places rather than the scale of the workplace.

6.7 The Migration Industry

It is easy to assume that migrants move based on individual decisions and motivations. In reality, however, their movements are shaped and guided by an array of institutions through which they are variously advised, recruited, regulated, trained, transported, and connected with employers. These functions inevitably involve the regulatory role of the state, but they also involve private entrepreneurs, personal social networks, and other actors. This web of institutions forms a ‘migration industry’ or ‘migration infrastructure’ (Xiang and Lindquist 2014). Here, we will focus on two broad components of the migration industry – the state and the private sector.

Clearly, the state is closely involved in migration in a variety of ways. As we saw in Section 6.3, the right to legally move, settle, and work is controlled by the territorial state. In some instances, however, the state goes further and seeks to facilitate or promote the export of human labour. The Philippine government has one of the most highly developed infrastructures for labour export in the world (Rodriguez 2010). The collection of policies and institutions in the Philippines originated in the 1970s when labour export was initially presented as a temporary policy measure to address high levels of unemployment. At the time, major government agencies were established and they have developed into an extensive infrastructure to promote and regulate overseas work, including: the Philippine Overseas Employment Administration; the Overseas Workers Welfare Administration; and the Commission on Filipinos Overseas. The role of the government in deploying overseas workers includes a variety of functions. At a strategic level, the government conducts market research and promotes Filipino workers to employers and host governments around the world. This includes signing bilateral recruitment agreements with employers and other governments. More practically, the state prepares migrants for overseas work through pre-departure orientations, which may also serve to indoctrinate ‘good’ migrants, who will work hard and faithfully send money home (Polanco 2017). The state also regulates and permits an extensive private recruitment and training industry, which deals with the practicalities of migrant labour deployment. Less tangibly, the Philippine government promotes a discourse that glorifies the role of the migrant worker as *bagong bayani* or ‘new heroes’. In all of these ways, then, the Philippine government is deeply involved in promoting labour export. The global prominence of Filipino workers in domestic work, nursing, shipping, hospitality, and construction is explained, at least in part, by this extensive state infrastructure for migration.

As noted, the practical aspects of labour migration are mostly administered not by governments but by dense networks of private businesses that are involved in the training, transportation, processing, and placement of workers, and in selling them a broad suite of other services. To prepare workers for overseas deployments, training institutions (e.g. nursing schools, language institutes, and seafaring

academies) are needed. They may be regulated by governments but in most contexts around the world, they are owned and operated privately. After workers are trained, then recruiters or brokers will link them with overseas employers. Latvia, for example, was one of the eight countries that joined the EU in 2004, which started a major flow of migrant workers to the United Kingdom and other countries. By 2011, there were 85 registered employment agencies operating in Latvia, along with many more informal ‘gangmasters’ and recruiters (Findlay et al. 2013). Together they formed an ‘infrastructure’ that effectively supplied labour to UK farms and other employers. In addition, every context where migrants are either sent or received will also have a raft of lawyers, legal advisors, and consultants who assist in securing the necessary documents and permissions, and may be called upon if migrants face legal problems.

Figure 6.8 gives a sense of how extensive the migration industry can be. Within a single building in a Filipino neighbourhood of Toronto, businesses offer legal services, immigration advice, remittance transfers, cash loans, job training, employment placement, flight bookings, and property investment opportunities in the Philippines. While these service providers operate legally and in a regulated industry, in many other contexts labour brokers work informally and may facilitate illegal migrations or human smuggling. Furthermore, while these examples



Figure 6.8 The migration industry in Toronto, Canada

Source: the authors.

generally refer to low-paid workers, intermediaries will be no less important in the assembly of a migrant workforce within professional, technical, and managerial types of work. Executive search firms, or ‘headhunters’, for example, play a key role in facilitating the global flow of migrant labour at the top end of the labour market (Faulconbridge et al. 2015).

Financial companies and shipping companies are also key parts of the migration infrastructure as they facilitate the transfer of remittances, gifts, and belongings between countries. In this sector, Western Union is the world’s largest provider of international financial transfer services. The company reports that it has over 500,000 agents worldwide and in 2017 generated revenue of US\$5.5 billion by moving over US\$300 billion in money transfers.

By focusing on the institutions that facilitate migration, we can make two final points. First, thinking about these institutions also allows us to consider the ways in which non-migrant workers are delivered into labour markets. A local worker getting a local job may not need such an extensive chain of brokers, but intermediaries may be equally important. The case of temporary employment agencies provides a good example of how labour markets are institutionalized for migrants and non-migrants alike (see Box 6.3).

CASE STUDY

Box 6.3 The temporary staffing industry

Temporary staffing agencies represent labour market institutions that supply client companies with non-permanent workers. Essentially, they sell the labour of their workers to client firms, and make a profit by taking a share of the workers’ wages. This may be an appealing arrangement for many employers. It allows them to: make rapid changes in the size of their workforce; reduce the cost of hiring; avoid the risks and responsibilities of a standard employment relationship such as pensions, benefits, holidays, and so on; and, in some cases, it may also reduce wage costs even after paying the fees of the temp agency. Since the 1970s, temporary staffing has developed into a significant component of many national labour markets. In 2006, it was estimated that 67,500 employment agencies around the world placed 8.9 million workers. By 2016, 56 million people were being placed by agencies (a six-fold increase in just a decade), generating approximately US\$550 billion in revenue for the staffing industry (WEC 2018). In recent years, major temporary staffing firms have expanded globally. The largest global firm is Adecco, based in Switzerland. In 2017, Adecco had global revenues of over US\$26 billion, with 88 per cent of it coming from the company’s temporary staffing businesses (Adecco 2018). Although the numbers of temp

agency workers may be a small fraction of the total workforce (4.1 per cent of the workforce in the United Kingdom; 3.6 per cent in Australia; 2.1 per cent in the United States; 2 per cent in Japan; 0.8 per cent in Brazil; 0.7 per cent in Canada), the existence of such employment relations may be a factor in undermining standards in the labour market as whole. In particular, standard employment contracts that included permanent, full-time work with employee benefits have increasingly given way to insecure work that may be part-time, on contract, outsourced, fixed-term, and home-based. The temporary staffing industry is therefore an example of a labour market institution that acts as an intermediary between employer and employee, but it also *shapes* the labour market as a whole in important ways. Its presence in the labour market both reflects and reinforces changing standards of ‘normal’ practices, rights, and responsibilities in labour relations. For an overview of the contemporary staffing industry, see Fudge and Strauss (2014).

A second point to take away is a wider argument about labour markets and how they work. It is easy to assume that labour markets are simply the sum of the actions of individual buyers and sellers of labour power. We have seen that this is seldom the case. Instead, they are deeply underpinned by an array of actors and institutions that shape them and make them work. These institutions range from training and educational institutions, to staffing agencies, to the laws and regulations imposed by the state. They can also include the social and cultural contexts in which labour is employed: the gender norms that shape family life; the working class cultures that form the basis for labour organizing; and the social networks whereby friends help each other find jobs. These (and many other processes) constitute the ways in which labour markets are socially embedded – whether that means social structures that are quite local, or institutions that bring together workers and employers across global space. As we saw in Chapter 2, markets everywhere are rooted in wider social processes that take us outside of what is conventionally considered the ‘economic’, and labour markets are no exception.

6.8 Summary

This chapter started with the question, ‘Are migrant workers the new normal?’ Inevitably, the direct answer to this question depends on where in the uneven global economy the answer is coming from. There are certainly places (Singapore, Dubai, Toronto, Chicago, London, and Sydney) where employment of migrant labour (temporary, permanent, or undocumented) is the norm. There are also places (Delhi, Shanghai, and Guangzhou) where internal migrants are a critical part of the workforce. The question can also be answered from the perspective of

migrant-sending locations (the Philippines, Bangladesh, Mexico, and Jamaica) where going overseas to work has become normalized.

But the growing prevalence of migrant labour is symptomatic of new norms in more subtle ways too. The employment of migrants is often one way, among many others, of reducing the share of resources accruing to those at the lowest end of the labour market. Migrants are usually more compliant and harder working – because their residency status is precarious and because they have faraway family members who are depending on them – but they represent just one strategy among many to ensure that profits for the owners of corporations are maximized. The rolling back of rights to unionize, the use of temporary staffing agencies and day labour, cutting back on permanent employees who might have access to health and pension benefits, and the relocation of production to overseas locations, are all symptoms of the same systemic urge to cut costs and maximize flexibility. The costs of such strategies are often borne in ways that are difficult to count: migrants separated from their families; precarious workers with unpredictable work schedules and incomes; and poor safety standards in the workplace. In this way, then, the migrant worker is symbolic of wider trends in the global economy.

We have also noted that the organizing of migrant workers reveals some important trends in labour organizing as a whole. Organizing campaigns are increasingly focused on spaces outside of the workplace. The urban spaces of city neighbourhoods and communities are replacing the traditional spaces of unionism in factories, mines, public transport systems, and hospitals. From there, labour organizing has moved to other scales in order to meet the scale at which employers operate. This has led to a diversification of the actors involved in labour politics – beyond unions to include a wide range of civic organizations, from faith groups, to immigrant advocacy groups, to neighbourhood associations. The issues addressed by such campaigns have also shifted. Beyond the workplace conditions and wages that were the concern of collective agreements negotiated by unions, campaigns are now as likely to take on questions of income inequality, access to education and other public services, housing affordability, and precarious citizenship status.

Migrants do not, however, simply appear based on their own struggles and journeys (or at least, they do not appear in large numbers that way). Rather, an array of intermediaries and facilitators are needed to make migrant workers available. This is true whether we are talking about Polish workers in a food processing plant in Eastern England or a top executive in the financial sector. In each case, a network has both shaped that worker to fit the needs of the labour market, and has delivered them to their potential employer. This point allows us to make a wider observation about labour markets – that they are markets that are deeply embedded in other institutions and social relations. Whether we are talking about migrant workers or non-migrant workers, the labour market is a thickly institutionalized process, and one that is both deeply embedded in places and widely connected through networks.

Notes on the references

- Taylor and Rioux (2018) and Herod (2017) provide comprehensive and student-friendly overviews of Labour Geography as a field. Other recent reviews of the field include Peck (2018) and Strauss (2018).
- The case of migrant labour in Dubai has been the subject of several recent studies, including Buckley (2012, 2013). On nearby Qatar and Abu Dhabi, see also Mohammad and Sidaway (2012, 2016).
- For more on the debate concerning migrant remittances as a development strategy, see Gamlen (2014) and Kelly (2017).

Sample essay questions

- How is the world of work changing and how does migrant labour figure in these changes?
- How does the territorial state produce uneven rights for labour migrants?
- For a migrant-sending country, explain the pros and cons of a development strategy based on migration and remittances.
- Why might employers prefer labour migrants over local recruits?
- How has the rise of migrant labour changed the way in which working class struggles have been organized?

Resources for further learning

- International organizations provide rich interactive databases to further explore the changing world of work and the phenomenon of migrant labour. The websites of the International Labour Organization (www.ilo.org), the World Bank (<https://datacatalog.worldbank.org/>), and the Organization for Economic Cooperation and Development (<https://data.oecd.org/>) are especially useful. The World Bank, in particular, has a specific research unit focused on the link between migration, remittances, and development (<https://www.knomad.org/>).
- The experiences of migrant workers are depicted in many documentary films. For example, the film *Migrant Dreams* by Min Sook Lee and Lisa Valencia-Svensson (2016) addresses the seasonal agricultural workers discussed in Section 6.5 of this chapter. Many unions also have video material available – the SEIU, for example, which was behind both Justice for Janitors and the Fight for \$15, has a well-populated YouTube channel (<https://www.youtube.com/user/SEIU>).

- Many trade unions, migrant advocacy groups, and specific campaigns have extensive websites that allow in-depth explorations of their struggles. For example, LabourStart (www.labourstart.org) provides a multilingual news service about labour movements around the world.

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CHAPTER 7

CONSUMERS

Who decides what we buy?

Aims

- To understand the nature and importance of consumption as an economic activity.
- To advance a sociocultural perspective for framing consumption dynamics.
- To appreciate the changing spatial patterns, networks, and territories of retailing.
- To reflect on how consumption more generally is both spatially uneven and place-specific.
- To explore how tourists consume and experience places in different ways.

7.1 Introduction

As consumers, how do we know which goods and services we want to buy? These purchase decisions, while sometimes based simply on impulse, usually depend upon flows of information, which can come from many different sources, such as the producers of the goods and services, the media, peers, friends, and family members. In particular, however, advertising plays a critical role in constructing and disseminating knowledge about commodities. Advertising is a huge global business worth an estimated US\$600 billion a year, with the world's largest advertising group, WPP, generating annual revenue of

US\$15 billion and employing 200,000 people worldwide. The leading global spenders on advertising are consumer goods, technology, and automobile firms. In 2016, for example, the two biggest spenders were Proctor & Gamble (US\$10.5 billion) and Samsung Electronics (US\$9.9 billion). These huge investments are designed to create and sustain demand for products by making connections between the particular qualities of the commodities concerned and our senses-of-self and the lifestyles to which we aspire as consumers. Advertisers thus seek to influence the many decisions we make as consumers about what to buy – from the everyday purchase of food and drink, to regular demands for clothing, books, and music, to more infrequent large acquisitions such as cars, TVs, and furniture.

In recent times, however, the nature of advertising has been transformed in ways that are very revealing about contemporary consumption and technological dynamics. In 2017, for the first time global spending on internet advertising (37.6 per cent of the total) exceeded that spent on television advertising (34 per cent). Mobile internet (19.8 per cent) had risen rapidly to overtake desktop internet (17.8 per cent) spending, while by far the fastest growing digital advertising medium was social media such as Facebook and WeChat (developed by China's Tencent). Amazingly, two-thirds of the roughly US\$220 billion spent on online advertising in that year was paid to just three American and three Chinese companies, namely Facebook, Google, Microsoft, Alibaba, Baidu, and Tencent. The top two firms alone collected half of global online advertising revenues: Google accounted for one-third (US\$73.8 billion) with Facebook receiving 16 per cent (US\$36.3 billion) (data from www.zenithmedia.com, accessed 7 May 2018). While some of these firms have predominantly one function, such as Facebook (social media) or Baidu (search engine), the activities of the Chinese giants Alibaba and Tencent straddle e-commerce, online payment systems, and social media.

Such data offer a snapshot of the profound ongoing transformations that are taking place in the overlapping online worlds of social media, advertising, and retailing. Increasingly, we are alerted to new goods and services, research and discuss their qualities, and purchase them through digital platforms as part of our daily online activities. Scratch beneath the surface, however, and there are several important geographical dimensions to these seemingly ubiquitous developments. First, while the growing significance of large, globally networked internet companies is clear, they are reworking patterns of consumption in uneven ways. For instance, while Amazon and Google are dominant in the United States and many other markets, in China for regulatory and consumer preference reasons, the clear market leaders are Alibaba, Tencent, and Baidu. Amazon has expanded internationally most effectively into Western Europe, while Alibaba has focused on Southeast Asia. At the same time, these online worlds are not simply erasing what went before, but rather continue to sit alongside, and interact with, 'old' technologies. For instance, while internet advertising

had expanded rapidly by 2017, as noted above, over 60 per cent of advertising revenue was still derived from traditional channels, such as television, newspapers/magazines, radio, cinema, and billboards. Similarly, as we shall see in this chapter, store-based and online modes of retailing are co-evolving and will continue to do so.

Second, we should not assume that everyone in the world can seamlessly tap into these various online forums – uneven internet access remains a notable feature of the contemporary world. At the end of 2017, the global internet penetration rate was 54 per cent, with levels of 35 per cent in Africa and 48 per cent in Asia, providing an important reminder that by no means everyone has access to the online worlds of consumption. Third, within these broad spatial patterns of uneven access, there are place-specific dynamics at work. Working at the nexus of social media, advertising and retailing allows producers and advertisers to target their goods and services at individual consumers with increasing sophistication and accuracy. What began over 20 years ago through the collection of consumer data through supermarket loyalty cards has developed into the dominant form of advertising in a highly fragmented world of consumption. Importantly, this targeting is simultaneously social and spatial, as firms adjust their targeting to reflect the place-specific nature of consumption dynamics. Consumption is also given a local flavour in the way that it is not an individual practice, but is informed by social relationships and peer reviews and opinions. When as consumers we buy goods and services, it is increasingly likely that we will have done pre-purchase research using a wide range of available online forums, such as TripAdvisor for hotel and travel expenditure, but also discussed them within our family and friendship chat groups.

Building upon these initial insights, this chapter proceeds in four sections. First, we consider different interpretations of who controls consumption dynamics, arguing for a perspective that takes the roles of both corporations and consumers seriously (Section 7.2). The sociocultural perspective we advocate is well attuned to the various uneven geographies of consumption that are the core focus of the chapter. Second, we look at the changing spatial patterns of retailing in the contemporary era, profiling globalization processes and urban scale shifts before considering the rise of online retailing and the prevalence of informal spaces of retailing (Section 7.3). Third, we broaden out from retailing to consider how consumption practices are always and unavoidably geographically uneven in two key respects: the spatial distribution of consumers of different types, and the ways in which consumers use the commodities they buy as part of place-specific processes of identity construction (Section 7.4). Fourth, we explore how consumption is not only heavily shaped by the interconnected places in which it occurs but also note that certain kinds of places are themselves actively consumed through tourism (Section 7.5). Overall, this chapter aims to reveal how consumption is just as geographically varied and complex as processes of production identified in Chapters 4 and 5.

7.2 Towards Viewing Consumption as a Sociocultural Process

Who controls consumption processes? There are different perspectives on this question, depending on how one views the relationship between production and consumption within the capitalist system. As we saw in Chapter 4, the production network concept allows us to see how consumption is the final step in a series of material transformations and value-adding activities. The discussion in Section 7.1 may give the initial impression that large corporations of different kinds, rather than consumers, are the dominant shapers of consumption within such networks. This resonates with what is known as the *consumers-as-dupes* viewpoint, which emphasizes the primacy of production within the economic system as a whole. From such a perspective, consumption is read as the outcome of changes in the nature of the production process and therefore driven by these capitalist firms. It is a pleasure-seeking but ultimately regressive activity in which passive consumers are enticed into parting with their money, thereby delivering profits for producers and refuelling the basic capitalist system outlined in Chapter 3. As we shall see shortly, the rise of retail capital over the last few decades has complicated the picture in that consumption is increasingly shaped by *retail* rather than manufacturing corporations. Most importantly, however, the consumers-as-dupes perspective places capitalist corporations rather than consumers in control of consumption processes. While there are strong elements of truth to this interpretation, this chapter will demonstrate how it underplays the extent to which individuals and groups of consumers exert their agency through their diverse consumption practices.

This can be compared with the *consumer sovereignty* view, which foregrounds the free will of individual consumers. Deriving from neoclassical economics, consumption is seen here as an economic transaction dependent on individual preferences and price-based decisions. Rational consumers – the *homo economicus* introduced in Chapter 2, acting on full information about different products and prices and in accordance with their preferences, will make informed decisions about which products to buy. In turn, these actions will have an impact on the production process, as market information about which products are popular feeds back through retailers to manufacturers. In short, consumers can choose whether to buy the products on offer or not, and as such they have considerable sovereignty, or control, over the economic system as a whole. Again, as with the consumer-as-dupes perspective, this approach is not entirely without merit. Capitalist firms – whether manufacturers, retailers, or other service providers – do indeed closely monitor their customers and markets and respond rapidly to signals they receive about the popularity (or not) of the commodities they produce. The atomistic, rational view of consumers inherent in the sovereignty view has clear limitations, however, particularly in the way that it represents consumption

decisions as being taken by autonomous consumers unaffected by wider society and its various norms and expectations.

By contrast, a *sociocultural* perspective emphasizes the way in which consumers actively construct their own identity through their consumption practices. Such an approach draws attention to the other intersecting facets of identity – such as class, gender, ethnicity, age, and sexuality (see also Chapter 13) – and looks at how consumers knowingly purchase certain commodities and use them in specific ways as part of an active process of identity construction. These processes of identity construction, in turn, are not individualized as in the consumer sovereignty view, but are instead part of larger social forces and trends within society (e.g. teenage fashion or ethical purchases). Rather than simply being rational economic actors (*homo economicus*), consumers also exercise aesthetic judgement (*homo aestheticus*) and are unavoidably social beings (*homo sociologicus*) (Warde 2017). From such a perspective, the interactions between consumers and producers are viewed as complex and two-way. Consumption processes are clearly influenced by manufacturing and retail corporations and the commodities they offer, but consumers purchase such goods selectively and knowingly: firms, in turn, will respond to emerging consumption dynamics within society.

This approach – which underpins the remainder of this chapter – incorporates three important aspects of consumption. First, it looks beyond the initial decision to buy a particular commodity and conceives of consumption as a *process* involving the sale, purchase, and subsequent use of commodities. Hence, it is not only about the interface between those offering products/services for sale, and those making decisions about which products/services to buy, but is also about what people do with commodities after buying them. Consumption is thus much more than just a simple economic transaction at the point of sale. Rather, as a process it includes multiple sociocultural aspects of commodities and their use, encompassing a wide range of activities: purchasing, shopping, using, discarding, recycling, reusing, wearing, washing, eating, leisure, tourism, and home provisioning and renovation, among others. In addition to retailing, consumption is taking place in a wide range of outlets, such as shops, restaurants, and hotels, and repair, servicing, cleaning, and recycling operations, many of which are increasingly important economic sectors in their own right. An important implication here is that in addition to being consumers, many people also depend on consumption-related employment for their work and livelihood (see Box 7.1).

Second, the nature of consumption within capitalism should not be seen as unchanging, but rather as *evolving* over time. In line with our discussion of post-Fordism in Chapter 3, it is possible to examine the emergence of what might be called post-Fordist consumption tendencies over the past few decades (see Table 7.1). In general, the Fordist era was characterized by the large-scale, mass consumption of a relatively limited range of standardized commodities (originating, most famously, with the Model T car, available as Henry Ford notably declared, in ‘any colour so long as it’s black’). The system was driven by economies of scale and low prices that

FURTHER THINKING

Box 7.1 Consumption work

In developed economies, a growing proportion of the workforce is employed in services such as retailing, restaurants, tourism, and entertainment. At the same time, the rapid growth in these kinds of jobs has raised questions about their quality, security, and desirability. These doubts have prompted economic geographers (and other social scientists) to look within workplaces and explore the nature of work in the consumption sphere. This research has revealed that consumption-related jobs tend to be characterized by some, or all, of the following features:

- Socially constructed as low status jobs within society (e.g. ‘the waitress’, ‘the flight attendant’, and ‘the checkout assistant’) and receiving relatively low wage rates.
- Low levels, or indeed the complete absence of, collective representation and unionization.
- Dominated by part-time and temporary contracts rather than full-time positions. In some instances (e.g. tourism and Christmas shopping), there may be a marked seasonality to availability of employment.
- Technology-based surveillance of the workforce both to monitor workers (e.g. listening in to telephone sales calls and measuring productivity of fast-food operatives) and to deploy them efficiently (e.g. gauging the appropriate number of checkout staff in a supermarket).
- Based around labour-intensive, repetitive tasks which cannot easily be replaced by technology (e.g. waiting on tables or cutting hair).
- Having a ‘performative’ component in which workers are required to take on a particular role or personality. This can occur in both face-to-face (e.g. the scripts given to fast-food workers) and technologically mediated situations (e.g. Indian call centre workers taking on English names as part of scripted encounters with customers). These performances may challenge workers’ true senses of identity and lead to substantial stress levels.
- The social construction of many of these jobs as essentially ‘female’ (e.g. flight attendants) and/or being for young people (e.g. fast-food workers, and bar and nightclub staff), reinforced through recruitment practices.
- Selective recruitment on the basis of a wide range of other personal attributes – ethnicity, bodily appearance, weight, bodily hygiene, dress and style, and interpersonal skills – to fulfil the requirements of the performative encounter with customers.

For more, see McDowell (2009).

Table 7.1 Mass consumption and post-Fordist consumption compared

Characteristics of mass consumption	Characteristics of post-Fordist consumption
Collective consumption	Increased market segmentation
Demands for familiarity from consumers	Greater volatility of consumer preferences
Undifferentiated products/services	Highly differentiated products/services
Large-scale standardized production	Increased preference for non-mass produced commodities
Low prices	Price as one of many purchasing considerations, alongside quality, design, novelty, etc.
Stable products with long life cycles	Rapid turnover of new products with shorter life cycles
Large numbers of consumers	Multiple small niche markets
‘Functional’ consumption	Consumption less ‘functional’ and more about aesthetics
	Growth of consumer movements, alternative, and ethical consumption

enabled the widespread consumption of a specific range of household and personal goods. The post-Fordist era, by comparison, seems to have engendered a much more fragmented consumption pattern in which many highly differentiated products are offered to a much wider range of consumer groups or *niches*. This mode of consumption is driven less by the price and functionality of commodities, and more by the aesthetic and symbolic value they bring to consumers. It is shaped by knowledgeable end consumers making strategic decisions about the commodities that they wish to buy. Persuasive though such arguments are, it is important to recognize that the prevalence of post-Fordist consumption processes is highly uneven across different places and sectors. We will come back to this point.

Third, and as we shall see in the remainder of the chapter, a sociocultural perspective also allows the *uneven geographies* of consumption to be laid bare. In terms of spatial patterns, the ‘everyday’ nature of many consumption processes means that they necessarily have a more extensive and disparate geography than other economic activities. Put simply, while not every city or region will have a major manufacturing plant, all will have supermarkets, cinemas, petrol stations, restaurants, libraries, recycling plants, and the like. Indeed, in some places, the whole economy can be based primarily around such activities – think, for example, of leisure and tourism destinations such as Las Vegas or the Maldives. Equally, however, we need to comprehend the ways in which the *nature* of consumption varies geographically, due in large part to the sociocultural dimensions which give it a

very place-specific character. Indeed, understanding consumption sometimes necessitates that we consider even smaller spatial scales, such as the body and the home. For instance, while most commodities that we buy ultimately end up at home, home furnishings (e.g. furniture, curtains, bed sheets, paint, and flooring) are explicitly deployed to create particular environments and spaces within the home. This material process of decoration and maintenance contributes to identity formation, as the home becomes a micro-space of creativity and personal expression.

7.3 The Shifting Spatial Patterns of Retailing

In this section we explore the shifting spatial patterns of retailing. Retailing is a core element of wider consumption processes and a huge economic sector in its own right. In the United Kingdom in 2017, for example, it employed 2.9 million people – approximately 10 per cent of the total workforce – across 300,000 businesses, while in the United States, 15.8 million people were employed in just over 1 million retail outlets. The changing geographies of retailing are therefore an important component of the contemporary economic landscape. We consider these changing geographies in four stages. First, we will profile the ongoing globalization of retail activity and its wider impacts. Second, we explore the shifting intra-national geographies of retailing, and, in particular, dynamics at the urban scale. Third, we move beyond physical retail forms to consider the growing significance of online retailing, before fourth, looking at the prevalence of both temporary and quasi-permanent informal retail spaces.

The Globalization of Retailing

Perhaps the most important geographical outcome of the rising power of retailers has been the extensive globalization of retailing over the last 30 years, as retailers have sought new market opportunities in which to invest the profits secured from their home markets. This period has seen the emergence of a select group of retailers as transnational corporations (described in Chapter 5) that have used aggressive merger and acquisition activities, backed up by subsequent rapid organic growth, to assume dominant market positions across a range of countries. The globalization of retailing is not a new process, dating back as far as the late 1800s. Foreign expansion started to take off in the 1960s, and was initially dominated by investments between the leading economies of North America, Western Europe, and Japan. Since the mid-1990s, however, more aggressive expansion has taken on an entirely new geographical configuration. Figure 7.1, for instance, shows the global store distribution of the world's largest retailer Wal-Mart in early 2018. Wal-Mart has operations in China, India, Japan, the United Kingdom, and 13 countries in sub-Saharan Africa in addition to extensive operations throughout the Americas. In general, investment by the leading retail TNCs is

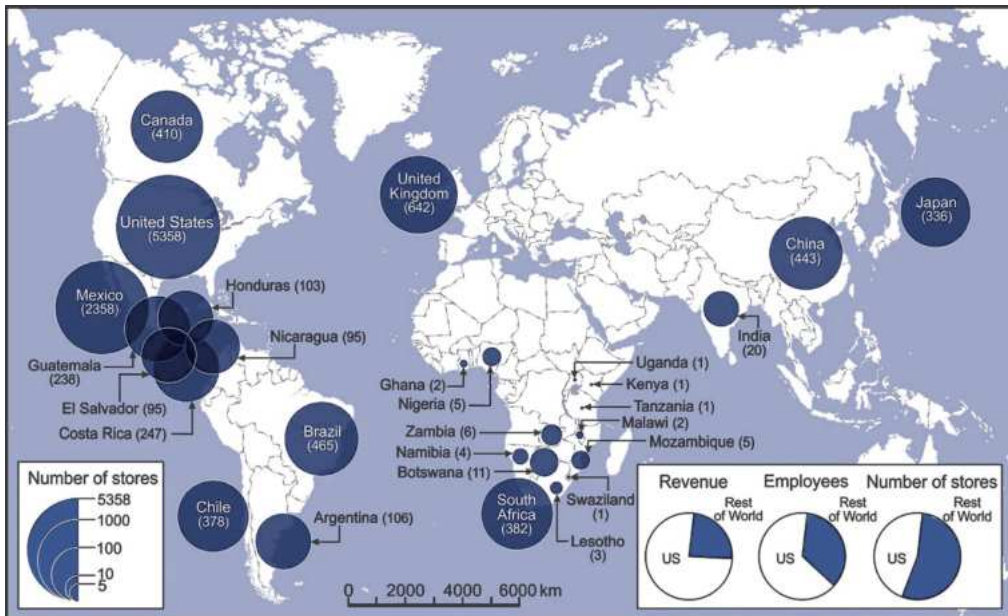


Figure 7.1 The global distribution of Wal-Mart stores in 2018
Source: data from company annual reports.

now targeted towards countries in so-called *emerging* regions, most notably South and Central America, East and Southeast Asia, and Eastern Europe.

The leading transnational retailers, ranked in terms of their foreign sales, are detailed in Table 7.2. A number of important observations can be made from these data. First, it gives a sense of the *scale* of international retail operations, with the retailers deriving between US\$18 and \$120 billion in sales from foreign markets in 2016. Second, it gives a sense of the *scope* of international retailing, with many of the leading players having store operations in 20–30 countries, a level of international expansion comparable with many manufacturing sectors. Third, it reveals that many of the leading retail TNCs – with some exceptions such as Wal-Mart – are Western European in origin. While many of the world's very largest retailers hail from the United States (e.g. Home Depot, Kroger, Lowe's, and Target), they can achieve that size without straying far beyond the borders of their home country. Fourth, it shows that the leading transnational retailers tend to be food retailers or general merchandisers, rather than specialty providers (e.g. selling toys or electronic goods).

Three further characteristics distinguish this latest phase of retail globalization. First, the sheer *speed* of the international expansion is notable. For example, in 1990, Carrefour was to be found in five countries outside of France, and Wal-Mart was only present in its home market. By 2016, Carrefour was present in 34 markets and Wal-Mart in 29. Second, the *scale* of investment currently being undertaken is unprecedented. Static 'snapshots' such as Table 7.2 and Figure 7.1 may not give a real sense of the size of the phenomenon. For example, by 2018, Wal-Mart had 6,360 overseas stores employing a total of 800,000 workers. These expansion processes are creating retail giants with foreign operations of unprecedented size. Third, the *impacts* of this expansion on the retail structures of the host countries have been significant. Table 7.3 profiles Poland's retail structure in 2017, revealing that 6 of the top 10 grocery retailers are foreign, or more specifically Western European, owned. Those six transnational retailers account for 45 per cent of the total grocery retail market and own over 5,000 stores in Poland; they particularly dominate in terms of larger format stores, with the Polish firms being more dominant in terms of convenience stores (hence their larger store numbers). A similar story can be told for many leading economies across Eastern Europe, Latin America, and East Asia. The implications for host economies stretch way beyond the competitive impacts on the domestic retail sector. Transnational retailers also drive important changes in terms of consumption patterns (e.g. consumers switching from local markets and small stores to supermarkets and hypermarkets) and supply chain dynamics (e.g. buying in bulk, removing intermediaries, demanding higher quality standards, and implementing new logistics technologies). They have also triggered a range of responses from state regulators who have tried to manage the expansion of retail TNCs in different ways, often through planning laws.

Leading transnational retailers, then, are coordinating increasingly extensive networks of stores at the global scale. However, we need to be cautious about inferring from these trends that the nature of retail spaces is becoming identical

Table 7.2 Leading transnational retailers, ranked by sales outside home market, 2016

Rank	Name of company	Country of origin	Type of retailer	International revenue (USD million)	International revenue (% of total)	No. of countries of operation
1	Wal-Mart	USA	Food and general merchandise	118,089	24.3	29
2	Schwarz Group	Germany	Food and general merchandise	61,241	61.7	27
3	Aldi Group	Germany	Food and general merchandise	56,898	67.0	17
4	Ahold Delhaize	The Netherlands	Food and general merchandise	51,893	79.1	11
5	Carrefour	France	Food and general merchandise	44,216	53.3	34
6	Metro	Germany	Food and general merchandise	40,029	61.0	30
7	IKEA	Sweden	Furniture	36,083	95.0	48
8	Auchan	France	Food and general merchandise	36,071	64.9	14
9	LVMH	France	Luxury goods	35,624	90.0	80
10	Amazon	USA	General merchandise	34,837	36.8	14
11	Costco	USA	Food and general merchandise	32,173	27.1	10
12	Apple	USA	Electronics	27,200	51.3	22
13	H&M	Sweden	Apparel	22,755	96.0	64
14	Inditex	Spain	Apparel	18,762	78.9	93
15	Casino	France	Food and general merchandise	17,984	47.4	27

Sources: Deloitte (2018), Euromonitor (GMID Passport Database), annual reports, and other public sources.

Table 7.3 Top grocery retailers in Poland, 2017

Company	Ownership	Market share (%)	Number of stores	2017 sales (\$ millions)
Biedronka	Portugal	20.7	2,823	12,316
Schwarz Group	Germany	10.9	702	6,402
Eurocash	Poland	8.2	14,000	4,963
Lewiatan	Poland	5.0	2,800	2,910
Tesco	UK	4.5	440	2,683
Auchan	France	4.4	109	2,614
Nasz Sklep	Poland	3.8	5,716	2,239
Carrefour	France	3.3	900	1,930
Zabka Polska	Poland	3.1	4,700	1,829
ITM Group	France	2.1	360	1,775

Sources: Euromonitor and company websites.

around the world. Clearly, there are tendencies in that direction, with elements of store formats and signage, for example, being common across all markets. A British shopper entering a store of the leading UK retailer Tesco in Prague (Czech Republic) or Bangkok (Thailand) would quickly see aspects of the store design that are very similar to stores in the home country. Equally, however, the same shopper would also notice significant variations in terms of the product range on offer, the display of goods to consumers, and the physical structure of the store. In Prague, for example, Tesco has a city centre department store stretching over several storeys. In Thailand, Tesco hypermarkets often include a range of other food, leisure, and community services, while in rural areas, smaller Tesco stores offer external market space to local traders (see Figure 7.2). All these stores are quite different to the free-standing single-storey supermarkets that dominate in the United Kingdom.

Equally, we should not be lulled into thinking that international retail expansion is a straightforward process. On the contrary, meeting the needs of different national consumer markets is a challenging business and the recent history of retail globalization is littered with examples of both high-profile successes and failures across the leading retail TNCs. For example, Wal-Mart, while successful in many markets as shown in Figure 7.1, has failed to establish itself and subsequently exited the markets of Germany (1998–2006), Hong Kong (1994–1996), Indonesia (1996–1998), and South Korea (1998–2006). Sometimes troubles in the home market can lead to market exit decisions: Carrefour, one of the first retailers to expand into Southeast Asia in the early 1990s, announced in late 2010 that it was withdrawing from the region due to its severe losses incurred in Europe and that its hypermarkets in Thailand, Malaysia, and Singapore were up for sale. Transnational retailers work hard to achieve legitimacy within host markets through the *strategic localization* of their store and sourcing activities to meet the needs of specific territories – the extent



Figure 7.2 Tesco Lotus in Thailand

Source: the authors.

to which they are able to achieve this has a strong bearing on their success or failure. Wal-Mart's failure in Germany, for instance, can be traced to a mismatch between a 'lean retailing' business model developed in the United States and the needs of the German market. In particular, Wal-Mart was unable to adapt its supplier and labour relations to conform to German norms for collective governance and struggled financially as a result. An inability to adapt sufficiently its business model to the needs of the host market also underpinned Wal-Mart's exit from South Korea. It is too simplistic, however, to conclude that some retailers are 'good' at international expansion while others are not; the reality is a complex picture of success and failure as retailers from different home contexts strive to adapt to widely varying host economy conditions.

From Centre to Suburbs, and Back Again?

Having established the contemporary importance of processes of retail globalization, we can now move on to consider the changing geography of retailing at the urban scale. In particular, we want to profile the shifting patterns of retail investment from the inner city and downtown to the suburban periphery and back again, and in so doing, reveal how retail capital plays a central role in the constant re-making of the urban built environment (a dynamic capitalist process introduced in Chapter 3).

Up until the 1950s, retailing was essentially a *central* urban activity. The post-World War Two suburbanization of retail capital and related decline of city-centre retailing were arguably pioneered – and indeed most evident – in the United States (see Box 7.2 for the classic example of Chicago). These dynamics, often driven by powerful alliances of property developers, retailers, and financiers, have been repeated in hundreds of cities across the United States and Canada. A similar suburbanization of retail provision has occurred in many other countries, and particularly those of Western Europe. Such trends have been fuelled by a series of

CASE STUDY

Box 7.2 Retail decentralization in post-war Chicago

The scale and significance of these dynamics can be illustrated through briefly looking at developments in and around Chicago, Illinois, over the period from 1950 to the mid-1970s (drawing on Wrigley and Lowe 2002). By the end of the 1950s, four large open-air shopping centres with ample parking provision had appeared on the periphery of Chicago as department stores began to realize the potential of shifting their focus to the rapidly expanding middle-class suburbs (see Figure 7.3). The 1960s saw the building of a series enclosed shopping centres or *malls* in a ring around Chicago, facilitated in part by the expanding urban expressway network. By the end of the decade, a total of 11 suburban shopping centres had combined retail sales to rival central Chicago. By 1974, the total was up to 15 shopping centres, and a second ‘ring’ around Chicago was starting to emerge. Some of the key tenants of these new suburban centres were the very department stores – such as Sears Roebuck and J.C. Penney – that had once dominated downtown shopping districts. At the same time, central and inner city retail outlets were closing in their hundreds. Chicago’s leading inner city shopping district, known as 63rd and Halsted, was severely hit, finding itself in the middle of a decaying area with falling income levels by the early 1970s. In just two-and-a-half decades, the geography of Chicago’s retail provision had undergone a profound transformation.

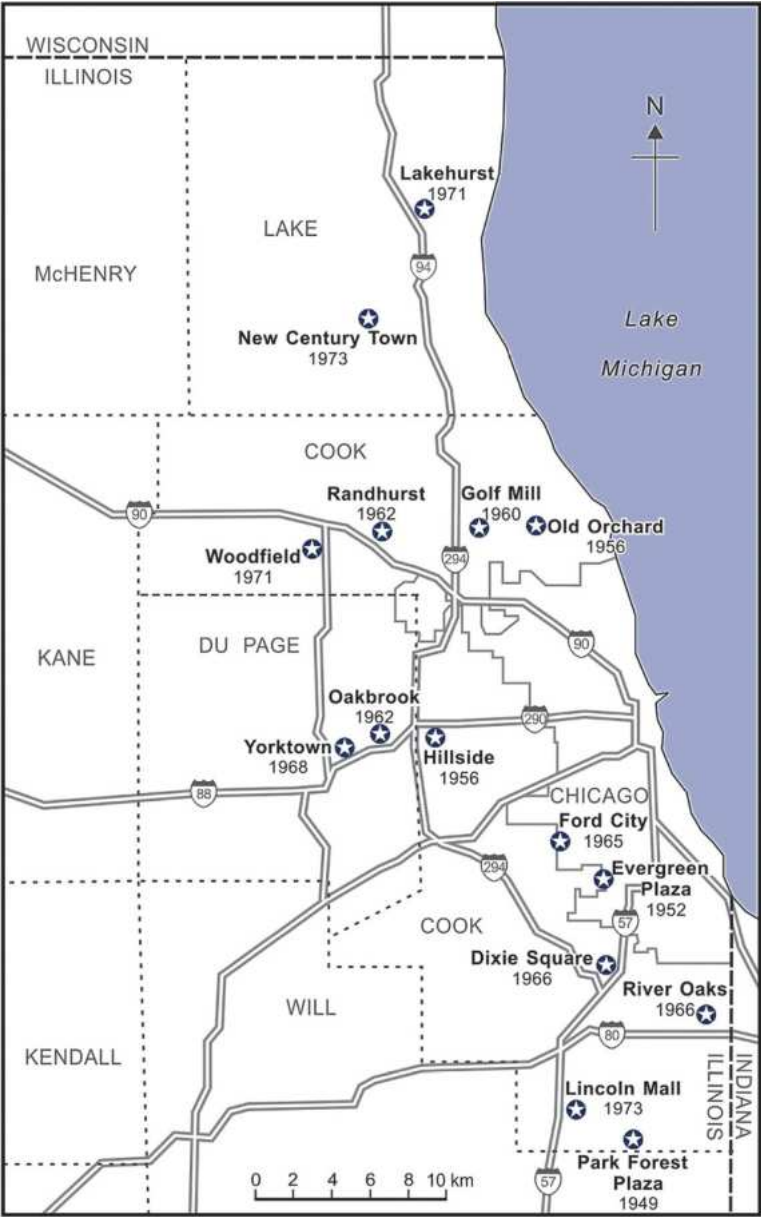


Figure 7.3 The development of Chicago’s suburban shopping centres, 1949–1974
Source: adapted from Berry et al. (1976).

overlapping dynamics: the increased mobility of consumers and high levels of car ownership; the emergence of portions of the population with large amounts of disposable income; population decentralization from urban to suburban areas; higher female participation in the workforce driving demand for quicker and more

efficient means of shopping (e.g. the 'one-stop-shop'); and the growth strategies of retailers as they seek enhanced economies of scale through larger and more accessible stores. The *extent* to which the North American trends described above have been replicated elsewhere has been dictated by the strength of planning regulations in different countries: most European countries, for example, have been more resistant to suburban greenfield developments than in the United States. Moreover, in many fast-growing Asian cities – for example, Bangkok, Hong Kong, Seoul, and Shanghai – strong centralization of retail remains the dominant feature of the urban retail landscape. Regulatory conditions also critically affect the timing of any decentralization processes. In the United Kingdom, for example, there was a boom in the development of out-of-town food superstores in the 1980s and early 1990s when planning guidelines on building in suburban areas were favourable. These regulatory influences clearly show how general patterns are imprinted with the characteristics of the different territories and places in which they play out.

In most countries, however, suburban retail parks are now a well-established part of the retail landscape. In the United Kingdom, the initial wave of food superstores has been joined by three subsequent phases of out-of-town development. First, there has been a wave of retail parks containing, for example, home maintenance, carpet, furniture, and electrical stores whose bulky products suit such accessible locations. Second, in contrast to the large-scale decentralization of city centre retailing seen in the United States, planning constraints have restricted such relocations (beyond the food superstores and retail parks just mentioned) to a small group of massive regional shopping centres that aim to serve more than their immediate urban hinterland. As shown in Figure 7.4, these are quite evenly spread across the country and pioneers, such as Brent Cross and the MetroCentre apart, were largely built in the 1990s. The 1998 Trafford Centre, for example, on the western outskirts of Manchester, has approximately 1.9 million square feet of retail, catering, and leisure space encompassing 280 stores and attracting 30 million visitors a year. An interesting line of research has explored how such shopping centres are carefully designed in ways to induce consumers to spend money (see Box 7.3).

The third, and latest, wave of suburban retail in the United Kingdom takes the form of outlet shopping malls that offer clothing manufacturers' excess stock at reduced prices. Outlet malls originated in the United States; one of the most famous is Woodbury Common, an 850,000 square foot facility just one hour's drive from New York City, offering 220 different stores. The largest outlet mall in the United Kingdom – Cheshire Oaks in northwest England – has over 140 stores selling a wide range of designer brands (see Figure 7.5). Overall, it is important to recognize that the suburbanization of retailing now constitutes many different kinds and formats of retailing, and that its extent varies significantly across different national territories.

While suburbanization has had a massive and lasting impact on the spatial patterns of retailing, there are also notable recent trends working in the opposite

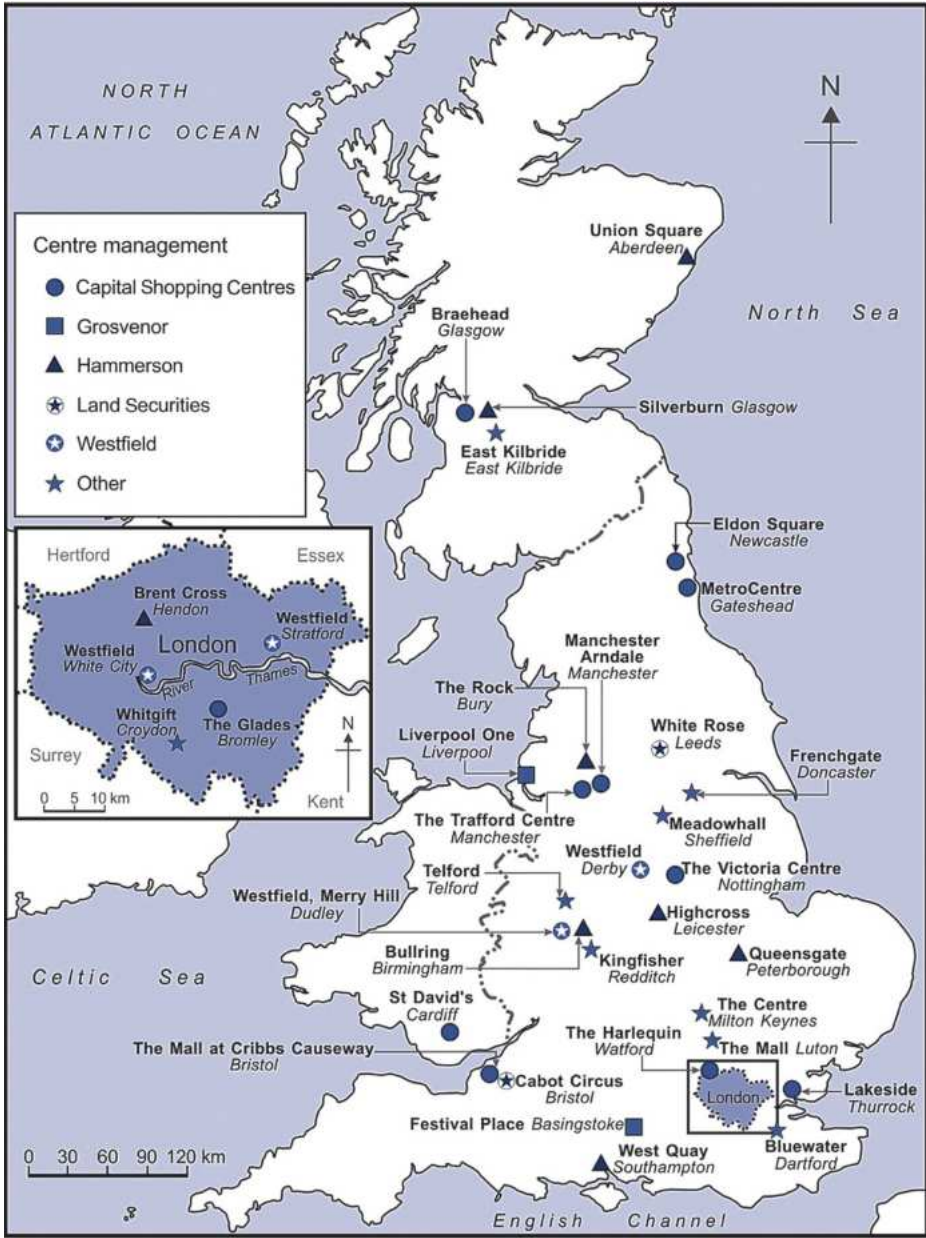


Figure 7.4 Britain’s largest shopping centres
Source: adapted from *The Guardian* (2011).

direction. While the nature and extent of the trend will again vary from context to context, three brief illustrations can be offered here to show the kinds of dynamics that are occurring. First, in the United States, since the mid-1970s when the level of retail decentralization was at its peak, considerable efforts have been

FURTHER THINKING

Box 7.3 The ‘magic of the mall’

Shopping malls are a particular kind of retail space especially designed to induce consumption. In contrast to the more open landscape of the street, malls are enclosed, privately owned *territories*. As such, to understand them, we need to look beyond the surface ‘magic of the mall’ (drawing on Goss 1993). Put another way, by exploring the form, function, and meaning of shopping malls it is possible to understand better how developers, retailers, and designers actively encourage the purchase of goods and services. There is a wide range of seemingly mundane attributes of mall design that seek to promote consumer spending, including:

- The use of attractive central features to draw shoppers in particular directions and then direct them towards further purchasing options.
- The configuration of escalators, and the strategic positioning of toilet facilities and exits, in order to make consumers walk past as many shop fronts as possible.
- Limiting long straight stretches so consumers are unaware how far they are walking.
- The use of signs and displays to encourage shoppers to keep walking.
- Supplying rest points and seats for the weary consumer.
- The use of soft-lighting and the absence of natural light to help suspend a sense of time.
- The use of mirrors and reflective glass to create an illusion of space.
- The use of ‘soothing’ background music to induce spending.
- The presence of highly visible security staff to reinforce the safety of the environment.
- Ongoing, regular cleaning to reinforce the cleanliness of the environment.

At the same time, and linking back to arguments made in Chapter 4, strenuous efforts are made to disconnect the commodities on sale from their real-world production systems and reposition them in a world of pleasure, fantasy, and magic promoted through architecture, interior design, and theming that evokes other times and places. In sum, what at first might seem to be a rather bland shopping mall is in reality a highly designed and strategic *territory*, reflective of the power of its owners, designers, and tenants. While it gives the impression of being a public place, in reality it is privately owned and is intended to generate profits. For a more recent study of a mall in Buenos Aires, Argentina, see Miller (2014).



Figure 7.5 Cheshire Oaks outlet mall

Source: the authors.

made to regenerate the downtown districts of American cities. Central to such initiatives have been so-called festival marketplaces, stimulated by the success of the Faneuil Hall Marketplace, which opened in Boston in 1976. The central idea here is to use combinations of architecture, cultural exhibits, concerts, and ethnic festivals to attract people to speciality markets, shops, and restaurants. A different, but closely related, form of development has seen downtown retail revitalization as part of multiple-use complexes comprising offices, hotels, leisure facilities, and convention centres (for example, the Marina Bay Sands integrated resort in Singapore; see Figure 7.6). Similar schemes have subsequently been tried in many cities around the world, including those where retail decentralization has been less pronounced.



Figure 7.6 The Marina Bay Sands integrated resort, Singapore

Source: the authors.

Second, in many of the post-industrial cities of developed countries (e.g. New York, Toronto, and Manchester) inner city retail has been boosted by gentrification processes, which have seen the return of young middle-class professionals to live in new or renovated apartments in inner city areas. This has created high-income areas that are attractive to shops, restaurants, nightclubs, and so on. These processes are also becoming apparent in rapidly developing Asian cities such as Shanghai. Third, large retailers have started to reinvest in the inner city, prompted in part by the gentrification trends just mentioned. In the United Kingdom, both Tesco and Sainsburys have established new small supermarket and convenience store formats to tap into these growing urban markets. These processes have partly been driven by the competitive responses of retailers to planning restrictions on large format stores, a process also seen in emerging markets (e.g. the rapid growth of Tesco's small Express format in Thailand).

The Online Spaces of Retailing

Many forms of retailing evidently still rely on the co-presence of sellers and buyers within a dedicated physical space, i.e. stores. Since the late 1990s, however, various forms of business-to-consumer e-commerce have emerged, presenting challenges to traditional retailers. After many initial years of steady expansion, the last few years have seen explosive growth in such online retailing, driven at

the global scale by developments in China. While estimates of online retailing vary considerably, many observers agree that in 2017, online sales in China exceeded US\$1 trillion for the first time (over twice the levels of the next largest market, the United States, and up from less than US\$100 billion in 2010), accounting for approximately 20 per cent of all retail sales in that country. Other leading markets in terms of the penetration of online retailing at that time were the United Kingdom (18 per cent of total sales), United States (15 per cent), Germany (15 per cent), South Korea (14 per cent), France (10 per cent), and Japan (9 per cent).

Geographic unevenness in uptake of online retailing has been accompanied by important sectoral differences. In 2017, in the United States, for example, over 60 per cent of sales of books, films, and music were conducted online, and over 40 per cent of sales of computers and toys, while for food and cars the figures hovered at around just 5 per cent of the total. For certain segments, therefore, online retailing has already been transformative. Online sales of books and DVDs – easily transported, non-perishable standardized products – have expanded rapidly, bankrupting many store-based retailers, and distribution of certain commodities such as music have moved decisively to the Internet (e.g. iTunes). Online retailing has also proven highly effective for a range of niche and specialist goods (e.g. relating to hobbies) due to the Internet's ability to match buyers and sellers over long distances, thereby increasing the effective size of the market. In terms of services, the Internet has proved to be a very efficient channel in several areas including travel and insurance. These variations reveal two important aspects of the nature of retailing. First, it has become clear that while online retailers can save money by avoiding the need for store premises, there are still considerable costs associated with selecting and delivering goods ordered over the Internet. In particular, the logistical challenges associated with high-frequency, low-value local deliveries are severe. Second, there are elements of tactility and sociality inherent in many forms of shopping, meaning that ahead of purchase consumers like to see and 'feel' the goods, discuss them with family and friends, and benefit from the expert knowledge of retail staff. These concerns may encompass both low-order (e.g. selecting high-quality, fresh foods) and high-order goods (e.g. expensive clothing or large electronics purchases). In this way, many consumers now move seamlessly between the online and physical spaces of retailing, sometimes even for the same product, for instance, combining in-store assessment of goods with the power of online price comparisons and peer review.

Growth in online retailing, therefore, has been driven not only by 'online only' retailers but also by store-based retailers who have moved parts of their business online, remodelling themselves as multichannel 'bricks-and-clicks' operators. Major store-based retailers have been proven to have considerable competitive advantages relating to their pre-existing warehouse and supply chain infrastructures, customer support centres, and product-return networks. They have been able to leverage these resources and economies of scale – for example, in terms of sourcing – by grafting e-commerce operations onto their existing businesses.

Many leading retailers, for instance, those in Table 7.2, have thus become hybrids, operating extensive store and online operations simultaneously. Increasingly, efficient logistics have become critical to these combined operations. Initially, there were two basic models of fulfilling online orders, either direct from a dedicated distribution facility or by ‘picking’ products from store shelves. However, there is by now a plethora of different online fulfilment models, again being driven by innovations in the Chinese market, involving different geographical configurations of warehouses and different levels of involvement of independent logistics firms (Wang and Xiao 2015). Same day delivery at a predefined timeslot of even the most mundane goods has become the norm in China and other contexts, and is underpinned in the Chinese case by an army of over 1.2 million couriers continually criss-crossing cities in vans and on motorbikes.

Until this point, online retail spaces have thus by no means replaced physical spaces, but rather are overlain on, and interact with, the changing geographies of store-based retailing. Moving forward, however, there are signs that online-only retailing may be in the ascendancy, as the operations of the global leaders such as Amazon, Alibaba (Taobao and Tmall), and JD.com are reaching an unprecedented scale and driving more systemic change. The rapid rise of Alibaba’s Taobao in China, for instance, is having very varied impacts in rural towns and villages. In many places, small stores are being put out of business by the online competition. For so-called ‘Taobao villages’, however, of which there are now estimated to be over 1,500, specialized production of certain commodities (e.g. cultural products and furniture) for the national market (accessed through Taobao) is driving economic growth and, in some cases, dramatically reducing poverty levels in certain localities.

The meteoric rise of Amazon is also highly instructive here (see Figure 7.7). The company was established in 1994 and did not return any profit until 2001, but has undergone exponential growth since 2010. What started out as a bookseller has become a broad-based retailer with annual revenues approaching US\$200 billion, roughly one-third of which comes from acting as a platform for third-party sellers, and selling internet ‘cloud’ services and subscriptions (notably for its ‘Prime’ service, which also gives access to original film and TV content on which Amazon spent US\$4.5 billion in 2017). Its e-commerce website accounts for 5 per cent of all retail spending in the United States, and the company employed over 500,000 people globally in 2018, up from just 150,000 in 2014, and was the second largest employer in the United States after Wal-Mart. The company’s competitive strength derives from its combined abilities in logistics and data management (Hesse 2018).

While its data centres collect and manage a vast array of consumer data, Amazon’s fulfilment centres manage the efficient flow of goods to customers, in some cases using its data processing to predict consumer demand ahead of it actually being realized through purchases on the website. Amazon’s operations are therefore underpinned by an extensive network of different kinds of centres, as shown in Figure 7.8 for the case of Europe. There are clear spatial patterns here: fulfilment centres are spread across locations near to large urban areas, customer

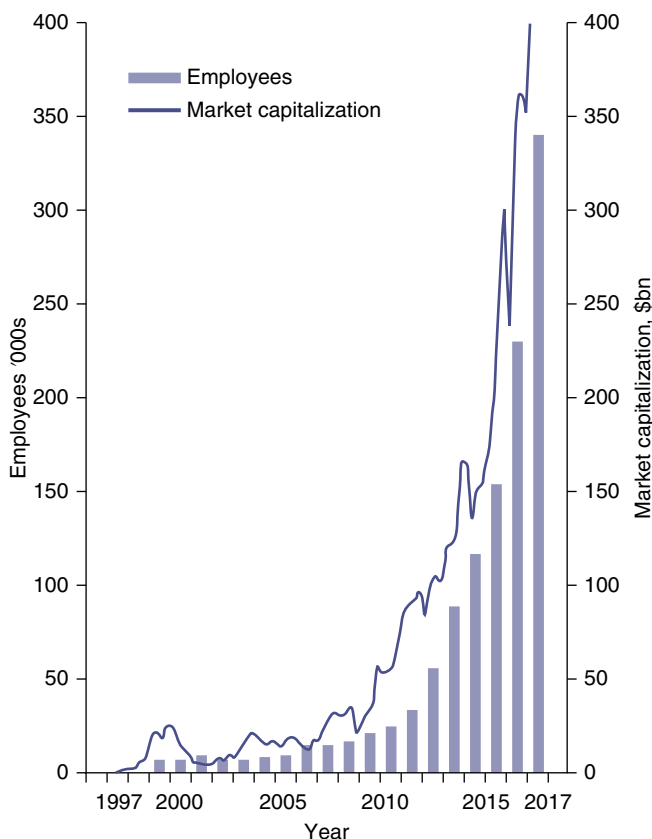


Figure 7.7 Amazon's growth trajectory

Source: based on data from Bloomberg; Thomson Reuters.

services centres are in more peripheral locations, and HQ/data centre operations are located in leading cities. Interestingly, to cope with the increasing demands of time-sensitive deliveries and also a growing interest in fresh food retailing, Amazon is currently adding a layer of smaller scale 'sorting centres' in its leading markets to bridge between regional distribution centres and urban end markets. Overall, while our argument about the uneven geographic and sectoral penetration of online retailing still holds, there is growing evidence of a tipping point being reached in certain leading markets (e.g. China, the United States, and the United Kingdom) in terms of its significance and wider implications.

Informal Retailing

So far we have tended to focus on formal retailers – both in terms of stores and the underlying logistical infrastructure – as perhaps the most prevalent and important consumption sites in capitalist society. It is vital to recognize, though, that beyond the formal spaces of retail lie a wide variety of informal trading and exchange

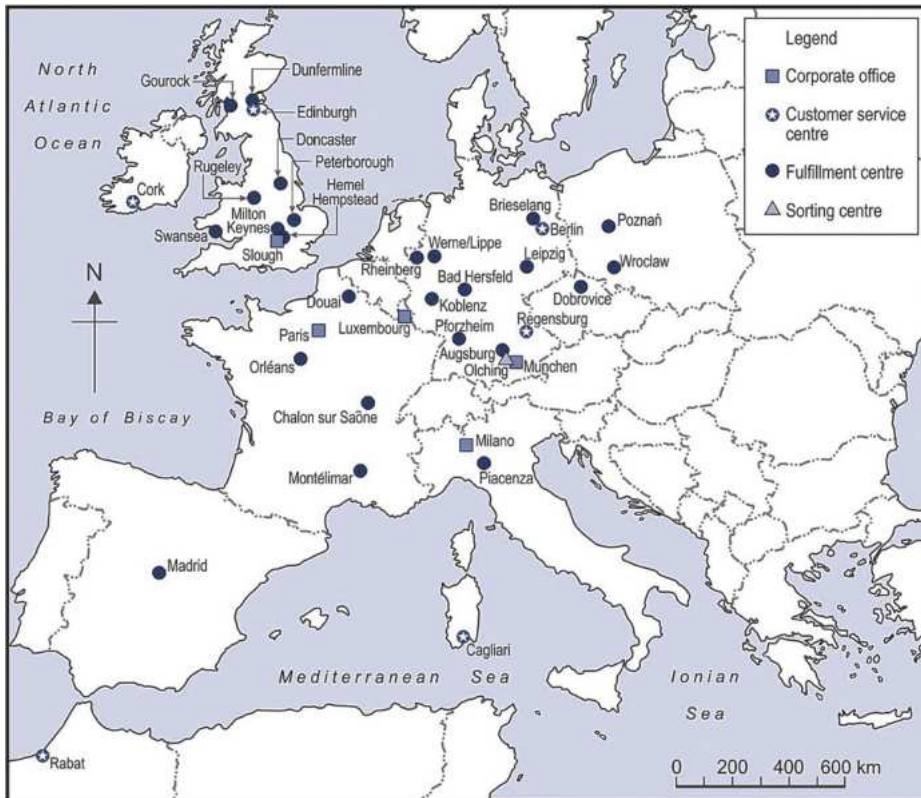


Figure 7.8 Amazon's operations in Europe, early 2016

Source: redrawn from Hesse (2018), figure 33.1. Reproduced with permission of Taylor and Francis.

practices. These are different to formal retailing in several important ways. First, while some are relatively permanent features of the built environment (e.g. charity shops), many are transient and temporary in nature (e.g. mobile street vendors and street markets). Second, while some will be entirely legal operations, others may operate at the very limits of the law, or even illegally (e.g. illicit trade and dealers). Third, prices are often agreed through negotiation and bargaining, rather than being fixed. In this sense, there may be more consumer involvement than in the standard shopping experience structured by retailers. Fourth, and relatedly, shopping in informal retail spaces can be a less predictable experience, as participants do not know what goods will be available. Instead, the shopping experience unfolds as an exciting and highly tactile (i.e. hands-on) search for bargains.

Informal retail activities are present in all countries but much more so in developing countries. This is demonstrated in developed markets, for example, by the prevalence and popularity of car boot/yard sales, and the number of charity and second-hand shops in central urban areas. Occasional markets also continue to be a persistent feature of the retail landscape, as seen in the weekly fresh produce

markets that have existed for hundreds of years across the towns and villages of Europe. However, while informal retail spaces can thrive in developed market contexts, they tend to operate around the margins of the mainstream, formal retail sector. Informal retail spaces take on far greater significance in the context of developing world cities, where such exchanges may be more important than formal sites of retailing. Examples are found on the streets of many Asian cities such as Bangkok and Hanoi, with small temporary stalls selling a huge variety of goods, including freshly prepared snacks and meals and other foodstuffs (see Figure 7.9a). In such contexts, informal retailing is central to the livelihood strategies of many families and households. Estimates suggest that in the developing world, some 60 per cent of employment is provided by informal economic activity (ranging from 38 per cent in Latin America to 76 per cent in Africa) compared to 15 per cent across high-income countries (ILO 2018). While some of this work is constituted by small-scale manufacturing activity, a considerable proportion is derived from informal retailing activities. An estimated 45 per cent of non-farm informal employment in the city of Lomé, Togo, for instance, is provided by informal trading, of which half is associated with street vending; one in three women in the informal economy in Lomé are street vendors (Roever and Skinner 2016).

South Africa – where non-store retailing accounts for half of the country's informal economy and provides employment for an estimated 900,000–1,200,000



Figure 7.9 Informal retailing: (a) street vendors in Hanoi, Vietnam and (b) a *spaza* shop in Cape Town, South Africa

Source: the authors.

people – provides a compelling case study of informal retailing. There are two main kinds of informal retail in South Africa: street traders who sell goods such as foodstuffs, handicrafts, and traditional herbs either in temporary markets or at fixed sites in the street; and home-based enterprises that sell a wide range of goods – including cooked foods, cakes, sweets and snacks, clothes, fruit and vegetables, jewellery, furniture, live chickens, crafts, paraffin, and cosmetics – and are known as *spazas* or tuck shops in the South African context (see Figure 7.9b). The relative importance of these two kinds of informal retailers varies between different places. In the inner city of Johannesburg and Durban, for example, street traders dominate, while in township areas *spazas* are the most common form of operation. Different forms of regulation have been implemented across South Africa in response to the continued prevalence of informal retailing. In Johannesburg, for city leaders the estimated 8,000–10,000 street traders sit uneasily with the stated goal of being an established world city by 2030. Markets have been constructed to try to concentrate traders in particular areas, but the policy has been largely unsuccessful due to the out-of-the-way locations chosen for the markets.

In Cape Town, an arguably more progressive approach has been adopted in which *spazas* have been targeted for business support in an effort to make them more efficient and sustainable small businesses. The regulatory approach also changes through time. For example, since 2000, Durban has had an informal economy policy that seeks to liaise with, and provide support to, street traders, but in recent years there have been severe police clampdowns on unlicensed traders, a process that is common across many developing world cities (Eidse et al. 2016). It is also important to note that formal and informal retailing are not insulated from one another but rather coexist and compete with each in complex and spatially variable ways. The ongoing formalization of South African retailing and the movement of chain stores into township areas, for example, have put increasing pressure on poorly resourced *spazas* in certain districts.

To summarize the arguments of this section, retail geographies are restless and continually changing. These changes reflect both the growing size and power of retailers, and wider societal dynamics such as patterns of urban decay/renewal and the movement of high-income segments of the population. Due to the acute sensitivity of retailing to planning and regulatory conditions, the timing, nature, and extent of change varies substantially between different territories, and from place to place. Moreover, the tangible geographies of stores, and the logistics and distribution systems upon which all forms of retailing depend, increasingly coexist and intersect with a range of online retail spaces. In turn, a variety of informal retail activities and places exist alongside these formal retail operations. The importance of such activities varies geographically: in some contexts they will be relatively insignificant, filling particular market niches in a largely formal retail sector, while in others they form the mainstay of the urban economy, representing the only way for millions of poor urban inhabitants to make a living.

7.4 Uneven Geographies of Consumption

We now move on to consider how, as consumers, we interact with the evolving retail geographies outlined above. While these clearly serve to constrain and structure our consumption choices, in returning to the sociocultural perspective outlined in Section 7.2, we are reminded that consumers can also usefully be thought of as active agents, constantly making informed decisions about which commodities to buy in order to construct their particular identities, or senses-of-self. This is particularly true of certain kinds of highly visible symbolic goods – such as clothing, jewellery, and cars – that are often taken to signify a certain standing or position within society. Other consumption activities, including the choice of restaurants, bars, and holiday destinations may be part of the same process. Equally, purchases may be used as markers of difference, to indicate a position outside, or towards the margins of, the mainstream of society (e.g. buying a car that runs on vegetable oil or wearing distinctive designs of clothing). In terms of clothing, jewellery, make-up, and the like, the body itself becomes a site of inscription through which key elements of individual identity are communicated (see Box 7.4).

KEY CONCEPT

Box 7.4 Bourdieu's cultural capital

In his now famous 1984 book *Distinction: A Social Critique of the Judgement of Taste*, the French sociologist Pierre Bourdieu outlined a theory of cultural capital. His analysis focused on the symbolic value of commodities and how social differences were produced through the consumption of goods. Based on a study of class-based distinction in 1960s French society, he argued that an individual's position in society was linked to certain forms of consumption practices and processes of self-identification relating, for example, to the arts, education, cuisine, and fashion. From this perspective, social difference or 'distinction' was based less on wealth itself, and more on the ability of different groups to *display* wealth through investing in symbolic goods. Hence, dominant fractions of society derived their status and prestige from their ownership of cultural or symbolic capital. Cultural capital, in turn, was conferred through the ability to implement judgement or taste with relation to the consumption of commodities (e.g. what is fashionable or what constitutes a high-quality bottle of wine). For Bourdieu, education was critical to the acquisition of cultural capital and the distinctions between different social groupings. These distinctions were seen to be reproduced through routinized and often unconscious

social practices which Bourdieu termed ‘habitus’. Overall, his work has made a crucial contribution to consumption research by linking the societal positions of groups and individuals to the symbolic meanings of the various commodities that they consume. Moreover, Bourdieu’s emphasis on the importance of local social context has made his work particularly appealing to geographers.

These dynamics exhibit very uneven geographies, however, as we explore in the following two sections. First, we look at how the ability to engage in symbolic consumption is far from ubiquitous across the world. Second, we explore how consumption processes are inevitably place-specific and how those places, in turn, maybe be influenced by transnational connections of different kinds.

Segmented Spatial Patterns of Consumption

It is important to appreciate that the ability of consumers to engage in symbolic forms of consumption varies hugely, both socially and spatially. Socially, it may only be certain groups within the population, and particularly middle- and upper-class consumers with the necessary disposable income, that choose to take part in symbolic consumption. Spatially, such consumption will be more widespread in wealthy countries than in poorer countries, where simply meeting basic needs requirements (water, food, shelter, etc.) may be the only priority. Even within wealthier countries, poor urban or rural dwellers with low-income levels, limited local retail provision, and poor access to transportation may effectively be excluded from the consumption of symbolic goods. These factors intersect to create a segmented spatial pattern of consumer types.

At the risk of simplification, it is perhaps useful to think of three broad groups of consumers that are unevenly distributed across the global economy. First, we can profile a high-end, luxury segment involving an estimated 330 million consumers worldwide and worth US\$1.1 trillion in 2014 (data from Economist 2014a). After luxury cars (US\$440 billion), the next biggest segment was branded personal luxury goods (US\$280 billion) such as accessories, clothing, jewellery, watches, and perfume. Purchases of these goods are driving the rapid growth of European luxury firms such as LVMH (owner of the Louis Vitton and Bulgari brands, among others), Richemont (Cartier and Piaget), and Kering (Gucci and Yves Saint Laurent). LVMH, for example, accrued US\$50 billion of revenues in 2017, while Europe as a whole exported US\$400 billion worth of personal luxury foods, accounting for 17 per cent of total goods exports. After the United States – by far the largest market for these goods – Asia is home to the most rapidly expanding national markets for these goods, namely China, Japan, and South Korea. Two-thirds of China’s purchases of

US\$19 billion in 2014 were actually made abroad as Chinese consumers sought lower prices, greater choice, assurance of non-counterfeit goods, and were able to benefit from burgeoning cross-border e-commerce flows. At the global level then, consumption of 'cultural capital' goods is expanding and its geographies are shifting.

Second, the emerging middle class we introduced in Box 3.2 is a disparate group. Towards the higher income end of the range, it clearly overlaps with the luxury consumption we have just described. The bulk, however, may exhibit different consumer preferences, with price being an overwhelming consideration, and product variation mattering less. Thus, while millions are reaching broad middle-class status, they do not yet have the same levels of income as their counterparts in more developed economies and price sensitivity remains of paramount importance. In such contexts, the product differentiation (i.e. highly priced products based on variety and quality) characteristic of post-Fordist consumption in developed markets (see Table 7.1) gives way to Fordist-style product commodification (i.e. standardized, low-cost products based on mass production). The potential of tapping the consumer power of the newly emerging consumer class has been popularized through the notion of the 'fortune at the bottom of the pyramid' (see Box 7.5). The commodification and standardization of existing goods to push down prices is often led by developing country firms. For instance, the Indian consumer electronics company Videocon has pioneered low-cost washing machine models attuned to the needs of the Indian consumer; for example, they automatically finish the wash cycle after a power outage, and they do not have a drying option as it is not required in India's climate. Cheap netbook computers are another emerging market innovation. These market conditions can be challenging for foreign transnational corporations who have to learn how to reformulate their goods and services to meet the specific needs of such markets. Such markets are, however, central to the global expansion plans of consumer goods giants Proctor & Gamble and Unilever.

Third, and very importantly, we can think about low-income consumers whose consumption practices are dominated by meeting basic needs on a daily basis. While poverty levels have fallen significantly at the global scale over the past two decades, it is salutary to note that estimates suggest that some two-thirds of the world's population earn less than US\$10 per day and are therefore deemed to be 'low income', while 10 per cent earn less than the international poverty line of US\$1.90 a day (half of this latter category reside in sub-Saharan Africa). In short, the majority of the world's consumers are to a greater or lesser extent excluded from many consumption practices and yet they are not often the focus of investigation. As the economic geographer Eric Sheppard (2016: 57–58) powerfully states, for many 'consumption is dominated by...a politics of necessity and desperation as much as identity and choice. Our understanding of these aspects remains impoverished'. Overall, we clearly need to recognize the profound social and spatial variation in the degree of consumer agency with respect to identity formation.

KEY CONCEPT

Box 7.5 Bottom of pyramid markets

The notion of the market at the bottom (or base) of the pyramid (BoP) was first put forward by business scholars C.K. Prahalad and Stuart Hart in the late 1990s and was popularized in the early-to-mid 2000s. In their initial formulation, they made the simple yet powerful observation that 4 billion people were living outside the global market system (the figure is undoubtedly much lower now) and that they offered huge untapped market potential for global businesses. Investing in the specific requirements of these markets was argued to offer different sources of opportunity for TNCs: some BoP markets are huge in their own right (e.g. India); local innovations could be transferred to other BoP markets; some BoP innovations could be transferable to developed markets; and there might be management lessons that benefit the firm as a whole. Prahalad (2005) argued that the key to success lay not simply in ‘tweaking’ global products and services, but in really understanding the needs of low-income consumers. One often-quoted example is how Hindustan Unilever Limited (Unilever’s Indian subsidiary) responded to local competitor Nirma in developing an eco-friendly washing detergent (called ‘Wheel’) that suited an Indian market with low water availability. Importantly, this process involved not just reworking the product itself but also adopting a more decentralized and labour-intensive production and distribution system. The lessons from India were, in turn, transferred to other markets – for example, sales of ‘Ala’ detergent in Brazil. While the theory originated in the domain of business strategy, it has subsequently become part of a wider debate about the extent to which market mechanisms can be used to lift people out of low income and poverty situations.

Consumption in and Across Places

In addition to these geographic patterns of consumer segmentation, the *nature* of the relationship between consumption and identity works out differently in different places – in other words, it is *place-specific*. Put another way, even within the same types of consumer identified above, there will be great place-to-place variation in their consumption practices (e.g. luxury consumers in China versus Italy, or BoP consumers in India versus Nigeria). This is because of the social and cultural specificity of consumption practices such as shopping and eating. This variation will reflect the intersections of a consumer’s unique individuality, their

membership of particular groups in society (e.g. youth or ethnic cultures), and their position within particular regional or national cultures.

Consumer preferences always emerge in a particular geographical context, therefore, and are heavily conditioned by interpersonal networks and societal norms. Think, for example, of a basic cosmetic product such as lipstick – the market for which is worth an estimated US\$8 billion each year. What it means to use lipstick is clearly associated with certain gender and age norms but also varies geographically as different forms of ‘youthful femininities’ are created in different societal contexts. In the West, lipstick resonates with a well-established ‘beauty myth’, propagated through media and advertising circuits, that sustains a huge and highly profitable cosmetics industry. In central and eastern Europe, lipstick may indicate different forms of female participation in ‘capitalist’ labour markets after the collapse of state socialism. In the Middle East, wearing lipstick may be a marker of rebellion against prevailing social norms. In cities across China, lipstick may signify participation in a globalized form of urban modernity associated with a broad range of conspicuous consumption practices. In contexts like the Philippines, it may infer a post-colonial desire to achieve certain attributes of ‘whiteness’. What these examples suggest is that even if the lipstick is produced by the same cosmetics firm, its use as a bodily marker carries high variable meanings across different social contexts as ‘young women appropriate, adapt and subvert globally marketed versions of femininity’ (Kehily and Nayak 2008: 339).

Further mobilizing a sociocultural perspective on consumption, we can start to reinterpret shopping, a seemingly routine and everyday activity that was implicitly an integral part of our earlier discussion of retailing. Shopping is clearly much more than a robotic response to the stimuli provided by retailers and shopping mall designers. Instead, it can be thought of as a culturally and societally specific set of practices. Shopping is a social activity as well as a simple exchange of commodities, entailing, for example, interaction with shop workers, and discussions with friends about the relative merits of products both before, and after, the act of purchase. Social relations within the family are particularly important, as many purchases are made for other members of the family group. Consumers may also make decisions in the context of wider societal forces. In Japan, for instance, there is a very strong and long-standing preference for foreign brands. In China, however, while foreign brands do well in segments introduced from outside (e.g. chewing gum and chocolate), that have heritage appeal (e.g. premium cars and luxury goods), and where local brands are not trusted (e.g. powdered baby milk), for many other products local brands are strong competitors. Brand allegiances are quite volatile, and consumers partake in frequent ‘brand-hopping’ (Economist 2014b: for more on the geographies of branding, see Box 7.6). Consumers may also be influenced by debates concerning what might constitute ‘ethical’ or ‘environmentally responsible’ consumption (we will return to this topic in Chapter 14). Putting together these various elements, we can see that not all consumers will readily succumb to the ‘magic of the mall’ (Box 7.3) and other retail spaces.

FURTHER THINKING

Box 7.6 Geographies of branding

Branding seeks to add value to goods and services by linking positive associations to the brand name – for example, to do with quality, style, reliability, sophistication, or design – and thereby cultivating customer loyalty to that brand. Branding is a nonmaterial, creative element of the broader production process that seeks to differentiate products and services from those of competitors and make them more meaningful to consumers, in turn allowing firms to charge a premium. Branding often works through the use of symbols such as logos – think of Apple’s iconic logo, Coca-Cola’s swirling script, or Nike’s ‘swoosh’ – and/or people, for example, Lionel Messi (soccer) or Roger Federer (tennis). Recent research, however, has demonstrated how branding processes are also always geographical in nature.

Most importantly, branding has strong connections to the geographical origins of the goods and services in question, a process broadly known as origination. This is most often seen in terms of links to the country of origin, which may be either explicit – for example, Singapore Airlines or Nippon Steel – or implicit, for example, the ‘German’ quality and efficiency inherent in brands such as BMW and Mercedes-Benz. Equally, however, the geographical component of branding may operate on other spatial scales such as the regional (Scottish whisky and Californian wine) or the local (Newcastle Brown Ale, *Parmigiano Reggiano*, and Beefeater Gin). Emphasizing the geographical origins of the product and associated qualities becomes an integral part of the brand-building process. The attachments created can be with a range of different elements of the ‘home’ environment: economic (e.g. Japanese design and innovation – Sony), social (e.g. Scandinavian design – IKEA), political (e.g. Swiss neutrality and discretion – Credit Suisse), cultural (e.g. Italian style and design – Prada), or ecological (e.g. small-town values and environmental commitment – Ben & Jerry’s ice cream). Branding processes are also highly geographical in the sense that they are unevenly implemented in social and spatial terms. Brands require a degree of adaptation to different consumer cultures, and sometimes branding will be about trying to weaken the geographical associations the brand conveys (e.g. McDonalds’ links to unhealthy American fast food culture). It can also be argued that by spatially targeting brands at differentiated groups of consumers in different places, for example, promoting luxury brands to rich enclaves within global cities, branding processes actually serve to reinforce patterns of uneven economic development. For more on the multiple geographies of branding, see Pike (2011, 2015).

Instead, they will strategically and knowingly use them to undertake their ongoing consumption practices in ways that are highly geographically specific.

At the same time, while processes of identity construction predominantly take place within local consumption cultures, we must not fall into the trap of reading those cultures in static terms. Places are increasingly open to influences transmitted through transnational connections. Television, film, and new media technologies, for instance, form part of global circuits of culture that circulate a wide range of images about norms and aspirations of consumption. Consumption processes are also shaped, however, by links forged through migration and diasporic connections. London and Mumbai, for example, are part of a transnational British-Asian domain of fashion that is constituted by intense exchanges of people, information, images, commodities, and capital and which has been shaped by a long history of colonial and post-colonial relations (drawing on Jackson et al. 2007). These interconnections serve to blur what is understood as authentic ‘British’ or ‘Indian’ fashion as a variety of *hybrid* forms of clothing emerge. These hybrid fashions are interpreted locally in both London and Mumbai, and those interpretations vary across consumers of different ages, genders, occupations, and educational level. The transnational domain should not be read, therefore, through simplistic notions about the Westernization of ‘Asian’ dress or the imposition of a Western ‘modernity’. Instead, processes of change are spatially and socially uneven in both London and Mumbai. Indian consumers in Mumbai can resist or even reverse the commonly assumed contrast between ‘Western’ modernity and ‘Eastern’ tradition, with Mumbai being seen as a fast-paced consumption arena open to a broad range of global influences and with wide-ranging consumer choice. University students in Mumbai may feel that their overseas cousins are ‘behind’ in terms of dress because of the pace of change in Mumbai’s fashion circles. Equally, British-Asian students living in the United Kingdom may perceive themselves to be lagging the trends being set in Mumbai through, for example, the Bollywood film industry, itself an increasingly global cultural form. Overall, the persistent ‘localness’ of consumption cultures should not obscure the ways in which places and their associated local cultures are increasingly interconnected transnationally.

7.5 Consuming Places: Travel and Tourism

In Section 7.4, we looked at the ways in which consumption processes are given a distinctive ‘flavour’ by the interconnected places in which they occur. But there is another angle we can take here, namely recognizing that a significant proportion of consumption activity is actually concerned with the consumption of places themselves. Tourism is centrally about the generation of different kinds of pleasurable and/or memorable in-place experiences. Tourist experiences are often about the combination of tangible elements (e.g. hotel and flight) and intangible experiential elements (e.g. sunset and mood). Tourism is a huge

industry – accounting for an estimated 7 per cent of world exports, 10 per cent of GDP, and 1 in 10 jobs – and is increasingly global in scope. International tourist arrivals have grown strongly in recent decades, rising from 435 million in 1990 to 675 million in 2000, 950 million in 2010 and 1,235 million in 2016 (these figures include business travellers). Table 7.4 charts the top 10 destination and source countries for international tourists in revenue terms, with the United States, Spain, and Thailand being the biggest recipients of international tourist spending, while China, the United States, and Germany are the biggest sources. The rise of Chinese tourist expenditure has been especially spectacular: while in 2010 Chinese tourists spent US\$54.9 billion overseas, or 6 per cent of the global total, in 2016 it had rocketed to US\$261.1 billion, an astounding 21 per cent of the total (all data from UNWTO 2017).

But how have tourism, and the kinds of places it involves, evolved over time? Large-scale tourism dates to the second half of the nineteenth century, when first the middle classes and then the working classes in countries such as the United Kingdom took advantage of social change and improvements in transport to travel to coastal resorts, such as Blackpool and Southend, for rest and relaxation. International tourism flourished from the 1950s onwards, driven by increased disposable incomes and leisure time in developed countries, the rise of airline travel, and the entry of transnational corporations into the industry in areas such as hotels and travel agencies, thereby increasing the availability and affordability of so-called ‘package’ holidays combining travel, accommodation, and other tourist services. The 1960s and 1970s were the golden era of international mass tourism in Europe in particular, with large numbers of consumers purchasing standardized products. This period of strong growth was associated with the

Table 7.4 International tourism receipts and expenditure – top 10 countries in 2016

Rank	Country of destination	2016 receipts (US\$bn)	Country of origin	2016 expenditure (US\$bn)
1	USA	205.9	China	261.1
2	Spain	60.3	USA	123.6
3	Thailand	49.9	Germany	79.8
4	China	44.4	UK	63.6
5	France	42.5	France	40.5
6	Italy	40.2	Canada	29.1
7	UK	39.6	South Korea	26.6
8	Germany	37.4	Italy	25.0
9	Hong Kong	32.9	Australia	24.9
10	Australia	32.4	Hong Kong	24.2

Source: adapted from UNWTO (2017).

development of standardized tourist resorts along the Mediterranean coast but also on the Black Sea and in the Alps.

As with consumption trends more generally (see Table 7.1), the tourist industry has changed significantly in recent decades, becoming more ‘post-Fordist’ in nature. More individualized consumption patterns have become apparent in tourism as they have in many other consumer-oriented industries. Most importantly, there has been something of a rejection of mass tourism from middle-class consumers who now seek a wider range of tourism experiences, driving growth in a number of areas, including:

- *Urban and heritage tourism*: urban tourism, often undertaken in short trips, has grown rapidly. As a result, tourism has become central to the economic development strategies of many towns and cities, in particular through what can be thought of as ‘culture-led’ development. Here, an overlapping complex of tourist, cultural, and creative sectors – encompassing museums, galleries, theatres, the arts, the media, architecture, and design – are seen to be the key drivers of growth. These amenities, and associated services such as restaurants, clubs, and bars, blur the distinctions between tourism and leisure in that they are used by residents and visitors alike. In particular, post-industrial cities in North America and Western Europe have turned to this model of growth to replace manufacturing jobs lost in the 1970s and 1980s. As noted in Chapter 3, old industrial zones within cities have been redeveloped into shopping malls, heritage sites, conference and exhibition centres, entertainment districts, and arts and cultural quarters as a consumption-based economy is carved from the remnants of an industrial one (see Figure 7.10a and b).
- *Mega-event tourism*: these processes of urban regeneration can be given a boost by cities hosting large-scale one-off events that attract significant numbers of visitors, such as a World Expo (e.g. Milan, 2015) or Olympic Games (e.g. Rio de Janeiro, 2016). The Barcelona Olympics of 1992 and the associated revitalization of its built environment are widely seen to have played a central role in Barcelona becoming one of the leading tourist cities in Europe. The Olympics gave planners and politicians the opportunity to undertake large-scale public works, for example opening up the city’s waterfront as a consumption space.
- *Theme park tourism*: here visitors pay for admission to an entirely themed complex, placing particular emphasis on the architecture and its symbolism. At the heart of the theme park model is the consumption of multi-sensory experiences which may combine simulated environments (e.g. natural, cultural, historical, or technological); the humanizing of those environments by live interpretations, performances, and commentaries (e.g. re-enactments of historical events); state-of-the-art technological devices (e.g. films, rides, and games); and themed exhibits and eating places. The focus of the global theme park industry is increasingly turning to Asia, as developers seek to benefit from the rapidly growing middle classes in many Asian markets.

- *Ecotourism*: this has been defined by the International Ecotourism Society as ‘responsible travel to natural areas that conserves the environment and improves the well-being of local people’. Ecotourism is concerned with enjoying the natural environment through low impact and sustainable activities, such as trekking and animal/bird watching. It is associated with certain kind of relatively wealthy tourists and also with certain destinations that are rich in natural amenities, such as Costa Rica, Iceland, and New Zealand.

(a)



(b)



Figure 7.10 Urban and heritage tourism: (a) culture-led redevelopment – the waterfront in Bilbao, Spain and (b) reclaimed industrial heritage – Legoland in Duisburg, Germany
Source: the authors.

Overall, while mass tourism is still an important component of the industry, it is now supplemented by a wide range of other specialized niche markets offering more distinctive, individualized experiences. One outcome has been a significant blurring of the boundaries of tourism with other activities, such as leisure, recreation, shopping, entertainment, education, and sport. Chinese tourists, for example, are renowned for combining their travel with extensive purchases of branded goods. Another has been the proliferation of places and local economies that now depend, to a greater or lesser extent, on tourism-cum-leisure revenues.

Accordingly, state agencies and businesses involved in promoting and selling tourism have sought to shape distinctive images of their localities through place-marketing campaigns. In these campaigns, places are presented to appeal to particular types of tourists who may wish to consume different aspects of those places, including cultural heritage and the natural environment. These place-marketing campaigns can operate at a number of different spatial scales, including an individual street (e.g. Chicago's 'Magnificent Mile' of shops), a district (e.g. 'The Rocks' district of Sydney), a city (e.g. 'Visit Manchester'), a region (e.g. the Lords of the Rings 'Trilogy Trail' in southern New Zealand), or a national economy. An example of the latter is the long-running 'Magical Kenya' campaign, designed to promote Kenya's undoubted attractions to international tourists (see Figure 7.11). Each poster in the series bears the phrase 'Jambo! Welcome to magical Kenya' (Jambo means hello in Swahili). The logo uses the colours of the Kenyan flag and the arch in the middle represents a necklace from the Masai people, one of Kenya's most famous tribal groups. Other images in the series show a tropical beach, a



Figure 7.11 Magical Kenya

Source: magicalkenya.com.

fisherman brandishing a huge catch and a balloon passing over a beautiful landscape. As with all place-marketing campaigns, however, it is a particular sets of images of Kenya that are presented to the wider world. This is a Kenya of big landscapes, pristine beaches, wild animals, stunning vistas, and traditional tribal people. There is understandably no reference to poverty or the sprawling Kibera slums of Nairobi. The wider point here is that crafting and disseminating a place image is a crucial component of the economic development strategies of localities that need to attract visitors in order to fuel their tourism and recreation sectors.

7.6 Summary

This chapter has explored different aspects of the geographies of retailing and consumption. We started by advocating a sociocultural perspective on consumption dynamics that, while recognizing the power of capitalist corporations in structuring our consumption options and choices, affords consumers a significant degree of agency as they go about constructing their identities through the purchase and subsequent use of commodities. Three arguments were then developed in the subsequent analysis. First, we profiled the changing patterns of where retailing, the starting point for many consumption processes, takes place. At the global scale, store and sourcing networks are increasingly coordinated by a cadre of large retail transnational corporations. At the national scale, the suburb has risen to challenge the city centre as the pre-eminent site of retailing in contemporary society, but this general trend conceals complex patterns of decentralization and recentralization that vary across different territories. The physical spaces of retailing also increasingly coexist with online retail spaces, while informal retailing at the neighbourhood level remains as a central component of daily consumption practices for much of the world's population.

Second, we profiled the different ways in which consumption processes are inherently geographical. On the one hand, the ability of consumers to engage in symbolic consumption and identity construction is very unevenly distributed, both socially and spatially, across the global economy. These vitally important spatial patterns of consumer segmentation merit further investigation by economic geographers. On the other hand, where they do occur, processes of identity formation are often place-specific, with commodities assuming different meanings in different sociocultural contexts. Consumers, rather than passively just using the products offered by retailers, seek to reinterpret and even subvert the intended meaning of commodities in geographically variable ways. However, as arenas of consumption, places should not be seen as self-contained, but open to a range of cultural influences circulating through global networks of various kinds. Third, we have looked beyond the place specificities of consumption to think about how places themselves are consumed through leisure and tourism practices. As the tourism industry continues to develop, an ever-widening variety of places are becoming

involved in such activities and place-marketing has become an integral part of the economic development strategies of many cities, regions, and countries.

Notes on the references

- Wrigley and Lowe (2002), Mansvelt (2005, 2012), Wrigley (2009), Miles (2010), Crewe (2011), and Cook and Crang (2016) deliver student-friendly reviews of the best geographical work on retail and consumption. Coe and Wrigley (2007, 2018) offer overviews of the globalization of retailing from an economic–geographical perspective. For a classic study of Wal-Mart’s exit from Germany, see Christopherson (2007).
- Although neither are geographers, Trentmann (2016) and Warde (2017) offer impressive recent overviews of the nature of consumption from empirical and theoretical perspectives, respectively. On the evolving nature of consumption in the Global South, see Kaplinsky and Farooki (2010).
- Williams (2009) and Hall and Page (2014) provide comprehensive accounts of the changing nature of tourism and leisure places.

Sample essay questions

- Why is consumption such a geographically variable process?
- How are patterns of retail globalization evolving?
- Why are there growing tendencies for the recentralization of retailing at the urban scale?
- How do individuals use consumption to develop place-based identities?
- What are the limits to talking about ‘consumers’ as a general category?
- In what ways can places themselves be consumed through travel and tourism?

Resources for further learning

- Deloitte’s annual *Global Powers of Retailing* report provides a detailed overview of the world’s largest 250 retailers (http://www.deloitte.com/view/en_US/us/Industries/Retail-Distribution/index.htm).
- The websites of leading global retailers, such as Wal-Mart (www.walmartstores.com), Carrefour (www.carrefour.com), and IKEA (www.ikea.com), provide a range of information on their global store operations.
- Similarly, the websites for regional or ‘mega’ malls, such as Manchester’s Trafford Centre (<https://intu.co.uk/traffordcentre>) and Minneapolis’ Mall of America (www.mallofamerica.com), give some sense of what is on offer at such shopping attractions.

- www.unwto.org: the website of the World Tourism Organization hosts a huge range of materials about the global tourism industry. See also the World Travel & Tourism Council (WTTC): www.wttc.org.

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CHAPTER 8

FINANCE

How has capital become so powerful?

Aims

- To appreciate the changing role of finance in the world economy.
- To understand deregulation and its role in the rise of global finance.
- To demonstrate why place matters in global financial markets.
- To comprehend how financial capital has entered into everyday life through the processes of financialization.
- To consider alternative forms of financial system.

8.1 Introduction

In the United Kingdom, a *Guardian* report on 15 June 2017 showed that at the end of March that year, cumulative tertiary student loan debt, covering 3.9 million borrower accounts, passed £100 billion for the first time in history. Some economists have even predicted that this debt level will double to £200 billion by 2023. In the United States, outstanding tertiary student debt was 10 times bigger at \$1,340 billion (£1,050 billion) by March 2017. In the midst of this extraordinary growth in student debt, the UK government began a sale of up to £12 billion worth of student loans – through its not-for-profit Student Loans Company (SLC) – as a class of financial ‘assets’ to investors in global financial markets. In his 6 February 2017 written statement to parliament, the Universities’ Minister

announced that ‘as part of this, we will look to sell assets where value for money to the UK taxpayer is assured. This sale will have no impact on people with student loans and will only proceed once we are satisfied that it represents value for money for the taxpayer’. In the United States, a similar sale of loan portfolios comprising federally guaranteed student loans took place in the second quarter of 2017 when JPMorgan Chase, the largest American bank, decided to offload its \$6.9 billion student debt portfolio to Navient Corp, the largest student loan servicing company and a NASDAQ-listed firm. Earlier in 2014 and after its split from Sallie Mae (formerly known as the Student Loan Marketing Association), Navient also bought a \$8.5 billion portfolio of federally guaranteed student loans from Wells Fargo, the third largest US bank (data from <https://www.theguardian.com> and <https://www.usatoday.com>, accessed on 9 January 2018).

If you have taken up a student loan from SLC in the United Kingdom, Sallie Mae in the United States, or any government-backed institution in your country, have you ever wondered *how* is your student loan actually financed – where does the money come from? These most recent sales of loan assets by SLC in the United Kingdom and JPMorgan in the United States offer some hints: you might have taken up a student loan with a government institution funded by taxpayers (e.g. SLC), or a government-guaranteed institution (e.g. Sallie Mae), or a loan with a commercial bank (e.g. JPMorgan). But your debt will eventually get packaged into financial instruments or ‘assets’ that can be bought and sold among financial institutions in global markets – a process known as *securitization* in Box 8.1.

KEY CONCEPT

Box 8.1 A glossary of common financial terms

Global financial services facilitate capital circulation for all parts of the economic system, but they are also commodities/services in themselves. In this global financial market, the following financial instruments and institutions are common:

Asset-backed securities (ABS): These are securitized debt backed by the value of the underlying assets (e.g. properties or capital goods) and repayment from debt (e.g. mortgages and student loans). A particular form of ABS is mortgage-backed securities (MBS) that are issued as investment products to investors against the value of the income streams from mortgages. The same logic applies to ABS derived from student loans and corporate debt.

Capital markets: These are markets for the selling and buying of equity securities (stock exchanges) or debt securities (bond markets).

Collateralized debt obligations (CDOs): A specific type of security formed through the bundling together of different kinds of debt and loans to form

structured financial products tradable in international markets. Buyers of CDOs are unlikely to be fully aware of the underlying debt types and their associated risks.

Credit default swaps (CDS): Insurance contracts developed by lenders to manage the default risks associated with their lending (i.e. assets). These default risks are securitized and traded as CDS among financial institutions and other investors.

Derivatives: These are complex securities whose value is derived from the value of underlying ‘things’ such as commodities (e.g. coffee or gold), assets (e.g. land and buildings), rates (e.g. interest and exchange rates), debt (e.g. bonds), indices (e.g. the Dow Jones or the FTSE), economic aggregates (e.g. GDP or inflation), and, more extremely, probabilities (e.g. likelihood of a snowstorm or terrorist attack).

Hedge funds: These are private funds that invest in a broad range of financial products and hedge their risks through investment in (i) shares, bonds, and commodities that they already own and (ii) risky securities and derivatives that they borrow from a third party, with the obligation of returning the same securities on a mutually agreed future date.

Insurance funds: These are a form of collective investment that offers life assurance policies to cover policyholders against unforeseen circumstances.

Mutual funds: These are investment vehicles made up of capital pooled among interested parties who collectively or ‘mutually’ own a portfolio of securities.

Pension funds: These are retirement funds that pool together regular contributions from employers and/or employees and are invested in a variety of financial instruments, such as bank deposits, securities, funds, and private equities.

Private equities: These are investments in securities not publicly traded on stock exchanges and are issued by private firms that pool together capital from interested parties such as private funds and investors. These securities can include different types of funds, such as hedge funds and mutual funds.

Securities: Financial instruments negotiable between the seller and the buyer whose value is determined by the market mechanism. They include equities (e.g. stocks and shares) and debt (e.g. bonds) issued by firms, non-firm institutions (e.g. universities), and state agencies.

Securitization: A process through which debt and loans are packaged into, and sold via, financial securities at prices determined by their underlying risks (e.g. defaults) and returns (e.g. payments on these debt and loans).

Unit trusts: These are trust funds similar to the structure of mutual funds, except that profits go directly to individual unit owners.

Through these financial institutions, private and other investors in today's global economy can profit by acquiring and selling different forms of *securities*, i.e. financial instruments that are tradable in global markets. Some of these financial securities are backed by the value of their underlying assets, such as expected future interest and principal payments from your current student loan. A simple student loan is therefore no longer just about a long-term relationship between a student and a state or federal institution (e.g. SLC or Sallie Mae). More crucially, through securitization and financial transactions in global capital markets, your loan can be turned into asset-backed securities (ABS) that become someone else's *investment* opportunity. For those of you taking up private student loans directly with commercial banks in your country, such a securitization process has started the moment you or your parents sign on the dotted line of those bank documents. Together with many other types of corporate and consumer debt, these billions of dollars of cumulative student loans are fed into a gigantic global financial system valued at \$69.1 trillion (\$69,100 billion) in 2016 in terms of total global assets under management (<https://www.bcg.com>, accessed on 28 September 2017).

While the lessons we can learn from this story about the massive student debt in developed countries have both moral and financial dimensions, this chapter focuses on the geography of financial flows that literally connect all our fortunes through such savings/investment and borrowing/debt. For instance, how has money become such a global commodity and how has this form of *financial capital* – savings and investment funds originally meant for productive purposes such as building infrastructure, setting up factories, and making goods and services – become a 'productive' force in its own right? What are the key factors that explain the emergence of global finance? What are the places where global finance conducts its business? How do finance-based connections create and/or destroy cities and places that rely heavily on mortgages and debt-financing for development? By unpacking the historical and geographical evolution of the global financial system, this chapter aims to draw attention to both the broader structural processes involved and the varied everyday geographies of global finance, known as 'financial capital' throughout this chapter. By tracing capital's global reach and the specific processes of its transformation, we can understand more fully the complex linkages in a globalizing financial sector that bring together student loans, investment banks, depositors, pensioners, regulators, and even national governments.

This chapter proceeds with five main sections. Section 8.2 examines our common understanding of the role of finance as an investment or input into economic processes and the 'real' economy – defined as economic activities directly contributing to the production, distribution, and consumption of goods and services. We show how this popular understanding has underestimated the complex geographical linkages and variability of capital inherent in today's global financial system. Section 8.3 then discusses the relatively recent emergence of the financial sector as a global industry in its own right, producing financial products such as securities,

pension funds, unit trusts, and derivatives. In Section 8.4, we focus on the dominant places within the financial sector, namely global cities and offshore financial centres (OFCs). Section 8.5 shows how global finance can produce serious consequences as the global economy is becoming increasingly ‘financialized’, with the circulation of financial capital becoming being divorced from its productive allocation and use in the real economy. Finally, Section 8.6 considers Islamic finance as an alternative to the dominant form of global finance centred on London and New York.

8.2 How is the Real Economy Financed?

We live in a real economy that produces goods and services for our everyday consumption. But what makes it possible for a myriad of private actors (e.g. firms, non-firm institutions, workers, and consumers) to be involved in the production, distribution, and consumption of all those goods and services? The answer is *financial capital*. Finance serves as a productive input into economic processes, in particular through the role of the modern banking system as a financial intermediary between savers (creditors) and investors (debtors). In general, banks pool together our money/savings as capital and use that capital to finance value-added activities in the real economy, such as the production of primary commodities (e.g. agriculture and mining), the manufacture of goods (e.g. electronics and apparel), and the provision of services (e.g. education and telecommunications). This mode of money and finance operated successfully long before the emergence of global finance and its associated capital markets, securitization, private equities, hedge funds, and the like (see Box 8.1). Two important issues of ownership and accountability arise: Who owns money and how does it become someone else’s investment capital, and what/who are involved in this process of saving and investment? These questions clearly raise issues about the *agency* of financial capital. To understand these twin issues, we need to probe into the modern financial system by first asking what does finance really do?

In modern times, most people think of finance as ‘the things that banks do’. The real question here, then, is what might these ‘things’ be? In theory, the banking system is about the pooling of financial resources among those with surplus funds (savers) to be lent out to those in need of such funds (borrowers) for investment in productive activity in different economic sectors. As the key player in this *primary* financial market, banks lend a lot more than they have as cash deposits and this is called a reserve ratio. In this saving–investment relationship, a creditor receives compensation in the form of interest on his/her deposit held temporarily by the bank, while a borrower pays a cost for using the funds pooled from many creditors depositing with the same bank. In general, the interest payable by the borrower is significantly higher than the interest received by the creditor. The ‘middle agent’ or intermediary – the bank – will retain the difference in these

interest rates as compensation for its service of rendering financial intermediation and taking on the risk of lending. In this system of funds exchange, all three parties – the depositor, the bank, and the borrower – receive returns in relation to their inputs into the overall capitalist system. Geographically, these three parties need not be in the same area/region for such exchange to take place. This unique form of financial geography allows for capitalism to grow in different regions and countries in tandem with the spatial reach of the banking system. In short, modern banking has oiled the wheels of capitalism and influenced its structural outcomes (see Chapter 3).

This possibility for exchanging funds through borrowing and lending via the banking system has enabled two forms of finance: consumer and corporate. In *consumer finance*, credit is extended to individuals for their acquisition of tangible assets (e.g. housing mortgages) or services (e.g. education loans). In *corporate finance*, investment in existing or new productive activities and places becomes viable and the real economy continues to grow. Entrepreneurs with innovative ideas in different places can turn these ideas into real products and/or services, even if they and their local social ties cannot generate sufficient funds of their own to do so. They can borrow working capital from banks and put these funds into their productive activity in the hope of making sufficient future profits that exceed the repayment of these loans and interest charges. This productive activity includes everything from agriculture (e.g. acquiring land and farming equipment) and manufacturing (e.g. building factories and purchasing inputs and equipment) to services (e.g. IT innovations, retail and wholesale businesses, or non-speculative property development).

In short, capitalists can borrow capital to fund their profit-making productive activities. The banking system will allocate capital to those economic endeavours with the highest rate of return and therefore to the most efficient uses of limited financial capital. It will also reallocate or ‘switch’ financial capital from one sector of the economy to another, prompting the emergence of new sectors in different regions and economies. The greater the efficiency of this capital exchange system via banks and other related financial intermediaries, the higher the productivity gains to the overall economy will be, as surplus funds will be deployed rationally – hypothetically at least – by economic agents in the real economy. In the context of this seemingly straightforward link between savings and lending in the real economy, how can we explain the apparent paradox in Section 8.1 that accessibility to finance has become much more global (e.g. getting student and consumer loans) and yet much of those \$69.1 trillion of total global assets under management in 2016 did not go into financing production in the real economy? In fact, today’s largest financial institutions often lend no more than 15 per cent of their usable capital to productive new businesses. The rest goes into ‘a closed loop of trading’ financial instruments among each other. What has happened to money and finance as sources of productive capital in modern capitalism? What has changed since the late twentieth century, when we saw the transformation of

money from an everyday tool into an instrument of global finance? To understand these shifts, we need to look at the rise of activities in the so-called ‘secondary’ financial markets that in turn helps us understand how capital has become so much more powerful in an era of finance capitalism.

8.3 Deregulation and the Rise of Global Finance

As the global financial system evolves over time and space, we find banks and other financial institutions increasingly keeping their financial resources within the financial system rather than using them to fund investment in production and related value-adding activity in the real economy. This process of ‘churning’ occurs when credit creation is not driven primarily by the need to finance productive activities, but rather by perceived or actual gains from investments or even speculations via the various forms of financial instruments described in Box 8.1. In other words, banks have now been turned into *institutions of financial investment* – a kind of value-added service increasingly overshadowing their traditional business of handling savings and lending. Since the 1970s, banks have turned their attention to credit extension that goes well beyond the financial needs of borrowers in the productive sector (i.e. what we have been terming the ‘real’ economy). Banks can now gain more from lending to investors of all sorts, including those who speculate on various financial instruments traded in secondary financial markets. More particularly, banks are actively engaged in securitization by issuing securities with underlying asset values rather than just engaging in direct lending to borrowers. Many commercial banks have also set up investment banking arms to profit from the rapidly escalating possibilities offered by trading financial securities and derivatives available on capital markets. As a result, banks are no longer merely financial intermediaries, but are also active investment agents in their own right.

Meanwhile, the global financial services industry has broadened to include not just banks and bank-related institutions. Importantly, financial services are now provided by a wide range of *non-bank institutions*, such as securities and commodities trading firms, fund and asset management companies, hedge fund firms, and so on. These non-bank institutions pool vast sums of financial capital in the form of pension funds, life insurance, mutual funds, unit trusts, and private equities for investment at the individual customer level and, more frequently, at the institutional level (see definitions in Box 8.1). These non-bank investments can be put into conventional bricks-and-mortar tangible assets such as properties and businesses. Increasingly, however, these institutional investors are engaged in securities that are issued on stocks, shares, currencies, and commodities, and their derivative financial instruments such as swaps, options, futures, and CDOs. Since the late 1980s, and enabled massively by advancements in information and communications technologies (ICTs), this rapid proliferation of financial services and

investment instruments worldwide has led to the emergence of what we now know as *global finance*. It is today possible for an individual or institutional investor to invest, via the above securities and related financial instruments, in virtually any asset, real or otherwise, located in territories that are connected to the global financial system.

Through this phenomenon of global securitization and financial trading, the geography of finance is no longer confined to localities; it has become much more global in scale and scope with two profound consequences. First, local financial transactions and assets are increasingly ‘plugged into’ global financial markets. This means that local financial outcomes are much more dependent on the behaviour and decisions of actors and institutions located elsewhere than before. Second, events within these global financial markets have much greater intended and unintended impacts on the conditions and processes at work in local financial systems in particular places. As evident in the global financial meltdown in 2008 and its aftermath (see more in Section 8.5), local housing and mortgage bubbles were deeply linked to, and destabilized, global financial markets with serious consequences for local people and communities.

This major shift from financial capital for productive activity in the localized real economy to global finance within three decades merits further discussion. In particular, the emergence of global finance is closely associated with rapidly escalating global capital flows during the past three decades. Prior to the 1960s, a global financial system did not really exist as such, as national banking systems were closely regulated and largely self-contained within specific territories (see a few exceptions such as HSBC in Chapter 5). National governments sought to maintain autonomy over monetary policy (e.g. printing of currencies and setting interest rates), control their exchange rates, and closely limit foreign investment in, and ownership of, national banks. Hence, financial capital did not flow freely across borders, and global financial institutions did not really exist. There was an international system in place for cross-border trade, but financial systems were primarily national and relationships between them were governed by supranational organizations such as the Bank for International Settlements (BIS) and the International Monetary Fund (IMF) (see Chapter 10). These international institutions served as the lenders of last resort for central banks in different nation-states; they were the ultimate guarantors of nationally oriented banking and finance systems. A limited initial form of internationalization of finance came about when national banks expanded their activities abroad in order to service transnational corporations producing overseas from the 1960s onwards. In other words, financial capital started to follow the internationalization of production described in Chapter 5, but it remained tightly regulated by home governments.

This national system of financial regulation based on such international organizations as the BIS and the IMF began to break down in the early 1970s due to intense competition between different financial centres and their embedded regulatory frameworks. As shown in Table 8.1, the regulatory context for the

international financial system has evolved through several stages over the last 150 years. The first major challenge to the post-war nationally based system of financial regulation was the development of ‘stateless monies’ through the Eurodollar markets. These Eurodollar markets refer to US dollars held outside the United States and therefore outside of US regulatory control. In the late

Table 8.1 The changing regimes of financial regulation in the global economy

Period	Regime of regulation	Characteristics
1870s–1920s	International gold standard	Value of a national currency guaranteed by the amount of gold held by the country’s central bank.
1945–1973	The Bretton Woods system	Central banks of countries other than the United States maintained fixed exchange rates between their currencies and the US dollar. This was the first international monetary order established and signed in July 1944 in Bretton Woods, New Hampshire, under the auspices of the United States.
Mid-1970s to mid-1980s	Successive international deregulation	Collapse of the Bretton Woods system, new technologies, financial innovation, and the need for risk-managing financial instruments created the environment in which the New York Stock Exchange was deregulated in 1975 and successive British governments implemented deregulation from 1978 onwards.
Late 1980s to late 2000s	New re-regulation and monetary integration	Establishment of the Basel Banking Accord: a set of minimal capital requirements for banks to ensure liquidity and stability in the international financial system. Increased systemic risk from exposure to derivatives and fallout from associated scandals, as well as the 1997 Asian financial crisis, leading to demands for global re-regulation. Completion of European monetary integration through the creation of a single currency (Euro) and a common monetary policy space among the member states of the European Union (European Central Bank).

(Continued)

Table 8.1 (Continued)

Period	Regime of regulation	Characteristics
2008 to now	Re-establishing the global financial order	Massive systematic risks led to the collapse of collateralized debt obligations (CDOs) and other complex financial derivatives and instruments. Nationalization of major banks in many developed countries, including the United States, the United Kingdom, and Germany. Major global imbalances in debt and bondholding led to potential currency wars and sovereign debt crises. Reduction in US influence in the new global financial order and the emergence of new institutions for international monetary and financial cooperation, e.g. the Asian Infrastructure Investment Bank in January 2016.

Source: 1870s–mid-1980s adapted from Budd (1999, table 1: 119). Reproduced with permission of John Wiley and Sons.

1950s and the early 1960s, the Eurodollar markets were particularly appealing to the Soviet Union and China. Because of the Cold War, these two large communist states were unable to obtain US dollars through trade with the United States. The availability of US dollars through the Eurodollar markets was vital in resolving their need to buy goods and services transacted in US dollars in international markets.

London was the major centre of these Eurodollar markets up until the 1970s when the British government tightened its regulation of foreign banks operating Eurodollar deposits and businesses. Subsequently, these banks moved their Eurodollar operations to other less-regulated tax havens such as Hong Kong, Singapore, the Bahamas, and the Cayman Islands. This emergence of an offshore currency market essentially meant a global, rather than *inter*-national, financial system could emerge. During the early 1970s, massive oil price increases saw the huge accumulation of wealth in oil-rich states and the recirculation of so-called petrodollars globally, largely through European banks in the Eurodollar markets. Again, money disentangled from its national origins became a big part of the global economy, culminating in serious challenges to the US-dollar-based system of international finance (see Table 8.1). The existence of these Eurodollar markets meant that there was already some *de facto* deregulation in the international financial system.

Table 8.1 illustrates how, since the mid-1970s, other factors created pressures that ultimately forced regulators to relax controls in response to wider processes that were increasingly beyond their control. Competitive international deregulation became the dominant trend, with financial centres and authorities mimicking each other in lowering their control of, and constraints on, financial sector activity. In particular, significant changes occurred in this period to allow foreign banks to operate in the United States and to facilitate American banks expanding overseas. The ‘Big Bang’ of 1986 in the United Kingdom also allowed British banks to do what other institutions had previously done (e.g. trade in securities and engage in investment banking) and allowed foreign banks to operate in the United Kingdom. Similar kinds of changes occurred elsewhere in Western Europe and East Asia driven by the logic that domestic financial sectors would otherwise lose business to rival financial centres such as London and New York. This trend towards deregulation of financial sectors accelerated rapidly from the 1980s onwards.

To summarize, the role of the state in facilitating this process of deregulation of global capital was critical. In addition, the national state in the United States and the United Kingdom was experiencing an ideological change from a welfare regime to a neoliberal market regime (see Chapter 9). The rise of the so-called Reaganomics and Thatcherism during the 1980s led to the massive privatization of public goods, from transport to communications to utilities. This major liberalization and marketization of public utilities and services resulted in the widespread securitization and public offering of assets formerly belonging to these government institutions and enterprises. These securities were subsequently sold to national financial institutions such as pension funds, private equities, and other institutional investors. The wealth and assets of citizens of these countries became more entangled with these financial market instruments. The deregulation of financial markets was a necessary step in this move towards a neoliberal market regime of economic governance. However, as finance became increasingly freed from its national context, did its global reach entail the demise of existing financial centres? Interestingly, Section 8.4 shows that these financial centres have not only remained dominant in an era of global finance but also that their intensified *inter-place competition* with each other plays a crucial role in driving further the globalization of finance.

8.4 Putting Global Finance in Its Place

Since the late 1980s, popular writings on the global reach of finance and the future of financial markets have been full of rosy predictions of seamless global financial integration and uninterrupted flows of global capital across different national jurisdictions (just like the ‘borderless world’ discourse we discussed in Section 5.2). This period was symptomatic of the ‘irrational exuberance’ – the

term used by former US Federal Reserve Chairman Alan Greenspan in December 1996 – surrounding global financial integration that prevailed up until the 2008 financial crisis, and which saw the constraints of geography being inevitably overcome by technological innovations and other forms of societal change. Pundits suggested that financial firms only had to invest in computer technology to open up a wide variety of potential locations. Equally, stock exchanges would become far less tied to particular cities, and consumers would be presented with a proliferation of financial products and services. In short, finance would become increasingly *placeless*. This observation is not at all surprising if we take into account the common perception of finance’s hypermobility.

Yet, the overall geography of the global financial industry is curiously resistant to change. The vast majority of financial assets today remain confined to investments in, and institutions of, their home jurisdictions. In other words, the ‘home bias’ effect is very strong even in global finance. Indeed, as accessibility to finance becomes more global, financial centres in specific places are further consolidating their dominance. Today’s leading international financial centres are almost always global cities in their own right (see Box 8.2). Finance continues to be highly concentrated in these global cities – the *place* of/for global finance – despite deregulation on a global scale. These financial centres have a peculiar mix of actors (e.g. bankers and financiers), institutions (e.g. capital markets), and advanced producer services (e.g. accounting, legal, consultancy, and research firms) that facilitate their central role in spearheading global finance. In other words, these global cities are the nerve centres of global finance; they compete fiercely against each other for finance and investment. Finance involves a large number of individuals and institutions whose spatial orientations are, more often than not, ‘local’ – they need places in which they reside, locate, accumulate capital, and make savings or investment decisions. In reality, financial services are among the most spatially concentrated of all economic activities. While the evolution of the banking industry described earlier has made physical proximity to borrowers, customers, and clients ever less necessary, locating near other financial and business service institutions has become strategically more important because of patterns of interdependencies in the financial sector (Taylor et al. 2014; Hall 2018).

Figure 8.1 illustrates a range of global cities as *strategic places* for global finance because of the strong presence of advanced producer services firms that constitute ‘strategic networks’ and underpin the global network connectivity of these cities. A small number of leading global cities – London and New York, together with Hong Kong, Singapore, Shanghai, Tokyo, Chicago, Zurich, and San Francisco – control the lion’s share of the international financial transactions in the world economy. In the September 2017 issue of the *Global Financial Centres Index* (GFCI 22), London, New York, Hong Kong, Singapore, and Tokyo remained, respectively, the top five global financial centres, with Shanghai and Beijing jumping to the sixth and tenth positions.

KEY CONCEPT

Box 8.2 Global cities

There have been many attempts over the last 25 years to try and capture the essence of the global urban hierarchy and its interactions with the changing geography of the world economy. A leading example is Sassen's (1991) detailed research on the so-called global cities of New York, London, and Tokyo. Her thesis is that globalization has created a new strategic role for major cities with control and organization functions. There are four steps in her basic argument: (i) cities are key command points in the world economy; (ii) this creates a demand for financial and business services that are leading sectors in advanced economies; (iii) cities become key sites for production and innovation in these sectors; and (iv) cities in turn constitute the main markets for business and financial services. In this view, global cities – of which New York, London, and Tokyo are leading examples – are not just the site of corporate headquarters described in Chapter 5.3, but full-blown global service centres with a wide array of innovative support activities such as legal, banking, insurance, accountancy, management consultancy, advertising, public relations, and software firms. While other scholars have used different measures to construct global urban hierarchies (e.g. number of Fortune 500 firm headquarters and scale of the financial sector), most studies agree that there is a leading group of cities – most notably New York, London, Tokyo, Paris, Zurich, and Frankfurt – that have played a disproportionate role in controlling and coordinating the global economy. Three caveats about this approach should be noted. First, beyond this very top tier, the ranking can alter significantly, depending on what kind of measure is being used. Second, any ranking of cities must be seen in dynamic terms: the more recent rise of cities such as Beijing, Hong Kong, Shanghai, and Singapore, for example, has profoundly shaped existing patterns. Third, an ongoing challenge for economic geographers is to reveal the nature of the connections between key cities, rather than their static attributes. It may well be that the notion of a hierarchy is outdated in today's interconnected world economy (Derudder and Taylor 2018).

Between 1995 and 2016, London and New York were the top two cities for global foreign exchange trading and interest rate derivatives transactions, together accounting for 45–55 per cent in the former and 43–79.6 per cent in the latter (Table 8.2). Importantly, their shares in both types of transactions have grown very substantially during the past two decades, and they have become the most dominant places for these transactions. While Tokyo's role in foreign exchange

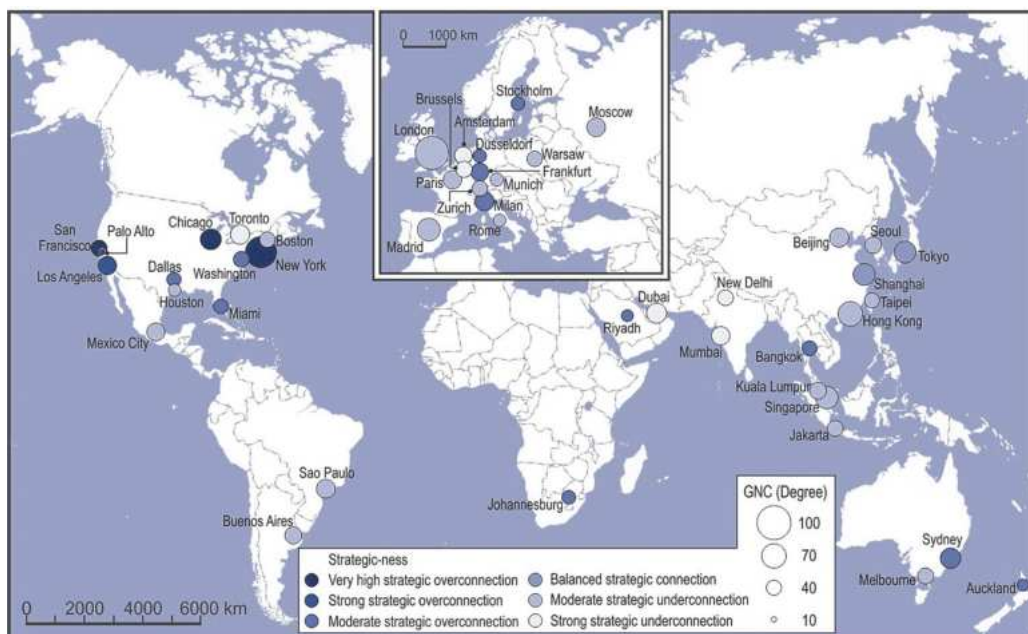


Figure 8.1 Global network connectivity of major financial centres

Source: Taylor et al. (2014, figure 1: 282). Reproduced with permission of Taylor and Francis.

Table 8.2 Leading global cities in global financial markets for foreign exchange trading and derivative transactions, 2001–2016 (Daily turnover in US\$ billion and percentages)

	2001		2010		2016	
	\$bn	%	\$bn	%	\$bn	%
Foreign exchange						
London	542	31.8	1,854	36.7	2,406	36.9
New York	273	16.0	904	17.9	1,272	19.5
Singapore	104	6.1	266	5.3	517	7.9
Hong Kong	68	4.0	238	4.7	437	6.7
Tokyo	153	9.0	312	6.2	399	6.1
Total	1,705		5,045		6,514	
Interest rate derivatives						
New York	116	17.1	642	24.2	1,241	40.8
London	238	35.2	1,235	46.6	1,180	38.8
Singapore	3	0.5	35	1.3	58	1.9
Hong Kong	3	0.4	18	0.7	110	3.6
Tokyo	16	2.3	90	3.4	56	1.8
Total	676		2,649		3,039	

Source: data from the Bank for International Settlements, <http://www.bis.org>, accessed on 28 September 2017.

transactions is still significant, it has been declining over time. Hong Kong and Singapore, meanwhile, have gained slightly a bigger role in global foreign exchange trading. In 2016, these three Asian cities accounted for a combined 20.7 per cent share of the world's \$6.5 trillion transactions in foreign exchange trading. As the world's leading financial centre and home to more than 200 foreign banks, London alone accounted for 37 per cent of the world's daily foreign exchange trading in 2016. More broadly, it employed 34 per cent of the 2.2 million people in the UK's financial and related professional services, and produced 46 per cent of the industry's gross value added and 49 per cent of its trading profits in the UK economy in 2015 (<https://www.thecityuk.com>, accessed on 9 January 2018). Hence, by some measures, the concentration of control in these leading global cities has actually increased at the same time as the use of ICTs has been expanding rapidly.

In New York City, Wall Street plays a dominant role in global financial markets. Wall Street is in the heart of lower Manhattan, America's leading financial district and, together with Broad Street, defines the boundary of an area that hosts the world's most powerful financial institutions. These institutions range from the

New York Stock Exchange (NYSE) and NASDAQ to the headquarters of many of America's largest financial groups, such as four of the top five American banks (JPMorgan Chase, Bank of America, Citigroup, and Goldman Sachs) and three of the top four American private equity firms (Apollo Global, Blackstone, and KKR). The NYSE has been particularly powerful after its 2007 merger with Euronext N.V. – an integrated platform of the exchanges of Brussels, Paris, and Amsterdam – that resulted in the world's leading equities exchange group. Both now operate as divisions of Intercontinental Exchange, a leading US-based operator of global exchanges and clearing houses, with more than 12,000 listed issues of contracts and securities and 5.2 million futures traded daily. The stock market indices of the NYSE, such as the Dow Jones Industrial, literally dictate the global price movements of stocks in numerous other stock exchanges. By 2017, NYSE's capitalization was \$25.8 trillion and its average daily trading value was \$123 billion. Its 2,400 listed companies represented 87 per cent of the Dow Jones Industrial, 77 per cent of the S&P500 and 80 per cent of the Fortune 100. As the preferred listing destination for major brands – from technology to consumer firms, the NASDAQ was home to four of the top five of *Fortune* magazine's 'World's Most Admired Brands' and five of the *Fortune*'s top seven 'Fastest Growing Tech Companies' in 2017. Across its global exchanges, the NASDAQ now lists 3,700 companies in 35 countries, representing \$10 trillion in total market value (<https://www.nyse.com> and <http://business.nasdaq.com>, accessed on 9 January 2018).

There is no doubt that New York, particularly Wall Street, has served as a key node in the global financial system and has come to dominate the global financial economy since the last decades of the twentieth century. Wall Street institutions are extremely well connected to financial circuits operating at the global scale. Its global dominance owes much to the historical growth and role of New York City in the expanding hierarchy of urban centres in the United States, and the rise of American power and global finance in the post-Cold War era of financial globalization (see Table 8.1). Equally, the contemporary flows of people, capital, and knowledge into, and out of, New York City have continued to ensure its integral role in the global financial system. It is therefore not surprising that a social movement, known popularly as 'Occupy Wall Street', started in Manhattan's Liberty Square on 17 September 2011 as a bottom-up response to counter the excessive power and greed of Wall Street banks and firms in the new millennium (Figure 8.2). Some have even called New York and London the 'safe deposit box' for the transnational wealth elite (Fernandez et al. 2016). The movement has since spread to over 100 cities in the United States and over 1,500 cities worldwide (<http://occupywallst.org>, accessed on 28 September 2017).

With the deregulation and re-regulation of the international financial system described in Section 8.3, however, a new breed of international financial centres, particularly those in Asia, has emerged in recent decades (see Figure 8.1 and Table 8.2). Up until the mid-2000s, Hong Kong, Singapore, and Tokyo were the only three Asian centres in the top 20 international financial centres. By 2017,



Figure 8.2 The Occupy Wall Street movement in New York City

Source: reproduced with permission of B Christopher/Alamy Stock Photo.

Asia was much more significant, with four centres in the top six. One good example is China's world city, Shanghai (ranked sixth in GFCI 22). In comparison with New York, Shanghai is a relatively new entrant to the world financial markets. From a relatively low ranking in the mid-2000s, Shanghai had risen very rapidly to almost the level of Tokyo (fifth), an established global city, by September 2017. In other cases, new OFCs such as the Cayman Islands and British Virgin Islands have arisen in response to the desire of financial institutions to evade national and international regulatory constraints and the propensity of wealthy individuals to engage in speculative/illicit financial transactions. Almost overnight in the late 1970s, for example, these former tax havens were transformed into OFCs (see Box 8.3). Recent geographical research shows that colonial links are particularly strong and pervasive between these OFCs and their metropolises such that their activities are often controlled remotely by financial institutions located in major onshore financial centres such as London (Haberly and Wójcik 2015: 93).

8.5 Financialization: Circulating Global Capital

This chapter has so far demonstrated how, in recent decades, the productive role of finance has been increasingly replaced by one of circulating financial investments that are detached from the real economy. Once the brainchild of the nation-state to fund

CASE STUDY

Box 8.3 The Cayman Islands as an offshore financial centre (OFC)

The Cayman Islands, a British Overseas Territory, is a well-known example of the place-selectivity and competition within global finance. As financial institutions started to move offshore in the 1960s, the Cayman Islands was a preferred destination due to its no-tax policy as part of a raft of legislations put in place by then British Foreign Office. In 1972, it had more than 3,000 registered companies and 300 trust companies. By 2016, the Cayman Islands had housed over 100,000 companies, some of which were well-known British brands such as Tesco, Sainsbury, BP, Manchester United, and even the National Grid! The collective tax avoidance by all British-origin companies registered in the Islands was estimated to reach £20 billion. A *Guardian* report in 2016 calls the Cayman Islands ‘the most notorious tax haven on earth’ (Peretti 2016). The Cayman Islands’ development has been driven by a combination of different economic and political contexts. In economic terms, the Islands’ attraction to foreign banks is clearly related to the activities of transnational corporations, many of whom have established financial departments on the Islands to serve as profit centres benefitting from tax minimization and transfer pricing (how internal transactions within business are accounted for). In this way, foreign banks are attracted to the Islands because they can cater to the needs for financial services of these transnational corporations. These foreign banks also offer customized packages of services (e.g. ‘global custody’ or the handling of global financial portfolios for clients) and other international private banking services to clients that have registered operations on the Islands. In political terms, the Cayman Islands experiences significant inter-island competition from other nearby OFCs such as Bermuda, the Bahamas, and Panama. While each occupies a special niche in the global offshore financial market, they also gain market share from the common practice of risk diversification among bank clients who do not want to base all their finances in one jurisdiction. The Cayman Islands underwent a major political struggle over national development options during the 1960s and found the OFC route to be the most viable and easy-to-implement growth strategy. In other words, its expansion as an OFC has been driven both by changing international economic circumstances and by the limited domestic options for other modes of economic development (see more in Clark et al. 2015 and Aalbers 2018).

the development of the economy, global finance has itself now become a primary driver of state policies and the behaviour of all sorts of economic agents. It is no longer amenable to control and regulation by any single territory or institution. After more than four decades of unabated growth and transformation since the 1970s, global finance is now increasingly shaping the world economy in its own image.

In this section, we explore how this situation has come about. We argue that it has much to do with a complex and all-pervasive process known as *financialization*. In this process, all sorts of assets and things are transformed into financial instruments for trading among individuals and firms in global capital markets (see Box 8.1). In turn, the buyers of these complex financial instruments are no longer connected to, or potentially even aware of, the underlying assets of their investment. This increasing disconnection between assets and investments through financialization has created enormous opportunities for profit creation and appropriation via different capital markets. Financialization thus enables the ever-growing power and influence of financial markets, financial institutions, and financial elites at a global scale because of the dense connections between domestic and international circuits of financial capital.

Our consumption behaviour is also increasingly embedded in financialization processes. As more unsecured credit is extended to consumers through student loans, personal loans, credit cards, hire purchase, and cashback purchases, our borrowings have been aggregated to form securitized debt instruments and derivatives that can be traded in global capital markets. This process of financializing personal debt has greatly increased the incentives for credit-extending institutions such as credit card companies, retail banks, and savings societies to bankroll a dramatic expansion in household borrowing across the advanced industrialized societies, particularly the United States and the United Kingdom. Since the 1980s, credit card companies have pioneered the selling of their cardholders' debt as securitized debt to investors in global capital markets. Financialization has led to the rapid emergence of CDOs and other complex financial derivatives and instruments that are associated with massive systemic risks and the 2008 collapse of global financial markets (see Box 8.4). As related in Section 8.3, however, it is important to remember that financialization has been fostered not only by the activities of financial firms but also by deregulatory government policies.

This section first begins by examining how financialization works through the city and its built environment before offering an analysis of a newer class of institutional investors whose enormous capital adds significant fuel to these financialization processes.

Financialization, Crisis, and Urban Transformations

One of the biggest impacts of financialization throughout the world has been on the city and its built environment, primarily through the mechanisms of real estate and housing markets. This is because real estate and housing have been heavily

CASE STUDY

Box 8.4 Subprime and the crisis of global finance

Subprime finance, particularly in the United States and the United Kingdom, was deeply implicated in the 2008/2009 global financial crisis. All sorts of credit facilities were extended to borrowers who previously would not have been granted such facilities. These ‘subprime’ borrowers usually had low, irregular, or unverifiable income and tended to have poor credit histories and scores. They were lured into borrowing by a wide range of dubious lending practices undertaken by creditors, brokers, or even home-improvement contractors who were often not subject to federal banking supervision. These practices involved engaging in deception or fraud, manipulating the borrower through aggressive sales tactics, or taking unfair advantage of a borrower’s lack of understanding about loan terms.

Through securitization of these subprime mortgages, banks were able to separate out their risky lending business (e.g. credit card and mortgage lending) by trading these ABS in the capital markets, effectively eliminating the need for matching funding from savings and deposits for this kind of growth in liable assets. Through this process of securitization at the global scale, lenders could profit from a ‘local’ subprime loan even if the borrower defaulted within months. This was because once such a loan was packaged into an ABS and sold on global capital markets, the lender would have already recouped the loan amount plus profits and passed the future risk and liability to investors elsewhere who had bought the ABS. In late 2007 and throughout 2008, a major crisis of confidence hit the subprime market due to concerns about housing oversupply, leading to falling home prices that in turn reduced the mortgage-servicing ability of subprime borrowers. When a large number of these subprime borrowers could not repay their lenders, the latter’s creditors, such as mainstream commercial banks and investment banks, got into trouble because these banks and their clients had bought into financial instruments derived from these subprime mortgages that became literally worthless. The CDO market thus collapsed and dragged down with it the entire global financial market, including Lehman Brothers – a US investment bank deeply involved in structuring these CDOs and burdened with over \$600 billion in debt.

securitized into many different financial instruments that form one of the core asset classes in global finance (Martin, 2011: 593–594). Prior to the 1980s, most mortgage lending took place at the local or national level when the buyer of real estate for business or residential purposes would approach a financial institution

for a mortgage loan. In the United States or the United Kingdom, these mortgage loans were mostly offered by locally based specialist mortgage institutions, such as state savings and loans in the United States and mutual building societies in the United Kingdom. These institutions operated within longstanding market and geographical restrictions and issued long-term mortgages funded mostly by deposits of local savers. As described in Figure 8.3, this was a ‘locally originate and locally hold’ model of mortgage provision. To a certain extent, funds tended to be generated and repaid locally or at most interregionally, and mortgage crises were often contained and resolved within the same country.

With the emergence of global finance, however, we have witnessed a significant shift from this ‘locally originate and locally hold’ model to a highly securitized ‘locally originate and globally distribute’ model (see Figure 8.3) in which local real estate and housing markets are directly tied to global capital markets and thus exposed to all of their volatility and instabilities. This process has had several implications. First, mortgage borrowers could now access non-local lending options, sometimes even from financial institutions in different countries. Second, a much wider range of mortgage lenders were attracted to real estate and housing markets in the 1990s and 2000s in order to try and benefit from the financial gains on offer. Third, securitization of this mortgage lending/debt became the new

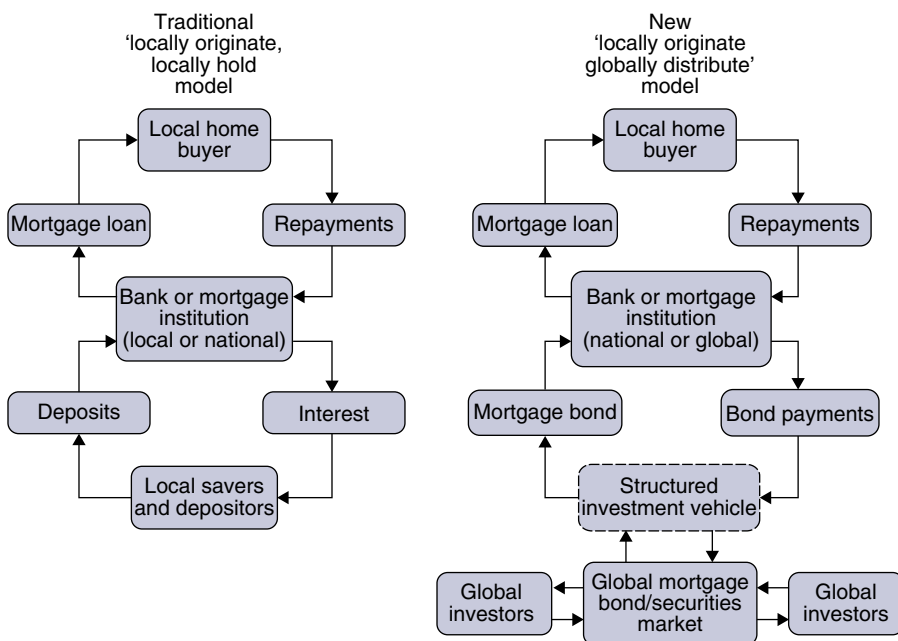


Figure 8.3 Global finance and the shifting relationship with local mortgage lending
Source: adapted from Martin 2011, figure 2. Reproduced with permission of Oxford University Press.

norm in many real estate and housing markets in developed countries, most notably the United States, the United Kingdom, and the Netherlands. In effect, mortgage lenders sought to offset the risk of their loans by securitizing them through special investment vehicles and selling shares in these vehicles. As we now know, these processes had dire consequences in 2008/2009 (see Box 8.4). Interestingly, similar financial instruments have also emerged on the supply side of real estate and housing. Real estate investment trusts (REITs), for instance, are a type of mutual fund available in over 40 countries and registered under a company that invests in real estate, such as office buildings and shopping malls, and trades on major exchanges like a regular stock. In short, financialization has driven profound changes in the nature of housing and real estate markets.

But how does this financialization of the city play out in the urban built environment? We examine two major geographical outcomes here – urban governance and neighbourhood decline. First, financialization has major implications for urban governance in terms of the ways in which municipal governments seek to grow and/or regenerate their cities. As cities throughout the world embarked on massive projects to develop or transform their urban assets in the 1990s and the 2000s, more municipal governments were attracted by the promise of global finance as a major alternative to their existing funding through local taxes and national redistribution. They turned to *debt-financing* in global capital markets and bought into ‘innovative’ financial instruments, such as municipal bonds, ABS, and even private equities, to finance their entrepreneurial projects such as public infrastructure, urban amenities, social housing, and so on. To service this debt financing, municipal governments relied on future property taxes and other forms of earnings such as anticipated future income from user fees on these urban assets. In the United States alone, the amount of outstanding debt in the municipal bond market was valued at \$3.7 trillion by 2012, with 44,000 state and local issuers (Peck and Whiteside 2016: 244).

In their study of Detroit’s recent bankruptcy, the largest municipal bankruptcy in US history, Peck and Whiteside (2016) argue that financialization led to the rising power of financial gatekeepers and creditors in urban governance. By the time Detroit filed for Chapter 9 bankruptcy on 18 July 2013, its municipal government owed \$18 billion to its creditors comprising large corporate bond holders and insurers (e.g. Bank of America, UBS, Syncora Guarantee, and Financial Guaranty Insurance), municipal pension funds and commercial banks. Its Water and Sewerage Department debt alone made up one-third of this massive long-term debt. The other two-thirds comprised unfunded retiree health care liabilities (32 per cent), unfunded pension liabilities (19 per cent), and government debt (16 per cent). Confronted by dwindling local tax bases and deindustrialization since the 1980s, Detroit first went on a drive to develop new growth sectors and to renew its urban infrastructure in the 1990s. During this initial period of urban entrepreneurialism, the municipal government and its broader coalition of actors retained much of its governance power.

However, the transition towards financializing the city since the 2000s has led to the power shifting in favour of creditors' privileges. The rise of privately financed public-private partnership projects, such as the Riverwalk and Campus Mauritius projects, the Woodward Avenue M-1 rail project, and the new Windsor-Detroit bridge, has given bond holders and private capital much more say in urban governance. After Detroit's file for bankruptcy in July 2013, these creditors compelled the city government to sell public assets and to introduce massive cost-cutting measures in other areas of public interest (e.g. reducing municipal services in some suburbs). While cities and municipalities worldwide do not often go bankrupt, Detroit's experience is not the only one and it will not be the last. As such, financialization is not only taking place via financial elites in global cities but is also operating as a transformative urban process reshaping what municipalities in ordinary cities can and cannot do in an era of debt-financed urban development.

Second, financializing the city has major geographical implications for suburban transformations at the *neighbourhood* scale. Prior to the 2008 global financial crisis, geographically uneven closure of bank branches in different countries had already impacted on low-income and/or racially marginalized neighbourhoods by excluding them from the financial system. Ironically, these same neighbourhoods were also targeted for bad mortgage-related financial products such as subprime loans. This twin phenomenon of financial exclusion and subprime lending in the housing market tended to be prevalent in US and, to a certain extent, UK cities. However, the 2008 global financial crisis and its subsequent economic recession and austerity measures have affected many North American cities and some European cities (e.g. Iceland, Ireland, and the United Kingdom) through much of the 2010s, resulting in uneven mortgage foreclosures, growing unemployment, and rising poverty in geographically specific areas. Coupled with other country- and city-specific factors (e.g. weaker economy, lower quality housing stock, and less government involvement), the effects of financial crisis and recession on neighbourhood decline can be disastrous.

There are four main ways in which the 2008 financial crisis can lead to neighbourhood decline (Zwiers et al. 2016):

- Austerity programs and budget cuts result in a weaker social safety net for vulnerable groups and to more limited options on the social housing market, leading to increasing concentrations of low-income groups in particular neighbourhoods.
- The effects of the crisis are stronger in cities that have actively stimulated homeownership at high loan-to-value rates. Vulnerable groups such as racial or ethnic minorities, low- to middle-income households, and first-time buyers are especially affected by the crisis. When these groups are over-represented in particular neighbourhoods, they are often most affected by rapid processes of decline.
- Low- to middle-income groups and first-time buyers have been increasingly excluded from the mortgage market since 2008. This new round of financial

exclusion has created a large group in need of affordable rental housing, leading to increasing inequality between renters and owners in specific neighbourhoods.

- The crisis has led to an increase of corporate investment in the private rental sector (e.g. Australia, Japan, the United Kingdom, and the United States). Converting more properties into rental units might lead to neighbourhood instability and negatively impact on surrounding property values. These effects will be the strongest in neighbourhoods most hard hit by recession and are likely to have negative spillover effects on surrounding areas.

To sum up the above discussion, financialization since the 1990s has clearly turned all kinds of things into ‘asset classes’. Real estate and housing are certainly no exception, partly because the global reach of finance is often most visible in these spatially fixed assets. Next, however, we should perhaps examine more closely who these global investors are and where they come from. Apart from the big banks and private investors, there is indeed another ‘investor class’ that has very deep pockets because of their funding by national wealth – sovereign wealth funds (SWFs).

The Emergence of Sovereign Wealth Funds

In recent years, certain states have become major global investors through their own national funds or SWFs. As such, they have become important players in the global financial landscape. In September 2017, the combined assets of the world’s SWFs were \$7.4 trillion (\$7,417 billion) – some 11 per cent of the global assets under management. The top 12 SWFs alone were worth \$5.9 trillion or almost 80 per cent of all SWFs (<http://www.swfinstitute.org>, accessed on 30 September 2017). Similarly, the world’s top three largest public pension funds were the Social Security Trust Fund from the United States (\$2.9 trillion), the Government Pension Investment Fund from Japan (\$1.3 trillion), and South Korea’s National Pension Service (\$0.5 trillion). PwC (2016: 7) thus predicted that the combined assets of these SWFs *and* public pension funds would increase from \$11.3 trillion in 2015 to \$15.3 trillion in 2020. In comparison, the world’s top three largest *private* asset management firms as of December 2016 were American – BlackRock (\$5.8 trillion), Vanguard (\$4.4 trillion), and State Street Global (\$2.8 trillion). The biggest difference between SWFs/public pension funds and these private institutional investors lies in the former’s *state* control of and/or influence over financial investment decisions on the basis of accumulating national wealth and securing inter-generational equity (i.e. preserving wealth for future generations). In general, SWFs are developed through the accumulation of capital via the following means:

- *Huge resource endowments in home countries*: Surplus national funds can be accumulated through the large-scale extraction and export of commodities derived from such endowments as oil fields (e.g. Norway and Saudi Arabia) and minerals (e.g. Russia and Australia).

- *Significant trade imbalances through exports*: Surplus foreign exchange reserves are turned into national funds for global investment (e.g. China, Hong Kong, and Singapore).
- *Longstanding conservative fiscal management*: Significant government budget surpluses over time are accumulated to form SWFs (e.g. Singapore).
- *Accumulated pension and social security funds*: There are state-backed allocations and accumulations of retirement funds for citizens (e.g. China and New Zealand).

Table 8.3 shows the world's 12 largest SWFs as of September 2017, ranging from Norway's Government Pension Fund (\$954 billion) to Singapore's Temasek Holdings (\$197 billion). Four things stand out about this form of 'sovereign fund capitalism' (Clark et al. 2013). First, with the exceptions of Norway, Hong Kong, Singapore, South Korea, and Australia, the leading funds are based in rapidly

Table 8.3 World's 12 largest sovereign wealth funds in 2007 and 2017 (US\$ billion)

Country	Fund name	Launch year	Assets (December 2007)	Assets (September 2017)
Norway	Government Pension Fund-Global	1990	322.0	954.1
UAE (Abu Dhabi)	Abu Dhabi Investment Authority (ADIA)	1976	875.0	828.0
China	China Investment Corporation (CIC)	2007	200.0	813.8
Kuwait	Kuwait Investment Authority	1953	250.0	524.0
Saudi Arabia	SAMA Foreign holdings	1952	—	514.0
Hong Kong, China	HKMA Investment Portfolio	1993	—	456.6
China	SAFE Investment Company	1997	—	441.0
Singapore	Government of Singapore Investment Corporation (GIC)	1981	330.0	359.0
Qatar	Qatar Investment Authority	2005	—	320.0
China	National Social Security Fund	2000	—	295.0
UAE (Dubai)	Investment Corporation of Dubai	2006	—	209.5
Singapore	Temasek Holdings	1974	108.0	197.0

Source: December 2007 data from Yeung (2011, table 1) and the rest from <http://www.swfinstitute.org>, accessed on 9 January 2018.

developing countries where the pace of economic growth is allowing the accumulation of funds. Some of the SWFs from developed countries were relatively smaller at less than \$50 billion (e.g. the Alaska Permanent Fund and Texas Permanent School Fund from the United States, and the New Zealand Superannuation Fund). Second, most of these countries are small economies, with the notable exceptions of China and Russia. The emergence of very substantial SWFs from these small economies indicates their intention to seek greater returns to their national wealth for sustaining future generations. The emergence of SWFs of such mammoth scale from small economies that are either resource-rich (e.g. Norway and Saudi Arabia) or resource-poor (e.g. the city states of Hong Kong and Singapore) is a startling feature of the contemporary world economy and can be very significant financially even in advanced industrialized countries. For example, 35 per cent of the 50 largest German industrial firms in 2010 had SWFs from oil-rich Middle East countries as their ‘anchor investors’ (Haberly 2014). These ‘White Knights from the Gulf’ can help such firms mediate major financial crises associated with hostile takeovers, bankruptcies, or other restructuring events, for instance, the split of Daimler from Chrysler (the United States) in 2009.

Third, some of these SWFs have a long history of existence. However, as Clark et al. (2010: 2272) argue, ‘it was only during the first decade of the new millennium that governments around the world decided – seemingly en masse and independent of their “variety of capitalism” – that these special-purpose investment vehicles were crucial to achieving their policy objectives’. In fact, four of the top 12 SWFs in Table 8.3 were launched after 2000. Fourth, while most SWFs are managed professionally by national agencies, their close connections to ruling monarchs or political regimes have raised significant concern among the broader international community. Critics argue that the investment objectives of SWFs are often intertwined with state objectives that go beyond pure financial considerations to include geopolitical concerns and economic diplomacy. In reality, however, SWFs vary greatly in the extent to which they are pursuing strategic as opposed to economic objectives, and also in the extent to which there is transparency about those objectives. This mixing of financial with political imperatives has the potential to be an increasingly destabilizing and controversial aspect of state action within the global economy (see more in Chapter 9).

Overall, the growing role of the state as a major institutional investor in the international financial system has gone hand-in-hand with the advancement of financialization since the 1990s. With much greater national wealth accumulated through different state-controlled means, these SWFs are no longer constrained by the domestic orientation of their financial objectives and investment possibilities. Traditionally, SWFs have tended to be risk-averse and invest in ‘safer’ financial assets, such as cash, fixed income deposits, US treasury and corporate bonds, major currencies, and so on. In fact, most SWFs outsourced the management of their assets to the world’s leading *private* asset management firms (e.g. BlackRock and Vanguard). The Abu Dhabi Investment Authority (ADIA), for example, is

well known for delegating some 65 per cent of its assets to these private firms (<http://www.adia.ae>, accessed on 30 September 2017). As financialization has opened up many *new* avenues for generating greater returns on their assets, some SWFs have become more aggressive in their choice of investment vehicles and risk appetites and their acquisition of new asset classes, including securities backed, potentially, by your student loans!

These alternative assets can encompass hedge funds, real estate, private equity, and global infrastructure. In the field of global infrastructure, for example, financialization has clearly enabled the participation of a much greater variety of investors that includes SWFs and public pension funds. The general shift towards greater private ownership of infrastructure assets – such as transport systems, utility networks, and schools and hospitals – has allowed SWFs and other institutional funds to invest in the increasingly securitized infrastructure landscape. In Asia alone, the World Bank estimated that \$8 trillion from 2015 to 2025 would be needed to finance such infrastructure projects that will represent nearly 60 per cent of total global infrastructure spending by 2025. Between 2009 and 2014, direct infrastructure acquisitions represented 10 per cent of all SWF deals (PwC 2016: 22, 30). For example, London's Heathrow Airport, one of the world's busiest, has seven institutional investors, including SWFs from China, Qatar, and Singapore, and two of Australia's major ports are owned by SWFs from Abu Dhabi among other institutional investors.

8.6 A Different Kind of Finance?

While financialization has seemingly come to dominate the real economy, it is important for us not to overemphasize the pure economic logics of this form of global finance anchored primarily in the United States and the United Kingdom – broadly known as Anglo-American financial capitalism (see also Chapter 2). We have so far considered how, for example, student loans in this form of capitalism have been financialized and how global finance has apparently penetrated almost every corner of the world economy. Yet, we need to remember that the world is made up of many different societies and nation-states, some of which operate under cultures and religions quite distinct from the Anglo-American form of capitalism. Understanding how finance might have become so powerful today, we should be equally cognizant that finance, just like any other form of economic life, is a *social-institutional* phenomenon that is deeply embedded in the norms and practices of these societies and states.

A good contemporary example is found in the practices of *Islamic banking and finance* throughout the Muslim world, in particular Asia and the Middle East. According to Pew Research Center, the Muslim world in 2015 was made up of over 1.8 billion people or almost 25 per cent of world population and at least 50 countries had majority Muslim population. These figures will grow twice as

fast as the world's population until at least 2060 (<http://www.pewresearch.org>, accessed on 1 October 2017). In short, Islamic finance is *not* a small and isolated phenomenon, but rather it represents a major form of economic practice distinct from Anglo-American finance. As a significant and yet burgeoning trend in global finance since the 1990s, it has several core tenets that are consistent with Islamic beliefs of freedom from colonial rule, exploitation and oppression, the elimination of poverty, and the reduction of unequal distribution of wealth:

- *Money*: Money cannot be used to generate further wealth outside of a productive process. Money has no intrinsic value in itself and is only meant to define the value of something (e.g. goods or services). This is a rather different belief from the 'spirit' of contemporary global finance in which profits can be 'produced' on the basis of returns to investment in all sorts of financial instruments, irrespective of their speculative, manipulative, or even fraudulent motives.
- *Interest (riba)*: The charging or paying of interest on a deposit or a loan is not allowed under *Shari'a* or Islamic law. Loans and mortgages are not part of the financial products offered by *Shari'a*-compliant banks. A *Shari'a*-compliant bank can only use its deposits and funds to acquire productive assets and share any profits made on those assets with its depositors. *Shari'a*-compliant bonds known as *sukuks*, for example, typically offer a fixed-rate profit to their holders.
- *Investment*: *Shari'a* permits investing money in manufacturing, services, or trade compliant with Islamic principles, but investment in undesirable activities, such as gambling, alcohol, and pork-related products, are disallowed.
- *Risk (gharar)*: Banks share the risk of investment with their depositors and all risks and related information must be known to them. This means that high-risk investments are not permitted. *Shari'a*-compliant investments must also be on the basis of ownership to avoid future unavailability of underlying productive assets. Derivatives and CDOs, popular investment vehicles in Anglo-American finance, are thus uncommon in Islamic finance.

Taken together, this religious/cultural belief system, which requires investment behaviour that lies outside of the profit-maximizing and risk-taking imperatives of most conventional banks and financial institutions in Anglo-American capitalism, has fostered the rapid development of an alternative banking and finance system emphasizing equity and investment in the real economy. By 2014, *Shari'a*-compliant assets had reached about \$2 trillion and were expected to triple to \$6.5 trillion by 2020. In 2017, there were more than 300 exclusively Islamic banks throughout the world and, between 2000 and 2016, their capital grew massively from \$200 billion to over \$3 trillion. By 2020, this figure was expected to reach \$4 trillion. In commercial Islamic banking, the Muslim countries with the largest assets in 2015 were Iran (\$329 billion), Saudi Arabia (\$300 billion),

Malaysia (\$174 billion), and the UAE (\$128 billion) (data from <http://www.ifsb.org>, accessed on 1 October 2017).

Given the wealth of several oil-rich Islamic countries in the Middle East and their sovereign funds (e.g. Kuwait, Saudi Arabia, and the UAE), the practice of Islamic finance has led to the creation of an alternative circuit of significant financial centres with a different geographical structure than the existing network of global cities. As argued by Pollard and Samers (2007: 320), it is useful to note that this idea of ‘alternative’ refers to the question of ‘alterity’ of Islamic finance to Anglo-American finance. In Muslim-majority countries, Islamic finance is indeed *the* dominant form of banking and finance! While the vast sum of global capital moves between world cities such as New York, London, Frankfurt, Tokyo, and Hong Kong (Box 8.2), Islamic finance has established a relatively smaller and less globalized circuit centred on its ‘undisputed Mecca’ – Manama in Bahrain – followed closely by Kuala Lumpur in Malaysia. Other cities in this circuit include Dubai, Tehran (Iran), Karachi (Pakistan), and London (the United Kingdom). Figure 8.4 illustrates this map of Islamic financial centres. Apart from London, it is clear that Islamic finance operates in *networks* and *places* outside the dominant form of Anglo-American finance capitalism. Indeed, the recent development in Islamic finance has further prompted regulatory shifts in the United States and the United Kingdom to accommodate non-interest-based financial practices among Muslims. *Sukuk* or Islamic bonds traded in London and New York rest on English common law and yet the decisions of their *Shari’a*-compliance or ‘Islamic-ness’ are subject to prominent and highly respected *Shari’a* scholars who sit on various

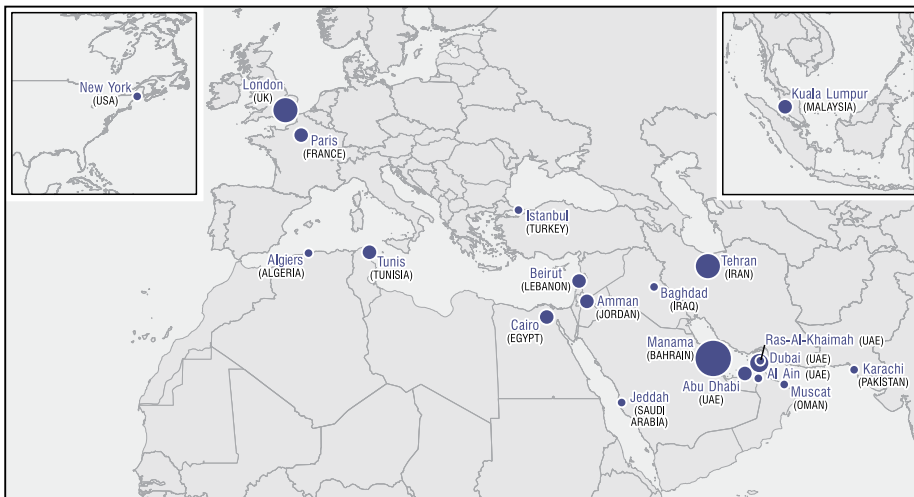


Figure 8.4 The circuit of global financial centres in the Islamic banking and finance system
Source: adapted from Bassens et al. (2010). Reproduced with permission of John Wiley and Sons.

Shari'a supervisory boards in the United States and the United Kingdom and reside in Muslim-majority countries elsewhere.

8.7 Summary

This chapter has examined how money and finance have experienced different transformations over time and space, bringing today's world of global finance into being. Examining the massive accumulation of student loans and their securitization over time in the United Kingdom and the United States, we began the chapter with the promise and perils of global finance. In particular, financial capital has had a long history of funding the emergence of industrial capitalism in which productive inputs and assets are acquired and transformed through value-added activities into final goods and services for our everyday consumption. In this developmental phase of modern capitalism, finance and banking remained fairly constrained within the territorial boundaries of nation-states. There was thus no such thing as global finance as we know it today. This began to change in the 1970s when competitive deregulation of the financial sector and new technologies enabled capital to become an economic force in its own right and increasingly divorced it from the real economy.

To expand on this economic–geographical reading of money and finance, we have investigated the processes through which finance has gone global. Since the 1980s, national banks in developed countries began to consolidate their domestic activities and ventured into investment banking beyond original their intermediary role. Non-bank financial institutions in these countries also grew rapidly and developed new financial instruments for global capital markets. In the 1990s and beyond, new sources of financial capital were found in emerging markets and developing economies. These global shifts in the financial sector and its changing role within the wider economy led to the emergence of global finance by the turn of the millennium. To a certain extent, the promise of global finance is predicated on the popular discourse of finance as 'placeless capital' that can reach every corner of the global system. We have cautioned against this reading of finance precisely because we understand that the *actually existing* geographies of finance clearly favour dominant financial centres and places. Arguing that geography matters in putting global finance 'in its place', we have shown how financial centres such as London, New York, and the Cayman Islands are pivotal in the orchestration of global finance to an extent that dwarfs their territorial and population size. In short, finance is global only because of the existence of these dominant places that serve to mediate massive global financial flows.

As capital flows through global financial centres have continued to expand since the 1990s, we have witnessed the growing domination of the world economy by global finance. These intensified processes of financialization have fundamentally reshaped the saving and borrowing behaviour of individuals and firms and

turned virtually everything, whether tangible or intangible, into potentially tradable financial instruments. The financial economy has grown to be a gigantic system that outstrips the importance of the real economy, whereby money and finance are now widely viewed as the primary source of investment returns and economic growth. This financialization has, not surprisingly, turned the potential promise of global finance (democratization) into a peril best illustrated by the global financial crisis that unfolded in late 2008 and its devastating consequences continually manifesting worldwide throughout the 2010s. The severe destruction of value and wealth, the massive growth of debt, and the unprecedented number of housing market foreclosures that ensued are reflective of the centrality of the financial system within today's world economy. We have illustrated in some detail the severe impacts of financialization and financial capital/crisis on urban governance and neighbourhood decline. Yet, we ended the chapter by discussing two different forms of state-backed finance within (SWFs) and outside (Islamic finance) the orbits of global finance. These 'alternatives' to the dominant Anglo-American model finance point squarely to the continued importance and role of *states* and *international institutions* in governing the real economy – the central task in the next part of this book.

Notes on the references

- For trenchant critiques of modern finance-driven capitalism, see Harvey (2011), Langley (2014), and Tridico (2017).
- Christophers et al. (2017) and Martin and Pollard (2017) are major recent collections for understanding different geographical perspectives on money and finance.
- For major works on the rise of global finance, see Clark and Wójcik (2007) and Hall (2018).
- For recent geographical studies of global financial centres and world cities, see Taylor et al. (2014), Bassens and van Meeteren (2015), and Derudder and Taylor (2018); Coe et al. (2014) and Dörny (2015) for global financial networks; and Wójcik (2013), Clark et al. (2015), Haberly and Wójcik (2015), and Aalbers (2018) for OFCs.
- Pike and Pollard (2010), Lai (2016, 2017), and Teresa (2016) provide useful geographical accounts of financialization of everyday life. See Aalbers (2016), Christophers (2017), O'Neill (2017), and van Loon and Aalbers (2017) for studies of how cities and the built environment have become financialized.
- For recent geographical studies of financial market development in developing countries and other social-institutional contexts, see Wójcik and Camilleri (2015), Pan et al. (2017), and Yeung et al. (2017) on China; Pollard and Samers (2013), Pollard et al. (2016), Ewers et al. (2018), Lai and Samers (2017), and Poon et al. (2017) on Islamic finance; and Clark et al. (2010, 2013), Yeung (2011), and Haberly (2014) on SWFs.

Sample essay questions

- Why has financial capital become global in its nature and operation?
- Why do some international financial centres continue to be so influential and powerful in an era of global finance?
- How does financialization affect everyday social life?
- How and why did the financial crisis impact on the urban built environment?
- Using Islamic finance and other examples, discuss the extent to which it is possible to construct alternative financial systems.

Resources for further learning

- <http://www.worldbank.org/en/publication/gfdr/data/global-financial-development-database>: Global financial structure database from the World Bank, the most comprehensive data on global financial systems.
- <http://fas.imf.org>: Financial Access survey from the IMF that details who has access to credit and other financial services. Data on Europe are available from: https://ec.europa.eu/info/policies/banking-and-financial-services_en
- <http://www.longfinance.net>: The Long Finance website contains a comprehensive analysis of global financial centres, including the *GFCL*.
- <http://www.taxjustice.net>: The Tax Justice Network offers insights into tax avoidance and financial injustice, e.g. its Financial Secrecy Index. Oxfam International also offers a list of the worst tax havens in the world on its website: <https://www.oxfam.org/en/research/tax-battles-dangerous-global-race-bottom-corporate-tax>.
- <https://www.swfinstitute.org>: The Sovereign Wealth Fund Institute website offers very useful data and reports on some of the world's largest investors – SWFs and other institutional investors such as pension funds, family endowments, and asset management firms.
- <http://www.ifsb.org>: The Islamic Financial Services Board website contains all relevant information on the world's largest alternative form of finance.

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PART III

GOVERNING THE ECONOMY

CHAPTER 9

STATES

Who runs the economy?

Aims

- To understand how the state shapes economic processes in multiple ways within its territory.
- To appreciate the changing role of the state in an era of globalization.
- To recognize the different kinds of states within the world economy.
- To demonstrate geographical variations of control and authority within the state territory.

9.1 Introduction

In 2008, the federal government of the United States funded 57 per cent of the total national expenditure on basic research and development (R&D). Private business accounted for only 18 per cent, whereas universities and other non-profit sources took up the rest. By 2016, these ratios had not changed much, and the federal government remained the foremost sponsor of basic research. Indeed, the US government increased its spending on non-defence total R&D from \$67 billion in 2008 to \$70 billion in 2016, of which \$33.5 billion went into basic R&D (<https://www.aaas.org>, accessed on 10 January 2018). These R&D funds were disbursed through federal agencies such as the Department of Defense, Department of Energy, National Aeronautics and Space Administration, National Institute of

Health, and the National Science Foundation. This substantial federal involvement in supporting innovation and enterprise has led some observers to label the United States as ‘America Inc.’ and its federal government as a *national security state* that collaborates closely with private actors to pursue security-related objectives (Weiss 2014: 4).

In the United States, this state-led funding of basic R&D has clearly led to tremendous innovation in general purpose technologies (GPTs), many of which have subsequently been commercialized and used in our everyday lives in the form of new products and services. In 1994, for example, the National Science Foundation decided to fund one such GPT project – the multi-agency Digital Library Initiative (DLI). The purpose was to develop more accessible interfaces for data collections in the early days of the World Wide Web or Internet. Two Stanford University professors were awarded one of the six DLI grants, worth \$4.5 million. One of the graduate students funded by this DLI grant, Larry Page, was keen on viewing the Web as a ‘collection’ and uncovering the missing links among web pages. His work on millions of these links among different web pages provided a key adaption for the natural selection of search results. Together with a fellow Stanford graduate student, Sergey Brin, Page developed a prototype machine to use well-established technology to crawl different web pages by following their links. They soon realized that the family tree of these web links was simply too vast. They therefore developed the PageRank method to sort web pages on the basis of their frequency of links to other pages, and they tested it successfully on an initial set of 24 million web pages.

By 1998, Page and Brin started to commercialize their PageRank method or ‘algorithm’ by incorporating Google, Inc. (Hart 2004). But Google is not unique in having had its early development funded by the US government (Mazzucato 2013). From microprocessors and cellular technology to multitouch screens on successive generations of Apple iPods, iPhones, and Macs, we can trace the origins of these technologies to the Department of Defense and other related agencies in the US national security state. Even Apple’s Siri was acquired in 2010 from the non-profit Stanford Research Institute that had tapped into funding from the Defense Advanced Research Projects Agency for Siri’s initial development (<https://www.sri.com>, accessed on 24 October 2017).

The world-changing innovations of Apple and Google, and many others, reveal a great deal about the important roles played by the *state* in the contemporary global system in two major ways (for more on the basic terminology surrounding the state, see Box 9.1). First, these examples show the state performing perhaps more than just its political and security roles within its territory. Governments play many roles in fostering national development and providing economic management. Second, while successive US administrations are presumed to be broadly pro-market in their ideological stance, there is a great deal of interdependence between the state and the private sector. States are unavoidably both economic and political institutions, and it is the intersection of these two domains that often

KEY CONCEPT

Box 9.1 Unpacking the state

Terminology concerning ‘the state’ can be confusing, and so some clarity is useful. A state is an area of territory within which the population is governed by some kind of authority structure. A nation, on the other hand, is a significant grouping of people who normally have a shared culture and historical legacy. The two may or may not overlap to produce a nation-state where the political and cultural dimensions coincide. Many states have experienced traumatic journeys to *nationhood* characterized by internal contests and civil wars (e.g. the United States, China, the former Yugoslavia, and several African states), while others are subject to competing claims of *sovereignty* from other states (e.g. Taiwan from China). Equally, there are a range of ‘nations without states’ that continue to press their case for independence through separatist movements of different kinds (e.g. the Basques in Spain and France, the Palestinians in and around Israel, and the Kurds across Iran, Iraq, and Turkey). For simplicity, however, and because our primary focus is on the exercise of authority with respect to the economy, we prefer to use the term ‘state’ throughout the chapter. Importantly, linking back to our discussion in Chapter 1, the state is an unavoidably *territorial* organization.

We also need to have clarity in terms of the language of geographical scales that we use. While the state is fundamentally seen as a national-level structure, it is actually a *multi-scalar* organization that necessarily functions through different tiers of government (except city states such as Monaco and Singapore). Many large countries have at least three tiers of government, operating at the national scale, the regional scale, and the local/city scale. China, for example, officially has four levels – the national, the provincial, the county, and the township – but also uses the terminology of the prefecture and the village. The regional level in particular can cause some confusion, as these areas are variously called states (e.g. India and the United States), provinces (e.g. Canada and China), prefectures (e.g. Japan), and territories (e.g. Australia, Canada, and India) as well as simply regions (e.g. the United Kingdom and France). The degree of control exercised by these lower tiers of government varies depending on the country context. In federal states such as the United States, Australia, Canada, Germany, and India, regional governments (such as California, Queensland, Ontario, Bavaria, or Andhra Pradesh) have considerable autonomy in policy terms. In more centralized states – for example, the United Kingdom, France, and Norway – regional tiers of governments are much more limited in their resources and decision-making capacities.

defines the nature of particular states. But states have very different histories and geographies in terms of their formation and evolution. We can therefore expect states in different political–economic systems to vary a great deal in terms of their roles and functions.

In expanding on these initial observations, the chapter proceeds in four main stages. Section 9.2 introduces and questions debates surrounding the supposed irrelevance of the state in an era of neo-liberal globalization. Section 9.3 then demonstrates the wide range of ways in which states continue to exert influence over the economic activities that occur within their territory and across their borders, simultaneously performing the multiple roles of ultimate guarantor, regulator, manager, owner, basic service provider, and investor. These interventions in turn create uneven geographies, both in terms of how states ‘plug-in’ to the global economy and the distribution of economic activity within their borders. Section 9.4 profiles how different approaches towards these various roles, reflecting different political ideologies, produce tremendous diversity in state forms within the world economy today. We use a fourfold typology of neo-liberal, welfare, developmental, and authoritarian states to impose some clarity and organization on this diversity. In doing so, we point to a variety of different forms of capitalism in which state–economy relationships vary. Finally, in Section 9.5, we look at how state control is both socially and spatially uneven in its operation and effectiveness, with the result that certain spaces, even within the same national territory, enjoy greater autonomy in their connections to the world economy.

9.2 Neo-liberal Globalization and the End of the State?

Since the early 1990s, some have argued that the state is increasingly irrelevant to the free-market operation of today’s global economy. This is commonly known as the *neo-liberal globalization* position, promoted through popular accounts offered by business gurus, media commentators, and pro-market academics. Neo-liberal commentators have typically invoked classical economists such as Adam Smith and Friedrich Hayek in their advocacy for the market mechanism and free trade in a highly interconnected world economy. In this view, globalization is a competitive force that integrates capital, technology, and people in a ‘borderless’ world (see also Section 5.2). According to this argument, the state has succumbed to this externally imposed force by engaging in market-friendly deregulation and liberalization. One of the most powerful and pervasive expressions of this discourse is in the emergence of *neo-liberalism* as a contemporary political–economic ideology (see Box 9.2). Neo-liberal globalization, we are told, creates a single global market that cannot be controlled by individual states. In outlining this *new* global system, neo-liberal pundits have created a powerful popular discourse suggesting

KEY CONCEPT

Box 9.2 Neo-liberalism

Neo-liberalism is a political and economic ideology based on a strong belief in individual liberty, markets, and private enterprise. In contrast to the central economic management role played by the government in Keynesian welfare states (after ideas by the British economist John Maynard Keynes), neo-liberalism views the state's role in the economy as something that should be minimized and limited to enforcing property rights and the operation of free markets and free trade. These core beliefs map onto a series of policy prescriptions encompassing:

- Fiscal discipline and the minimization of government budget deficits.
- The reorientation of public expenditure away from welfare and redistribution, and towards the development of economic competitiveness.
- The lowering of tax rates and enhancement of incentives for economic growth.
- Financial liberalization to allow market control of interest rates and capital flows.
- Trade liberalization and reduction of both tariff and non-tariff trade barriers.
- The removal of barriers to inward foreign direct investment (FDI).
- The privatization of state enterprises and increased private-sector involvement in public service delivery.
- Widespread deregulation and the removal of barriers to competition.

The development of neo-liberalism can usefully be split into at least three phases (Peck and Tickell 2002). Its core ideas started to surface among politicians and academics during the economic crises of the 1970s in what can be thought of as a period of *proto-neo-liberalism*. General Pinochet's Chile was arguably the first country to road-test a neo-liberal reform programme in the aftermath of the 1973 coup. The elections of Margaret Thatcher in the United Kingdom in 1979 and Ronald Reagan in the United States in 1980 heralded a second phase of *rollback neo-liberalism* in which state intervention in these economies was reduced through simultaneous processes of privatization, deregulation, and marketization. By the early 1990s, neo-liberalism had seemingly become accepted as policymaking 'common sense' and a period of *roll-out neo-liberalism* developed. This phase has been characterized by a creeping extension of neo-liberal principles across all aspects of society and also its transfer around the globe through influential policy networks. The so-called 'Washington Consensus' – the alignment of key officials to neo-liberal principles at the three Washington, DC-based institutions

of the US Treasury, World Bank, and International Monetary Fund – was a particularly powerful vehicle for the spread of these ideas throughout the 1990s and the 2000s (see more on these institutions in Chapter 10). The work of economic geographers has been important in revealing three key aspects of this neo-liberal project. First, geographers have explored both the origins of *neo-liberal thinking* and the way it has travelled around the globe through different forms of policy transfer at the national and the urban scales. Second, geographical research has revealed that, as with globalization, neo-liberalism is a complex matrix of processes that are only ever partially effective, highly uneven geographically, and always actively resisted. Third, while it is possible to distil core neo-liberal beliefs, in reality they come together in highly varied and place-specific forms – ‘actually existing neo-liberalisms’ – that reflect the history and character of the pre-existing state formation. For more, see Peck (2010) and Peck and Theodore (2015).

the end of the state as an institution of political–economic governance. This discourse mobilizes what we might think of as the ‘globalization excuse’ – that is, explaining the ongoing reconfiguration of state functions by invoking the all-powerful external force of globalization. Neo-liberal globalization becomes a convenient explanation or scapegoat for whatever happens to the state and the country, not as something that itself needs to be explained.

In these neo-liberal accounts, power has shifted from states to the corporations and international financial institutions that orchestrate complex cross-border flows of capital and technology in the global marketplace. The state is deemed powerless to control its national economic affairs and the activities of the corporations within its territory. Instead, in deciding where to invest, global corporations are seen as playing states off against one another in order to obtain benefits in terms of political support, financial incentives, favourable environmental regulations, and market access. The successful outcomes achieved by some corporations in both advanced industrialized countries and poorer developing countries have led to the universal claim that host states are no longer able to govern their economies effectively. Meanwhile, the successful global reach of these corporations is seen to offer supporting evidence for the state’s declining role in domestic economic regulation. In short, the rise of corporate power and global finance, as we have explored in Chapters 5 and 8, is seen as explaining the demise of the state.

Many business leaders, politicians, and media commentators have fallen into the trap of deferring to neo-liberal globalization by constructing arguments that amount to: ‘Because of globalization, we *have to...*’ Even socialist China’s President Xi Jinping has endorsed this pro-globalization discourse. In his keynote speech to the January 2017 meeting of the World Economic Forum, Xi delivered a robust defence of globalization and free trade:

Whether you like it or not, the global economy is the big ocean that you cannot escape from. Any attempt to cut off the flow of capital, technologies, products, industries and people between economies, and channel the waters in the ocean back into isolated lakes and creeks is simply not possible (Xi Jinping, 17 January 2017, <https://america.cgtn.com>, accessed on 25 October 2017).

In response to such statements, however, we need to ask if the state is really withering away. In this chapter, we argue for an alternative and more nuanced economic–geographical reading of the role of the state in today’s global economy. More specifically, the role of the state in governing the modern economy can be understood in three ways. First, we argue for an alternative to the neo-liberal position that separates the state from corporate and financial actors. Instead, firms and markets need to be seen as engaged with the state in a mutually dependent or ‘embedded’ relationship. Firms need the state to function, while the state’s political legitimacy will be challenged if it fails to deliver economic development through the activities of firms and markets within its borders. Territorial control, then, remains of paramount importance in the current era.

Second, the neo-liberal account gives the impression that all states are the same – clearly a gross oversimplification even if we just look at President Donald Trump’s America and President Xi’s China. Instead, we need to appreciate that there are many different *varieties* of states with differing abilities to enact control and authority over their territories. While some states may succumb in particular ways to global forces, there are many others that have the influence to shape the ‘rules of the game’ of the global economy. For much of the second half of the twentieth century, the nature of global capitalism reflected US and Western European economic dominance (see more on this in Chapter 10); in the twenty-first century, a debate continues as to how far the global economy now reflects the power of new centres of growth and profit such as Brazil, Russia, India, and, in particular, China (the so-called ‘BRIC’ economies). Third, and perhaps most important, we present a geographical political economy perspective that sees the state as always remaking itself in relation to changing economic processes. The state is not a static institution; rather it is a dynamic entity that is constantly reinventing itself in pursuit of economic growth and, in democratic contexts, electoral support. Overall, the central argument of this chapter is that the territorial powers of the state are being *transformed* by globalization processes, rather than necessarily eroded.

9.3 The State as the Architect of the National Economy

To begin our analysis of the intersections of state politics and the national economy, we need to understand the ways in which states interact with firms and markets. In this section, we introduce the range of economic functions performed

by modern states and show how they work out very differently in different places. Here, we focus on six important state roles that directly impinge on the national economy – ultimate guarantor, regulator, economic manager, business owner, public service provider, and international investor.

The State as Ultimate Guarantor

While markets may appear to be self-organizing, they can fail in the wake of large-scale upheavals such as financial crises (see Chapter 8) and natural disasters. In these situations the state often steps in, becoming an institution of last resort and the ultimate guarantor of crucial economic instruments. This is perhaps the most basic role for the state as a collective actor, within which we can identify four important elements:

- *Dealing with financial crises:* As the period 2007–2009 showed (and was also seen in previous eras such as the Great Depression of the 1930s), severe financial crises can result from the real or potential bankruptcy of major financial institutions. While on some occasions states may choose to let struggling institutions fail – as seen, for example, in the collapse of the investment bank Lehman Brothers in late 2008 – in most cases the centrality of financial flows to the wider economy means that states intervene to stabilize and underwrite the system. This is what happened in countries such as the United States and the United Kingdom in 2008–2009 in order to restore confidence in the financial system and stabilize the economy at large. Through its \$475 billion Troubled Asset Relief Program in October 2008, the US government rescued Citigroup and Bank of America with capital injections of \$45 billion each. The UK government similarly spent about \$185 billion to rescue the Royal Bank of Scotland and Halifax Bank of Scotland and to nationalize the Northern Rock bank, among others.
- *Guaranteeing national economic instruments:* The international economic credibility of a state in part depends on its ability to maintain the value of its currency and government bonds. For example, US Treasury bonds – a form of government-issued credit note – have strong credibility in the international financial community. Many institutional investors such as sovereign wealth funds, pension funds, and insurance companies have purchased Treasury bonds because of their attractive interest payments and the security of repayment upon maturity (see Chapter 8). By comparison, the bonds issued by smaller and less stable economies may be subject to a lot more uncertainty and are therefore less attractive to potential investors. In relation to currencies, states ensure that their currency is the universal standard, or legal tender, accepted in their territory and try to maintain the relative value of that currency. The experiences of selected Latin American countries during the early-to-mid-1990s (e.g. Argentina and Mexico) and some Asian economies in the late 1990s (e.g. Indonesia, Thailand, and South Korea) are illustrative of what happens when states cannot

fulfil this role. In both instances, the governments were unable to guarantee their national currencies with sufficient foreign reserves or gold, resulting in massive depreciation and subsequent financial crises as investors rapidly sought to sell their reserves of the currency.

- *Securing international economic treaties:* The state is the only institution that has the political legitimacy to negotiate and sign international trade and investment agreements. States often engage in bilateral free trade agreements (FTAs) with one another in order to advance their common economic interests (see more in Chapter 10). States also engage in bilateral investment guarantee pacts in order to protect the commercial interests of their national firms in foreign territories. Smaller states such as Singapore have deployed these FTAs highly effectively in order to expand their networks in the global economy.
- *Property rights and the rule of the law:* States are key to establishing and maintaining private property rights and upholding the rule of the law through a well-defined and enforced legal system. Property rights refer to the right of an individual or a corporate entity to own properties (such as land, building, machineries, ideas, or designs) and derive income from these properties. This aspect of the state is a defining characteristic of modern capitalism (see Chapter 3) because without effective property rights, capitalists (individuals or firms) cannot capture profits or rents. A state has numerous departments to deal with property rights issues such as land titling, patents and trademarks, and business registries, and enacts and enforces laws to protect such rights.

The State as Regulator

States are the primary regulators of economic activities that take place within, and across, their borders. For those of a pro-market persuasion, the state should simply seek to enable and protect market-driven activities. At the same time, the state's primary source of legitimacy originates from its citizens, whom it is expected to protect from the potentially harmful effects of market and firm activities. The state often engages in a wide variety of forms of regulation of economic activities, ranging from economic and environmental to social and ethical considerations:

- *Market regulation:* The state endeavours to uphold the 'fairness' of the market mechanism. The extent to which the state actively regulates market behaviour varies between different national economies. The United States, for example, is known for its strong preference for open market competition and an anti-monopoly or antitrust stance. During the twentieth century, many large American corporate empires were broken down into smaller business units to prevent excessive market power being held by these corporate giants – for example, the dismantling of Rockefeller's Standard Oil in 1911, creating the precursors of today's ExxonMobil and Chevron, and the breakup of the former AT&T into many local 'baby' Bell companies in 1984. Many states

have established fair trade commissions and anti-monopoly units to ensure market competition in different industries. As we will see shortly, this anti-monopoly approach to regulating the market economy contrasts with the experience of other states that directly own and operate monopolies, mostly but not exclusively in developing countries.

- *Regulating economic flows:* The contemporary state plays a significant role in regulating its borders. This function is particularly important in an era of accelerated globalization associated with massive cross-border flows of capital, commodities, people, and knowledge. In regulating capital flows, some states may be very restrictive in not allowing financial capital to enter and leave their countries without complying with lengthy regulatory procedures or paying hefty taxes. Border regulation is of particular importance in relation to labour flows (see Figure 9.1). As globalization has intensified, so levels of international migration of various kinds have grown, as described in Chapter 6. Increasingly, major destination countries (e.g. the United States, the United Kingdom, Canada, or Australia) are seeking to regulate the *types* of migrants that they allow in, using ‘points’ systems, for example, to assess the skills, qualifications, and financial resources that potential migrants can bring into the economy. They also seek to police their borders against a range of clandestine or undocumented immigration flows, as seen, for example, along the US–Mexico border and the eastern and southern perimeters of the European Union.



Figure 9.1 The US–Mexico border

Source: reproduced with permission of Dimitros Manis/SOPA Images/LightRocket via Getty Images.

The State as Manager of the National Economy

In managing their national economies, most states pursue a wide range of economic policies in order to sustain, shape, and promote economic development. These policies may be linked to trade, FDI, industry, and the labour market (Dicken 2015). A critical issue here is the extent to which a particular state pursues these economic policies in a *strategic* manner in order to seek or advance its national competitive advantage (see Table 9.1 for a summary).

Table 9.1 Major types of economic policies and some examples

Trade policies (imports)	Trade policies (exports)
1. Tariffs	Financial and fiscal incentives to export producers
2. Non-tariff barriers	
For example, import quotas, licenses, deposit schemes, or surcharges; special labelling and packing regulations; and local content requirements	Export credits and guarantees Setting of export targets Operation of overseas export promotion agencies
FDI policies (inward)	FDI policies (outward)
Entry: government screening of proposals; exclusion of or restrictions on foreign firms	Restrictions on the export of capital (e.g. foreign exchange control regulations)
Operations: requirements on hiring of local managers, local content, minimum export level, and technology transfer	Necessity for government approval of overseas investment projects
Finance and incentives	
Industry and technology policies	Criteria for their selective application
Investment and taxation policies	Geographical areas: economically depressed areas or 'growth potential' areas (e.g. clusters)
Labour market policies	Industrial sectors: to bolster declining industries, to stimulate new industries, and to preserve key strategic industries
State procurement and ownership policies	
Policies towards small firms	
Merger and competition policies	
Labour market policies	
Introduction of different forms of flexible working time	
Promoting greater wage flexibility by getting long-term unemployed or the young to take low-paid jobs	
Increased vocational training to provide more transferrable skills	

Source: adapted from Dicken (2015, figures 6.8, 6.9, 6.11, and 6.12). Reproduced with permission of Sage Publications.

- *Trade strategies:* States often actively manage trade in the interests of domestic producers. In most cases, the result is policies that seek to stimulate exports while being restrictive to imports. In terms of imports, while international rules mean that tariff barriers have been dramatically reduced across the world economy, states may implement a variety of non-tariff barriers to curtail imports – including, for example, quotas, licensing regulations, labelling, and safety requirements. For exports, a state may be involved in promoting exports through various agencies, or by manipulating the cost of exports through financial subsidies and exchange rate policies. For instance, the managed exchange rate of the Chinese renminbi, particularly with the US dollar, is a contested geopolitical issue given its effect on the relative cost of Chinese manufacturing exports.
- *FDI strategies:* Rising levels of cross-border investments by transnational corporations have been a key element of globalization processes over the last three decades (see Chapter 5). In many cases, states combine tax incentives, the availability of prime land, and supporting industries and workforce characteristics to form an attractive package for foreign investors. States may also, however, seek to capture the gains from inward investment by insisting on certain levels of local purchasing and technology transfers, or by trying to limit the repatriation of profits. In certain sectors, states may try to restrict or ban FDI. France, for example, actively prevents foreign takeovers in a range of sectors including the cultural and defence industries (see also Box 9.3 for the cases of Canada and Australia).

CASE STUDY

Box 9.3 State blocking of takeover bids in Canada and Australia

BHP is one of the world's largest mining groups, headquartered out of Melbourne, Australia, and London, the United Kingdom, and with annual revenue of about \$30 billion in 2017. When the company announced a \$39 billion hostile takeover bid for the Canadian fertilizer firm PotashCorp in August 2010, many might have expected it to become simply the latest example of a major national player being bought up by a global giant. PotashCorp was then one of the world's leading producers of fertilizer and headquartered in Saskatoon, Saskatchewan. Instead, in November 2010, the Canadian industry minister Tony Clement rejected the bid, saying that it was not of 'net benefit to Canada'. Under the rules of the Investment Canada Act, foreign takeovers must be able to demonstrate a net benefit for the country in terms of jobs, exports, production, and investment. This was just the second time in 25 years that a takeover had been rejected on these grounds. At the heart of Canada's resistance was the fear of losing

\$198 million a year in tax revenues, which BHP would have been able to avoid paying due to its other existing investments in Saskatchewan. This case serves as a reminder not only of the continued ability of the state to police investment activity across its borders but also that the decision-making processes that underpin its decisions are unavoidably political *and* economic in nature.

Interestingly, BHP's home country, Australia, has also been active in blocking foreign takeover bids on political grounds in vital sectors such as energy and agriculture. In October 2016, the federal government cited 'national interest' and 'security concerns' for blocking two Chinese takeover bids led by state-owned enterprises (SOEs) from China. In the first deal, State Grid Corporation, a Chinese SOE, and Hong-Kong-based Cheung Kong Infrastructure were barred from submitting a \$7.8 billion bid for Australian electricity company Ausgrid. The federal government also blocked a Chinese consortium from buying S. Kidman & Co, one of Australia's largest cattle farms that stretches across 80,000 square kilometres or more than 1 per cent of Australia's land mass. This state blocking of Chinese takeover bids came at the time when the Australian government was concerned with a major wave of Chinese investment in housing, agriculture, and public infrastructure assets in many developing countries – some of which were under the auspices of China's 'Belt and Road Initiative' (see Section 'The State as International Investor').

- *Industry strategies:* These policies are concerned with seeking to stimulate certain areas of economic activity, and usually involve financial incentives. They may be applied across the economy as a whole (e.g. the level of corporate taxation) or applied selectively by sectors or subnational territories (e.g. in specific regions or zones). Selective interventions may target certain sectors – either to prevent decline (e.g. automotive and steel) or to reinforce growth (e.g. biotechnology and digital technology), certain kinds of firms (e.g. small start-ups or 'national champions'), or particular geographical areas (e.g. depressed deindustrialized or inner city areas).
- *Labour market strategies:* Policies in this area have sought to promote enhanced labour market flexibility through processes of deregulation, and in some contexts such as the United Kingdom and the United States there have been shifts from welfare to *workfare* regimes in which citizens are expected to work in return for state benefits.

The above policies often work out in varied ways across different economies. Trade policy provides one example. The United States, a powerful advocate for free trade (at least until the Trump administration), does not necessarily apply

the doctrine to its *imports* from around the world. In the past decade, the United States has imposed punitive tariffs on imports of steel from Europe, Japan, and many developing countries, and imports of textiles and garments from China. The United States justifies these tariffs on the basis of the strategic importance of domestic producers in these sectors and the unfair ‘cheap dumping’ by exporting countries. It also continues to subsidize domestic cotton production – an illegal practice under international trade rules – causing a trade dispute with Brazil and others in 2010 that was settled only in October 2014. In June 2016, however, the Department of Agriculture again announced one-off payments to American cotton producers totalling \$300 million under its Cotton Ginning Cost Share Program. Brazil questioned this new domestic support measure and its impact on the cotton market during a subsequent meeting of the World Trade Organization’s Committee on Agriculture (<https://www.ictsd.org>, accessed on 27 October 2017).

By contrast, the East Asian newly industrialized economies (NIEs) have explicitly engaged in the strategic promotion of *exports* since the 1960s in order to connect their national economies with global production networks (Yeung 2016). For example, generous export subsidies and tax incentives were offered to national champions such as Hyundai and Samsung from South Korea, and Acer and Tatung from Taiwan prior to the 2000s. Indeed, the Taiwanese state has pursued a wide range of strategies to develop its export-oriented information and communications technology industry since the early 1970s. These have included: the establishment of the Hsinchu Science Park; direct investment in key early players in the semiconductor sector including United Microelectronics Corporation (UMC) and Taiwan Semiconductor Manufacturing Company (TSMC); and steering developments in the industry through state-funded agencies, such as Electronics Research Service Organization (ERSO), Industrial Technology Research Institute (ITRI), and China External Trade Development Council (CETRA).

The State as National Business Owner

Many states directly engage in ownership of businesses. This is an obvious and yet often overlooked aspect of state involvement in the economy; put another way, in some areas the state *is* the economy. It also challenges the notion that neo-liberal globalization is driven *only* by private corporations, as some of these SOEs are actively globalizing as well. Different countries, however, display different levels of state involvement in business enterprises. A useful distinction can be made here between SOEs and government-linked companies (GLCs).

On the one hand, SOEs are public enterprises that are directly owned and controlled by the state. CNOOC, the Chinese National Offshore Oil Corporation, provides a good example. One of China’s largest oil companies, CNOOC was founded in 1982 and is headquartered in the capital city of Beijing. In 2016, it had

approximately 106,000 employees and an annual turnover of \$66.5 billion (<https://www.cnooc.com.cn/en>, accessed 28 October 2017). The Chinese state not only owns a 70 per cent stake in CNOOC but also directly appoints its top management. SOEs are commonly found in developing countries throughout the world, where the state has immediate developmental goals that can be achieved through direct state ownership and control of business enterprises. They are found in such diverse developing economies as Brazil (e.g. Petrobras), China (e.g. China Ocean Shipping), India (e.g. Indian Railways), Malaysia (e.g. Petronas), Mexico (e.g. CFE, an electricity monopoly), and Russia (e.g. Gazprom). SOEs are not only found in developing countries, however, as the examples of Statoil (oil, Norway), Systembolaget (alcohol, Sweden), Enel (electricity, Italy), and Amtrak (rail, the United States) demonstrate. It is important to note that state ownership rarely means that the state owns 100 per cent of a company – Italy's Enel and Russia's Gazprom have been partly privatized, for example – but rather has a controlling stake. Interestingly, the global economic crisis from 2008 onwards led to debates about whether we have seen a return to 'state capitalism' in developed economies, with leading financial institutions in countries such as the United States and the United Kingdom effectively being renationalized as a result of government bailouts (e.g. Northern Rock and Royal Bank of Scotland in the United Kingdom; and mortgage lenders Fannie Mae and Freddie Mac in the United States).

GLCs, on the other hand, refer to business enterprises in which the state has a direct or indirect stake and yet leaves the management to professional managers. State intervention in these GLCs is often much less significant in comparison to SOEs. The state may own some equity in these enterprises although they are mostly operated as profit-driven businesses and sometimes listed in major stock exchanges. GLCs are commonly – but not exclusively – found among the largest transnational corporations from many developing economies such as Singapore (e.g. Singapore Airlines), Taiwan (e.g. TSMC), Hong Kong (e.g. China Resources Enterprise), and Malaysia (e.g. CIMB Bank). The distinction from SOEs is that the state does not necessarily own a controlling share and does not exercise direct managerial control. GLCs can be very active globalizers, as seen in the central role played by GLCs such as the Keppel Group, the SembCorp Group, and Singapore Technologies in the Singaporean government's drive to promote outward investment across Southeast and East Asia since the mid-1990s. Among advanced industrialized economies, some states continue to have substantial stakes in their national firms. For example, the French and Italian states have significant ownership stakes in the automobile manufacturers Renault and Fiat, respectively, and the French-Italian semiconductor firm STMicroelectronics. Indeed, the French state has the highest level of enterprise ownership in Europe. At the end of 2016, through its public bank Caisse des Depots and state holding companies Bpifrance and APE, the French state had stakes in some 1,750 French companies with a combined market capitalization of over \$115 billion (see Table 9.2).

Table 9.2 French government's stakes in selected industrial firms, 2014 (per cent)

Company	Industry	State share
SNCF	Rail services	100
RFF	Rail infrastructure	100
La Poste	Mail	100
Nexter	Defence equipment	100
Areva	Nuclear reactors	86.7
EDF	Electricity	84.5
ADP	Airports	50.6
GDF	Gas and electricity	33.6
Engie	Gas	28.7
Thales	Aerospace/train-making	26.6
Safran	Aerospace	22.4
Alstom	Power/train-making	20.0
Air France-KLM	Airline	15.9
Renault	Automotive	15.0
Peugeot-Citroen PSA	Automotive	14.1
STMicroelectronics	Semiconductors	13.5
Orange	Telecoms	13.4
Airbus	Aircraft-making	11.0

Source: *The Economist*, 28 June 2014, <https://www.economist.com>, accessed on 28 October 2017, and authors' own research.

The State as Provider of Public Goods and Services

The state provides directly a wide range of *public goods*. These are goods and services – for example, transport, education, health, infrastructure, and public housing – that are seen as fundamental to a population's well-being and/or too risky or unprofitable for individual private firms. In many cases, the state's role in providing public goods makes it the largest single employer in the country:

- *Transport services:* States are involved in the provision of transportation at a variety of geographical scales ranging from the local to the international. For example, the German federal state continues to own and operate Deutsche Bahn, one of the most successful train systems in the world. In China, state ownership and development of its high-speed rail since 2007 has led to the rapid creation of the world's largest national high-speed rail system, covering over 100 cities in China. Most developing and some developed countries own and manage their national airlines (e.g. Singapore Airlines and Air New Zealand). This state-owned approach to public transport contrasts sharply with the UK experience where British Airways was privatized in 1987 and British Rail in 1993.

- *Health and education services:* States are usually heavily involved in the provision of health and education services for their citizens. In some countries, private sector health and education provision is available alongside public sector provision for those who can afford it. For example, at the tertiary level, most universities throughout the world today continue to depend (to varying degrees) on state funding. The state can also be very important in providing research infrastructure and funding as evident in the example of Google noted in Section 9.1.
- *Infrastructure services:* The state is often tasked with providing basic facilities and amenities such as roads, highways, airports, ports, power supplies, and communications networks. In developing countries, the capacity of the state to provide good public infrastructure is often critical to attracting inward investment. Some states also provide large public housing programmes in order to improve the living standards of their citizens and/or to maintain the cost competitiveness of their labour force. The latter experience has been particularly relevant for Hong Kong and Singapore, two cities in Asia that link their highly successful public housing programmes to export-oriented industrialization policies.

Taken together and across all the above areas of state-led activity in the national economy, state employment is clearly very significant. It can also, however, be geographically uneven in its importance, as public sector employment is often concentrated in particular places. Sometimes this is for obvious reasons, such as in capital cities; in other cases it may reflect a deliberate strategy of decentralizing state employment to promote economic growth in lagging regions.

The State as International Investor

Some states have accumulated a large amount of national wealth over time due to their huge resource endowments, significant trade imbalances through exports, longstanding conservative fiscal management, and accumulated pension and social security funds. Many of them have put this wealth into sovereign wealth funds that invest internationally in search of long-term financial returns. We have explored in Section 8.5 the global significance of these funds (worth over \$7.4 trillion) as international investors in financial markets worldwide. States funds may also be invested in large-scale projects that offer long-term financial and non-financial returns. These projects are typically found in transport infrastructure (e.g. roads, seaports, and airports), regulated infrastructure (e.g. gas, power, and water utilities), and social infrastructure (e.g. housing and schools) in the host countries. As noted earlier, they are part of the public goods provision undertaken by most states.

One of the most significant recent state-led initiatives in infrastructural investment is China's Belt and Road Initiative (BRI) (see Figure 9.2). Touted as China's



Figure 9.2 China's Belt and Road Initiative since 2013

Source: adapted from HKTDC, <https://beltandroad.hktdc.com/en/belt-and-road-basics>, accessed on 28 October 2017.

'gift to the world' and compared to the US-led Marshall Plan in the post-war reconstruction of Europe, the BRI was premised on an open and inclusive model of cooperative development along the ancient Silk Road Economic Belt and the twenty-first century Maritime Silk Road (Liu and Dunford 2016). Through strategic international economic partnerships and multilateral credit, China engages with different states interested in the BRI to address economic development issues such as infrastructure investment and employment. The BRI was first proposed by China's President Xi Jinping in September 2013. By 2017, China was spending roughly \$150 billion per year in the 68 countries that had participated in the initiative, particularly those in Central, South, and Southeast Asia. Some \$900 billion in projects were planned or underway by October 2017. By investing heavily in infrastructure in these countries, China seeks to make better use of its enormous foreign exchange reserves and to create new markets for its high-speed rail systems and excess capacity in cement, steel, and other metals. In addition to economic motives, state investment through the BRI is also seen as creating a more stable geopolitical neighbourhood on China's western border and extending its influence elsewhere in Asia.

To summarize this section on state functions, the state continues to exercise an enormous range of powers over the economic activities that occur both within

and across its borders. The six categories of state functions we have just reviewed are not separate, but rather interconnect and overlap in complex ways. State involvement in the domain of transport, for example, may straddle several of these economic functions in many countries, encompassing basic guarantees of service delivery, strict safety and pricing regulations, interventions to promote growth in new transport technologies, state ownership of transport providers, and strong involvement in the management and provision of the underlying networks. These multiple functions also intersect to produce enormous diversity in state–economy relationships across the global economy. Contrary to the neo-liberal globalization perspective, these multiple state–economy interactions create, over time, national political economies that operate in different ways. In Section 9.4 we move on to make sense of this national diversity by identifying some key categories of contemporary states.

9.4 Varieties of Capitalisms and States

States have diverse historical origins – some are rooted in thousands of years of history, while others might be the product of postcolonial independence just half a century ago. The current configuration of the global political map is therefore quite recent (see Figure 9.3). With these varied histories, states have developed over time to produce different combinations of political–economic attributes. Whereas some states exert strong direct control over their domestic economies through the functions described in Section 9.3, others have delegated such functions to non-state entities such as firms or financial markets. Defining diverse

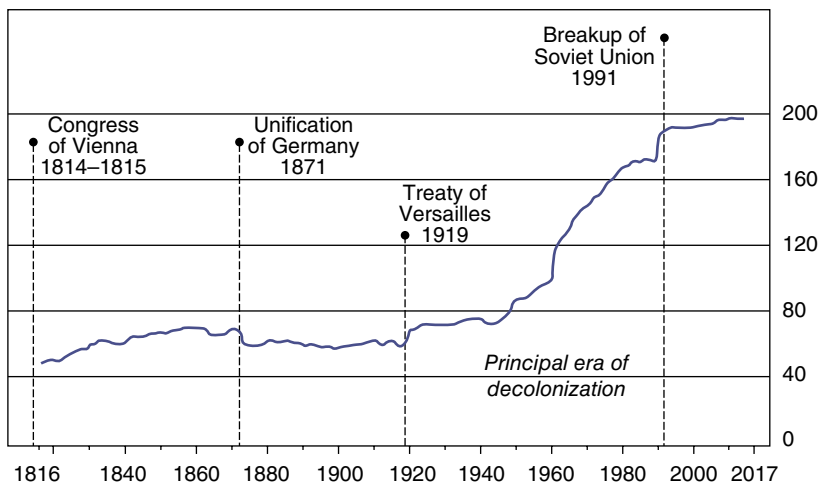


Figure 9.3 The number of independent states, 1816–2017

Source: adapted from *The Economist*, 23 December 2017.

types of states helps us understand their capacities to control the economy and to resist and (re)shape globalization processes. This diversity can be thought of as different national *varieties of capitalism*.

Varieties of Capitalism

How can we explain the fact that the nature of capitalism seems to vary significantly between national contexts? To answer this question, we turn to a concept developed in the fields of political science, economic sociology, and comparative management – the *varieties of capitalism* approach (Hall and Soskice 2001). Put simply, this approach argues that in different national varieties of capitalism, there are distinctive ways in which the state interacts with society and the economy such that over time, these relationships become *institutionalized* as common ways of organizing economic activities and market relations in these national economies.

We can think of states that are more pro-market as ‘liberal market economies’ (LMEs). Other states are more interventionist in market operations and they can be described as ‘coordinated market economies’ (CMEs). To distinguish these two basic national varieties of capitalism, scholars have focused on four important elements:

- *Business formation and management processes*: In countries with highly competitive markets or LMEs (e.g. the United States and the United Kingdom), firms tend to be established by private entrepreneurs. The development and maturity of financial markets in these countries puts tremendous pressure on top management to seek short-term returns and to pursue financially driven corporate strategies (see Chapter 8 on financialization). Firms supposedly experience low levels of inter-firm trust that reduce incentives for long-term collaboration with other firms. In contrast, in countries practicing ‘cooperative capitalism’ or CMEs (e.g. Germany and Japan), stable and enduring relationships between banks, firms, and the state tend to encourage strategic and long-term investments by corporate managers.
- *Corporate governance and ownership patterns*: A diversity of organizational structures exists across different countries to govern managers in firms and corporations, ranging from public companies traded on stock exchanges, to SOEs, family businesses, cooperatives, and private companies. In LMEs, the shareholders of most firms tend not to exercise direct control and leave businesses in the hands of professional managers. In CMEs, the state takes an active role in coordinating inter-firm relationships and industrial development through management supervision and/or direct equity investment.
- *Work, training, and employment relations*: The delegation of responsibility to skilled workers and the demarcation of workplace functions can vary significantly between national capitalist systems. In the United Kingdom (LME), for

example, the main divisions in the workplace exist between generalist top managers and managerial specialists, as well as between skilled workers and unskilled operatives. In Japan (CME), it has traditionally occurred between male, core employees and female, temporary workers. Diverse national capitalist systems thus tend to foster different relationships between employers and their employees, and between different employees within the workplace. In CMEs, training systems are much more rigorously developed through explicit state policies, for example, through the development and funding of vocational training institutes and industry internships.

- *Financial systems:* As noted in Chapter 8, LMEs have deregulated financial systems that have become highly globalized and, since the 1990s, financialized. These systems are more prone to large-scale crises due to the profit maximization tendencies of financial actors and their inherent lack of close state supervision or monitoring. CMEs, on the other hand, have financial systems that promote close and cooperative relationships between financial institutions and industrial firms. The state may also play a direct role through state-owned banks and other financial tools (e.g. special development funds and state subsidies).

In a variety of ways, then, these two distinctive national capitalisms can be identified, reflecting the interactions between firms and the evolving political and institutional contexts in which they operate. This ‘varieties of capitalism’ approach has been important in challenging the dominance of neo-liberal globalization discourses discussed in Section 9.2. However, since the early 2000s a range of critiques have emerged (Morgan and Whitley 2012; Coe and Yeung 2015). These generally concern some or all of the following: the need to move beyond the binary typology of *either* LMEs *or* CMEs; how best to understand institutional change involving both internal and external actors in these states; and, recognizing the potential for sectoral and subnational variations even within national varieties of capitalism. Equally important, we need to go beyond the recognition of state types in these varieties of capitalism to include those states that are politically organized in rather different ways from capitalist democracies, including, for example, socialist and communist states.

Varieties of States

Here, we introduce four different types of states that may characterize LMEs, CMEs, and socialist economies (see Table 9.3 for a summary). To distinguish and make sense of these varieties of states, we use two broad criteria:

- *Political governance systems:* These range from liberal democracy in neo-liberal states and social democracy in welfare states to stronger political control in developmental and authoritarian states.

Table 9.3 Varieties of states in the global economy

Type of states	Examples	Main characteristics	Political governance systems	Organization of economic institutions
Neo-liberal states	North America (e.g. Canada and the United States), the United Kingdom, Australia, and New Zealand	Reliance on the free market economy	Liberal democracy with multiple political parties	Strong role of capital markets and finance-driven investment regimes
Welfare states	Nordic countries (e.g. Sweden, Finland, and Norway) and many Western European countries (e.g. Germany and France)	Coexistence of substantial provisions of state benefits and the market economy	Social democracy with multiple political parties	Bank-centric financial systems and strong interdependency between capital, labour, and the state
Developmental states	Japan and the newly industrialized economies (e.g. Brazil, Mexico, Singapore, Taiwan, and South Korea)	Relative autonomy of the capitalist state from corporate interests and voters	Soft authoritarianism often dominated by a single large political party	Direct involvement of state in economy through industrial policies and strategic investments
Authoritarian states	Post-socialist countries in Eastern Europe (e.g. Hungary), former Soviet republics (e.g. Russia), China, and Southeast Asia (e.g. Cambodia)	Former communist states that have moved rapidly towards market-oriented economies	Strong authoritarianism dominated by a single political party and/or authoritarian leader	Coexistence of state-owned enterprises and market economy – a dual track phenomenon

- *The organization of economic institutions:* This attribute refers to how firms, industries, and state and non-state institutions relate to each other. In some contexts, the state will seek to shape and drive this web of relationships, while in others it will allow private sector organizations to take a leading role in the national economy.

In *neo-liberal states*, government institutions seek to keep their distance at ‘arm’s length’ from private firms and industries. The main role of the state in these economies is to establish market rules via legislation and to enforce these rules through their regulatory capacity. In the United States, for example, competitive and antitrust or anti-monopoly rules have led to the development of a particular kind of investment regime that governs the market. In this investment regime, American firms tend to rely on capital markets for their investment needs, and their performance is measured according to the ability to maximize shareholder value. Hence, short-term investors exert a great deal of influence on corporate decision-making. Flexible labour market practices are also a prominent feature. New Zealand, for example, has experienced labour market restructuring in tandem with massive privatization programmes – both hallmarks of neo-liberalism more generally (see Box 9.2).

In *welfare states*, labour unions and state institutions play a more direct role in corporate governance and firm behaviour. Private firms do not necessarily have a free hand in labour management; instead, there are stringent labour laws and other welfare provisions that shape the investment behaviour of private firms. The role of capital markets in driving the national economy is less than in neo-liberal states. The economies of both Germany and France, for example, are heavily funded by their national banks, many of which are state controlled, and less so by the capital markets. As a result, German and French banks have substantial ownership stakes in, and management input into, large German and French firms (see Table 9.2). In this way, welfare states are able to control the national economy through their well-developed and regulated banking systems. Through state taxation, they are also able to provide a significant range of national welfare services for their citizens, ranging from unemployment benefits and medical insurance to retirement pensions and education.

Developmental states are characterized by their relatively autonomy from the influence of interest groups, businesses, and the population at large. This autonomy, often achieved through an element of political control, is necessary for the state to pursue interventionist policies favouring economic development (see Box 9.4). To achieve their economic development objectives, these states exercise economic control through developing elite state-sponsored economic agencies and strategic industrial policies (e.g. Japan’s former Ministry of International Trade and Industry and South Korea’s former Economic Planning Board, EPB). These ‘pilot’ agencies are heavily engaged in consultation and coordination with the private sector, and these consultations become an essential part of the process

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Box 9.4 The East Asian developmental state

East Asian experiences have been central to the emergence of a developmental state model (Yeung 2016, chapter 1). Based on the success of the state in guiding economic development in Japan and, later, South Korea, Taiwan, and Singapore, leading proponents of the developmental state thesis (e.g. Amsden 1989; Wade 1990) argued that deliberate state interventions via active industrial policy and selective financial support had enabled state-sanctioned domestic firms, known as ‘national champions’, to overcome their latecomer disadvantages and to achieve economies of scale in domestic and international competition. Much more so than in neo-liberal states, the East Asian developmental state effectively deployed many innovative policy instruments to provide organized help to private entrepreneurs. Instead of allowing the price mechanism to dictate decisions, the developmental state intentionally distorted the market by ‘getting prices wrong’ to induce private entrepreneurs to participate in state-led industrialization programmes. Interventionist policy instruments included trade and foreign exchange controls; selective allocation of credit, export, and tax incentives; public enterprises; and other subsidies. Industrial policy was sectoral or firm-specific in order to target the development of selective industries and/or national firms, to promote their efficiency and productivity growth, and to overcome initial coordination failures in the domestic market. In return, these entrepreneurs were subject to very stringent performance standards and monitoring by state agencies. The state also took on the role of entrepreneur and readily stepped in with the establishment of SOEs that socialized the market or the industry in the hands of the public sector.

In South Korea, the direct control and allocation of *financial resources* became a necessary condition for the developmental state to incentivize private entrepreneurs and to engage in large state-led industrialization projects. Through a combination of control mechanisms during the 1960s and the 1970s, such as the strategic manipulation of geopolitics to rally American aid and support, the nationalization of financial institutions (e.g. military control over the Bank of Korea after 1964), and the rationing of policy loans and export credits to targeted industries and firms, the developmental state in South Korea managed to develop strong competitive position and exports in several major industries, such as shipbuilding, chemicals, machinery, and later electronics. The institutional platform through which active industrial policy and financial control was pursued was an *elite bureaucracy*. These pilot or nodal agencies played critical roles in conceiving, coordinating, and implementing sectoral industrial policy. In South

Korea, pilot agencies, such as the EPB and the Committee for the Promotion of Heavy and Chemical Industrialization (CPHCI), were coordinated by the Economic Secretariat reporting directly to then President Park Chung Hee. They not only centralized functions previously distributed across a wide range of ministries and state agencies but also developed laws and regulations steering industrial transformation with relative autonomy from party politics and other organized pressure groups.

of policy formulation and implementation. Through these elite agencies, the state decides on the 'right' industries to nurture and the 'best' firms to promote, creating a range of 'national champion' firms, some of which are directly owned and managed by state institutions. The developmental state is also actively involved in regulating its domestic capital and labour markets in order to enhance the success of its industrial policies. In capital markets, the finance ministries in most developmental states take direct stakes in national banks and fund export-oriented industrialization programmes through export subsidiaries and generous grants to its chosen national champions. In labour markets, developmental states are often actively involved in subordinating the interests and rights of their workers. For example, in Taiwan and South Korea, labour unrest and strikes are managed through tough laws that curtail labour union activity.

Authoritarian states combine a highly centralized political system with an increasingly open economic system. Many are former socialist states that have sought to liberalize their economies at the same time as maintaining tight political control. Their economies tend to be dominated by a mixture of SOEs and private firms (domestic and foreign), and the state continues to exercise a great deal of control over domestic economies through owning stakes in SOEs and strictly regulating private firms and industries. Authoritarian states are mostly found in Central and Eastern Europe and in East and Southeast Asia. While some of the post-socialist states in Europe have implemented both economic and political reforms, others – most notably Russia, but also former Soviet republics such as Belarus, Kazakhstan, Kyrgyzstan, and Uzbekistan – continue to control tightly political affairs. In East Asia, China is a significant example of an authoritarian state. The opening of China to the global economy since 1978 has been accompanied by limited advances in political freedom. The Chinese Communist Party (CCP) remains the only legitimate political party in China, prompting a hybrid form of economic development characterized by strong communist control and expanding market freedom some refer to as socialism with 'Chinese characteristics' (Lim 2014). In this system, many SOEs are managed jointly by Party-appointed and firm-specific managers. This state penetration into business enterprises in China has extended to foreign firms too. According to Qi Yu, deputy head of the CCP's Organisation Department, among 100,000 foreign-funded

companies in China, 70 per cent had Party-appointed personnel by the end of 2016 (<http://www.straitstimes.com>, accessed on 30 October 2017). Since 1986, Vietnam has also pursued a similar path under its *doi moi* (renovation) programme. Several states in North Africa and the Middle East (e.g. Saudi Arabia) also fall into the authoritarian category.

Taken together, the above fourfold typology allows us appreciate the very varied institutional configurations that exist within different state forms and how these are influenced by political ideologies. But it is also important to recognize that there is significant variation even *within* each category of states. The United States, the United Kingdom, and Australia, while sharing some core neo-liberal characteristics, are at the same time very different institutional configurations, reflecting their different histories, economic structures, and positions in global affairs. This can be seen, for example, in the contrasting policies and attitudes towards universal healthcare in the United States and the United Kingdom. Similarly, leading East Asian developmental states such as Japan, South Korea, Taiwan, and Singapore have pursued distinctive growth paths, leading to very different industrial structures (e.g. domination of large business conglomerates in Japan and South Korea).

As well as being internally diverse, states are also dynamic (rather than static) entities, which can change over time. In Latin America, for example, recent decades have seen several countries attempting to reverse neo-liberal trends, as seen in Venezuela's extensive nationalization programme. The post-socialist states of Central and Eastern Europe have moved in the opposite direction, shifting from being centrally planned socialist economies to authoritarian states with strong market elements in just two decades. Similarly, the 'Arab spring' of 2011 saw the overthrow of authoritarian regimes in Tunisia, Egypt, Libya, and Yemen. Tunisia, for example, was once the recipient of a structural adjustment programme (forcing liberalizing policies) in the mid-1980s because of a balance of payments crisis. Since then, it has been able to industrialize under a strong state that consolidated its political power, liberalized its trade regime with the European Union, and sought to integrate foreign capital into its domestic production arrangements (Smith 2015). It is, then, quite possible for states to shift their characteristics both within and between the categories laid out in this typology.

One last point concerns the ways in which states are being reconfigured in terms of their different geographical scales of operations. States are actively reshaping their institutional structures of economic governance at both the subnational and international scales. In this *rescaling* process, the state relinquishes some of its control of national economic affairs to other governmental authorities at lower (subnational, regional, and municipal) or higher geographical scales (international and macro-regional). Such rescaling does not necessarily imply less of a role for the state, but rather that not all state functions are carried out at the national level.

9.5 Graduated Sovereignty and the State

So far, we have considered the state as exercising influence and control in a uniform manner across its territory. In reality, however, state control is both socially and spatially uneven in its operation and effectiveness. In terms of social unevenness, certain portions of the population may be more or less excluded from state attempts to marshal the economy in the context of neo-liberal globalization. This may be voluntary on the part of some sections of the populace – for instance, in the case of those deliberately working in the illegal or informal economy beyond the reaches, or at the margins, of state regulation. Or, it may be involuntary – as in the case of temporary migrant workers who may not have access to a full range of states services and public goods (see Chapter 6).

With regard to spatial unevenness, states may choose to apply policies in a deliberately uneven way across their national space in order to enhance their position within the global system. In certain territorial spaces a different form of state control may be in existence – for example, in a tax-free export processing zone. Alternatively, there may be spaces where the reach of a state is weak – for example, in distant or inaccessible regions. Rather than thinking of states exerting unproblematic control over their entire society and territory, we therefore need to be mindful that most states in reality operate a form of *graduated sovereignty* in which different zones and degrees of political-economic control overlap and coexist within a national territory.

A recent example of graduated sovereignty is Saudi Arabia's attempt to create a separate zone of governance in the proposed new city of NEOM, shorthand for 'New Future' (see Figure 9.4). In October 2017, Saudi Crown Prince Mohammed bin Salman announced plans to build a new city-zone on the Red Sea coast. Costing \$500 billion, this project will operate independently from the existing governmental framework in Saudi Arabia, with international investors to be consulted at every step during its development. Similar to Dubai's free zone concept, NEOM will be exempt from tariffs, with its own regulations and labour laws on par with international standards, and an autonomous judicial system that will operate separately from the rest of Saudi Arabia. The state's goal is to enable firms and industries to produce goods and services more competitively. Strategically located close to Egypt and Jordan, NEOM is designed to serve as a global hub connecting Asia, Europe, and Africa. The new city is part of an ambitious Vision 2030 plan to overhaul the Saudi economy in the face of declining global oil prices since 2014.

9.6 Summary

In this chapter we have shown that it is simplistic to claim the irreversible demise of the state in managing national economies, even in an era of neo-liberal globalization. As we have seen, states continue to shape profoundly the economic activity within, and across, their borders in a wide range of ways: from the assurance of



Figure 9.4 The future mega city of NEOM, Saudi Arabia

Source: adapted from *The Daily Mail*.

basic laws and property rights, through the provision of basic infrastructure and education, to direct ownership of companies and a range of financial and tax incentives. At the same time, states are not all alike: there is a range of different state forms in today's global economy, from neo-liberal variants through to welfare and developmental variants wherein states play a much stronger role in economic development processes.

Even where states are relinquishing some aspects of their territorial control over the economy, such processes have not diminished the state's significance as the single-most important shaper of political-economic activity. Importantly, the state itself is always implicated or involved in directing these restructuring or rescaling processes through conscious decisions to engage with international organizations or to devolve power and authority to local levels of government. Together with the transnational corporations described in Chapter 5, states are architects rather than passive observers of globalization. In Chapter 10, we will examine how states *upscale* their governance capacity and responsibilities to higher levels by building and driving international institutions for global development.

Notes on the references

- See recent reviews of debates on globalization and the state in Sparke (2013), Murray and Overton (2014), and Dicken (2015).
- For more on neo-liberalism and its geographies, see Peck (2010, 2013), Park et al. (2012), and Birch and Siemiatycki (2016).

- Dicken (2015) offers a wealth of useful material on contemporary states and their interaction with transnational corporations. Other economic geographers have recently explored in great depth the state and its manifold roles and functions in the United States and the United Kingdom (Christophers 2016, 2017), East Asia (Yeung 2016), and Central and Eastern Europe (Smith 2015). For recent geographical debates on the East Asian developmental state, see Glassman and Choi (2014), Yeung (2014, 2017), Hsu (2017), and Hsu et al. (2018).
- For debates on the varieties of capitalism approach, see Walter and Zhang (2012) and Prevezer (2017). In economic geography, recent major work has been done in relation to theory (Peck and Theodore 2007; Coe and Yeung 2015), East Asia (Yeung 2016), China (Webber 2012; Peck and Zhang 2013; Lim 2014; Zhang and Peck 2016), and the United States/United Kingdom (Christophers 2016).

Sample essay questions

- Why is the end-of-the-state thesis flawed?
- How does neo-liberalism influence state behaviour?
- How do states differ in their approach to economic governance?
- To what extent is the state still capable of managing its national economy?
- What are the key dimensions through which capitalist institutions differ in their varieties?

Resources for further learning

- <http://www.globalpolicy.org/nations-a-states.html>: The website of the Global Policy Forum provides useful insights into the history and formation of modern states.
- <https://www.gov.uk/government/organisations>: The web portal for the public services operated by the UK government.
- <http://www.ca.gov>: The website of the state of California reveals the range of state powers in a federal context.
- <https://economicsociology.org>: Website of useful blogs on state formations and varieties of capitalism posted by a global community of researchers, students, and activists interested in economic sociology and political economy.
- The 2011 movie *Too Big to Fail* is based on Andrew Ross Sorkin's book of the same name, and depicts the dealings between the US government and major banks during the crisis of 2008. See also Charles Ferguson's 2010 film *Inside Job*.

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CHAPTER 10

INTERNATIONAL INSTITUTIONS

How do they govern and foster global development?

Aims

- To appreciate the different multilateral institutions involved in governing the global economy.
- To understand the powerful role of international institutions in global development.
- To explore the involvement of state and non-state forms in fostering development initiatives.
- To recognize the possibility for a bottom-up approach to development.

10.1 Introduction

‘Our dream is a world free of poverty’ says the mission statement of the World Bank Group, and the phrase is carved in stone and prominently displayed in the reception area of its headquarters in Washington, DC. Indeed, in 2010 and five years ahead of schedule, the world attained the first Millennium Development Goal (MDG) target, set by the United Nations (UN), to cut the 1990 poverty rate in half by 2015. This positive outcome in global development can be attributed to the collective action spearheaded by international institutions, national governments, business and industry, civil society organizations (CSOs), and people throughout the world. Yet, according to the World Bank’s comprehensive estimates in its *Poverty and Shared Prosperity 2016* report, some 767 million people, or

10.7 per cent of the global population in 2013, still lived in extreme poverty (defined as having less than \$1.9 per person per day).

Half of the world's extreme poor are living in sub-Saharan Africa. The World Bank therefore puts significant effort into development initiatives in this region, and in some cases they seem to be yielding positive outcomes. Uganda, for example, has been hailed by the Bank as achieving one of the fastest reductions in the share of its population living in extreme poverty – from 53.2 per cent in 2006 to 34.6 per cent in 2013 (all data from <http://www.worldbank.org>). The Bank contributed to this poverty-reduction process in Uganda through funding projects, such as new infrastructure, that improved market access and efficiency for its agricultural households.

Interventions by international institutions such as the World Bank to foster local integration into the global economy can, however, sometimes backfire and lead to serious failures. In December 2015, then World Bank Group President Jim Yong Kim announced the cancellation of funding to the Uganda Transport Sector Development Project (UTSDP) because of major livelihood problems and contractual breaches. Between 2009 and 2011, the World Bank had provided \$265 million in loans to the Ugandan government for the UTSDP. The project aimed to upgrade a 66 km gravel road from Kamwenge to Fort Portal in western Uganda, as part of larger national road project connecting western Uganda to the Trans-Africa Highway (see Figure 10.1). The Africa Development Bank financed



Figure 10.1 Construction work along the road from Kamwenge to Fort Portal in western Uganda

Source: reproduced with permission of Sue O Connor/Alamy Stock Photo.

another section of the road in Uganda. While aiming to improve market access and employment opportunities for local communities, the project was plagued by serious problems and revealed the Bank's weakness in providing safeguards, monitoring, and enforcement. According to a report by the World Bank's (2016) Inspection Panel, local communities faced significant livelihood impacts related to construction activities, such as limited access to water sources, seedling nurseries, and tourism trails. They also suffered seriously from greater exposure to gender-based violence by project workers from outside these local communities. The Panel chastised the Bank for its failure to respond and concluded that 'The intersection of risk and harm arising from social change triggered by the Project is a reminder that building a road is never *just* about land acquisition, monetary compensation, and construction. It is also about coping with difficult, social, structural changes' (World Bank 2016: 102, our emphasis).

This example of a failed World Bank project raises at least three major challenges to our common understanding of global development and the role of international institutions. First, global development does not operate only at the global scale. For such development to take place successfully across the world, institutions at multiple *geographical scales* must be involved. In the UTSDP case, major international institutions such as the World Bank and the African Development Bank (AfDB) provided the initial funding. But the project's implementation required full support from institutions at the national scale (e.g. the Ugandan government and its many ministries) and the local scale (e.g. project contractors, communities, and people). The lack of attention to negative impacts at a local scale was the fundamental cause of this project failure.

Second, global development projects entail *diverse actors* that often go beyond international institutions and national governments. Other actors might include CSOs like Joy For Children Uganda, which acts to protect the rights of children, and non-government organizations such as the Bank Information Center, a Washington-based research and advocacy organization that monitors the local impacts of organizations like the World Bank. These non-state actors can play very significant roles. In Uganda, their help in channelling the complaints of community members to the World Bank's Inspection Panel led eventually to its critical findings and the termination of project funding.

Third, global development cannot be boiled down to economic dimensions alone. Building roads, better market access, and network connectivity are useful development initiatives that might contribute to poverty reduction. But developmental goals also entail other important *non-economic dimensions*, such as gender equality, health and well-being, sustainable energy, liveable cities and communities, and so on. Development itself, then, is a multidimensional process.

In Chapters 5–9, we have examined the role of large transnational firms, labour, consumers, financial capital, and the state in contributing to different dimensions of global development. In this chapter, we consider in four sections how international institutions are centrally involved in *governing* and *fostering*

global development. Section 10.2 suggests that free-market mechanisms are flawed as a means for achieving development in poorer countries because they fail to acknowledge the importance of institutions in governing development. In Section 10.3, we begin with such institutions, showing that they are often multilateral in nature, involving multiple state and non-state actors. These multilateral institutions are critical in *governing the global economy* through the establishment and enforcement of rules, regulations, and standards that influence virtually all facets of our everyday lives (from finance, trade, and investment to labour, environment, health, and safety standards). In Section 10.4, we focus more specifically on the role of international institutions, ranging from state-sanctioned global institutions such as the UN, to non-governmental organizations (NGOs) and private foundations, in *fostering development*. Finally, we argue in Section 10.5 that global development initiatives do not always come from ‘above’ – that is, from multilateral and international organizations. Community-based development efforts can be just as important and effective.

10.2 A Market Mechanism for the ‘Global South’?

In a 1952 article entitled ‘Three worlds, one planet’, French demographer Alfred Sauvy coined the term ‘Third World’ to include all countries not actively aligned with either side in the Cold War. The ‘First World’ consisted of the United States and its allies in Western Europe, Japan, and Australasia, while the ‘Second World’ comprised the communist bloc of the Soviet Union and its Eastern European allies, China, North Korea, parts of Southeast Asia, and Cuba. Since then, Third World countries have often been taken to include impoverished former European colonies and nearly all the nations of Africa, the Middle East, Latin America, and Asia. Because of their geographical location near to the equator and south of most First World countries, the term ‘Global South’ has also been widely used as a collective label for these countries. They are often seen as having various internal problems of underdevelopment that must be addressed before they can ‘catch up’ with the First World model of market-based industrial capitalism. In this conventional development discourse, it is the development experts and institutions of the Global North that will advise and ‘rescue’ the Global South.

To address the problems of underdevelopment, experts and consultants from the Global North often start with a set of assumptions that market-based development processes will ultimately spread income and wealth across societies and territories. As we noted in Chapters 2 and 3, this has been a key argument of mainstream approaches to economic development over the last 60 years. While intellectual fashions have changed, the argument has remained essentially the same: that all economies can develop if they adopt appropriate pro-market policies and strategies, and that uneven development is merely a temporary condition that will, naturally, be overcome. One of the earliest manifestations of this

perspective was in *modernization theory* – a school of economic thinking prevalent in the 1950s and the 1960s that saw largely cultural and institutional barriers to development in the Third World. Impoverished economies would develop towards the First World model of industrial production, a modern democratic society, and high mass consumption, if they first established certain preconditions. In early versions of the theory, developed by American economic historian Walt Rostow in 1960, these conditions included high savings and investment rates, and the removal of cultural resistance to modern science and industrial production. Such models implied that global economic development would tend towards an equilibrium pattern in which differences are smoothed out over time. Box 10.1 explains the radical critiques of this view that emerged at the time.

More recent incarnations of this kind of economic thinking about development are found in the strong emphasis by neoclassical economists and powerful international institutions (such as the International Monetary Fund [IMF], the World

FURTHER THINKING

Box 10.1 Dependency: neo-Marxian critiques of modernization theory

In sharp contrast to the belief in convergence and diffusion by Walt Rostow and other modernization theorists, neo-Marxist scholars such as Andre Gunder Frank and Samir Amin have argued since the mid-1960s that development in the core countries, or First World, is necessarily founded or based on the exploitation of natural resources and other endowments in the peripheral countries of the Third World (many of them former colonies of core countries). In this unequal core–periphery relationship, Third World development is *dependent* on capital, technology, and markets in the core countries. This exploitative and dependent relationship means that periphery countries cannot achieve their full development potential – a phenomenon known as ‘underdevelopment’ – because of the continual repatriation of surplus value from the periphery to the core. Known as ‘dependency theory’, this body of critical work was particularly influential in Latin American and African countries from the 1960s to the 1990s and served as a major political and policy justification for inward-looking development initiatives, such as import-substitution industrialization and restrictions on inflows of foreign capital. Although both dependency and modernization theories have very different views on development outcomes, they share some similarities in terms of their common focus on Third World development, their high levels of theoretical abstraction, and, for the purpose of our economic–geographical analysis, their spatial unit of analysis at the scale of the nation-state (see more in Moseley 2017).

Bank, and the World Trade Organization [WTO]) on the role of *free markets* in generating wealth and development. What remains constant in this ‘Washington Consensus’ or neoliberal approach to development in the Global South is the notion that underdevelopment is a problem that is internal to a developing country, and will naturally be fixed if the capitalist free-market system is allowed to operate fully. The standard prescriptions for Third World development are therefore rapid trade liberalization, free movement of capital flows, and elimination of government interventions and budget deficits.

Over time, however, more politicians, development experts, and policy consultants have come to realize that the neoliberal market mechanism, if left completely unchecked, will not solve development woes in the Global South (for example, Sachs 2015). Economists at the IMF, for example, noted recently that ‘[i]nstead of delivering growth, some neoliberal policies have increased inequality, in turn jeopardizing durable expansion’ (Ostry et al. 2016: 38; also Stiglitz 2015). To them, a regime of managed trade liberalization alongside policy instruments such as subsidies and tariffs can be established to open up markets slowly and achieve diverse development goals. This regime of managed markets implies a need for domestic and international institutions to be involved in actively governing both national economies and their links with the global system. As we have seen in the case of Uganda, these institutions operate at multiple geographical scales and involve a diverse range of state and non-state actors. In Chapter 9, we examined how domestic state institutions serve as the architect and manager of the national economy. In Sections 10.3 and 10.4 of this chapter, we go further by presenting the role of multilateral and international institutions in governing and fostering global development.

10.3 Governing the Global Economy

In this section, we consider how multilateral institutions have been established to govern the global economy. Historically, the state executed its functions at the *national* scale. Processes of global interdependence have, however, challenged this state-centric model of economic governance. In particular, the rise of international and macro-regional organizations has increased the importance of international cooperation and the coordination of economic policies among states. This movement, from national regimes of economic governance to authority at higher geographical scales, can be described as a process of *upscaling*. The institutions involved include both organizations with global responsibilities and macro-regional groupings of states. Private and non-state institutions can also play an important role. We will now examine each of these in turn.

Global Governance

Among the international organizations for global governance, the UN is the oldest and broadest in terms of its mission and scope, dating back to the 1942 ‘Declaration

of United Nations' by four countries during World War Two (the United States, the United Kingdom, Soviet Union, and China). The UN's resources to influence economic governance at the global scale are, however, limited. In this regard, greater influence is wielded by the IMF, the World Bank, and the WTO, which govern aspects of the global financial system, development assistance, and international trade. The first two, the IMF and World Bank, are commonly known as the 'Bretton Woods institutions' because of their creation in Bretton Woods, New Hampshire, in July 1944, during the United Nations Monetary and Financial Conference. At the conference, 730 delegates from 44 member nations agreed to create a family of multilateral institutions to address critical issues in the international financial system. The Bretton Woods agreement created the IMF and the International Bank for Reconstruction and Development (subsequently renamed 'World Bank') in order to establish a post-war economic order based on consensual decision-making and cooperation in international trade and economic relations. The United States and the United Kingdom in particular thought that a multilateral framework was needed to overcome the destabilizing effects of the previous global economic depression and trade wars. A few years after the Bretton Woods agreement, the General Agreement on Tariffs and Trade (GATT) was created, and then eventually replaced by the WTO in 1995.

Headquartered in Washington, DC, the IMF had 189 member countries by 2017. It is the central institution of the international monetary system, and is often called upon to resolve problems created by large trade deficits or financial shortfalls in member states. As of October 2017, the IMF had total funds of \$987 billion, of which \$206.6 billion was committed under current lending arrangements. Its four largest borrowers were Greece, Portugal, Ukraine, and Pakistan. The IMF's role, however, goes beyond lending to help states through cash-flow crises or a lack of sufficient foreign currency. The organization also seeks to impose conditions and policy adjustments so that its borrowers' national economies are restructured. In other words, the IMF intervenes directly in the domestic governance of national economies. Consequently, many IMF-assisted states have historically been required to reduce their government expenditures and liberalize control of the domestic economy in line with the IMF's neoliberal policy prescriptions (see Box 10.2).

The Geneva-based WTO was created in 1995 as the successor to the GATT, which had been established in 1947. As an international organization the WTO operates a multilateral rules-based system for the regulation of global trade negotiated among its member states. Virtually all decisions in the WTO are taken by consensus among all member countries, and they must be ratified by elected parliaments or appropriate organs in the member states. In 2011, the WTO had 153 members which together accounted for 97 per cent of global trade. By 2016, its membership had increased to 164 states. In addition to administering trade agreements and providing a negotiating forum, it handles trade disputes and their settlement, monitors national trade policies, builds trade capacity, and provides technical assistance and training for developing countries. As a multilateral

FURTHER THINKING

Box 10.2 Shock therapy

As we saw in Chapter 3, capitalism as a system has inbuilt crisis tendencies. Such crises offer political opportunities for dramatic intervention and for the spread of particular forms of economic governance, especially when states seek outside help from agencies such as the IMF. Shock therapy is a term that has emerged to describe the imposition of a neoliberal package of policy measures at such times of economic crisis. The package usually includes trade liberalization, the removal of price and currency controls, free capital flows, the withdrawal of state subsidies for local industries, the reduction of budget deficits, and the large-scale privatization of state assets. Such packages can be assembled and implemented quickly – hence the term ‘shock therapy’. The reforms are often imposed by the IMF in return for the injections of capital required by struggling economies. Before the 1980s, the role played by the IMF was mostly short term – for example, to ease temporary cash-flow problems. This changed with the onset of the debt crisis in Latin America in the late 1970s, as many countries suffered from a sudden downturn in capital inflows, devaluation of their national currencies, and hyperinflation. One of the first and best-known shock therapy packages was implemented in Bolivia in 1985 to stem hyperinflation. Decree 21060 contained over 200 separate laws, including provisions that allowed the peso to float against the dollar, cut two-thirds of the employees in state oil and tin companies, ended price controls, eliminated subsidies to the public sector, and liberalized trade rules. Inflation fell rapidly, with the package being lauded as a success, but the medium-term impacts on Bolivia’s economy were negative. Similar IMF packages, formally known as *Structural Adjustment Programs* (SAP), were implemented in other Latin American countries in response to debt crises, including Argentina, Chile, and Peru.

Since the 1980s, shock therapy has been used as a standard IMF prescription around the world in response to economic crises, most notably during the early 1990s in Central and Eastern Europe (e.g. Poland and Russia), and in East Asia in response to the 1997–1998 Asian economic crisis (e.g. Indonesia, South Korea, and Thailand). Commentators have become increasingly critical of such schemes due to both the huge social costs of rapid economic restructuring and the uneven post-therapy performance of these economies. In all such debates, it is important to remember that while the implementation of shock therapy reflects the increased power of international institutions such as the IMF, it also requires the support and cooperation of domestic political elites. More recently, the 2008 global financial crisis discredited much of the IMF’s earlier SAP policy prescriptions

because its key members, such as the United States and the United Kingdom, were hard hit and could no longer claim any superiority in their financial regulatory systems. This in turn prompted a major rethinking at the IMF. In 2013, IMF Managing Director Christine Lagarde supported the US Congress in raising the country's national debt ceiling to fund continued growth in federal spending. Similarly, in 2015, the IMF advised countries in the Euro zone to expand rather than reduce public investment.

institution, the WTO has one of the most active international dispute settlement mechanisms in the world. Since 1995, over 500 disputes have been brought to the WTO and over 350 rulings have been issued and enforced.

For some critics, the rise of the WTO and its enforcement of global trading rules have actually increased uneven development at the global scale. While developing countries aspiring to become developmental states (described in Box 9.4) find it hard to engage in protectionist trade policies because of WTO rules, some of the richest states in the world – most notably the United States and some within the European Union (EU) – continue to flout WTO rules by protecting their domestic producers in politically sensitive sectors such as steel, clothing, and agriculture. Trade liberalization under the auspices of the WTO does not therefore necessarily reduce its uneven impacts, as different countries benefit differentially from free trade. The very slow progress of the Doha round of negotiations initiated in 2001 (and still incomplete in 2019) is reflective of these tensions, with agricultural subsidies and tariffs proving to be a major sticking point. Still, these negotiations have yielded some tangible changes in the organization of global trade. In December 2015, WTO members signed on to the Nairobi Package that includes a commitment to abolish export subsidies for farm products, widely hailed as the most significant outcome on agriculture in the WTO's history. Other aspects of the package cover public stockholding for food security purposes, a special safeguard mechanism for developing countries, and measures related to cotton. Decisions were also made in relation to preferential treatment for least developed countries (LDCs) in the area of services and the criteria for determining whether exports from LDCs may benefit from preferential treatment with regard to trade rules.

Macro-Regional Governance

Macro-regional groupings have emerged primarily for member states to engage in regional economic integration and, to a limited extent, political integration. As such, regional economic blocs are a significant addition to the governance architecture of the global economic system. The initial stimulus for such region-specific formations came from a desire to reduce barriers to trade and therefore enhance levels of intra-regional trade. Following Dicken (2015), we can identify four key types of regional blocs, illustrated further in Table 10.1. As we move down the list, the level of economic and political integration increases:

Table 10.1 Major regional economic blocs in the global economy

Type	Regional group	Membership	Date
Free trade area	EFTA (European Free Trade Association)	Iceland, Norway, Liechtenstein, and Switzerland	1960
Free trade area	NAFTA (North American Free Trade Agreement)	Canada, Mexico, and United States	1994 (renegotiated as the 'USMCA' in 2018)
Customs union	CAN (Andean Community)	Bolivia, Colombia, Ecuador, Peru, and Venezuela (withdrawn in 2006)	1969 (revived 1990)
Customs union	MERCOSUR (Southern Cone Common Market)	Argentina, Brazil, Paraguay, Uruguay, and Venezuela (suspended since December 2016)	1991
Common market	CARICOM (Caribbean Community)	Antigua and Barbuda, The Bahamas, Barbados, Belize, Dominica, Grenada, Guyana, Haiti, Jamaica, Montserrat, St. Kitts and Nevis, Saint Lucia, St. Vincent and the Grenadines, Suriname, Trinidad and Tobago, and five associate members	1973
Common market	ASEAN Economic Community	Brunei Darussalam, Cambodia, Indonesia, Laos, Malaysia, Myanmar, Philippines, Singapore, Thailand, and Vietnam	1967 (ASEAN) 1992 (ASEAN Free Trade Area) 1997 (ASEAN + 3: China, Japan, and South Korea) 2012 (ASEAN + 6: +3, India, Australia, and New Zealand) 2015 (ASEAN Economic Integration)

(Continued)

Table 10.1 (Continued)

Type	Regional group	Membership	Date
Economic union	EU (European Union)	Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, France, Finland, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, and United Kingdom (to exit in October 2019)	1957 (European Common Market) 1992 (European Union)

Source: adapted from Dicken (2015, table 6.19). Reproduced with permission of Sage Publications.

- *The free-trade area*: Trade restrictions between member states are reduced, but states retain their individual trading arrangements with non-members – for example, the North American Free Trade Agreement (NAFTA) between Canada, the United States, and Mexico since 1994 (known since 2018 as the United States–Mexico–Canada Agreement, or USMCA).
- *The customs union*: Members operate a free-trade agreement among themselves and have a common trade policy for non-members – for example, the MERCOSUR customs union between Argentina, Brazil, Paraguay, and Uruguay since 1991 (Venezuela joined in 2006, but was suspended in 2016).
- *The common market*: This has the characteristics of a customs union, but also allows the free movement of factors of production (e.g. capital and labour) between members – for example, the Caribbean Community (CARICOM) since 1973, and the ASEAN Economic Community since 2015.
- *The economic union*: This ultimate form of integration promotes harmonization and supranational control of economic policies. Only the EU comes anywhere close to this form, as evidenced by the adoption of the Euro as the sole currency of most member states in 2002. The EU started out as the European Common Market in 1957, but now encompasses 28 European countries in an advanced form of regional integration (see Figure 10.2).

Three further points should be made about these macro-regional groupings. First, the vast majority of groupings fall under the first two headings (i.e.

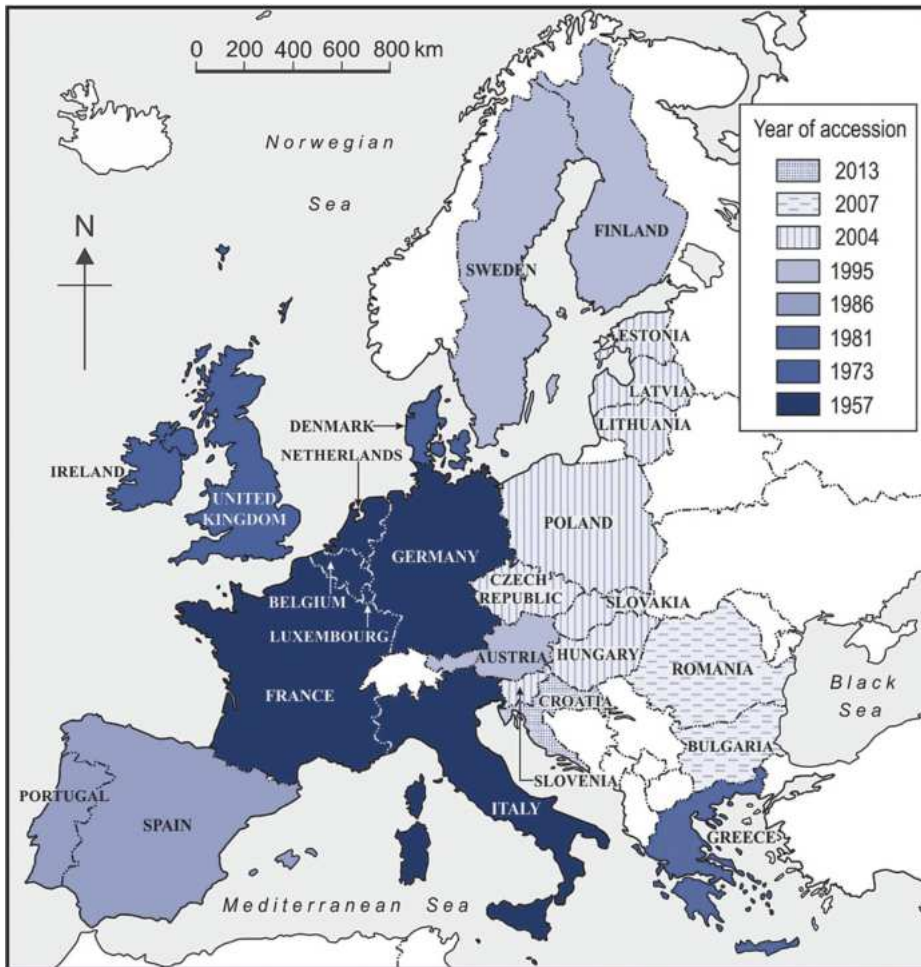


Figure 10.2 The expansion of the European Union since 1957

free-trade areas and customs unions) as they are easier to negotiate and more likely to be politically acceptable. Second, economic blocs may develop over time and move down this list, as with the case of the EU and the ASEAN Economic Community. These macro-regional institutions have evolved over time and grown stronger in the governance of their respective macro-regions (see Box 10.3). Third, it is important to recognize that all of these regional economic forms are initiated by, and derive legitimation from, their member states. However, as states increasingly participate in such regional initiatives, some claim that they are surrendering power over their domestic economic governance. This claim is in part based on the experience of EU member states that have had to adjust domestic budgets to avoid deficits and thereby maintain the integrity of the single European currency system. Member states also have to abide by EU-level rules and regulations. Countries may also experience painful

CASE STUDY

Box 10.3 ASEAN and macro-regional integration in Southeast Asia

As explained in Chapters 4 and 5, the globalization of transnational corporations (TNCs) and their production networks is producing a more integrated global trading system. On a closer look, it becomes apparent that production activities are increasingly being organized within specific macro-regions of the global economy. This growing *macro-regionalization* can be explained by three interrelated factors. First, the scope and complexity of many TNC operations means that they need to coordinate and integrate their activities at a macro-regional, rather than truly global, scale. Second, economic resources such as labour, capital, and technology are increasingly mobile within specific regional contexts due to intra-regional cooperation. Third, macro-regional free trade arrangements have been growing in number and significance at the same time as globalization processes have been accelerating.

We can illustrate these dynamics by looking at the example of macro-regional integration in Southeast Asia, an area covered by the Association of Southeast Asian Nations (ASEAN). There, integration processes are primarily driven by TNCs from Japan, the United States, and more recently South Korea. Integration has been given further impetus by the implementation of the ASEAN Free Trade Agreement (AFTA) since 1992 and the ASEAN Economic Community since 2015. AFTA was signed by six ASEAN members with the eventual goal of removing both tariff and non-tariff barriers and increasing the region's competitiveness as a key platform in global production networks. Since then, import tariffs on almost all goods traded among the original six ASEAN countries have been removed or at least reduced to less than 6 per cent. In 2008, the ASEAN member states agreed to work towards a full single market and production base, culminating in the establishment of the ASEAN Economic Community in 2015. ASEAN as a region is expected to be the world's fifth largest economy by 2020, accounting for 5.1 per cent of global GDP. A very large domestic market is being created by the rapid growth of the middle and affluent classes. By 2020, some 120 million people in ASEAN will join these classes, primarily in the largest emerging markets of the region, such as Indonesia, Vietnam, the Philippines, Thailand, and Myanmar (see ASEAN Secretariat 2016; Yeung 2017 for more on ASEAN economic integration and its impact on local development).

periods of adjustment as certain kinds of economic activity relocate to take account of the new regional context (for example, manufacturing activity shifting from western to central/eastern Europe, and from the United States to Mexico, as discussed in Box 5.2).

Multi-Stakeholder Initiatives: Hybrid Governance and Private Regulation

We have seen how major international organizations and macro-regional groupings can govern aspects of the global economy through rule-setting and enforcement in the fields of international finance, trade, and economic cooperation. This capacity for economic governance is underpinned by the political power and financial contributions of member states. But the global economy is also produced by a wide range of other actors, comprising *private and non-state institutions* who are not necessarily subject to the power of international organizations and macro-regional groupings. This creates a new form of *hybrid governance* through which public and private entities come together to seek desired outcomes.

Here, we focus on how economic activities are increasingly being governed through efforts to impose consistent *global standards* on production, consumption, and finance. As Table 10.2 illustrates, the world of standards is a broad and varied one. They can be applied to different aspects of the economy – for example, health, product quality, environment, finance, or labour conditions. Such standards may take the form of a code of conduct, a label on a finished product, a tightly specified technical standard or rating, a set of voluntary initiatives, or some combination of all of these. The standard may apply to a particular commodity (e.g. fresh tomatoes or dolphin-safe tuna) or product (e.g. *Shari'a*-compliant bond or ethical investment fund described in Section 8.6), a sector (e.g. agriculture or manufacturing), or be generic (e.g. a safety standard to sell an electrical good in a particular national market). While consumer campaigns are clearly the domain of end-consumers (and sometimes labour unions), standards may also be developed by firms, NGOs, trade unions, or international organizations (such as the International Organization for Standardization), or a combination of these institutions. Moreover, the certification or accreditation to assess whether standards have been met may be undertaken by a variety of different parties (both public and private, for profit, and not-for-profit). The regulatory impacts of standards will also vary from the voluntary (e.g. seeking ‘Fairtrade’ status for a product) to the mandatory (e.g. safety standards for plastic toys, organic certifications for food, environmental certification for forestry products, and ‘investible’ ratings for bond issues). Finally, standards are innately *geographical* in two different ways: in terms of the territory within which they apply to the production and consumption of particular products; and, in the way in which they have implications elsewhere in production networks that may connect distant places and territories.

Some specific examples of global standards in different industries and countries illustrate the ways in which hybrid governance might be effective in promoting positive development outcomes. They encourage us to think of global development as a transnational field within which collaborations and struggles between different stakeholders determine the success of particular governance solutions (Bair 2017). Conventional distinctions of private versus public or national versus global governance are not easily applied. For example, the International Labour

Table 10.2 The world of standards

Attribute of standard	Variability
Field of application	• Quality assurance • Environmental • Health and safety • Labour • Social/economic • Ethical • Finance
Form	• Codes of conduct • Label • Standard
Coverage	• Firm specific • Sector specific • Generic
Key drivers	• International associations • International NGOs • International trade unions • International media and rating agencies • International organizations
Certification process	• First, second, or third-party firms • Private-sector auditors and rating agencies • NGOs
Regulatory implications	• Government • Legally mandatory • Market competition requirement • Voluntary
Geographical scale	• Regional (e.g. a US state) • National • Macro-regional (e.g. the EU) • Global (e.g. the UN Global Compact)

Source: adapted from Nadvi and Waltring (2004).

Organization's (ILO) Better Work programme began in 2001 as a country-specific monitoring programme for Cambodia's apparel industry. Identifying violations of national labour law by local manufacturers did not necessarily change bad labour management practices because of lack of support from state actors and local NGOs. Since 2007, however, the program has been 'scaled up' into a unique model of hybrid governance incorporating state, non-state, and private stakeholders at the local, national, and global levels. The program is now administered by the ILO in conjunction with host states and private actors of various kinds, including trade

unions, factory owners, and global brand-name clothing and retail firms. As a multi-stakeholder initiative, it has been successfully implemented in eight developing countries in Asia (including Bangladesh, Cambodia, Indonesia, and Vietnam), the Middle East and Africa (Egypt and Jordan), and Latin America (Haiti and Nicaragua). Over 1,500 factories are covered, with 2.1 million workers (see <http://betterfactories.org> and <https://betterwork.org>).

In more specific forms, multi-stakeholder *organizations* can be established to regulate labour standards and conditions in global development. The UK's Ethical Trading Initiative (ETI) is a multi-stakeholder organization established in 1997, and funded jointly by its membership and the UK government's Department for International Development (DFID; the Fair Labor Association is a similar initiative in the US context). By 2017, the ETI had 65 full corporate members with a combined turnover of over £166 billion (including leading UK retailers and suppliers such as Asda, C&A, The Gap, H&M, and Tesco). The initiative also included 17 NGOs (including many charities such as Christian Aid and Oxfam), and representatives from three international trade unions representing almost 160 million workers worldwide. The ETI has established a Base Code for labour conditions in supply chains consisting of the following nine provisions (<https://www.ethicaltrade.org>):

- Employment is freely chosen
- Freedom of association and the right to collective bargaining are respected
- Working conditions are safe and hygienic
- Child labour should not be used
- Living wages are paid
- Working hours are not excessive
- No discrimination is practiced
- Regular employment is provided
- No harsh or inhumane treatment is allowed

While most retailers use large international, independent social auditors such as Bureau Veritas, some pass on the auditing role to key suppliers, and others seek the involvement of NGOs with an on-the-ground presence in source areas. Interestingly, the ETI explicitly chooses not to pursue a label, arguing firstly that it is simply not possible for a retailer or a brand-name merchandiser to know about labour conditions at all points along its supply chain, and secondly that several of the Base Code provisions rely partly on government action in producer countries (e.g. the right to form a labour union).

Apart from these broad institutional initiatives, recent decades have also witnessed the rise of *private sector-led* multi-stakeholder initiatives for different commodities, particularly in the agrifood sector (Ouma 2015). Box 10.4 describes an example of the environmental certification of dolphin-safe tuna that connects multiple actors in California, Thailand, and elsewhere. These standards allow individual buyer firms to be 'hands-off' regarding the governance of their supply chains.

CASE STUDY

Box 10.4 Environmental certification of dolphin-safe tuna production

In the early 1990s, the Earth Island Institute (EII), a California-based NGO, initiated a highly successful consumer-driven global environmental campaign known as the International Marine Mammal Project. The EII scheme has played a key role in defining, monitoring, and regulating the use of the label/term ‘Dolphin Safe’ in the tuna-packing industry (Baird and Quastel 2011). At the time of the initiative, much of the industry was concentrated in Thailand, with 25 different tuna-canning firms in operation. Thailand’s Unicord, then the world’s largest tuna canner, was canning about 500 metric tons of tuna daily and employing more than 7,000 people. The main market for canned tuna was the United States, followed by other developed countries such as the United Kingdom, Italy, Germany, and France. The EII project was a multi-stakeholder certification scheme based on perceived consumer demand, product labels, US government labelling laws, UN resolutions, and strong advocacy in the media. The initiative built on environmental legislation in the name of marine mammal protection (e.g. the US Marine Mammal Protection Act 1972) and the work of non-governmental and private regulatory efforts by EII and private sector adopters. The scheme’s success can be measured in terms of the significant decline in dolphin deaths and injuries associated with the harvesting of yellow-fin tuna in the eastern tropical Pacific and other tuna caught by drift-netting in the western Pacific and Indian Oceans. From an estimated 252,000 dolphin deaths associated with tuna fishing in 1973, the number declined to 8,258 in 1984 and about 1,000 in 2008. By 2017, dolphin deaths in tuna nets had declined by 99 per cent. More than 95 per cent of the world’s tuna companies are now committed to dolphin-safe fishing practices and the Dolphin Safe label is found on canned tuna in markets throughout the world (<http://www.earthisland.org> and <http://savedolphins.eii.org>).

To sum up this section, the global economy is governed by a variety of actors and institutions that go beyond a single geographical scale. Global governance is clearly a *multi-scalar* process that encompasses the national state, macro-regional groupings, and international organizations, as well various networked initiatives that regulate specific economic activities. The effect is to connect gradually different territories into a more unified ‘regulatory space’ and to create possibilities for actors in different places to participate in the global economy.

10.4 Fostering Development in the Global South

We have so far focussed on how multilateral institutions – whether international, macro-regional, or non-state – have collectively participated in governing the global economy. While some of them are directly involved in economic development, such as the WTO, others are much less explicitly oriented towards development issues in the Global South (e.g. the EU). In this section, we consider some of the most important international institutions that are specifically promoting development in the Global South. They range from international organizations and development agencies to development-related non-governmental organizations (D-NGOs) and private foundations. The power wielded by such institutions can make a significant difference to development outcomes.

Institutions of International Development

International development has been at the forefront of work by several international organizations including the UN (and its various agencies), the World Bank and regional development banks, and development and aid agencies from the United States, the United Kingdom, Australia, Canada, Japan, and other countries. The UN represents perhaps the most influential international platform through which development issues can be addressed. Since its founding in 1945, the UN has emphasized improving well-being through poverty reduction, environmental conservation, international cooperation in peace and security, human rights protection, humanitarian aid delivery, and upholding international law. These roles have been carried out through various UN programmes and specialized agencies (see Table 10.3). The United Nations Development Programme (UNDP) is the key UN agency for the eradication of poverty and reducing inequality. It helps countries to develop policies, leadership skills, partnering abilities, and institutional capabilities. In September 2000, world leaders adopted the United Nations Millennium Declaration at the UN Headquarters in New York. Building on a decade of major conferences and summits sponsored by the UN, the declaration set out an ambitious set of targets to be met by 2015, broadly known as the Millennium Development Goals (MDGs). These goals included:

- Eradicating extreme poverty and hunger
- Achieving universal primary education
- Promoting gender equality and empowering women
- Reducing child mortality
- Improving maternal health
- Combating HIV/AIDS, malaria, and other diseases
- Ensuring environmental sustainability
- Developing a global partnership for development

Table 10.3 The United Nations system for international development

The UN system	Activities
UN programmes and funds	
UNDP – United Nations Development Programme	Works in nearly 170 countries, helping to eradicate poverty, reduce inequalities, and build resilience so countries can sustain progress. Plays a critical role in helping countries achieve the Sustainable Development Goals.
UNICEF – United Nations Children’s Fund	Provides long-term humanitarian and development assistance to children and mothers.
WFP – World Food Programme	Aims to eradicate hunger and malnutrition. The world’s largest humanitarian agency. WFP feeds almost 80 million people annually, in around 75 countries.
UNCTAD – United Nations Conference on Trade and Development	Responsible for dealing with development issues, and particularly international trade and investment as drivers of development.
UN specialized agencies	
WB – World Bank	Focuses on poverty reduction and improving living standards by providing low-interest loans, interest-free credit and grants for education, health, infrastructure, and communications. Operates in over 100 countries.
IMF – International Monetary Fund	Fosters economic growth and employment by providing temporary financial assistance to countries to help ease balance of payments adjustment, as well as technical assistance.
ILO – International Labor Organization	Promotes international labour rights by formulating international standards on freedom of association, collective bargaining, the abolition of forced labour, and equality of opportunity and treatment.
FAO – Food and Agriculture Organization	Leads international efforts to fight hunger. It is both a forum for negotiating agreements between developing and developed countries and a source of technical knowledge and information to aid development.
IFAD – International Fund for Agricultural Development	Focuses on rural poverty reduction, working with poor rural populations in developing countries to: eliminate poverty, hunger, and malnutrition; raise productivity and incomes; and improve quality of lives.
UNIDO – United Nations Industrial Development Organization	Promotes industrial development for poverty reduction, inclusive globalization, and environmental sustainability.

Source: adapted from UN website <http://www.un.org/en/sections/about-un/funds-programmes-specialized-agencies-and-others/index.html>, accessed on 3 November 2017. Reprinted with the permission of the United Nations.

By the end of 2015, the MDGs had galvanized international institutions, states, civil society, and private partners, and had made *some* progress towards meeting its objectives (see Liverman 2018). Building on this momentum, former Secretary-General Ban Ki-moon announced in 2016 a new agenda featuring 17 Sustainable Development Goals (SDGs) to be achieved by 2030. Figure 10.3 illustrates the categories covered by the SDGs and shows that they go beyond the usual economic dimensions of development. The UN seeks to mobilize diverse means for their implementation, including financial resources, technology development and transfer, capacity building, and enhanced partnerships.

One of the main arenas for achieving some of the MDGs and SDGs has been in developing an international set of codes of conduct to make businesses more socially responsible. Launched by former Secretary-General Kofi Annan in July 2000, the United Nations Global Compact represents an initiative for businesses to align their operations and strategies with 10 universally accepted principles in the areas of human rights, labour, environment, and anti-corruption (<https://www.unglobalcompact.org>). With more than 9,670 company signatories in over 163 countries, it is now the world's largest voluntary corporate sustainability initiative.

In addition to its designated programmes financed through voluntary contributions, the UN also seeks to achieve its MDGs and SDGs through the specialized agencies listed in Table 10.3. A few points should be noted here. First, these specialized agencies are independent international organizations funded by both voluntary and assessed contributions from member states and, sometimes, donations from private sources. Established in different historical periods (some predating the UN, e.g. the ILO), they were brought into the UN system through



Figure 10.3 The United Nations' 17 Sustainable Developmental Goals for 2030

Source: adapted from UN website <http://www.un.org/sustainabledevelopment/sustainable-development-goals>, accessed on 1 November 2017. Reprinted with the permission of the United Nations.

negotiated agreements. Second, these agencies tend to specialize in diverse facets of international development, ranging from project finance (WB) and financial stability (IMF) to labour rights (ILO), food security (FAO), agricultural development (IFAD), and industrialization (UNIDO). Third, the institutional capacity and resource endowment of these agencies vary dramatically, which in turn influences their power and efficacy in governing development work. While some formulate international standards (e.g. ILO), negotiate agreements (e.g. FAO), or provide technical assistance (e.g. UNIDO), others such as the World Bank and IMF take a more direct role because of their large financial capacity in providing loans, credits, and grants.

The World Bank is perhaps the most prominent UN agency focusing on development issues. Based in Washington, DC, the Bank has 189 members and provides expertise and finance to over 100 developing countries. This assistance covers a wide variety of activities including basic health and education provision, social development and poverty reduction, public service provision, environmental protection, private business development, and macroeconomic reforms. In 2010, the Bank's financing peaked at \$58.8 billion, through a mixture of loans and grants, with Africa and South Asia being the biggest recipients. By 2017, this lending commitment had fallen back to \$42.1 billion. Some states have benefitted from the World Bank's assistance and engaged in a virtuous circle of successful development pathways (e.g. post-war Germany, Japan, and the Asian newly industrialized economies). Other states have benefitted less from the World Bank's economic advice and development assistance (e.g. Chile and Peru). One relatively recent, and widespread, initiative promoted by the Bank has been its *conditional cash transfers* (CCTs) programme. By asking millions of cash transfer beneficiaries to make pre-specified investments in children's education and health, CCTs provide safety net programmes to reduce poverty and to encourage parents to invest in their children. The largest CCTs, such as Brazil's *Bolsa Família* and Mexico's *Oportunidades*, have covered millions of households, and the programme has been popular in many developing countries (e.g. Bangladesh, Cambodia, Chile, and Turkey) and regions (e.g. sub-Saharan Africa).

World Bank programmes have, however, often been controversial. The Bank tends to impose its policy instruments on recipients of grants and funded projects. It is constantly looking for ways to ensure more developing countries adopt the policy interventions that it claims have worked in other places. This rapid global diffusion of (usually neoliberal) development ideas and interventions is known as 'fast policy' and has often led to unintended outcomes and failures (Peck and Theodore 2015). The uneven outcomes of development interventions by the World Bank have created discontent in some developing economies. The Bank's policies have been seen as a cause of inequality and development problems, rather than the solution. In particular, critics see the World Bank as an unapologetic promoter of Western neoliberal approaches to development.

To counter the perceived Western influence on development in the Global South, China launched the Asian Infrastructure Investment Bank (AIIB) in 2013. The AIIB is designed to serve as a new multilateral financial institution to address pressing infrastructure needs across Asia. The AIIB also allows China to make use of its massive foreign currency reserves to finance projects in Asia and to play a much greater role in the macro-region's economic development beyond the Japan-dominated Asian Development Bank (ADB). With 80 approved member states, including several European governments, the Beijing-based AIIB started business in January 2016 (see Figure 10.4). The AIIB's \$100 billion in capital is roughly equivalent to two-thirds of the funds available to the ADB, or half of the World Bank's capital.

Apart from international organizations such as the UN, the World Bank, and AIIB, there are other macro-regional and state-funded international development agencies that wield influence in targeted countries and territories. These include *multilateral development finance institutions* such as: the AfDB (established in 1964); the ADB (1966); the European Bank for Reconstruction and Development (EBRD, 1990); the Inter-American Development Bank (IADB, 1959); and the Islamic Development Bank (IsDB, 1975). Originally created to address market failures in long-term capital flows to post-conflict and developing countries, these multilateral development banks (MDBs) support investments in infrastructure, economic growth activities, and poverty reduction. The MDBs bring together not



Figure 10.4 The AIIB: a new multilateral institution for global development

Source: reproduced with permission of Xiao Lu Chu/Getty Images.

only financial resources but also technical expertise across a wide range of economic and social issues.

Since the 2010s, however, these MDBs have faced major challenges to their purpose and relevance. First, capital market failures are much less significant due to the rise and availability of global finance (see Chapter 8). Most developing countries now rely primarily on domestic resources to finance their public investment and/or borrow abroad in the global capital markets. For example, lower income countries like Ghana and Tanzania can routinely offer 10-year sovereign bonds to global investors. Second, the rapid growth and spread of professional expertise on development policy and practice has rendered the advisory services of MDBs less relevant. The success of diverse development models described in Section 9.4 (especially the developmental state) has also reduced the reliance of developing countries on the single-recipe approaches that used to dominate these MDBs (the ‘Washington Consensus’). Third, the rise of private foundations and other funding actors, and their targeted aid and development activities have reduced the dominant financial role of MDBs in member countries. In fact, the MDBs have been slow to adapt to these new challenges – partly a reflection of their age, bureaucratic growth, and official governance arrangements. As shown in Figure 10.5, most of their portfolios in 2014 were dominated by direct loans to governments and firms. Their role in supporting or catalyzing the development of private markets was limited. Except for the World Bank, the share of loan guarantees as a development instrument to stimulate private sector investment was rather minimal.

A final category of state-funded international development institutions comprises the development agencies operated by individual national governments. These include: the Australian Agency for International Development (AusAID);

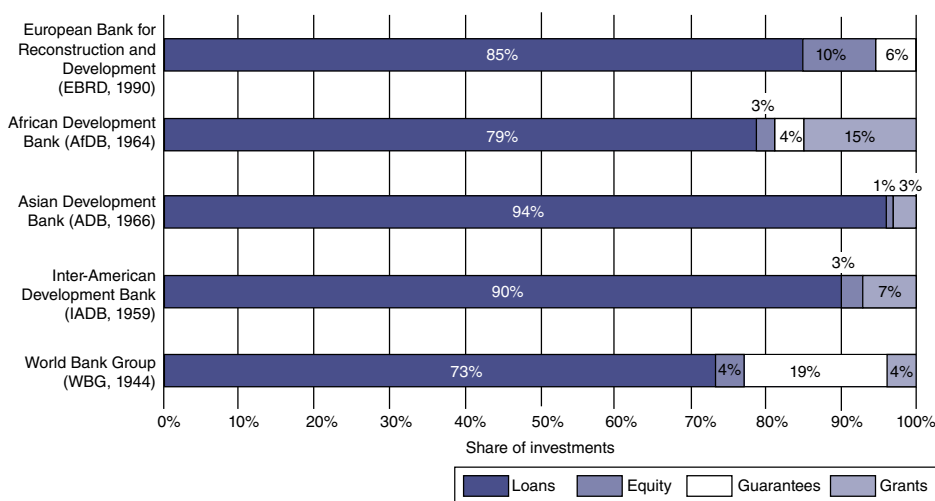


Figure 10.5 Investment instruments by multilateral development banks, 2014

Source: data from Center for Global Development (2016, figure 3: 18).

the Danish International Development Agency (DANIDA); the UK's DFID; the Japan International Cooperation Agency (JICA); and United States Agency for International Development (USAID). These agencies are primarily responsible for managing and distributing the overseas development assistance contributions of their home states. Unlike multilateral institutions such as the UN and regional development banks, these agencies tend to advance the foreign policy goals of their respective states through bilateral cooperation with recipient countries. In doing so, they may incorporate home state objectives, such as geopolitical and security goals, market creation or trade promotion, and 'soft power' influence. In terms of operations, some of their funded projects are managed bilaterally with recipient countries, while others may be implemented as part of the initiatives led by multilateral institutions such as the UN or the World Bank. Still, most of these development agencies work with a wide range of actors, such as host states, NGOs, the private sector, and academic institutions. For example, with an annual budget of \$12–14 billion between 2007 and 2013, USAID 'does development' by disbursing grants and contracts to various for-profit development contractors who undertake the actual work specified by the agency (Roberts 2014: 1033). Since the late 1990s, however, many of these international development agencies have been confronted with declining aid budgets, loss of donors due to changing geopolitical environments, and decreases in public support (Mawdsley 2015).

Non-Governmental Organizations and Global Development

Clearly, the role of states has been central in advancement development agendas around the world, but global development has been more than just a state-led project. In recent decades, we have seen greater involvement by many NGOs and private foundations. The idea of development has therefore shifted from being an 'inter-national' affair – between states – to being a 'global' project fostered by a much wider range of actors. Non-governmental and private actors are playing an increasing role in promoting development outcomes. These processes reflect a *hollowing-out* of state functions and the rise of either public–private partnerships or private development initiatives. This rise in non-state forms of development work leads to the devolution of state power to independent CSOs and sometimes private entities such as philanthropic foundations.

Many D-NGOs are now well known. Among many others they include: Christian Aid, Global Justice Now, and Oxfam (the United Kingdom); American Red Cross and World Vision (the United States); Doctors Without Borders (Switzerland); and BRAC (Bangladesh). These organizations are also variously termed CSOs, private voluntary organizations (PVOs), charities, non-profits, third sector organizations, and so on. There are now many thousands of such national-level D-NGOs in developing countries that include groups ranging from corporate-funded think tanks and development research organizations, to community groups, grassroots activists, advocacy organizations, and emergency/humanitarian relief operations.

In recent years, the rise of *private foundations* has provided a new kind of D-NGOs. Foundations are increasingly prominent both because of the resources they can mobilize (supplied by their wealthy founders) and because they have extensive political and economic influence in both developed and developing countries. Working in tandem with older private foundations such as the Rockefeller Foundation and the Carnegie Foundation, the leading philanthropic organizations of the new millennium include the Bill and Melinda Gates Foundation (since 2000) and the Chan Zuckerberg Initiative (since 2015). Their stated goal is to address market failures in education and health through carefully targeted interventions. This phenomenon has led to the emergence of what Mitchell and Sparke (2016) term a 'New Washington Consensus'. These new 'public-private-philanthropy' (3P) partnerships are characterized by some unique features, such as a reliance on elaborate cost-effectiveness algorithms and the integration of recipients into a 'business logic' for health and educational improvement. American billionaires such as Bill Gates (Microsoft), Warren Buffett (Berkshire Hathaway), and Mark Zuckerberg (Facebook) see themselves as a new breed of social entrepreneurs who bring market-based practices into their philanthropic work, including highly targeted investments, market-mediated partnerships and leveraging, rapid application of technologies, constant assessment, quick exit, and the use of competition, benchmarking, and rankings to set funding priorities. Their grant-funded projects also actively recruit marginalized recipients (individuals and populations) and train them to understand and adopt more market-based solutions to their problems.

The Gates Foundation, for example, views every project that it funds in the fields of global poverty, health, and education as a form of business venture. Each has its own problem definition, identification of strategy, investment allocation, management plan, and framework for closure and evaluation (<https://www.gatesfoundation.org>, accessed on 19 January 2018). By the end of 2016, the Gates Foundation had \$40.3 billion in its endowment. Since its inception in 2000, it has disbursed \$41.3 billion in grant payments to projects in more than 100 countries. On a smaller scale, Acumen is a private organization with seed capital from the Rockefeller Foundation, Cisco Systems Foundation, and three individual philanthropists. Founded in 2001 by a former Wall Street banker, Acumen invests 'patient' capital in innovative companies and entrepreneurs in the fields of agriculture, education, energy, health, housing, and water and sanitation. By investing capital for such businesses to grow, Acumen believes that these services will reach as many poor 'customers' as possible. By the end of 2017, it had invested over \$110 million in 102 companies and 385 'change-makers' in 13 countries. In both the Gates Foundation and Acumen, we can see the ways in which business practices, market logics, and consumer (rather than 'beneficiary') ideas are being brought into the field of global development.

In this section we have examined some of the institutions that seek to foster development in the Global South, including multilateral organizations, international development banks, national development agencies, NGOs, and private foundations. These organizations operate at multiple geographical scales and tend

to exceed the institutional and financial capacity of individual states in the Global South. Significantly, however, such development efforts are usually driven by institutions and actors from *outside* the Global South, resulting in contentious outcomes for host communities in developing regions and countries. In Section 10.5, we examine some alternative development initiatives that are based on localized efforts and practices.

10.5 Bottom-Up? The Rise of Community-Based Development

We have so far considered how international institutions are deeply involved in the governance and fostering of global development. Most of these initiatives are driven as top-down or externally imposed sets of development goals and practices. The Ugandan road project at the beginning of this chapter was a clear example. They are often seen as initiatives planned and led by interested parties outside of the affected communities, who may feel quite marginalized by the process.

Other kinds of development initiatives emerge from the *local* scale – that is, within local communities themselves. These community-based development projects can be a useful alternative to mainstream top-down initiatives driven by international organizations, regional groupings, and wealthy foundations that tend towards ‘one size fits all’ strategies. Expert planners in these top-down projects often see development issues as ‘engineering’ problems that can be solved through standardized know-how and technical solutions. ‘Bottom-up’ community-based initiatives, on the other hand, can be more flexible and adaptable to local development needs. They emphasize the participation of local communities so that development projects better reflect their own goals, resource environment, and means of implementation. Local participation in turn ensures community ownership, accountability, and commitment.

Some community-based projects seek to increase engagement with the market economy, for example, through creating new or improved production processes, and better transportation connections. Often, however, community development aims to increase living standards and quality of life through ‘alternative economies’ that exist outside of capitalist processes (see more on this in Chapter 14). They need not be large in scale when compared to multimillion dollar World Bank initiatives, but they can better serve the particular needs of local communities. Examples might include local farmers pooling resources to bring their produce to nearby markets or local residents sharing their labour through non-monetary mutual assistance. In such an exchange system, trust and fairness are guiding principles to ensure benefits to members in the local community. A specific set of ethics often guide such initiatives, including: equitable social distribution of resources; ensuring environmental health and sustainability; focusing on local assets and strengths; and building community and partnerships (Gibson-Graham et al. 2013).

An example is found in social enterprises created by community groups in the Philippine provinces of Surigao del Norte, Bukidnon, Bohol, and Lanao del Norte (Gibson et al. 2015). There, resources such as time, money, and products are pooled together among local residents, farmers, and migrant workers to engage in economic activities that provide employment and a decent income. In the rural community of Jagna on the Philippine Island of Bohol, fresh ginger grows very well due to the cooler upland temperature, but the local market is very small and farmers find it hard to sell. Since December 2004, a group of 6–10 older women ranging in age from 47 to 81 have come together to generate income by producing ginger tea. These women had been excluded from the mainstream economy because government and private sector jobs tended to specify an age limit that the women exceeded. By establishing their own social enterprise, they have been able to use cash income from ginger tea to purchase eyeglasses and pay for health check-ups. Over time, their success in ginger tea has led them to diversify into other ginger-related products, such as cookies, candies, and even an exfoliating scrub made from the by-product of the ginger tea-making process. Being part of the local municipality's Jagna Council for Women (JCW), they have also been able to leverage credit services and environmental programmes promoted by the JCW. This example shows that development projects can be initiated 'from below' by local communities for the benefit of local people. While not all community-based initiatives are successful or effective, these initiatives can serve as useful alternatives that complement large-scale projects from the above.

10.6 Summary

Just as national economies were shown in Chapter 9 to be shaped in fundamental ways by the state, we have also seen in this chapter that the global economy is far from being the product of unregulated markets. Instead, the global economic system is facilitated and fostered by institutions. We noted several features of these institutions at the outset of the chapter: they operate at multiple scales; they involve diverse actors; and, they address more than just economic issues. These points have been illustrated throughout this chapter in the various organizations that shape the global economy and seek to foster development.

In the case of global economic management, we examined the important role of multilateral institutions with a truly global mandate, such as the UN, the World Bank, the IMF, and the WTO. Other institutions operate at a macro-regional scale, such as the EU in Europe and ASEAN in Southeast Asia. Most of these multilateral institutions represent an upscaling of economic governance by states, from their national regimes of regulation to the international and macro-regional scale. While some states might have given up part of their capacity for economic governance to these multilateral institutions, it is important to remember that the world's most powerful states today (e.g. the United States, Germany, and China) have remained the key movers behind these institutions.

At the same time, we also saw the diversity actors involved in global economic regulation. In almost every conceivable industry there are standards and regulating bodies that establish the rules of the game. These range from ethical trade labels, to enforcers of labour standards, to environmental certifications. While some are inter-national institutions supported by states, others are established by the private sector or by NGOs. It is also clear that such institutions address more than just economic issues – the obvious example being the protection of dolphins in the tuna industry.

Development in the Global South is similarly fostered by a range of institutions at various scales. Multilateral institutions such as the World Bank and regional development banks are funded by member states, but some states also have their own national development agencies. The development ‘industry’ is also populated with numerous development NGOs – some based in the Global North, but many more to be found in the Global South. Philanthropic foundations have also become prominent players in development policy and practice. Both NGOs and philanthropic organizations may work closely with national and multilateral development institutions, as well as governments in the Global South, so the line between governmental and non-governmental is constantly being blurred. Perhaps the most effective forms of development, however, are those that started from the bottom-up, so that the needs and resources of local communities are reflected in the economic (and environmental) transformations that are fostered.

Notes on the references

- Mawdsley (2017) provides a recent review of the debates on the Global South in development geography and other related fields. For recent in-depth geographical studies of development throughout the world, see Mawdsley (2012) on BRICS; Murphy and Carmody (2015), Ouma (2015), and Carmody (2016) on Africa; Rigg (2012, 2015), Aoyama and Parthasarathy (2016), and Yeung (2016) on East and Southeast Asia; and Werner (2016) on the Caribbean.
- For earlier trenchant critiques of the IMF and the World Bank in development geography, see Peet and Hartwick (2015).
- Aoyama and Parthasarathy (2016) offer an interesting geographical take on the rise of hybrid governance in the field of social innovation in education, energy, health, and finance.
- For a sample of geographers’ critical work on international development agencies and their role in fostering development, see Ballard (2013), Roberts (2014), Mawdsley (2015), Peck and Theodore (2015), and Webber and Prouse (2018).
- For some examples of community-based development initiatives, see Roelvink et al. (2015).

Sample essay questions

- How do Bretton Woods institutions govern the world economy?
- Why are global standards important in addressing major development issues?
- How do non-state actors and private foundations foster global development?
- What are multi-stakeholder initiatives and how can they be linked to community-based development?

Resources for further learning

- <http://www.imf.org>, <http://www.worldbank.org>, and <http://www.wto.org>: The official websites of three of the world's most powerful financial and economic institutions offer a wide range of information on how these multilateral international organizations can shape development outcomes.
- <http://www.brettonwoodsproject.org> and <http://www.bankinformationcenter.org>: Websites of critical voices on the IMF and the World Bank.
- <http://europa.eu>: The EU portal contains a whole host of information on the genesis and workings of the world's largest macro-regional organization.
- <http://asean.org>, <http://www.apec.org>, and <http://www.naftanow.org>: ASEAN, APEC, and NAFTA are other good examples of regional economic groupings.
- <https://www.cgdev.org>: Website of the Center for Global Development, an independent centre for evidence-based development policy research and analysis.
- <https://www.dosomething.org> and <http://www.globalissues.org>: Websites of CSOs that aim to make positive change to the world and reduce global poverty.
- <http://www.communityeconomies.org>: Website of the Community Economies Collective and the Community Economies Research Network that showcases different economic practices and pathways to development.

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CHAPTER 11

ENVIRONMENT

Does global climate change change everything?

Aims

- To understand the physical and economic geography of climate change.
- To examine the uneven geographies of global warming's causes and impacts.
- To explore the ways in which governments attempt to reduce carbon emissions.
- To analyze the changing economic geographies of a 'post-carbon' world.

11.1 Introduction

On some maps of the world, the island nation of Kiribati appears twice. When a map is centred on the Greenwich Meridian passing through London (as many are, due to the colonial legacies of imperial power), Kiribati's location at the Equator in the central Pacific Ocean means that it is often labelled on both edges of the map. Kiribati is, however, in danger of not existing at all. Global warming is causing sea levels to rise, and if projections for the coming decades are correct, much of the land surface of Kiribati's archipelago of islands will soon be under water.

Kiribati consists of 32 coral atolls and reefs spread across 3.5 million km² of ocean (see Figure 11.1). In addition to being one of the world's smallest countries (with a 2015 population of 112,407), Kiribati is also one of the poorest. World Bank data for 2016 indicate a per capita income of just US\$2,800 per year. Two-thirds of the country's land area of 726 km² is less than 2 m above sea level, and

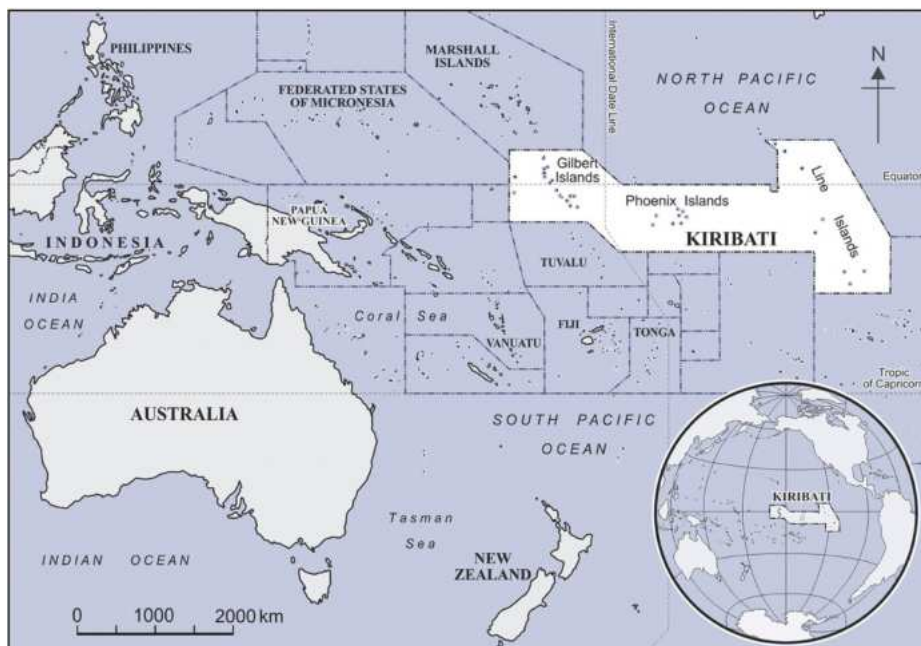


Figure 11.1 Map of Kiribati

very little is above 3 m (Donner and Webber 2014). The most recent assessment by the Intergovernmental Panel on Climate Change (IPCC) in 2014 reported a predicted mean sea level rise between 44 and 74 cm by the end of the current century, depending on future greenhouse gas emission scenarios (IPCC 2014). Nevertheless, such a global sea level rise will not be evenly distributed across the planet and may be higher in some areas, including the tropical Pacific (IPCC 2014). The situation is made even more complicated by natural changes in sea level in the Pacific due to periodic shifts in ocean circulation – known as the ‘El Niño’ phenomenon – which cause cyclical changes in water temperature and depth.

While sea level rise has profound implications for the very existence of Kiribati, the consequences of global warming for the country go much further. Higher air and water temperatures shift weather patterns and make extreme weather events such as typhoons and droughts more likely. The living ecosystem is also changing. Higher water temperatures and greater levels of dissolved carbon dioxide in ocean water are harmful to coral organisms. The 2014 IPCC assessment reported extensive coral damage in Kiribati, with implications for economic sectors based on fisheries and tourism (Figure 11.2). Other human impacts include a threat to the supply of fresh water in Kiribati. Many of its islands depend on a layer of fresh groundwater that sits above a deeper layer comprised of seawater. Sea level rise and storm inundation can reduce or contaminate this delicately balanced fresh



Figure 11.2 Picture of Tarawa, Kiribati

Source: reproduced with permission of Raimon Kataotao/EyeEm/Getty Images.

water supply. Global warming is not, therefore, just about warming – it encompasses a wholesale shift in ecologies, physical processes, and the human societies that depend upon them.

Kiribati is an obvious place to start our discussion because its very existence is directly threatened by climate change. Its population, physical size, and economy are all very small. If we look elsewhere, the impacts of global climate changes are magnified many times. The top five countries in terms of population living in vulnerable coastal locations (Bangladesh, China, Vietnam, India, and Indonesia) together account for almost half of the world's population. Nevertheless, the example of Kiribati highlights some key issues that we will explore in this chapter as we examine the economic geographies of climate change.

First, the complexity of physical environmental systems still leaves openings for misinformation about climate change – from so-called ‘climate sceptics’. For example, when scientific analysis notes that sea level rise in Kiribati is being exacerbated by natural ocean circulation patterns in the Pacific, this can be used to downplay the significance of human-induced climate change. In Section 11.2, we will examine several popular/misleading conceptions of climate change, including denials of its existence and professions of faith that technology will solve the problem.

We begin to roll out a geographical approach to climate change in Section 11.3. We will start with an understanding of the interactions between human and physical systems that have created the phenomenon, and note the way in which the physical environment creates a form of global connectivity that transcends political and economic processes. Thus, while Kiribati might be one of the most remote

countries on earth in relation to major centres of population and economic output, it is still connected in fundamental ways through physical–environmental systems. Our geographical theme of unevenness across space is also relevant here, as we will see that there is a distinct geography to the creation of emissions that cause global climate change. Needless to say, within this global geography of emissions, Kiribati bears very little responsibility and yet will potentially suffer a lot from it.

The impacts of climate change also need to be understood through a geographical lens, and we pursue this issue in Section 11.4. These impacts are often felt through complex environmental systems and feedback mechanisms, and may manifest themselves in unexpected ways. As seen in the case of Kiribati, two significant impacts are on coral reefs and fresh water supplies – neither, perhaps, where we would immediately expect to find the impacts of a warming atmosphere. It is only by understanding place-based environments and uneven vulnerabilities that we can come to terms with the geographically varied economic impacts of global climate change. We have noted the work of the IPCC whose assessments represent the careful development of a scientific consensus on the causes and impacts of climate change. A wide array of global agreements and governance programmes respond to the IPCC findings by attempting to limit emissions of the gases that cause global warming. In Section 11.5, we will examine some of these frameworks, which include carbon taxes, carbon offsetting, and cap-and-trade schemes.

The need to move beyond a carbon-based economy has led to the development of new economic sectors that seek to produce clean energy, use less energy, or supply products for the ‘green economy’. These sectors have specific spatial patterns that are often distinct from those of the older industries that they are seeking to replace. More broadly, the need to shift to a low carbon economy changes some fundamental assumptions about the spatialities of our economic world. We explore these geographies in Section 11.6. Finally, in Section 11.7, we take a step back from the mostly market-based solutions described in Sections 11.5 and 11.6. Instead, we return to the title of this chapter and ask whether something more fundamental is needed in the way we organize our economic systems and relationships to nature in order to lessen our destructive impact on the environment.

11.2 Climate Complacency

Considering the grave consequences of global climate change, in some quarters there is still remarkable complacency about the issue. A survey of global public opinion in 2015, for example, found that in the United States, only 45 per cent of people believed that climate change is a ‘very serious problem’. The United States was not alone, however: the figure was the same in the Asia-Pacific region and only slightly higher in Europe (at 54 per cent). Perhaps tellingly, though, the figure

was much higher in Africa and Latin America (at 61 and 74 per cent, respectively) (Stokes et al. 2015).

In part, complacency regarding climate change is rooted in the idea that there is still doubt about whether the process is even happening. In another survey, in 2016, 48 per cent of Americans thought that global climate change was due to human activity, 31 per cent said it was due to natural causes, and 20 per cent said that they did not believe it was happening at all (Funk and Kennedy 2016). In fact, for some time the proportion of Americans believing that climate change is due to human activity has remained stubbornly below 50 per cent – the numbers actually declined between about 2007 and 2011. In 2016, only 28 per cent thought climate scientists had a very good understanding of the causes of climate change.

These doubts are despite decades of clear scientific consensus on the existence of global warming, definitive statements on the link to anthropogenic (human-made) emissions, and a growing body of evidence of profound impacts on lives and environments (Oreskes and Conway 2010). Even in the 1960s and the 1970s, the American government had commissioned high-level studies to examine the link between carbon dioxide emissions and climate. In 1988, two high-profile events brought the issue to the headlines. First, James Hansen, director of the Goddard Institute for Space Studies, testified to the US Congress about the link between carbon emissions and global warming. Second, the IPCC was created as a global effort to assess and synthesize the best scientific evidence concerning climate change. In 1990, the first IPCC Scientific Assessment was published. It concluded:

we are certain... [that] emissions resulting from human activities are substantially increasing the atmospheric concentrations of the greenhouse gases carbon dioxide, methane, chlorofluorocarbons (CFCs) and nitrous oxide. These increases will enhance the greenhouse effect, resulting on average in an additional warming of the Earth's surface (Houghton et al. 1990: xi).

In the wake of Hansen's testimony and the IPCC report, it seemed that the US government would swing into action. President George H. W. Bush spoke of 'the White House effect' to counter the greenhouse effect; he sent his Secretary of State to the IPCC meeting in 1989; and funding was approved for a large-scale research programme on global climate change.

However, just at this critical stage, in the late 1980s and early 1990s, as a scientific and political consensus seemed to be forming on the need to take action on climate change, a counter-narrative started to emerge. This counter-narrative challenged the existence, causes, and impact of climate change and argued against taking action. It was propagated by a small group of scientists (although not climate scientists), economists, and think tank researchers, often with the support of the fossil fuel and automotive industries, and usually featured one or more of the

following arguments. Some argued that global warming is not happening and the data had been misinterpreted or misrepresented. Others suggested that warming is happening, but temperature fluctuations are a natural phenomenon due to variations in energy output from the sun and other environmental cycles. A further line of argument was that since there is uncertainty over the impacts of global warming, drastic action is unwarranted. Some have even argued that the impacts may be beneficial in terms of extended growing seasons and expanded cultivation zones in higher latitudes.

Finally, another argument (which contradicts the first three) is that warming is happening and its impacts will indeed be dire, but the costs of addressing it are so great that we should focus instead on adapting to a different environment through technological ingenuity and migration. Thus, faith is placed in developing new crops that will survive drier conditions, or more efficient car engines that will use less fuel. In addition to making these points, climate change sceptics have also sought to undermine the motives and practices of climate scientists and made their points loudly and effectively in the news media. Journalists covering climate change issues have therefore felt obliged to present ‘balanced’ coverage, by placing calls for climate change action alongside the opposing views of sceptics.

The arguments by sceptics have never been convincing in the face of detailed evidence, but they have managed to sow enough doubt among the public and politicians to effectively slow down or prevent action to curtail greenhouse gas emissions. Among those who have participated in this climate change scepticism, there seem to have been two broad motives. First, there is an ideological commitment to fighting ‘big government’. Many (especially Republicans in the United States) are suspicious of the planning, regulation, and spending that are involved in emission reductions. Second, orchestrated climate scepticism is supported by lobbyists and industry groups (especially in the fossil fuel and automotive sectors) whose profits or even survival are threatened by changing regulations or taxes on emissions.

Ultimately, however, the most important sceptics are perhaps those who deny climate change through apathy and inaction (a stance that applies to many more of us). In our everyday lives, it is often much easier to be in denial than to take action (Klein 2014). In part, this everyday denial is because it entails hard work to make sense of the scientific and policy debates about global warming. It is also because the consequences of climate change seem distant in time and space. But most of all, everyday denial of climate change is rooted in a sense that so much of what we as consumers enjoy (or aspire to enjoy) would be threatened by really tackling the problem: from private cars, to air travel, to inexpensive clothing, to globalized food supply chains (see Chapter 7). In this chapter, we will examine the causes and impacts of climate change, but in the end we will arrive at this difficult question: What fundamental aspects of our economic system need to change in order to tackle the threats posed by global warming?

11.3 Causes and Sources of Climate Change

Without an atmosphere, the average surface temperature of the earth would be around minus 23°C. This figure is based solely on the amount of incoming solar radiation that the planet's surface would retain. With the benefit of our atmosphere, however, the actual surface temperature of the planet is approximately +14°C. This warming or the so-called 'greenhouse effect' occurs because several atmospheric gases have the capacity to absorb and retain energy when solar radiation is reflected back from the earth's surface. The most important gas in this respect is water vapour (H_2O), but energy retention is also a property of carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), and ozone (O_3) (listed in descending order of their contribution to the earth's natural warming).

While such warming is a natural process, the important point is that human activities have increased the concentrations of 'greenhouse' gases and therefore the warming capacity of the atmosphere. This has primarily occurred through the burning of hydrocarbon-based fuels, such as coal, oil, and natural gases (along with their derivatives). This process of carbon release (and its conversion into atmospheric CO_2) started to pick up in the 1800s and then accelerated rapidly as industrial and urban development spread around the world.

Carbon dioxide is also produced in other ways, besides the burning of fossil fuels. Deforestation and land use changes (e.g. conversion to agricultural uses) lead to the release of carbon locked into plant material or soils. In more recent years, cement production has also been a significant source. Cement is made from limestone (calcium carbonate), and the heating process used in its manufacture releases large amounts of carbon dioxide. The incessant process of building urban and industrial societies has therefore increased carbon emissions. Because of these anthropogenic sources, between the pre-industrial era (around 1750) and the current decade (2010s), average levels of carbon dioxide in the atmosphere have increased by 40 per cent (see Figure 11.3). About half of that increase has been in the last 40 years (IPCC 2014). The earth's average temperature has increased by about 1°C since pre-industrial times, and the latest IPCC assessment estimates that 61 per cent of this increase is due to anthropogenic CO_2 emissions. Significantly, CO_2 also stays in the atmosphere for a longer period than other greenhouse gases.

The intensifying use of livestock for dairy and meat production has been a major source of methane (CH_4), which is released in the digestive process of animals such as cattle and sheep. Waste organic matter (including rotting plant material) is also a methane source. As our societies have shifted towards greater meat consumption and ever more waste production, methane concentrations have increased. Methane is a much more powerful greenhouse gas (per molecule) than carbon dioxide, but is present in much lower quantities and has a shorter lifespan in the atmosphere. It is estimated that CH_4 concentrations in the atmosphere have increased by 150 per cent between pre-industrial times and the

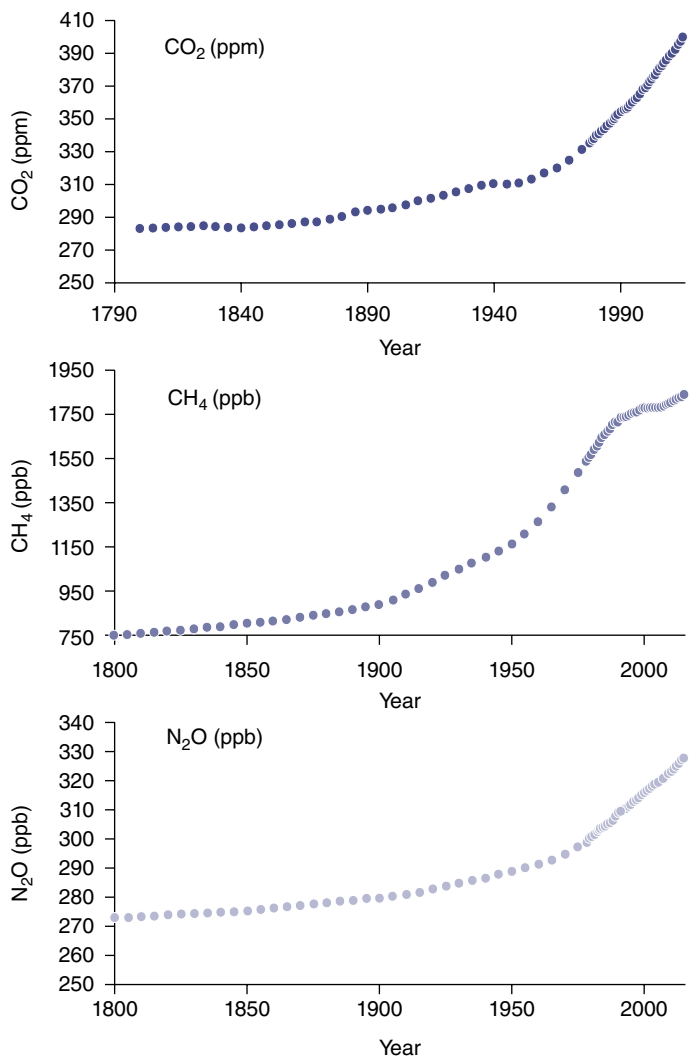


Figure 11.3 Globally averaged greenhouse gas concentrations, 1800–present
Source: data sources: IPCC (2014); European Environment Agency, <https://www.eea.europa.eu/data-and-maps>. Reproduced with permission of the United Nations.

present, and account for 17 per cent of the warming observed (see Figure 11.3). Processes of intensifying industrial production and consumption increase concentrations of other gases too. Nitrous oxide, for example, is generated through the application of nitrogen-based fertilizers to agricultural fields, while chlorofluorocarbons and ozone are released in industrial processes. Together these gases account for 16 per cent of global warming. Although all of these gases play a part, scientific and policy discussions usually convert them into ‘carbon dioxide equivalents’ as a single measure.

While increases in greenhouse gases are causing global warming, there are also feedback loops that can potentially intensify the process. For example, as permafrost regions across northern latitudes are thawed, they release trapped gases including methane, thereby further accelerating the process of warming. Similarly, the decline in annual sea ice extent and the permanent melting of polar ice caps reduces the earth's albedo (or reflectance) and therefore keeps more solar radiative energy within the atmosphere as less is reflected back out into space. Another feedback loop is created when unusually hot dry weather increases the size and frequency of forest fires, which in turn release more carbon into the atmosphere. At the same time, there is uncertainty about the role of clouds in providing a negative feedback that could counteract some of the warming (IPCC 2014). In all of these ways, there are various feedback loops that complicate our understanding of the exact trajectory of global warming. As a result, there has been much discussion of 'tipping points', as the reinforcing process of warming intensifies in a non-linear way.

A (perhaps obvious) point is that, once emitted, greenhouse gases circulate in the atmosphere and have an impact on the planet as a whole. Their effects are not limited to the areas where they are emitted. In this way, the global atmosphere forms a system of interconnection in which human activities are linked and made interdependent. Carbon dioxide emitted in the United States, or China, or Australia affects global concentrations. A distinctive feature of the climate change phenomenon, then, is that emissions from specific sources have longstanding impacts everywhere – both locally and globally. Responsibility for emissions has, however, been highly uneven, both in the present and in the past. Understanding this uneven geography of emissions is essential to determining who (and where) is to blame for climate change and who should therefore be responsible for reducing emissions, assisting those affected, and taking steps to minimize the impacts.

An initial geographical analysis of responsibility for greenhouse gas emissions might look at recent data for individual countries. Data for 2016 emissions of CO₂ are provided in Figure 11.4. The chart reveals that nearly half of all emissions come from the world's two largest economies: China and the United States. Other large economies, which also have high levels of mass consumption, such as Japan, South Korea, Canada, and the European Union, also feature prominently. Finally, major oil and gas producers, such as Saudi Arabia, Iran, and Russia, are listed.

A second and more insightful geographical enquiry would consider the historical or accumulated emissions that have been produced by different territories over time. As Figure 11.5 shows, even going back just half a century the bulk of carbon dioxide emissions have come from Europe and North America as the global centres of major deforestation, industrialization, urbanization, and high consumption. If the record were extended even further, these two regions would dominate global emissions all the way back to the Industrial Revolution. In recent years, there has been a shift towards higher emissions from developing countries,

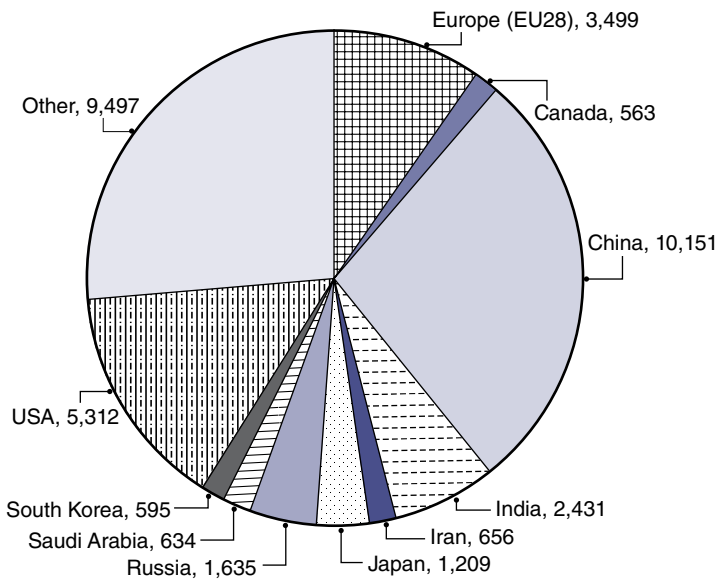


Figure 11.4 Emissions of carbon dioxide by country/region, 2016 (MtCO₂)
Source: data downloaded from www.globalcarbonatlas.org.

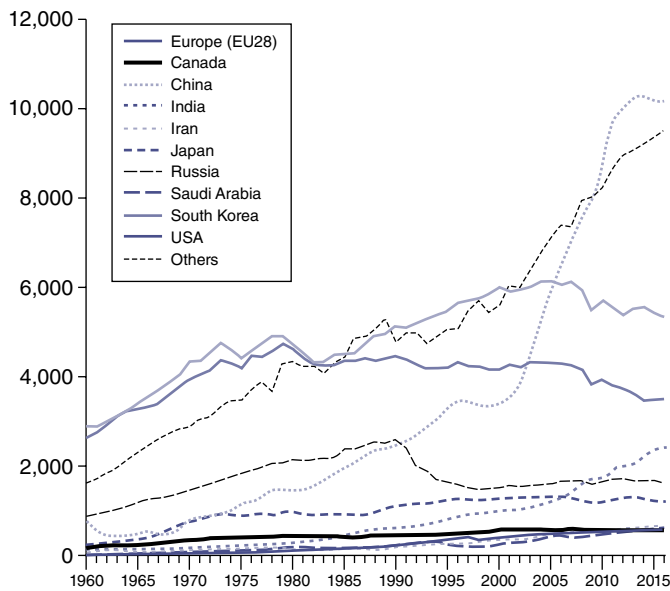


Figure 11.5 Emissions of carbon dioxide by country/region, 1960–2016 (MtCO₂)
Source: data from globalcarbonatlas.org.

especially larger countries that have been developing rapidly, such as China. Cumulatively, however, just over 50 per cent of anthropogenic carbon dioxide emitted from 1850 to 2014 came from the European Union, the United States, and Canada (WRI 2015). This shifting geography of emissions raises the concept of ‘climate debt’, meaning that wealthier countries have a historical responsibility for the changes being inflicted on the planet now and in the future.

A third geographical analysis would consider the connections and networks that exist in the global economy. Emissions in one part of the world may be generated in order to supply products for consumption in another part (Liverman 2015). For example, one calculation suggests that in 2008, 26 per cent of global emissions were generated due to the production of traded goods and services to be consumed elsewhere (Peters et al. 2011). Acknowledging a geography of global production networks thus makes responsibility for emissions far more complex than we think (see Chapter 4).

A fourth geographical take would integrate multiple scales into the analysis. High emissions in one region (for example, due to power generation or manufacturing activities) might provide goods or wealth to another region. In Canada, for example, emissions are high in provinces where bitumen is being mined from oil sands, or where natural gas is extracted from shale. But products created are generally not consumed in those regions and the revenue generated may spread over a range of geographies: to oil company shareholders located around the world; to banks and business service firms in Toronto; to the revenue base of the federal government in Ottawa that is then distributed nationally through government programmes; or remitted to the homes and families of oil patch workers who have temporarily migrated from the East Coast of Canada. It is therefore not easy to determine who and where is the ultimate economic beneficiary of emissions.

A fifth form of spatiality relates to the place-based context for emissions. Here, we would want to know what kinds of lifestyles or circumstances high emissions are supporting in a given place. In simple terms, this might concern a distinction between ‘survival’ and ‘luxury’ emissions. For example, India’s national emissions of CO₂ place it third in the world behind China and the United States. But in a context where mass poverty still exists and where 15.5 per cent of the population in 2016 (that is, over 200 million people!) did not have access to electricity, it is reasonable to ask if all emissions should be treated equally (World Bank 2018). In short, emissions that are used to bring about a basic right and quality of life should perhaps be considered differently than those that support high lifestyle consumption.

A final geographical question concerns whether a territorial space is even the appropriate unit for assigning emissions. The individual consumer or the firm might be better scales at which to attribute emissions. As Figure 11.5 shows, since around 2006 China has been the world’s largest national emitter of CO₂, but its territorial emissions *per capita* in 2016 placed it only fifty-third in the world. Reducing the attribution of emissions to the individual in this way can be taken

further still. In any society, the wealthy live far more emission-intensive lifestyles than those using fewer resources. Every aspect of individual consumption, from electronics devices and internet searches, to personal vehicles, to air travel, to household heating and cooling, can be included in a person's carbon 'footprint'. We might also consider the firm as the unit of responsibility, since it is at the firm level that profits are made based on a particular set of environmental/emission practices. One study suggests that from 1854 to 2010, just 90 companies (mostly in the fossil fuel and cement sectors) accounted for two-thirds of global carbon emissions (Heede 2014).

Clearly, the above spatialities of emissions matter because we can identify where responsibility should lie when it comes to reducing greenhouse gases. It has been precisely this differentiated responsibility that has been most contentious during international negotiations concerning emission reductions. To make sense of these complex negotiations, we first need a better understanding of the impacts and costs of climate change.

11.4 The Impacts and Costs of Climate Change

While the ways in which global warming affects physical environments around the world bear little relation to the geography of emissions, the economic costs of these impacts are also distributed unevenly and in ways that are disconnected from their causes. In this section, we examine some of the most pressing environmental impacts of global warming and the economic costs associated with them.

Physical Impacts

The direct impact of emissions is to cause warming in the atmosphere. Since 1880, the globally averaged combined land and sea surface temperature has increased by about 0.9°C (IPCC 2014), but the ways in which this then affects various physical systems is indirect and complex. Warming itself is unevenly distributed so that some regions have become significantly warmer while others have not. Hot dry days are increasing in number and intensity. The IPCC Assessment notes that 'each of the last three decades has been successively warmer at the earth's surface than any preceding decade since 1850' (IPCC 2014: 40). Models of the future predict further warming that will depend on the success (or failure) of efforts to curtail greenhouse gas emissions – likely somewhere between 2 and 5°C above pre-industrial averages by 2100.

As overall temperatures increase, some regions become wetter and others will become drier. The type of precipitation may also change. For example, in areas that find snow replaced by rain, a very different ecology results as the gradual release of spring meltwater is no longer happening. Such changes to hydrological regimes also cause unusually extreme or long-lasting flooding. Temperatures also

affect the geographic range, spatial distribution, and migration of plants, animals, insects, and fish populations – and the other species that are dependent upon them in an ecosystem (IPCC 2014).

Desert areas may expand on land due to drier and hotter conditions, but marine environments will also become less hospitable to life. The dissolving of CO₂ in ocean waters increases the acidity of seawater. Alongside higher temperature, acidity can affect the growth of sea organisms such as coral. In Australia, research on the Great Barrier Reef, a UNESCO World Heritage site, showed that in 2016 alone, coral cover declined by 30 per cent in just six months during a marine heat wave (Hughes et al. 2018).

Sea levels are also rising, partly because higher temperatures cause water to expand, and also because melting glaciers and ice sheets increase the volume of the oceans. During the period 1901–2010, global mean sea level rose by about 19 cm. As noted in Section 11.1, sea level is projected to rise a further 44–74 cm, depending on future emission scenarios. Marine environments are also changing because of declining sea ice extent in the Arctic. At current rates of greenhouse gas emissions, the Arctic Ocean would be ice-free in the summer by the mid-twenty-first century. Elsewhere in the cryosphere, permafrost depth and extent have also been decreasing.

Perhaps most notable of all climate change impacts are the uncertain links to daily weather patterns and the extremes they may reach. Warmer seawater adds greater intensity and power to typhoons or hurricanes that form over oceans and then move across land masses. Shifting weather patterns have also been linked to droughts and increased forest fires. Figure 11.6, based on the 2014 IPCC Assessment, synthesizes a range of biophysical impacts – including carefully calibrated degrees of confidence in attributing impacts to climate change.

Economic Costs

The economic implications of changes in physical systems are immensely complex to estimate as they involve so many aspects of human society. Our systems of production, transportation, and consumption are dependent on the natural environment at every turn. It is clear, however, that there are very few aspects of our lives that are *unlikely* to be affected as climate change proceeds. The IPCC Assessment identifies three sets of economic risks that we now consider in turn: (i) impacts on agriculture and fisheries; (ii) risks to urban infrastructure; and (iii) consequences for human health.

We have already noted the physical impacts of climate change in terms of species extinction, agricultural cultivation zones, and fish habitats and migrations. All have economic implications as these resources form the basis for production and livelihoods. Warmer temperatures and higher levels of carbon dioxide (used by plants in respiration) will mean fewer nights of frost at higher latitudes, faster

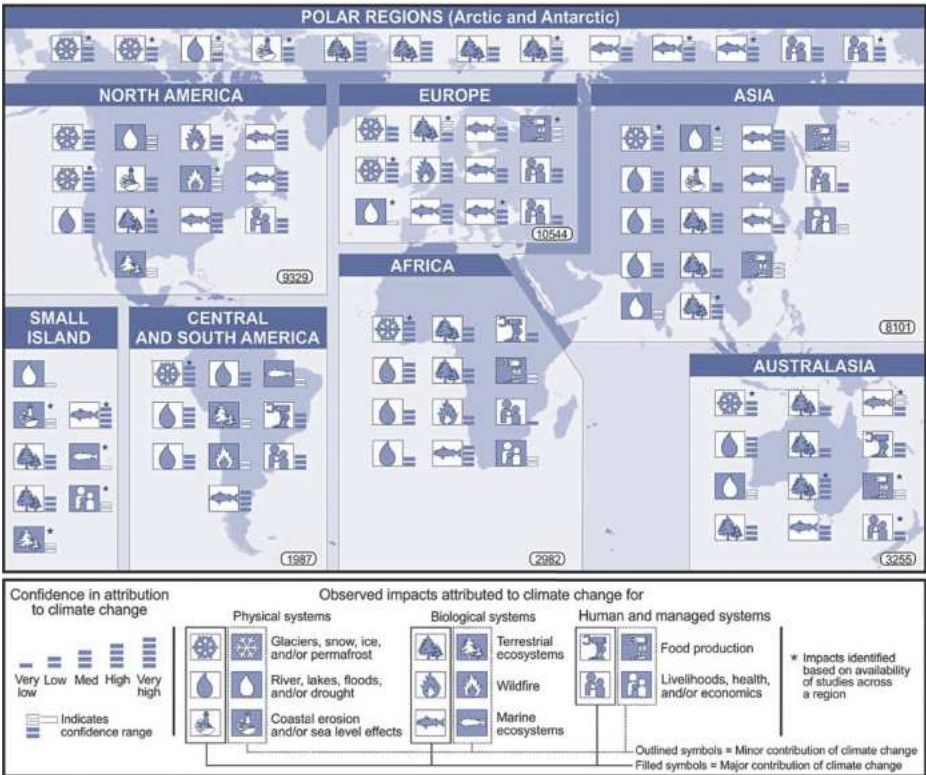


Figure 11.6 Observed climate change impacts on biophysical and human systems

Source: 2014 IPCC Assessment. Reproduced with permission of IPCC.

plant growth, and extended growing seasons. But this has to be placed alongside water shortages, expanding desertification, and shifting zones of cultivation. There are also the effects of extreme weather events, such as droughts, typhoons, and seawater incursions. Because of these negative factors, most models show a decline in crop yields over the course of the twenty-first century, with varying impacts across different crops. Global rice and soybean yields, for example, are less affected, but wheat and maize will decline in many regions. One estimate for North America suggests that temperature increases and water supply issues will reduce corn, soy, and cotton yields by 2020, with declines ranging from 30 to 82 per cent by 2099, depending on crop and future emission scenarios (IPCC 2014). With this pattern repeated across the world, it seems very likely that food security will be a problem for some regions and some social groups.

Urban water supplies, energy systems, housing, and businesses are also all highly vulnerable to extreme weather events, such as typhoons, hurricanes, and storm surges. Ultimately, in some areas of low-lying coastal land, the only viable option in the future may be to abandon them altogether. Three out of the five most costly hurricanes in American history occurred in August and September of

2017 (Harvey at US\$125 billion; Maria at US\$90 billion; and Irma at US\$50 billion). Hurricane Katrina in 2005 was even more devastating, causing US\$161 billion of property damage centred on New Orleans (NOAA 2018). The world's most powerful recorded storm was Typhoon Haiyan in the Philippines in November 2013. The death toll was officially recorded at over 6,000 people, with nearly 30,000 more injured. More than 1 million homes were totally or partially damaged and over 4 million people were displaced (IBON Foundation 2015). While it is problematic to make a direct causal link between any one storm and broader climatic changes, it is clear that the frequency and intensity of such events are increasing, and that warmer seawater provides a plausible explanation. It is also clear that storm surges (as the sea encroaches on the land), which cause so many deaths in such episodes, are exacerbated by higher sea levels. As noted in Section 11.1, island nations and coastal areas everywhere are significantly threatened by sea level rise. In some cases (such as Kiribati, and in the Indian Ocean, the Maldives), this represents a threat to the very existence of a country.

Human health impacts from climate change arise from both direct and indirect causes, and have economic implications in terms of healthcare costs, lost productivity, and livelihoods. Directly, injuries or deaths are caused by exposure to intense heat waves causing dehydration, heat stroke, and heat exhaustion. Particularly vulnerable groups include agricultural and construction workers who are exposed to the elements, but also children, the elderly, and the homeless. Less directly, the increased incidence of wild fires causes death and respiratory illnesses. Warming also increases the risk of foodborne and waterborne diseases because of expanding activity among various insect vectors. Undernutrition occurs in areas where food security is compromised due to crop failures. An assessment by the World Health Organization concluded that climate change is expected to cause approximately 250,000 additional deaths per year between 2030 and 2050 – of these, 38,000 will be due to heat exposure in elderly people; 48,000 due to diarrhoea, 60,000 due to malaria, and 95,000 due to childhood undernutrition (WHO 2018).

Economic models have sought to bring these various impacts together into unified analyses of the costs of global climate change. One of the most comprehensive accounts, sponsored by the British government in 2006 (known as the Stern Review) estimated that the overall costs and risks of climate change would be the equivalent of 5 per cent of global GDP each year. But the Stern Review also pointed out that using conventional economic measures underestimates the impact because the value of lost production, land, or housing in the global South is counted as being worth less. When that and other factors are included, the cost could be as high as 20 per cent of global GDP per year. The cost of action on the other hand – that is, taking measures to reduce emissions and avoid the worst scenarios of climate change – was estimated to be around 1 per cent of global GDP per year (Stern 2007).

A key concept in climate change economics is the 'social cost of carbon' (SCC), which is the 'real' cost of a tonne of carbon (or equivalent) emitted in the present. These estimates are important as they inform policies relating to carbon taxes (to

be discussed in Section 11.5). The SCC is calculated using a model that integrates the long-term damages from processes such as sea level rise, increasing cyclone frequency, human health impacts, and agricultural productivity declines. A key variable in such models is the rate at which future costs are discounted to make them equivalent to current costs – these discount rates are usually in the range of 1–5 per cent. William Nordhaus, who was awarded the 2018 Nobel Prize in Economics for his work in this field, developed one of the key models to estimate the SCC – known as the Dynamic Integrative Climate-Economy (DICE) model. In the most recent version of the DICE model, Nordhaus estimates the SCC at US\$87 based on a discount rate of 3 per cent (Nordhaus 2017).

These kinds of models and estimates are necessarily very sweeping and general, but serve a useful purpose in highlighting the long-term costs of current emissions. We can, however, add an important geographical perspective to these discussions by considering how vulnerability to climate change is shaped by *place-specific processes*. When extreme weather events such as typhoons, hurricanes, or droughts hit an area, they are usually presented as a ‘natural’ disaster that affects all people equally. Such equality of impact is, however, hardly ever true. In all contexts, the most impact is felt by those who are already the most disadvantaged in economic, social, and political terms. This might be because their livelihoods are already precarious – for example, farmers eking out a living on marginal land, or families who do not have the resources to move elsewhere even when warnings of danger are issued in advance. It may also be because their homes are already located on the most threatened land – for example, those living on low-lying or coastal areas that are prone to flooding. Or, there might be circumstances where undocumented migrants or minorities cannot easily access government services.

There are, then, many dimensions to vulnerability, including ‘class, occupation, caste, ethnicity, gender, health, age, land tenure, immigration status, and social networks’ (Liverman 2015: 308). The ways in which these forms of vulnerability operate are fundamentally related to how these forms of difference and unequal power are configured locally. As with all place-based analyses, local processes can only be understood in the context of connections to larger scales, and especially wider economic processes. In Box 11.1, we illustrate these points with an example from rural India. This example is illustrative of a broader body of thinking – political ecology – that addresses the ways in which political and economic power, livelihoods, and access to resources are all embedded in relationships with the natural environment. Box 11.2 provides a brief introduction to this field of research.

11.5 Regulating Emissions

The 1980s and the early 1990s saw a growing scientific and political recognition that global warming was a pressing issue. As we noted in Section 11.2, this consensus was undermined by climate sceptics, but it did lead to the establishment of

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Box 11.1 Vulnerability to climate change: the Deccan Plateau of India

A specific example highlights the importance of place in understanding why the impacts of environmental change will be uneven, both socially and spatially. The Deccan Plateau is a large inland area of south-central India, including parts of Telangana, Maharashtra, Andhra Pradesh, and Karnataka (see Figure 11.7). It is a mostly semi-arid region due to the rain shadow effects of



Figure 11.7 Map of India showing the Deccan Plateau and Ghats

coastal uplands – the Eastern and Western Ghats. Around 60 per cent of people in the region derive their livelihoods from agriculture, but it is a difficult existence because of regular droughts (Taylor 2015). These difficulties have been exacerbated in recent decades by three factors: liberalized agriculture, increasing household debt, and differential access to irrigation water.

Agricultural liberalization policies since the 1990s have reduced subsidies for farming inputs (such as fertilizer and seeds) and lowered the tariffs that had protected local producers. The main beneficiaries of these policies were larger farmers, while smallholders faced increasing hardship. Sources of credit to gain access to more expensive inputs forced farmers into cultivating cash crops rather than food crops – in this way, chillies, sugarcane, and cotton were increasingly grown alongside rice, while traditional food crops (such as sorghum and millet), which require less water and less fertile soil and are more drought resistant, were displaced. Higher water demands forced farmers further into debt as they borrowed money to drill bore holes to access groundwater. While affluent farmers could get further loans to deepen their wells in a ‘race to the bottom of the water table’, poorer farmers who were already deeply in debt had fewer options (Taylor 2015: 158). Class inequalities have therefore become more acute – not just because wealthier farmers are better able to prosper but also because debt itself represents a transfer of resources from the poorer borrower to the wealthier lender.

This is the already-vulnerable context into which climate change arrives. Average temperatures and days of extreme heat on the Deccan Plateau are increasing, monsoon rains are declining in frequency, extreme rainfall events are becoming more intense, and overall seasonal rainfall is decreasing (IPCC 2014). The impacts clearly deepen the crisis of survival for farmers. But vulnerability is not evenly distributed and is closely connected with the unequal economic system in which farmers operate. Those already on the edge of survival will suffer the worst consequences. The despair created by indebtedness, poverty, and environmental stress has caused increasing numbers of farmers to commit suicide. Official government figures recognized just under 10,000 farmer suicides in Andhra Pradesh and Telangana between 2011 and 2015, but wider estimates suggest that almost 60,000 suicides in India might be directly attributed to the stresses of climate change (Carleton 2017; Vaditya 2017).

On the Deccan Plateau, we therefore see a context in which human–environment relations and class relations are closely bound together. Furthermore, these local processes are linked to extra-local processes at multiple scales. Financial institutions are regional and national; development models have been driven by thinking promoted by World Bank advice and projects; and, agricultural commodity markets are shaped by local, regional, and global actors in the relevant production networks. It is a quintessentially geographical problem – and one with tragic consequences.

national and international institutions to negotiate reductions in greenhouse gas emissions. Over the last three decades, a variety of agreements and implementing mechanisms have been put in place. A geographical perspective on territory and scale is especially useful in understanding these regulatory processes. Ultimately, it is territorial power that shapes how emissions are regulated, but the multiple scales at which this happens explains why these schemes have so far failed to sufficiently reduce greenhouse gases.

The United Nations Framework Convention on Climate Change was established at the 'Earth Summit' in Rio de Janeiro in 1992. By 1995, negotiations were underway to establish targets and responsibilities and these were adopted in the Kyoto Protocol of 1997. The Protocol recognized the greater need for developed countries to reduce emissions (compared to developing countries) based on a principle of 'common but differentiated responsibilities'. Legally binding emission reductions relative to 1990 levels were agreed upon and would need to be met during two commitment periods, 2008–2012 and 2013–2020. A key weakness, however, was that the world's largest emitter, the United States, did not sign the Protocol. Another major emitter, Canada, withdrew from the agreement in 2011. Overall, while the emission reductions in the Kyoto Protocol were technically achieved, it was only because the fall of communism in Russia and Eastern Europe led to economic collapse and a decline of large-scale polluting industries. These emission reductions were unrelated to Kyoto-inspired policies.

The 2015 Paris Agreement, which addresses emissions in the period 2020–2030, saw all countries agree to the goal of keeping warming to below 2° (and preferably below 1.5°), but commitments were made based on 'Nationally Determined Contributions' rather than legally binding targets. The targets agreed in Paris do not actually meet the 2°C goal, so the framework also included five-year renewal cycles and strong accountability and transparency processes, in the hope that countries would establish more ambitious goals in the future.

Ultimately, then, the international regime for reducing emissions is relatively powerless to enforce targets. This is a key problem, as it leaves open the possibility of a geographically uneven map of regulations with industries gravitating towards weaker territorial regimes of emission control. Nevertheless, numerous national and subnational governments have implemented emission-reduction programmes. Generally, these have taken one or more of the following forms: carbon taxes; emission trading schemes; carbon offsets; and direct regulation of polluters.

A carbon tax places a direct price on a specific quantity of carbon emitted (or its equivalent in the form of other greenhouse gases). Putting a specific price on pollution in this way provides an incentive for conserving energy, lowering consumption, and shifting demand to less polluting alternatives. Those favouring carbon taxes point out that they can be used to shift the tax burden away from things seen as 'good' (like employment income or purchasing basic foods) and

FURTHER THINKING

Box 11.2 Political Ecology

Political Ecology is an interdisciplinary field of research that sees environmental problems as fundamentally rooted in economic and political structures of power. Political Ecology first emerged as a field in human geography in the 1970s. At the time, conventional approaches to human–environment relations, often labelled ‘cultural ecology’, tended to see societies as reaching a fully adapted and steady equilibrium with nature in specific places. Or, they saw ecological problems as technical issues that could be resolved with appropriate management. Growing awareness of environmental degradation around the world, and extreme poverty in the developing world in particular, meant that such views seemed increasingly inadequate. At the same time, the global environmental movement was gathering momentum in the 1970s and Marxian political economy was influencing human geographers to think more critically about the power relations that underpin capitalism (see Chapter 3).

Political ecologists started to examine how environmental change was embedded in social, economic, and political power structures. In this way, processes of privatizing common property, access to land and other resources, class-based inequality and exploitation in resource-based production, the role of the state, and the functioning of commodity markets were all seen as closely linked to ecological degradation. Nature and society were viewed as a combined system: ‘an ecological system in which capital necessarily privatizes, commodifies, monetizes, and commercializes every aspect of nature’ (Watts 2015: 32). An early classic in the field was Michael Watts’ book, *Silent Violence* (2013, first published in 1983), which examined drought and famine in West Africa. He showed that it was the interplay of markets, social inequality, and climate change that shaped the options available to different classes of peasant households as they sought to manage the risks of drought.

In the last few decades, the field of Political Ecology has expanded to encompass a wider array of empirical questions and theoretical influences. The ways in which environmental problems are represented and discursively constructed has been one broad line of inquiry since the 1990s. In this way, the scientific and technical management of ecosystems, such as forests, can itself become the object of study. Conservation strategies have been studied by political ecologists who question, for example, the impacts of nature reserves and national parks on resource access and economic well-being among different social groups (e.g. Lunstrum 2016, on Mozambique’s Limpopo National Park). Political ecology has also drawn from other

critical traditions outside of Marxism, examining, for example, the gendered power relations of resource access and the ways in which racialized groups are differentially subject to environmental degradation. For example, Pulido (2016) examines ‘environmental racism’ and ‘racial capitalism’ in the contamination of water in Flint, Michigan.

towards something that is bad (pollution). An example is found in the Canadian province of British Columbia. A carbon tax has been in place there since 2008 and is applied to the purchase and use of fossil fuels. The tax rate started at C\$10 per tonne of carbon (or equivalent), and gradually increased to reach C\$35 per tonne in 2018 – adding just under 8 cents per litre of gasoline. By 2021, the price will have increased to C\$50 per tonne. Revenue from the tax is refunded to residents of the province through tax credits, and the tax is used to provide incentives for businesses to become carbon neutral.

Carbon trading schemes work rather differently than carbon taxes (although in public discussions the two are often confused). In a carbon trading scheme, the government of a particular territory will decide the total emissions that will be allowed per year and will then issue permits that enable pollution up to that limit. Polluters who exceed their allowance need to buy permits from those who have not used up their full allocation. In this way, a market in pollution permits is created so that those reducing emissions will profit from selling permits, while those having to buy permits will be incentivized to find ways of emitting less. Such schemes are often, therefore, called cap-and-trade programmes. A major advantage of such programmes is that they place an absolute cap on emissions and therefore ensure that targets are met – unlike carbon taxes, where the price may not be set high enough to reach targets. On the other hand, it is difficult to get the initial allocation of permits correct, with the danger that large existing polluters are rewarded with large allocations. There is also the possibility that as emissions are reduced there will be an excess of permits on the market whose prices will be driven downwards. In this way pollution actually becomes less expensive. It is therefore important to ratchet down the allowable emissions target over time.

California’s cap-and-trade programme was started in 2013 and covers major emitters, such as large electric power and industrial plants and fuel distributors (e.g. natural gas and petroleum). It involves a ratcheting down of emissions caps from just under 400 million tonnes in 2015 to 200 million tonnes in 2030 (C2ES 2018). In total, around 450 businesses must participate in the programme, together accounting for about 85 per cent of California’s total carbon emissions. The goal of the programme is to reduce emissions from 1990s’ levels by 16 per cent between 2013 and 2020, and by an additional 40 per cent by 2030. The California scheme has been integrated with similar schemes in the Canadian provinces of Quebec and Ontario since 2014 and 2018, respectively (although the

participation of both provinces is now uncertain with newly elected governments in 2018). While the California scheme is not the largest in the world (the Europe Union's Emissions Trading Scheme, South Korea's cap-and-trade, and a pilot scheme in the Chinese province of Guangdong are all larger), it does represent the only cross-border emissions trading scheme that is organized by subnational levels of government (C2ES 2018).

Aside from carbon taxes and cap-and-trade scheme, a third, but related, form of emission reduction is through carbon offsetting. In some carbon trading schemes, permits can be acquired by offsetting carbon emissions with an equivalent reduction of emissions somewhere else. One key framework for such offsetting is the Clean Development Mechanism (CDM) established by the Kyoto Protocol in 1997. Under the CDM, emission-reduction projects (which reduce, avoid, or capture carbon emissions) in developing countries can earn 'certified emission reduction' (CER) credits – each equivalent to 1 tonne of CO₂. These CERs can be traded and sold, and used by industrialized countries to satisfy some of their emission-reduction targets under the Kyoto Protocol. By 2018, the CDM had registered more than 8,000 projects in 111 countries and had issued more than 1.9 billion CERs. The programme has, however, declined in recent years: while 379 million CERs were issued in 2012–2013, this had fallen to less than 150 million CERs in 2016–2017 (UNFCCC 2018). The CDM is not, however, the only source for carbon offsets. Many other schemes have emerged through private companies that offer the opportunity to 'invest' in projects that reduce or prevent emissions. The Australian airline Qantas, for example, operates the largest offsetting scheme in its industry, allowing passengers to compensate for their flight's carbon emissions by contributing to one of numerous projects. These projects include: supporting indigenous fire management techniques to reduce emissions from wildfires in Western Australia; conserving forested areas in Tasmania; and supporting rainforest community livelihoods in Papua New Guinea. As private offsetting programs have proliferated, various schemes to establish standards and certification have emerged, including, for example, 'The Gold Standard' (www.goldstandard.org).

Both carbon trading schemes and offsetting programmes have been widely criticized. As permits are traded and markets develop in emission credits, they become opportunities for speculation and profit-making (Bumpus and Liverman 2011). In that sense, pollution control starts to become a source of profit rather than prevention (Bryant 2018). The best solution to climate change issues is undoubtedly to reduce emissions in the first place, rather than buying permits or offsets that will make pollution acceptable. There may also be specific problems with offsetting schemes. It is hard to know, for example, if an offset credit has actually prevented carbon emissions that would otherwise have been released. Offset projects have also caused unintended consequences in the localities where they are implemented. For example, the local informal uses of forested land for

gathering firewood or other resources by local people may be ignored when it is designated as an offsetting project (Rotz 2014). In much the same way as a production network links the consumer of a t-shirt with the working conditions of distant and unseen garment workers, a carbon offset credit similarly creates a global network that links the purchaser with the distant users of a rainforest or other landscape.

A final form of emission reduction is through direct regulations or policy interventions. The United Kingdom and France, for example, both announced in 2017 that they would not allow cars or vans that use petrol or diesel to be sold in their territories after 2040. In China, the central government has used its enormous resources and close control over economic activity to push forward an ambitious programme of electric vehicle production. This has been done by providing incentives to domestic producers and subsidies to consumers, with the goal of 3 million electric vehicle sales per year by 2025 (Yeung 2018). Governments have also sought to encourage research and development in alternative green technologies (e.g. carbon capture and storage, wind or solar power generation, or waste recycling) through either direct funding or tax deductions. A notable feature of climate change policy, however, is that governments at all levels have been engaged – in some cases, subnational governments have been more proactive than their national counterparts. In the Canadian province of Ontario, the government made a policy decision in 2003 to end the use of coal-fired power plants. In this way, the amount of power generated by coal declined from 25 per cent in 2003 to zero by 2014. At the city level, urban governments have also taken an active role. New York City, for example, has a programme to retrofit 1 million buildings to make them more energy efficient, to electrify the city's vehicle fleet, to plant trees, and to install rooftop solar panels (Milman et al. 2017).

All of these programmes to control emissions are based on the territorial power of the state to regulate economic activities or its role as a producer of services. There is, however, a problem in the mismatch between the geographical scale at which regulations are implemented and the global scale of the issue being addressed. This problem becomes apparent in two ways. First, there is a clear possibility of 'free-riders', meaning that jurisdictions that do not implement stringent emission controls will benefit from the efforts of others (at least to the extent that those controls succeed in limiting global warming). This reduces the incentive for individual countries to tackle emissions. Ideally, a global agreement with penalties for non-compliance would govern emissions, but almost three decades of discussions through the United Nations Framework Convention on Climate Change has failed to achieve this. The only example of supra-state regulation remains the European Union's Emissions Trading Scheme.

A second, and related, point is that the local regulation of emissions can often just displace polluting activities to other jurisdictions – a phenomenon known as 'carbon

leakage'. Clearly this will become a more significant issue as emission regulations and costs start to rise. At a global scale we can see this happening with the huge rise in emissions from China (see Figure 11.5). Essentially, much of the world's manufacturing (of electronics, clothing, toys, etc.) and the associated emissions have shifted to China. But it can also happen inside national borders. Within China, different emissions trading schemes have been established at the provincial scale, with uneven emission allowances made for electricity generators (Zeng et al. 2018). When a product is easily transported and when costs are unevenly distributed across space, there will inevitably be a movement towards the least cost location – which, in this case, is the territory with the most generous emission allowances for power generators. Ultimately, then, local initiatives have limitations. The hope is that local regulations concerning carbon emissions will eventually prompt national and supranational scales of governance in order to tackle emissions more seriously.

11.6 Geographies of the Green Economy

The green economy, emerging as a result of concern and action over climate change, has two dimensions. The first relates to the development of new industrial processes and products as a response to the need to reduce emissions. The second dimension concerns a more general transition in the production and use of energy as 'decarbonization' becomes increasingly necessary. This has implications for the overall structure of urban and industrial geographies. We will address both of these dimensions in this section.

The previous section has examined the use of various schemes to reduce greenhouse gas emissions. Outside of such regulations, some commercial enterprises have also sought to reduce their emissions voluntarily. A minority are social enterprises (see Chapter 14) with a specific mandate to operate their business with a low environmental footprint – placing that goal higher than the imperative to generate a financial profit. An example would be a grocery store or restaurant that focuses on local produce in order to reduce emissions from transportation in global supply chains. Other businesses may simply be run by people for whom environmental concerns are a factor in their business decision-making. This can apply especially to small businesses whose owners have more freedom to act on their personal priorities and commitments (North, 2016). For other businesses, lowering emissions may be a rational economic strategy. Reducing the wasteful use of materials, investing in efficient machinery, or saving on energy are all ways in which costs can be reduced, while demonstrating environmental responsibility at the same time. In many cases, being able to publicize such responsibility may be the goal in itself, as it enables marketing opportunities that attract environmentally conscious consumers.

While new production processes are being adopted in many industries, the green economy also includes many new products and even entire industries. In the financial sector, the creation of markets in emission permits allows the development of new kinds of investment products. As noted in Chapter 8, as soon as a

tradable financial instrument is created, then the instrument itself becomes an opportunity to speculate and profit. In the insurance industry, new devices such as ‘catastrophe bonds’ are a way of responding to the risks of losses caused by, among other things, extreme weather events (Johnson 2014). In the manufacturing sector, the global production of items, such as solar panels, LED bulbs, and energy-efficient building materials, has expanded massively.

In some cases, new green economy production may have a distinctive economic geography. In the rapidly expanding electric car sector, for example, some producers are assembling vehicles in the traditional heartlands of the auto sector. In the American market, the Chevy Bolt, for example, is made by General Motors at its Orion Assembly plant near Detroit and the Toyota Prius is exported from Japan. The best-selling electric vehicles in the United States, however, are made by Tesla at its production facilities in Fremont, California. This sets up a quite different spatial pattern than the traditional geography of auto production. Meanwhile, far away from the centres of car manufacturing, mining companies are intensifying their search for sources of cobalt and lithium – both essential raw materials for the batteries that power electric vehicles. Around two-thirds of the world’s cobalt is mined in the Democratic Republic of Congo, in Africa, but Canada and China also have significant reserves. For lithium, mines in Australia, Argentina, and Chile provided the largest supplies in 2015 (Narins 2017). The geography of lithium production is especially interesting and provides some valuable insights into the world of resource extraction in general (see Box 11.3).

The second broad dimension of the green economy goes beyond the geographical patterns of individual industries and concerns wider ‘energy transitions’. The ways in which energy is generated and used across the world are changing. To a large extent this is because of the policies and regulations described in Section 11.5. A geographical perspective on these changes provides some important insights and we can identify several spatialities at work (Bridge et al. 2013).

The uneven distribution of economic activity reflects the way our economies have emerged over time based on an evolving energy system. A system primarily based on water power, then coal, and later electricity distribution, has shaped the economic geographies of many societies. Early industrial development was dependent on access to water power, while the use of coal led to the development of mining towns in places like Pennsylvania and South Wales. The development of oil and gas also changed the geography of the energy industry, with major reserves in Saudi Arabia, the United States, Russia, and Canada. In each case, a further spatial structure of pipelines, port facilities, and refining operations has developed. It is only to be expected, then, that any transition away from fossil fuels will also lead to new geographies of energy production and energy infrastructure. This has already driven new development in some places. Hydroelectric generation, for example, brought massive infrastructure development to parts of the Canadian province of Quebec in the latter half of the twentieth century. Similarly, the specific climatic and landscape needs of wind, tidal, and solar power generation all imply new geographies of production in the energy sector. The world’s largest solar

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Box 11.3 Lithium as commodity

Lithium is a critical raw material in the manufacturing of rechargeable lithium-ion batteries and is therefore an increasingly important resource as electric vehicles become more common. There has been a race to find and exploit new sources of the metal as the green economy has expanded. The price of the lithium has therefore been quite volatile. In late 2015, as major auto producers indicated serious moves into the electric car market, the price of lithium carbonate spiked from a steady US\$6,000–7,000 per tonne over previous years, to over US\$26,000 per tonne in first half of 2016, later settling just under US\$20,000 through to the end of 2017.

Several aspects of lithium extraction provide important insights into the extractives sector more generally. First, the material nature of a resource matters a lot. Lithium is the lightest metal on the periodic table and is used in relatively small quantities (compared to other metallic ores). In that sense, transportation costs are low. It is also a ubiquitous substance, but found in quite low concentrations and therefore only certain deposits are viable for extraction. The extraction process is also unusual, in that the primary useable source of lithium is in dissolved form in salt lake brine, which is evaporated to extract the metal. It does not, therefore, involve the same kinds of environmental and social disruption as many other forms of mineral extraction. Lithium in lake brine is primarily concentrated in Argentina, Bolivia, and Chile. However, reserves of lithium brine in those countries tend to be in remote mountainous areas of the Andes. At the same time, lithium production in China tends to be from hard rock minerals either mined domestically or imported from Australia, which also has significant known reserves (see Figure 11.8).

A second point relates to the importance of technology and economic demand in converting a natural material into a commodity. It is only relatively recently that the technology to extract lithium has been developed, and research has moved this technology ahead to accommodate deposits of the mineral at lower concentrations. Importantly, then, a material in nature only becomes a resource commodity when the technology exists to extract it.

Finally, there are always local politics associated with resource extraction in the sites where minerals are found, both nationally and where extraction occurs. Bolivia, located at the heart of major Latin American reserves of salt lake brine lithium, presents a particularly intriguing case. Despite having the world's largest known reserves, Bolivia has not even been among the top 10 lithium-producing countries. In part this is due to relatively low concentrations and the poor accessibility of remote sites. But it has also been because



Figure 11.8 An open pit lithium mine in Australia

Source: reproduced with permission of Carla Gottgens/Bloomberg/Getty.

nationalist politics in Bolivia provided fewer protections to foreign investors. International mining companies have therefore hesitated to become involved for fear that their operations might be nationalized. There is also local opposition to mining operations from agrarian and indigenous populations who see few benefits from such activity. For more on lithium, see Narins (2017) and Jaskula (2018).

power plant is located in Morocco, but by far the most solar power generation is in China, where installed capacity more than tripled in just three years between 2015 and 2017. The front cover of this book shows a relatively small solar farm in Leping, Jianxi province, China.

A decarbonization of the economy also has other consequences, well beyond the system through which fossil fuels are produced and distributed. Much of our economic world is based on the assumption of cheap oil – as a transportation and heating fuel and industrial raw material. Activities such as air travel – for people and for freight – depend heavily on this assumption. The global production networks for perishable food items are dependent on flexible and rapid transport. Complex assembly operations, including the auto sector, often also depend on logistics operations that can move batches of components quickly to where they

are needed. These kinds of operations have also developed on the basis of low transportation costs. If that assumption is undermined by higher fuel costs, then the spatial structure of certain industries may have to change. As carbon taxes and other mechanisms integrate the costs of emissions, and with growing consumer consciousness about the environmental impacts of global logistics, we are already seeing food supply chains showing signs of ‘deglobaling’, with local food movements arising in many places.

At the scale of city regions, sprawling suburbs are dependent on the fossil fuel-powered automobile (see Figure 11.9). In a post-carbon economy, that model becomes less tenable and the geographies of both production and reproduction (that is, residential landscapes) are shifting. We see, for example, changes in the form of urban densification, as cities increasingly seek to develop in more compact patterns and with greater dependence on public transit. Building design and materials are also becoming more energy efficient and in some cities charging stations for electric vehicles and bicycle sharing infrastructure are becoming increasingly common elements on the urban landscape.

The emergence of new geographies associated with the green economy is often contentious – especially at local scales. Forms of production and ways of life have developed in ways that are deeply dependent on the fossil-fuel economy. The movement to a post-carbon economy therefore comes with social disruption and unequal impacts. This might involve the decline of coal mining towns in which



Figure 11.9 Automobile-dependent suburban sprawl in Perth, Australia

Source: reproduced with permission of Jason Edwards/Getty Images.

strong communities and identities have been rooted; or, it might see the neglect of suburban locations that lack the density to justify transit. The installation of new forms of post-carbon infrastructure can also be contentious. A feature of fossil-based energy has been that it is produced through drilling or mining underground. The fuels produced in this way have been able to generate a large amount of power at a single point source. Renewable energy sources such as wind and solar generation, however, are far more dependent on large areas of land use that may conflict with other uses of space (Huber and McCarthy 2017). Such projects are especially controversial where they disrupt local land uses while the benefits accrue at regional or national scales. An example is found in the case of solar power in Gujarat state in India. There, the Charanka Solar Park became the largest installed solar generator in Asia when it opened in 2012. The 2,000 hectares of land used for the project was taken from a small village of 1,500 people who were mostly farmers and animal herders. While the land was officially designated as ‘waste land’, it was in fact used informally for charcoal production and grazing. Local livelihoods and ways of life were therefore deeply affected. In this way, a project that was seen as ‘environmentally good’ at regional, national, and global scales was borne at great cost at a local scale (Yenneti and Day 2016).

11.7 Should this Change Everything?

In Sections 11.5 and 11.6, we saw some of the ways in which the world is reacting to global climate change. There are approaches that control emissions through various kinds of taxation, market-making, or regulation (Section 11.5). These mechanisms are slowly forcing a transition towards a future based on different energy infrastructures and geographies of economic activities (Section 11.6). While this transition requires concerted action, it is not (or at least not yet) transformative of the ways in which we organize societies. There are, however, several arguments that suggest more profound changes are needed.

The first argument suggests that the actions described in Sections 11.5 and 11.6 will not even come close to limiting global warming to acceptable levels, and these efforts need to be dramatically intensified. A much more far-reaching and abrupt change in how we generate and use energy is required. An IPCC special report in 2018 noted that in order to limit global warming to 1.5 °C, global CO₂ emissions would need to decline by about 45 per cent from 2010 to 2030, and would need to reach zero net emissions by 2050. The equivalent figures for a 2 °C limit on warming would need to be a 20 per cent reduction by 2030 and zero by 2075. The report goes on to argue that this ‘would require rapid and far-reaching transitions in energy, land, urban and infrastructure (including transport and buildings), and industrial systems’ (IPCC 2018: 21). In other words, the coming decade will need to see dramatic changes in how we view mobility (by land and air), our diets (more local food, and less meat-based), and the ways we design

cities and buildings (for mass transit and energy efficiency). These kinds of transitions are feasible in technical terms, but they require a dramatic shift in expectations and would need determined and immediate action by governments and individuals.

A second argument concerns a philosophical change in how we view nature. Our economic system has emerged based on an operating assumption of ‘cheap natures’ – meaning that the resources of the natural world are assumed to be at our disposal (Moore 2015). Alongside this assumption we have developed cultural traditions that assume dominance over nature. This is evident, for example, in the labelling of our current geological epoch as the ‘Anthropocene’, implying human mastery of nature (Davies 2018). Wherever possible, nature is assumed simply to be there for the taking – to be without value. Certainly, some aspects of nature (timber, crops, land, minerals, groundwater, and plants) might be bought and sold and thereby assigned a monetary value. Outside of those specific valuations, though, much of nature is taken for granted. In particular, we have come to treat the earth’s great ‘commons’ – the oceans and atmosphere in particular – as sinks that will just continue to supply our needs or absorb our waste without consequences. As we saw in Chapter 1, the capacity of the oceans to perform this role is reaching its limits as plastic pollution threatens various forms of marine life. The same clearly applies to the atmosphere in relation to greenhouse gas emissions. An argument can be made, then, that our view of nature as something external, dominated, and undervalued needs to change. We need, instead, to view human society as ‘in nature’, rather than separated from it.

The third argument relates to the capitalist system that provides the main way in which we interact with nature. In her book *This Changes Everything*, Naomi Klein (2014) argues that early opponents of action on climate change recognized something important. She suggests that sceptics and deniers are not simply reacting because they are linked to the fossil fuel industry whose profits are at stake. They are also threatened because the implications of climate change have some very profound ramifications for the ways we organize our economic lives. To address climate change would be to question key aspects of capitalism itself. There are several logics of a capitalist system – and especially a neoliberal model – that, she argues, are incompatible with maintaining the integrity of our global environment (see Chapter 3):

- The imperative for continual growth in production.
- Continual expansion to encompass new spaces of production and consumption that require global transportation and mobility.
- Private ownership of resources and the privatization of ecological commons.
- An ethos of maximizing corporate profits and individual wealth.
- The externalization or socialization of as many costs of production as possible in order to maximize profitability.

- Opposition to regulations and government planning that create barriers to profit and wealth accumulation.
- Opposition to government spending (including ambitious emission-reduction projects).

This is not to argue that individual capitalist firms (and their owners and employees) are directly antagonistic towards the global environment. Rather, it is the system in which they compete that ultimately rewards those who conform to the positions listed above.

The answer, according to Klein, is to engage in a rethinking of the capitalist rules that organize our economic system and define our relationship to nature. This rethinking would take several forms. First, it would involve greatly increasing public ownership of economic activities, especially in contexts where environmentally important infrastructure such as transit and power generation has been privatized. These facilities would also need significant investment. For both public and private sectors, careful and extensive planning would be needed to ensure efficient, sustainable, and coordinated development. This also implies that for those areas that remain the domain of private enterprise, corporations would need to be closely regulated and incentivized to behave responsibly. A second area of change would be the re-localization of production so that our lifestyles are no longer dependent on ships, jets, and trucks to complete global production networks. Clearly this would involve a change in the geographical structure of many production systems. Continual capitalist expansion to find new markets and new products would have to be curtailed.

A third major change would be to curb the culture of consumerism that underpins lifestyles in wealthier countries and classes around the world. Consuming less must, however, recognize that much of humanity still needs to consume more to even meet their basic needs. The greatest burden must therefore rest with some societies and classes more than others. Continual expansion of consumption and expanding economic growth cannot, then, be the driving imperative of the system. This is an idea that has received widespread attention by ‘degrowth’ advocates – a concept that has been widely debated, for example, as *postwachstum* in Germany and *décroissance* in France (D’Alisa et al. 2015). All of this sounds like a very radical set of demands, but as we will see in Chapter 14, many would argue that these kinds of practices (sustainable, public, equitable, and ethical) already exist – they just need to be expanded and nurtured.

11.8 Summary

Although a compelling scientific consensus on the anthropogenic origins of global warming has been in place for some time, the implications of the process for our carbon-dependent economic world has made it a contentious issue. A part of that

contentiousness relates to the clear geographical unevenness of emissions. Responsibility for climate change is unevenly distributed, but it is a changing geography that closely tracks global shifts in economic activity. Such shifting responsibility is made even more complex when the emissions of global production networks – supplying consumption far from the sites of production – are accounted for. The physical system in which climate change occurs is also geographically complex, and so emissions in one place have uneven biophysical and human impacts around the world. It is clear, however, that humanity will see some profound changes in the decades ahead, in terms of impacts on fisheries and agriculture, less secure food and water supplies, damage to urban infrastructure, and effects on human health. In the carefully calibrated language of the IPCC, we can have ‘high confidence’ in these predictions.

Some analyses of climate change have sought to assess global impacts using the all-encompassing models that are the preferred tools of professional economists (see Chapter 2). A geographical approach, however, allows us to dig deeper into the physical and economic circumstances of specific places – an approach that allowed us to see interacting physical, economic, and political processes on the Deccan Plateau of India, for example. Such a place-based approach makes it clear that vulnerability is determined not just by where in the world you live but also by differentiated forms of economic power (and disempowerment) that are both rooted locally and shaped by global connections.

We have seen that efforts are underway by territorial governments (at various scales) to address carbon emissions, but again a geographical lens is important to study such schemes critically. With a few exceptions, carbon taxes, cap-and-trade schemes, and regulations are all national programmes. The UN framework for negotiating emission reductions has generally not been able to create a globally scaled solution to match the global scale of the problem. Territorial schemes are ultimately a mismatched and uneven mosaic of efforts that are susceptible to free riders and the displacement of emissions. Where emission regulation does happen on a transnational scale – for example, in the case of carbon offsetting – a place-based analysis is required to assess carefully whether emission reductions are really happening.

It seems clear that a rapid transition towards a post-carbon economy will have to come, and this has far-reaching implications for the uneven geographies of economic activities. Specific sectors of the ‘green economy’ are developing, often with quite different spatial patterns of growth than older industrial sectors. In some cases, previously overlooked resources such as lithium have become hot commodities, and they have distinctive geographies of extraction and processing. A broader change is implicated by a shift in how we produce and use energy. So much of the geography of our economic world has been based on an assumption of relatively inexpensive fossil fuels. A wholesale shift to renewable energy has far-reaching geographical implications. Some have argued that we need more than a shift to new sources of electrical power. Instead, we need to look at the imperatives of the capitalist system and its relationship to the natural world. It is in this sense that climate change has the potential to ‘change everything’.

Notes on references

- In Economic Geography, the work of several scholars has been influential in relation to the economic dimensions of climate change. For example: Diana Liverman (2015) on carbon emission regulation; Gavin Bridge on oil, extractive industries, and energy transitions (Bridge et al. 2018); Robin Leichenko (2018) on vulnerability to climate change; and Janelle Knox-Hayes (2018) on the construction of carbon markets.
- A contemporary overview of Political Ecology as a field is provided by Perreault et al. (2015). Marcus Taylor (2015) applies a political ecology approach to climate change adaptation and vulnerability in India, Pakistan, and Mongolia.
- The definitive works of synthesis on climate change science and impacts are the assessments of the IPCC. The most recent (fifth) assessment was published in 2013–2014 and its various components are available at www.ipcc.ch. A widely publicized special report on ‘Global Warming of 1.5 °C’ was released in 2018. The Sixth assessment will start to be released in 2021, with the full synthesis in 2022.
- The Stern Review (Stern 2007) was an early and comprehensive account of the economics of climate changes. William Nordhaus’ work on climate change was awarded the 2018 Nobel Prize in Economics. His technical work is widely available (e.g. Nordhaus 2017), while Nordhaus (2013) provides a more accessible introduction.

Sample essay questions

- How are the causes and impacts of climate change uneven across space?
- Describe four different means used by governments to reduce carbon emissions and discuss their advantages and disadvantages.
- Can climate change be addressed with policies that work within a capitalist market system, or will more fundamental changes to the way our economy is organized be needed?
- How does the emergence of a post-carbon green economy reshape existing economic geographies?

Resources for further learning

- The online Global Carbon Atlas (n.d.) (<http://www.globalcarbonatlas.org>) provided some excellent visualizations of the geography of greenhouse gas emissions, scientific projection of climate change impacts, and other issues. The CAIT Climate Data Explorer (from the World Resources Institute) is another excellent source of comparative data.

- Numerous documentary films address the science, economics, and politics of climate change. For this chapter, some especially relevant titles include: Matthieu Rytz's *Anotes Ark* (2018), which depicts Kiribati's struggles with climate change; Robert Kenner's *Merchants of Doubt* (2014), which is based on the book by Oreskes and Conway (2010) cited in this chapter; and Avi Lewis' *This Changes Everything* (2015) based on Naomi Klein's book of the same title.
- The Canadian Broadcasting Corporation has freely available six-part podcast titled *2050 Degrees of Change*, which examines the physical processes and human impacts of climate change in British Columbia in an accessible but informative style. The Elephant podcast (from 2015 to 2017) provides an excellent series of interviews on climate change science and policy.
- Many newspapers now have themed sections on climate change. The Guardian, in particular, has been providing excellent coverage for a long time, and is accessible free of charge: www.theguardian.com/environment/climate-change.

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PART IV

SOCIAL AND CULTURAL DIMENSIONS

CHAPTER 12

CLUSTERS

Why does proximity matter?

Aims

- To understand why proximity still matters for many different kinds of economic activity.
- To appreciate the range of clusters found in the global economy.
- To explore the different forces, both economic and sociocultural, that bind economic actors together in particular places.
- To consider the ways in which clusters depend on external network connections, and how they develop over time.

12.1 Introduction

You may not have heard of Sand Hill Road, a visually unremarkable street in Menlo Park, California. Since the early 1970s, however, when pioneering firms such as Kleiner Perkins Caufield & Byers and Sequoia Capital were established, Sand Hill Road has been the centre of the global venture capital industry. There are now dozens of venture capital funds clustered in the neighbourhood (see Figure 12.1), including the investors managing three of the largest six funds in the United States (New Enterprise Associates, IVP, and Canaan Partners). Venture capital firms are private fund managers who invest in early-stage companies – usually in high technology sectors – acquiring equity shares through successive rounds of investment. It

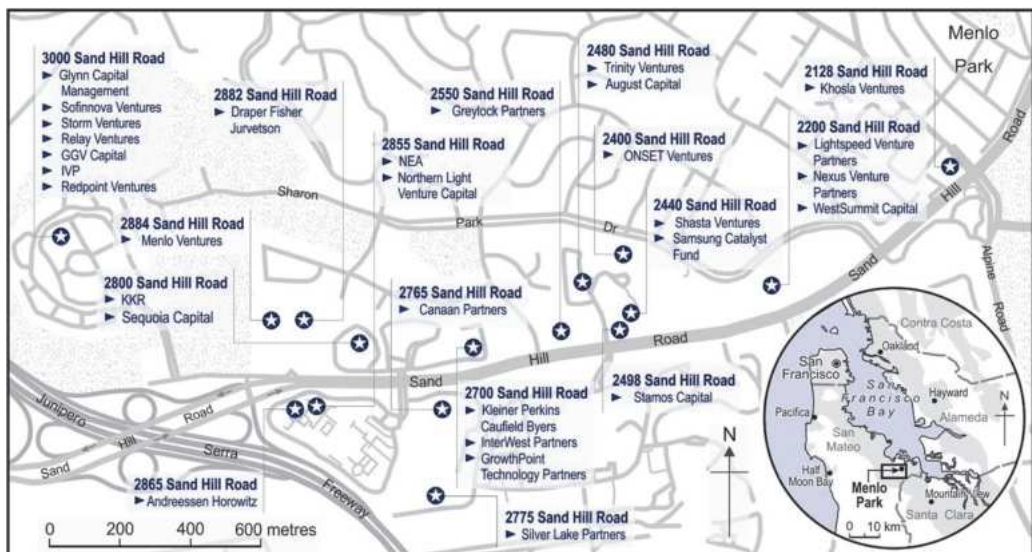


Figure 12.1 Venture capitalists on Silicon Valley's Sand Hill Road

Source: data from <http://www.ivycommercial.com/blog/2017/10/12/why-vcs-wont-leave-sand-hill-road> (accessed 29 May 2018).

is a high risk and high reward form of corporate financing that funds ideas usually not supported through traditional bank loans. Some of the returns from the most successful investments are startling. Both Kleiner Perkins Caufield & Byers and Sequoia Capital invested US\$12.5 million into Google in 1999, for instance. After Google's stock market launch in 2004, those investors' stakes were worth about US\$4.3 billion each (i.e. 350 times the original sum). WhatsApp represents another huge success for Sequoia, its only venture capital investor. When Facebook bought WhatsApp in 2014 for US\$22 billion, Sequoia's investment of US\$60 million over two rounds had grown in value to US\$3 billion.

In 2017, the United States accounted for 55 per cent of global venture capital investment. California, in turn, dominated the US industry with a 50 per cent share of total US venture capital investments, while the region around Menlo Park constituted just over 80 per cent of the Californian total. Put another way, the cluster of firms centred on Sand Hill Road invested 22 per cent of the global venture capital in 2017, or approximately US\$35 billion. Collectively, the firms were managing around US\$160 billion in total investments (data from NVCA 2018). In recent years, several leading firms have set up offices in places such as China, India, and Israel to try and tap new market opportunities, while significant new sources of venture capital have emerged in Asia. Overall, however, Sand Hill Road's position as the home of the global venture capital industry remains undisputed.

How can we understand this long-standing cluster of venture capitalists along Sand Hill Road? There are four lessons here. First, in an era of advanced and instantaneous telecommunications, it illustrates the continued importance of 'being there' in particular places, of having a physical presence among the networks of lawyers, investors, inventors, and entrepreneurs that constitute the social fabric of the area. Sand Hill Road is embedded in the innovative region of Southern California known as Silicon Valley, which is home to an impressive array of the world's most powerful and influential technology, software, and social media firms (see Figure 12.2). The close physical proximity of talent and capital in the area is central to its competitive success. Interactions do not just take place in workplaces but also in restaurants, coffee shops, bars, and other social spaces. Second, it demonstrates how over time, certain places become associated with certain forms of economic activity; they become known as the 'place to be'. These reputational effects reinforce the strength of the cluster, and start to explain the importance of having an address on Sand Hill Road in particular, rather than just being located in the wider Silicon Valley region. In short, having the right address gives the firms located there a certain credibility that in turn enables them to raise the capital on which their business depends.

Third, the attributes of venture capital as an economic activity are important to understand. In Chapters 4 and 5 we have seen how certain forms of production can be dispersed at the global scale and managed over great distances through the use of technology. Venture capital investments, however, are based upon localized networks of 'know-how' and 'know-who' that allow the rapid and effective circulation

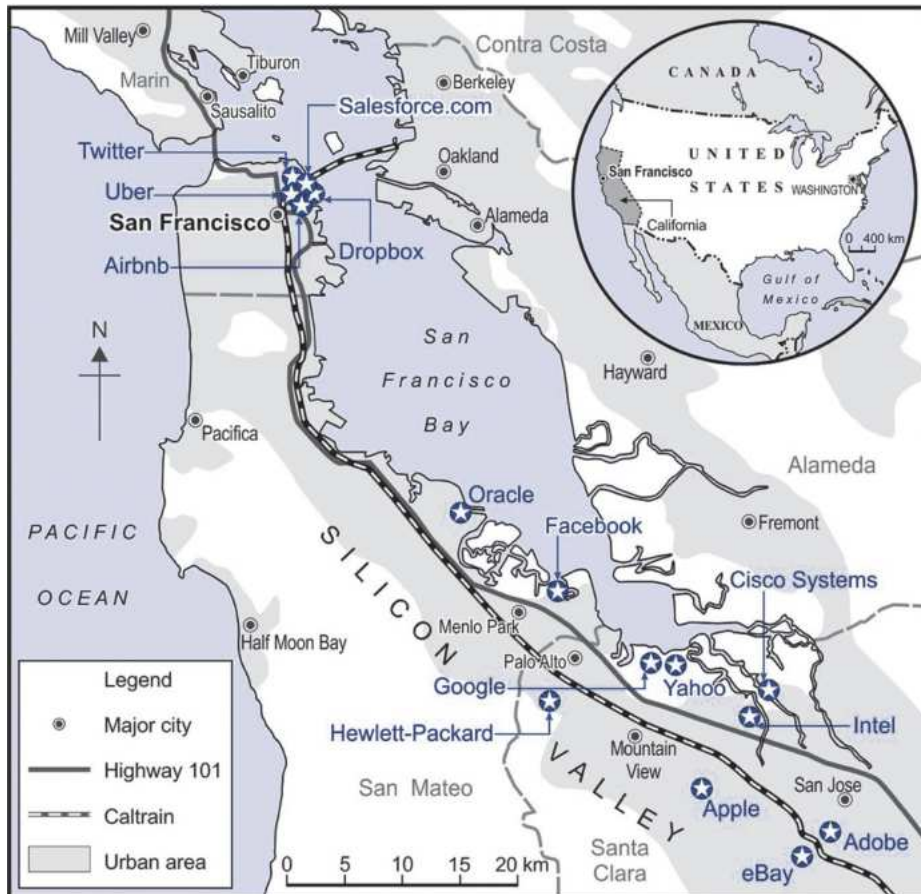


Figure 12.2 Leading technology companies in Silicon Valley

Source: the authors.

of particular forms of knowledge. Selecting new industries for investment and finding promising firms requires detailed observation of market and technological trends over time; working with firms after the initial investment also necessitates frequent ongoing interactions based on trust and social relations. In the risky and volatile world of venture capital and high technology industries, the place-specific relations between technologists and financiers are absolutely crucial. Fourth, Sand Hill Road offers a window on to the way in which locally specific ‘ways of doing business’ may develop over time. Silicon Valley is in part unique because of the particular business practices or ‘cultures’ that have developed there over a matter of decades, distinguishing it from other high-tech clusters around the globe.

This chapter, then, is about understanding the tendency of certain kinds of economic activities to cluster together in particular places. Clustering is not specific to Silicon Valley or the venture capital industry; rather it is a generic characteristic of the capitalist economy and is seen in all sectors and places. Promoting

the development of clusters is extremely popular with policymakers as they are often based on high value-added activities and are export oriented, thereby contributing strongly to economic growth. As will see later, however, there can be risks associated with clusters being overly specialized on a limited range of economic activities. Our argument here proceeds in six stages. In Section 12.2, we explore the need to move beyond the intra-firm factors considered in traditional location theory models and incorporate relationships external to the firm in explaining location decisions. Section 12.3 details the wide range of clusters that coexist within the global economy and are driven by different kinds of interactions – the venture capitalists of Sand Hill Road constitute just one cluster type among many.

We then unpack the nature of those local interactions in two stages. First, in Section 12.4 we look at the various contractual connections between firms that may bind them together in a cluster. Second, in Section 12.5 we broaden our canvass to look at a range of sociocultural forces that may also provide the ‘glue’ holding a cluster together. As part of this analysis, we will look at how regional cultures may build up over time as a result of long-standing patterns of intense interaction. In Section 12.6, we explore ways of understanding cluster development over time through deploying recent evolutionary thinking in economic geography. Finally, we start to question the notion of clusters as a ‘permanent’ form of agglomeration by considering how certain attributes of clusters may be achievable over short timeframes via what might be termed ‘temporary clusters’ (Section 12.7).

12.2 Industrial Location Theory

During the industrial revolution, Sheffield emerged as the world’s foremost steel-making city, a position it held into the early twentieth century. The industry prospered from Sheffield’s combination of local iron ore, coal, and water power as well as key innovations in metal working that built upon the city’s longstanding reputation as a centre for cutlery making. In textiles, Manchester similarly emerged as a global centre for the cotton industry, with 2,000 mills employing some 360,000 workers having sprung up across northwest England by 1860. Further afield in the northeast United States and northwest Europe, large-scale production of textiles and iron and steel also developed rapidly in coalfield regions, with burgeoning canal and rail networks facilitating the transportation of both raw materials and finished products. Lowell, Massachusetts (United States), Lille (France), and Ghent (Belgium), for example, are other places synonymous with early industrialized textile production.

It was against this backdrop that the first attempts to understand why firms locate in particular places emerged. Here, we will focus on the work of Alfred Weber, a German economist whose 1909 classic work *The Theory of the Location of Industries* was published in English in 1929. He developed his theory in the context of strong industrial growth in the coalfield areas of the Ruhr region of

Germany in the late nineteenth century. His aim was to develop a general theory of location that could explain the spatial distribution of production activities, and the approach he developed was a *least cost model* of industrial location. This seemed to be entirely appropriate in a period in which the dominant industries were locating close to energy and raw material sources, and transportation networks. These also contrast rather sharply with those modern industries described in Chapters 4 and 5 on networks and transnational corporations.

Weber started from the observation that manufacturing plants tended to locate where total transportation costs were minimized. He proposed that transportation costs were shaped by two factors – the *weight* of the materials to be shipped along with that of the final products to be taken to market, and the *distances* over which both the materials and the end products had to be transported. From these two elements, Weber derived a basic unit of cost, the ton-mile. The locational decision then became a search for the point where the total ton-mileage of a given production and distribution process was at a minimum. His locational triangle was a key representation of the industrial location problem (see Figure 12.3a). The triangle models a situation in which a single manufacturing plant needs to

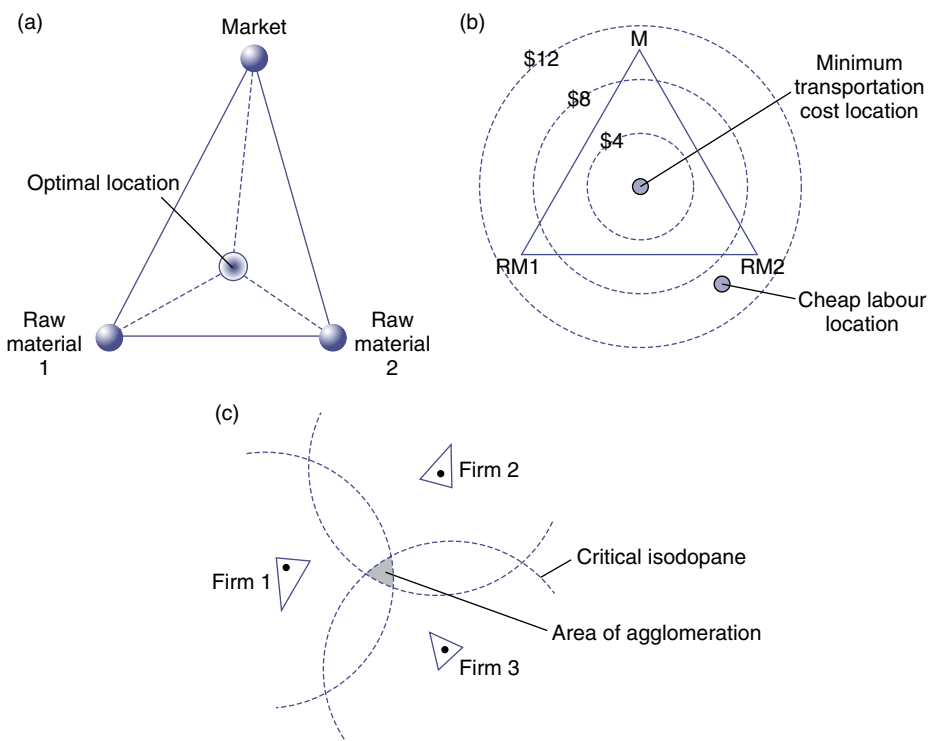


Figure 12.3 Weber's industrial location theory: (a) the locational triangle; (b) critical isodapanes; (c) agglomeration economies

Source: the authors.

access two sources of raw material inputs and one market location. Weber then used both mechanical and mathematical models to calculate the least cost location within the triangle. This process highlighted the significance of whether the manufacturing process was *weight-losing* – in which case the optimum location was drawn towards the raw material sources – or *weight-gaining* – in which case it was drawn towards the market site. So, while metal smelting, for example, is likely to take place near to where the relevant ores are extracted, the production of soft drinks or cars is likely to be located close to market.

In addition to modelling the effects of raw materials, markets, and transportation costs, Weber also introduced variable labour costs into his analysis. Through an index of labour cost, he measured the average cost of labour required to produce a given unit weight of a product; industries with a higher index were presumed to be more sensitive to spatial variations in labour costs. His model predicted that firms would move towards a source of cheap labour if the savings per unit of production were greater than the increase in transportation costs incurred by moving. This was calculated through using *isodapanes*, or lines of equal cost. The *critical* isodapane represented the places where the savings from a given location factor were just enough to outweigh the additional transport costs of being in that position. Looking at Figure 12.3b, if the critical isodapane is \$8, then it does not make sense to move to the cheap labour location, as the extra transport costs outweigh the savings in labour costs. If the critical isodapane is \$12, however, the cheap labour location falls within it, meaning that the labour savings exceed the extra transport costs and the firm should move.

Weber's approach to industrial location, and others like it, was particularly dominant in economic geography during the 1950s and the 1960s. Since the 1970s, however, they have been extensively critiqued by economic geographers as such abstract modelling techniques have slipped out of fashion (see Chapter 15). In many ways it is easy to see why. His model unfolds on a featureless territorial surface that bears little resemblance to the real world. It assumes that industrial decision makers have access to perfect information and act in an entirely rational manner dictated by pure economic thinking. It represents raw materials, markets, and cheap labour as being located at single points in space, which is clearly not the case. It prioritizes transport costs that are now a far less significant component of a firm's total costs, particularly in the service sectors that dominate the economic structure of many advanced economies. That being said, the basic insight that industrial location is shaped by the trade-off between different production costs still has tremendous contemporary resonance, particularly in the notion of the new international division of labour (see Box 5.4). The rise of China, India, Brazil, and others as global manufacturing hubs reflects the way in which low production costs can offset transportation costs. Moreover, state economic policies in many countries across the world are clearly driven by a desire to attract inward investment through offering lower production costs.

Importantly, however, Weber was also one of the first to consider the nature of the *agglomeration economies* – i.e. the cost savings that accrue from co-location – that form the focus of much of the rest of this chapter. While industries do indeed agglomerate or cluster, to differing degrees, at the sources of raw materials, at transportation and transshipment terminals, and at cheap labour locations – as predicted by industrial location theory – clustering offers further economies for the firms that take part in it. In contrast to the *internal* economies that can be accrued within a firm by, for example, producing at larger volumes (known as ‘economies of scale’), there are economies *external* to these firms that can be derived from connections to other firms and organizations (described as ‘inter-firm relationships’ in Section 5.5). Put another way, the connections of a firm to other participants in the wider cluster can lead to additional savings unavailable to those managing their own resources. For Weber, these agglomeration economies exerted a similar ‘deviational’ or pulling force on the least cost location generated by proximity to cheap labour. Whether firms moved in response to them depended upon whether the savings outweighed the additional transport costs accrued from moving. As Figure 12.3c demonstrates, agglomeration only occurred when the critical isodapanes of the relevant firms intersected. In other words, the small shaded triangular zone marks out an area in which the cost benefits of being co-located for all three firms exceed those incurred in moving from their current sites.

The analysis of agglomeration was arguably one of the weaker elements of Weber’s analysis. His work reveals little about the nature of agglomeration economies, in particular in relation to transfers of technology and other kinds of knowledge flows, and his view of industrial relocation is extremely simplistic and mechanistic. Moreover, agglomeration economies are different to other variables such as resource or labour costs in that they depend on the alignment, or not, of locational decisions taken by multiple firms. Nonetheless, in developing the idea of agglomeration economies, Weber’s work signalled what has become a very significant strand of economic geographical research. As we will see in the sections that follow, however, the way in which agglomeration economies are conceptualized and understood has developed significantly in recent decades.

12.3 Towards a Typology of Clusters?

The first step towards a fuller understanding of clusters is to recognize the wide variety of agglomerations in the contemporary economy, wherein firms of different kinds come together for different combinations of reasons. Moreover, as we saw at the start of the chapter, clustering can be observed from the broad regional scale (e.g. Silicon Valley) all the way down to the very local street/neighbourhood scale (e.g. Sand Hill Road). A large city such as New York, for instance, offers general agglomeration economies at the metropolitan scale to a wide variety of

different economic activities. Looking within New York City, however, you will find many more focused clusters of activity offering additional specialized agglomeration economies to firms in the financial sector (Wall Street district), advertising (Madison Avenue), and the fashion industry (midtown Manhattan), to name but a few. Recognizing this variability in terms of geographical scale, sectoral composition, and causal dynamics is vital if economic geographers are to understand effectively the contemporary space economy. In this context, we can usefully think of the following eightfold typology of significant cluster types:

- *Labour-intensive craft production clusters.* These are typical in industries such as clothing where work is characterized by sweatshop conditions and often very high levels of immigrant labour (see Chapter 6). Firms are involved in tight subcontracting networks, and may also use homeworkers. These networks require co-location to facilitate the efficient exchange of goods at different stages of the production process. Examples include the garment production districts of Los Angeles, New York, and Paris.
- *Design-intensive craft production clusters.* These refer to dense agglomerations of small and medium-sized firms specializing in the high-quality production of a particular good or service. They are characterized by a highly disintegrated production system in which individual small and medium-sized firms perform specialized and narrowly defined roles. These dense networks may have a high reliance on familial connections and artisanal skills. Again, co-location facilitates the efficient operation of a fine-grained division of labour. The industrial districts of central and north-eastern Italy are perhaps the pre-eminent examples. These districts, scattered across the provinces of Tuscany, Emilia-Romagna, and Veneto (see Figure 12.4), have collectively become known as the 'Third Italy', in contrast to the traditionally industrial north and agrarian south of the country. Each has an established international reputation for the production of a particular kind of customized, design-intensive, and high-quality product. Santa Croce, a leather tanning district in Tuscany, 40 km east of Pisa, is one such case. From the 1970s onwards, in response to burgeoning international demand for quality Italian leather products, this small area has developed into a production district of several thousand employees and over five hundred artisanal firms and subcontractors. These firms are engaged in a complex and fine-grained division of labour undertaking the 15–20 separate stages of leather tanning. The district is also home to the warehouses, export/shipping agents, buyers, chemical companies, and haulage firms needed to sustain the industry, as well as a range of supportive non-firm institutions.
- *High-technology innovative clusters.* These are characteristic of 'new' post-Fordist sectors, such as computers and biotechnology. These clusters tend to have a large base of innovative small and medium-sized firms and flexible, highly skilled labour markets. The concentration of particular forms of

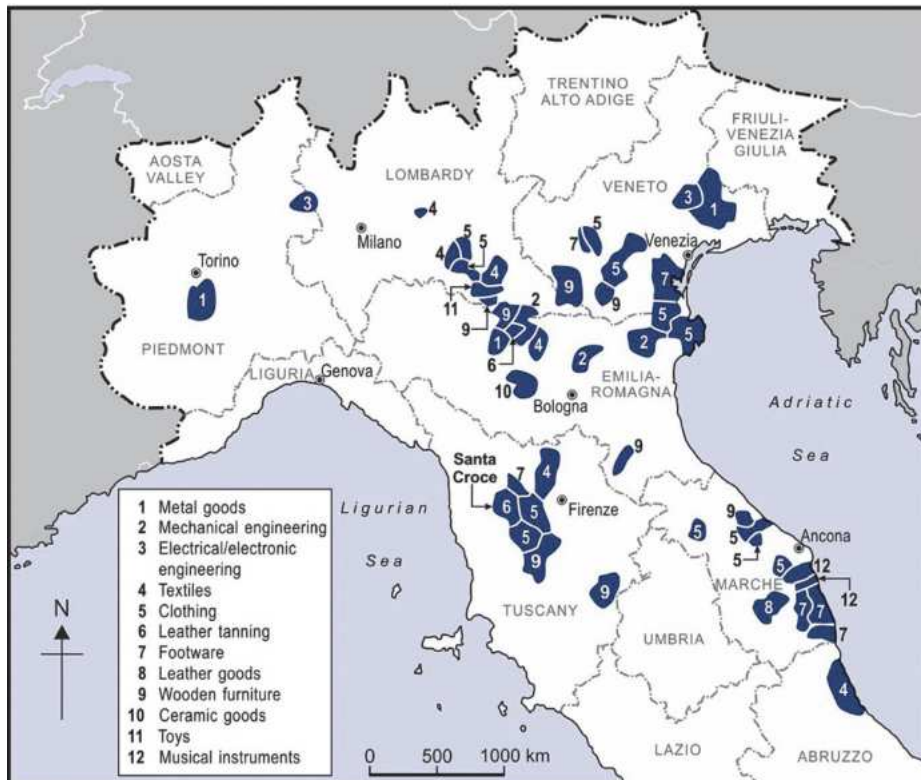


Figure 12.4 Industrial districts in Italy

Source: adapted from Amin (2000), figure 10.1. Reproduced with permission of John Wiley & Sons.

expertise forms the basis of the cluster. They have often grown up in areas with little history of industrialization and unionization. Examples include the Silicon Valley and Route 128, Boston, districts in the United States; Grenoble, France; and Cambridge, United Kingdom.

- *Flexible production hub-and-spoke clusters.* In these clusters, a single large firm, or small group of large firms, buys components from an extensive range of local suppliers to make products for markets external to the cluster. These clusters represent the spatial logic of just-in-time production systems. As Table 12.1 illustrates, the scale and frequency of component deliveries inherent in the system require close relationships between customers, suppliers, and logistics operators, and therefore create a strong incentive for co-location. Figure 12.5, for example, illustrates the close proximity of key suppliers and logistics firms to Toyota's plants in Toyota City, Japan. The three different kinds of plants are connected by tightly choreographed 'milk runs' of delivery vehicles that constantly circulate between them in the most efficient manner. Other examples include Boeing in Seattle, United States, and company towns

Table 12.1 The characteristics of ‘just-in-case’ and ‘just-in-time’ systems

‘Just-in-case’ system	‘Just-in-time’ system
Components delivered in large, but infrequent, batches	Components delivered in small, very frequent, batches
Very large and costly ‘buffer’ stocks held to protect against disruption in supply or discovery of faulty batches	Minimal stocks held – only sufficient to meet the immediate need
Quality control based on sample check after supplies received	Quality control ‘built in’ at all stages of supply chain
Large warehousing spaces and staff required to hold and administer the stocks	Minimal staff and warehousing required
Use of a large number of suppliers selected primarily on the basis of price	Use of a small number of preferred suppliers within a tiered supply system
Remote relationships between customers and suppliers	Very close relationships between customers, suppliers, and logistics operators
No incentive for suppliers to locate close to customers	Strong incentive for suppliers to locate close to customers

Source: adapted from Dicken (2015), figure 5.21. Reproduced with permission of Sage Publications.

in Germany, such as Ludwigshafen (where chemicals giant BASF provides one-third of total employment), Ingolstadt (Audi; one half), and Wolfsburg (Volkswagen; 80 per cent).

- *Production satellite clusters.* These clusters represent congregations of externally owned production facilities. These range from relatively ‘low tech’ assembly activity, through to more advanced plants with research capacity, but all are relatively ‘stand alone’. Firms have generally co-located to access the same labour market conditions or financial incentives within specific territories. Examples are to be found across the export processing zones (EPZs) of the developing world. The electronics industry on the Malaysian island of Penang is a specific instance of this kind of cluster but, importantly, they are increasingly found in service sectors. The massive growth in ‘offshore’ hubs for call centres and other forms of business process outsourcing (BPO) since the 1990s is indicative here. Call centres represent a form of firm–customer interface whereby a wide range of support services (e.g. sales and marketing, technical support, claims enquiries, market research, reservations, and information provision) are provided via telephone from dedicated centres to an often widely dispersed global customer base. Cities in India (e.g. Bangalore and Mumbai) and the Philippines (e.g. Manila and Cebu City) have been the biggest

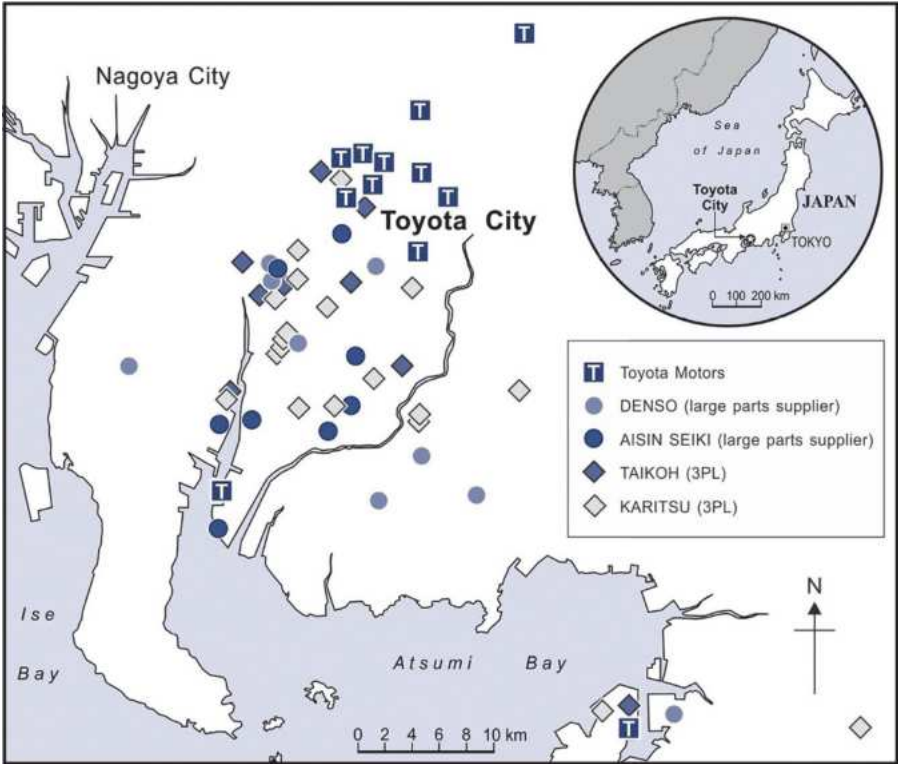


Figure 12.5 Just-in-time clustering in Toyota City, Japan
Source: adapted from Kaneko and Nojiri (2008), figure 6. Reproduced with permission of Elsevier.



Figure 12.6 Call centres in Manila, the Philippines
Source: reproduced with permission of Jana Kleibert.

beneficiaries of foreign investments in BPO facilities that seek to tap into young, affordable, and English-speaking workforces. The BPO sector provides some 1.2 million jobs in the Philippines and US\$21 billion in annual revenues. Manila accounts for 80 per cent of the industry, and new call-centre clusters

have sprung up in districts such as Makati and Bonifacio Global City (Kleibert 2017; see Figure 12.6).

- *Business service clusters.* Business service activities such as financial services, advertising, law, and accountancy are usually to be found in the central districts of leading or 'global' cities (e.g. New York, London, and Tokyo: see Box 8.2), and in some cases, their hinterland regions (e.g. software and computer services in the Western Arc of counties outside London). Indeed, such activities are among the most spatially concentrated of all sectors. Business services enable control and coordination functions for global production networks and hence usually co-locate with TNC headquarters in leading cities to facilitate knowledge exchange.
- *State-anchored clusters.* A disparate category of clusters has developed due to the location decisions of government facilities, such as universities, defence industry research establishments, prisons, or government offices. Examples include agglomerations that have developed due to government research investment (Colorado Springs, United States; Taejon, South Korea; M4 Corridor, United Kingdom; and Singapore's Biopolis) and universities (Madison, Wisconsin, United States; Oxford/Cambridge, United Kingdom; and Beijing, China).
- *Consumption clusters.* There are also strong propensities to cluster – often in central urban areas – in a wide variety of consumer service activities including retailers, bars and restaurants, and cultural and leisure facilities. The theatre districts of the London's West End and New York's Broadway offer specific examples, as do the many retail and entertainment districts of Tokyo (e.g. Shibuya) and Shanghai (e.g. Xin Tian Di). Las Vegas, in turn, provides a compelling example of a whole city economy based upon consumption activities (see Box 12.1). Tourist activities more generally also tend to congregate around different kinds of amenities (see Chapter 7).

CASE STUDY

Box 12.1 Viva Las Vegas!

It is hard to think of a more iconic example of a consumption cluster than the city of Las Vegas, in Nevada, United States. The city, famously founded on the site of a small desert railroad and agricultural town in 1905 is now home to over 2 million people. As is well known, the city has now grown into a massive centre of gambling, leisure, entertainment, and retailing, attracting 42 million visitors in 2017 who spent US\$10 billion on gambling and US\$35 billion in total in the city in that year. 6.5 million of those visitors came for the more than 20,000 annual industry conventions and trade shows for which the city is also renowned. The employment structure of the city clearly reflects its reliance on consumption activities: in 2017, 292,000 workers (29 per cent of the total) were employed directly

in leisure and tourism activities, with many others employed in related and support industries, such as government, health, education, business services, and construction. Manufacturing, on the other hand, employed only 23,700 workers (2.4 per cent of the total). Over the period from the mid-1970s until the mid-1990s, Las Vegas transformed itself from an American casino resort to a tourist attraction with global appeal, a transformation supported by national and local regulatory conditions that facilitated quick decision-making on planning and development requests. The leading theme park, retail, and casino attractions are clustered along the city's famous 'Strip' (see Figure 12.7), and the city is home to 12 of the world's 20 largest hotels, led by the MGM Grand with almost 7,000 rooms. The example of Las Vegas speaks to the importance of consumption for the economy of particular places, and also the way in which such places promote themselves as leisure destinations where visitors are induced to spend money, and in this instance, gamble (see Chapter 7). The narrowness of the city's economic structure created problems during the economic downturn of the late 2000s as consumer spending fell sharply, leading to high unemployment rates (hitting 14 per cent in late 2011) and falling property prices and real wages. The Las Vegas economy has recovered since then, and has diversified somewhat with the city now home to two large internet firms, Switch and Zappos, for instance. Overall, however, and as the data presented here make clear, Las Vegas is still heavily reliant on attracting external visitors to the city's attractions.

Source: data taken from *Economist* 2015.

In reality, of course, applying any such typology is not an easy task. Some places are constituted by clusters that are *hybrid* forms merging the characteristics of two or more of these types. For example, Silicon Valley (see Figure 12.8) is effectively a 'cluster of clusters', variously exhibiting the traits of a high-technology innovative cluster, a flexible production hub-and-spoke cluster (due to the presence of large high-tech manufacturers such as Intel and Hewlett-Packard), and a state-anchored district (due to the significance of huge levels of government defence spending). In addition to this complexity, Silicon Valley is not just defined by local interactions. Its firms are also very well plugged into or in fact leading a variety of important national and global production networks with diverse partners, suppliers, and customers. In other words, clusters are not necessarily shaped by local forces only. While simple categories of clusters give us a starting point, we need to work towards more nuanced understandings (see Box 12.2). We now move on to look in more detail at the agglomeration economies that bind clusters together.



Figure 12.7 A consumption cluster – The Strip, Las Vegas

Source: RebeccaAng/Getty Images.



Figure 12.8 A multifaceted cluster? High-tech business in San Jose, Silicon Valley

Source: Steve Proeh/Getty Images.

FURTHER THINKING

Box 12.2 The limits to clusters?

Although the idea of clusters has become extremely influential in both academic and policy circles, its ascendance has not been without critique. Taylor (2010) goes as far as to argue that the notion of clusters has become a ‘mesmerizing mantra’ that obscures meaningful understanding of the growth dynamics of local agglomerations. There are several elements to these critiques:

- *Slippery scales*: the geographical scale at which clustering is seen to occur varies widely from small districts within cities (e.g. Soho in London or Tribeca in New York) through city-regions as a whole (e.g. Paris or Shanghai) to small national economies (e.g. Singapore or Ireland). Precision is required as to the precise spatial scale at which clustering dynamics take place or the concept risks becoming meaningless.
- *Over prioritizing ‘the local’*: there is a real danger that cluster accounts overemphasize the importance of local economic interconnections at the expense of connections over wider geographies, e.g. at the national or international scales. Often the significance of local connections is presumed rather than demonstrated empirically, while there is counter-evidence that forms of knowledge can be effectively transferred across clusters, e.g. within TNCs and their global production networks.
- *Cluster interactions*: views also vary on the nature and importance of links between individual industry clusters within wider agglomerations. This may occur within the same industry – Beijing, for instance, has three complementary clusters in the biomedical sector (Bathelt and Zhao 2016) – or in broadly similar industries. We will return to these ideas in Section 12.6.
- *Capitalist imperatives*: many clustering accounts focus on the positive aspects of community, collaboration, shared goals, and win-win interactions. The capitalist imperatives of competition, prices, profits, and unequal power relationships – equally if not more important to the success of a cluster – can seemingly be neglected (see Chapter 3).

12.4 Binding Clusters Together: Agglomeration Economies

At first glance, the continued agglomeration of economic activity in an era of advanced transportation and communications technologies seems rather counter-intuitive. Traditional explanations of agglomeration – reprising the famous economist Alfred Marshall’s (1890) ideas about the industrial districts of Britain in the late nineteenth and early twentieth centuries – focus on four main sets of factors:

- The development of *intermediate industries* providing specialized inputs. The co-location of manufacturers with suppliers of component goods and services serves to reduce transport costs.
- The growth of a pool of *skilled labour* as workers acquire the skills required by local industry, thereby reducing the costs for firms and workers to find employees and jobs, respectively.
- The emergence of *dedicated infrastructure* and various other collective resources that reduce the costs for individual firms. This encompasses elements of the built environment – property, transport, communications, power supply, etc. – as well as a wide range of services pertaining to education, training, health, etc.
- The facilitation of both formal and informal *face-to-face contact* through the concentration of economic activity, in turn leading to the transfer of information about all aspects of economic activity, thereby enhancing the diffusion of ideas and innovations.

Taken together, these four forces generate agglomeration economies (i.e. cost savings) for individual firms locating within a particular cluster. These agglomeration economies can either derive from the concentration of firms in the same or related industry (e.g. a pool of suppliers or specialized labour) or from the general clustering of different industries in large urban areas (e.g. access to common educational or transport services).

In this and the following section (12.5), we will look at two kinds of agglomeration economies that help to bind firms together in specialized clusters. The first can be termed *traded* interdependencies (Storper 1997) and can be accrued through firms co-locating in a cluster alongside suppliers, partners, and customers with which they have formal trading relationships. Proximity to these firms reduces the transaction costs of transportation, communication, information exchange, and searching and scanning for potential customers. The greater the spatial dispersion of firms, the more onerous these costs will be. The consequence is that groups of firms with high interaction costs will chose to co-locate, thus creating an agglomeration tendency. We have already seen these forces at work in some of the cluster types presented in Section 12.3. In craft production clusters, the proximity of small firms and homeworkers enables fine-grained divisions of labour, while in flexible production clusters, suppliers often choose to locate close to customers in order to meet the needs of just-in-time production systems. It is thus common to find clusters of suppliers surrounding assemblers and manufacturers in many manufacturing industries (e.g. automobiles in Toyota City and personal computers in China's Chongqing municipality). In both cases, a key process underlying the agglomeration of firms is *vertical disintegration*, whereby lead firms shed many manufacturing activities and, instead, purchase components and modules from their suppliers in order to focus on their core competencies of design, innovation, and product integration. This disintegrative process creates more inter-firm transactional relationships within a particular sector, and hence a

strong propensity for spatial agglomeration to minimize the costs associated with sustaining those relationships.

We can illustrate these arguments with a brief exploration of the film and television production agglomeration centred in, and around, Hollywood, Los Angeles (Scott 2005; see Figure 12.9). Hollywood has long been the centre of a global industry now worth some US\$90 billion a year – split between cinema (US\$40 billion) and home entertainment revenues (US\$50 billion). The industry employs approximately 220,000 people in Southern California (one-third of the national total for the sector) and is constituted by over 5,000 firms. In 2016, California produced 700 films and television shows, over 50 per cent of the national total, generating wages of US\$22 billion (for more, see www.mpa.org). Figure 12.10 characterizes the nature of this agglomeration in schematic terms. At the core of the system are the immensely powerful ‘big six’ Hollywood studios (known as the ‘majors’) – Warner Brothers, Paramount, Sony, 20th Century Fox, Disney, and Universal – all of which are now part of global media conglomerates. While in the 1950s the studios were vertically integrated and used to undertake the whole production process ‘in-house’, regulatory and technological change meant that by the 1980s, a ‘new’ Hollywood had emerged and still prevails today.

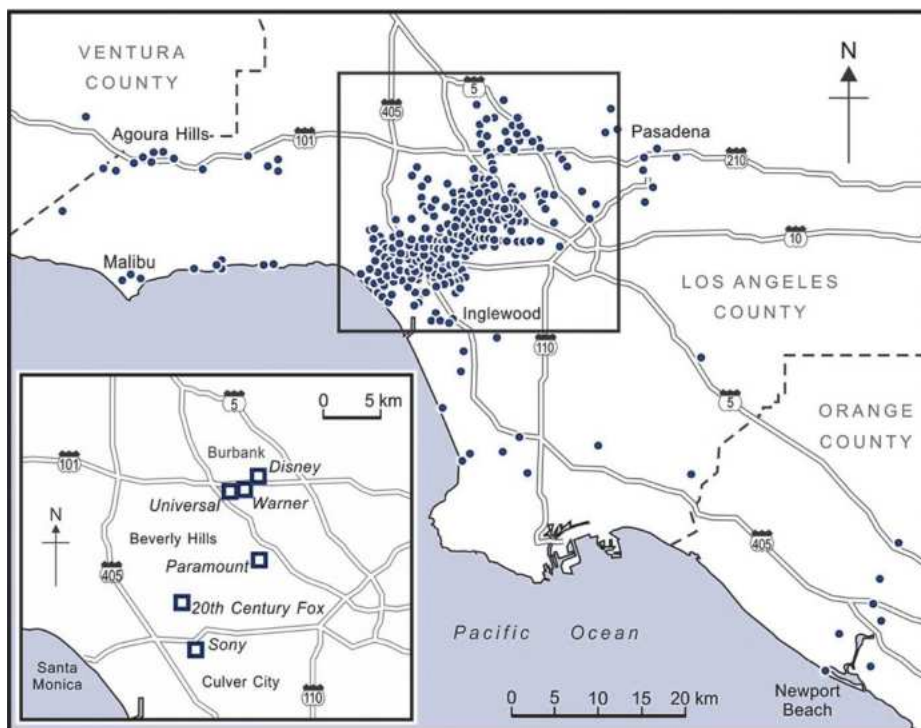


Figure 12.9 The Hollywood film production cluster

Source: adapted from Scott (2002), figure 4. Reproduced with permission of Taylor and Francis.

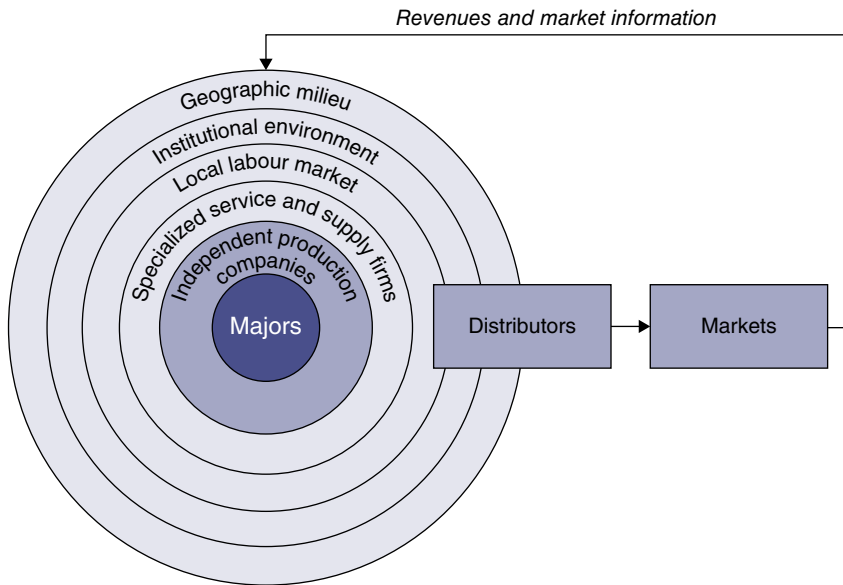


Figure 12.10 Schematic representation of the Hollywood film production cluster

Source: adapted from Scott (2002), figure 3. Reproduced with permission of Taylor and Francis.

The new production system is characterized by vertically disintegrated production networks characterized by powerful traded interdependencies among three groups of firms: the studios, a large base of independent production firms, and an even larger range of specialized service firms (e.g. script writing, lighting, costumes, catering, and cameras). The studios, however, remain as lead firms and thus retain control over the entire production networks through their domination of finance and distribution activities.

As Figure 12.10 shows, there are three other layers to the agglomeration, pointing to the need to look beyond the notion of traded interdependencies. First, there is a local labour market containing a large number of skilled individuals. This labour market is constantly being renewed by the in-migration of talents from all over the world. Second, there is a rich institutional environment comprised of many organizations and associations representing firms (e.g. the Alliance of Motion Picture and Television Producers), workers (e.g. the Screen Actors Guild), and government departments (e.g. the California Film Commission). These institutions help oil the wheels of the industry and represent its common interests. Third, the whole agglomeration is embedded in a particular place and landscape that, through path-dependent processes (see Section 3.5), has developed a reputation and image as *the* key place to make film and television productions (see also Box 3.4 on California's historical development). Taken together, these various dimensions have created a cluster of dense extra- and inter-firm relationships that offers strong agglomeration economies to its participants, thereby sustaining Hollywood's leadership in the industry and its strong exports to countries around the globe.

12.5 Untraded Interdependencies and Regional Cultures of Production

Hollywood is constituted by more than just tangible transactional relationships between directly related firms, however. It is also a place of gossip, information exchange, dealmaking, trust-building, and reputation forging between key decision makers and financiers within the global motion picture industry. As such, revealing the economic relationships within an agglomeration may not be enough to explain its formation, scale, and significance. We also need to bring into view the social and cultural bases of economic clusters, or what we might call *untraded interdependencies* (Storper 1997). These are informal connections that tie firms together, and they are constituted by intangible sets of skills, attitudes, habits, and conventions that become associated with particular forms of specialized production. In particular, clusters can facilitate patterns of intense and ongoing face-to-face communication between people working in the same or closely related industries. These interactions may in turn have a very real impact on the success of firms in the cluster by facilitating innovation and knowledge exchange.

Localized interpersonal interaction is thought to be particularly important for the transfer of what is known as *tacit knowledge*. Tacit knowledge is best thought of as ‘know-how’ that cannot be easily communicated. It can only be effectively created and shared through people actually doing things together in real life. It is often contrasted with *codified knowledge* – ideas and know-how that can be made tangible through, for example, writing it down or creating a diagram (an example being the book you are reading right now). While codified knowledge (e.g. a movie script) is able to travel across space, tacit knowledge (e.g. how to make that script into an appealing movie) is much stickier geographically, and may only be accessible by being immersed in the untraded social and cultural interactions of a locality. This in turn may attract more skilled workers, further driving the dynamic and creative social environment of particular places.

Untraded Interdependencies at Work: The Case of Motorsport Valley

But what specific form do these untraded interdependencies take in reality? The case of Britain’s Motorsport Valley provides an interesting window into these dynamics. The term refers to a dense agglomeration of motorsport activity in Southern England, and more specifically, a crescent-shaped area creating an arc around the west of London and centred on the counties of Oxfordshire and Northamptonshire (see Figure 12.11). The majority of the British motorsport industry – which has some 41,000 employees, many of which are highly skilled engineers, and 4,500 firms – is located in this area, a leading global cluster of motorsport activity since the 1990s. The industry has an annual turnover of

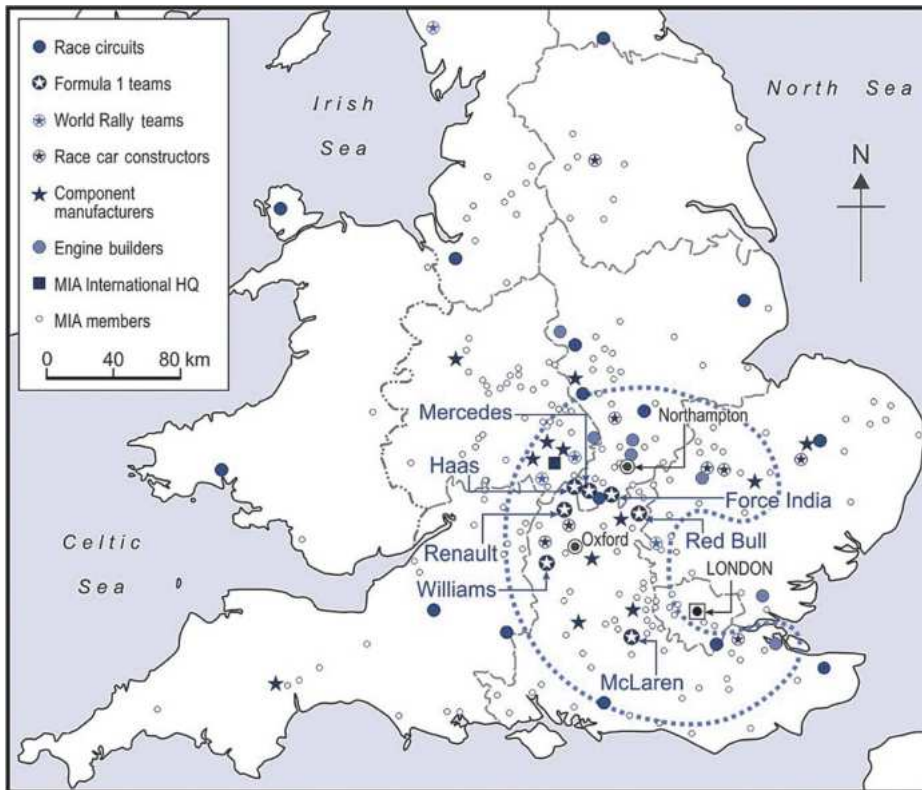


Figure 12.11 Motorsport Valley in the United Kingdom

Source: the authors.

around US\$12 billion, and spends an impressive 25 per cent of that turnover on research and development activities. Since 2000, seven or eight of the 10–12 teams that compete in Formula 1 each year have been UK-based. As another measure of concentration, of the 150 key firms involved in the Formula 1, Formula E, and Endurance Sports Car circuits, 72 of them or 48 per cent are UK-based. Motorsport Valley thus acts as the long-standing global hub for the industry, with drivers, expertise, engineers, components, money, and sponsorship coming from all over the world (for more, see www.the-mia.com/The-Industry).

What is of interest to us here is the ways in which specialist knowledge circulates between the hundreds of small firms that constitute the Motorsport Valley *outside* of formal business transactions, i.e. as untraded interdependencies. It is possible to identify six interacting ways that knowledge is disseminated (drawing on Pinch and Henry 1999; see also Jenkins and Tallman 2010):

- *Staff turnover.* The ongoing circulation of key personnel – engineers, drivers, designers, and mechanics – means that crucial information about how things are

done is transferred between firms and teams. Analysis of career trajectories has revealed that an average designer or engineer will move firm every 3.7 years, and eight times during their career.

- *Shared suppliers.* Another mechanism for knowledge transfer is through the links that motorsport teams have with numerous component and services suppliers. While confidentiality agreements are in place to limit the transfer of successful ideas from one team to another through a common supplier, in reality there is a tendency for technical know-how to leak, as suppliers want to provide their clients with the best and most up-to-date advice.
- *Firm births and deaths.* Motorsport is a very expensive and risky economic enterprise. As a result, the industry is characterized by high levels of firm births and deaths. Each of these individual events represents an opportunity for staff (re)mixing and hence the (re)diffusion of knowledge.
- *Informal collaboration.* Racing car companies are on the one hand extremely competitive and secretive, yet on the other hand are involved in a tightly regulated collective endeavour that necessitates interaction and involvement in working groups. Collective discussion of the regulations, and how to respond to proposed changes in them, provides another mode of inter-firm knowledge transfer.
- *Industry gossip.* Interpersonal networking in the Valley is extremely strong, in large part because of the dynamics described above. These networks criss-cross firms and teams, and are activated for a number of reasons, including facilitating staff recruitment and for advice on technical issues.
- *Trackside observation.* Racing car technology is revealed on the track during testing and racing. As soon as teams observe something different on another car, they will endeavour to imitate and test the changes themselves. It is not uncommon for new innovations to appear almost simultaneously on a number of competing cars.

As this brief case study has shown, there are numerous mechanisms for transferring tacit knowledge that do not depend on contractual relationships between two firms. In the Motorsport Valley, strong rates of new enterprise generation, high levels of inter-firm interaction, and rapid flows of skilled personnel between firms are at the heart of knowledge dynamics. The precise combination of effective mechanisms will vary from sector to sector, and from place to place. In sectors such as finance, for example, non-workplace spaces of informal interaction (e.g. pubs, clubs, and coffee bars) are very important for information-sharing. In certain areas of scientific research (e.g. computer science), presentations and interaction at conferences, publications in journals, and online forums are crucial avenues for knowledge dissemination, transfer, and development. What is most important here, though, is that many different kinds of clusters generate economies from the nature of the localized social-cultural interaction that takes place within them.

Untraded Interdependencies at the Regional Scale

But what if we step back from a particular sector and think about the preconditions for the development of untraded interdependencies at the urban or regional level? Another way to think about these processes is through the extent to which, over time, certain places become associated with certain industrial cultures. The existence of different local or regional sets of business practices – even within the same country – has attracted attention because of the purported link to economic success through, for example, varying levels of innovation and entrepreneurship.

To understand the social and cultural factors that lie at the heart of regional economic success, it is useful to return to the *institutional* perspective that we first introduced in Section 2.5 (Gertler 2018). Such a view sees the economy as being powerfully shaped by formal institutions, in the shape of laws and regulations, and informal institutions relating to business norms and practices (i.e. the realm of untraded interdependencies). Importantly, these institutions are not just shaped by the interactions between firms within a particular industry. A wide variety of non-firm entities are also an integral part of regional economies, ranging from educational and healthcare organizations (e.g. schools and hospitals) to political and economic organizations (e.g. governments and central banks). Some regions appear to be endowed with a beneficial ‘mix’ of such organizations that in turn engenders pro-growth economic cultures and a strong regional capacity for innovation. This ‘mix’ may encompass the range of organizations involved; the level and effectiveness of the cooperation among those organizations; the emergence of a collective voice for the region when bargaining for resources with authorities at the national and supranational scales; and the development of a sense of common enterprise among the firms and non-firm organizations within the regional economy.

In the most favourable circumstances, the outcome of the right organizational mix will be a regional economy characterized by dynamic, flexible institutions, ongoing innovation, high levels of trust, and effective knowledge circulation. Some economic geographers have used the term *learning region* to describe these successful territorial ensembles of production and innovation. Important regional organizations may emerge in the form of research centres and universities, other educational and training establishments, chambers of commerce, business associations, and technology-promotion agencies. The ongoing interaction of these entities with local businesses and workers gradually creates regionally specific sets of institutions or *industrial cultures*.

These arguments are well illustrated by a comparative study of Silicon Valley in California and Route 128 near Boston (drawing upon Saxenian’s classic book, *Regional Advantage*, published in 1994). The key question is why, during the 1980s and the early 1990s, certain industrial sectors (software and electronics, in particular) flourished in California’s Silicon Valley, while along Route 128 in Massachusetts they declined. Despite similar histories and technologies, Silicon

Valley developed a decentralized but cooperative industrial system, while Route 128 came to be dominated by independent, vertically integrated corporations. The two regions in the same country apparently had different *regional cultures*, characterized by more cooperative *inter-firm* relationships in Silicon Valley, and greater reliance on *intra-firm* vertical integration in Route 128.

As early as the 1940s, the Boston area in Massachusetts hosted a sizeable group of electronics manufacturers. At around the same time, the Santa Clara Valley (today's Silicon Valley) in California was mostly an agricultural region famous for its apricot and walnut orchards. Much was to change in the ensuing four decades. But how did Massachusetts, home to world-class educational institutions such as Harvard and MIT, lose out to Silicon Valley by the 1980s as the world's leading region in the electronics industry? In short, engineers and other professionals in Silicon Valley were much more entrepreneurial in their business culture. Moving frequently from job to job and quitting a job to start a new firm were both seen as perfectly acceptable in Silicon Valley's cultural environment. In Massachusetts, however, the industrial culture was very much big firm-centred in the sense that engineers and professionals were expected to remain working for the large firms that hired and nurtured them. The kind of labour market flexibility and mobility that prevailed in Silicon Valley on the West Coast of the United States was generally seen as disloyal and ungrateful in the East Coast context.

As a consequence of this difference in regional industrial cultures, there was much more cooperation and collaboration among Silicon Valley firms than their counterparts in Massachusetts. Silicon Valley firms collaborated with one another in both formal and informal ways – developing alliances, contracting for components and services, and simply sharing information. Employees of different firms mixed frequently at local business and social gatherings. In contrast, Massachusetts firms were highly secretive and self-contained, and employees had fewer inter-firm contacts. The industrial culture in Silicon Valley was much more relaxed about sharing of information and skills, whereas firms in Massachusetts anxiously sought to protect their intellectual property and prohibited inter-firm sharing of information and knowledge. As we saw earlier, venture capitalists in Silicon Valley have also played a critical role in transferring skills and knowledge among firms, while in Boston, where more traditional sources of finance were sourced, the banks supplying such capital simply did not have technical expertise to advise and promote entrepreneurial start-ups.

In sum, these contrasts between Silicon Valley and Route 128 illustrate the differing regional industrial cultures that can emerge, and the implications of these differences for entrepreneurship and innovation. The contrasts emerged gradually over time but eventually became very clear distinctions in the networks of knowledge circulation and support for small enterprises that existed in each place. Once such practices are entrenched, they tend to endure, and success stories such as Silicon Valley become examples that other localities try to emulate. Indeed, fostering a local culture of innovation and learning has become a celebrated cause for many local and national governments.

Nodes in Global Networks

Clusters, then, are embedded within wider regional cultures that give them distinctive characteristics. But now we need to ‘open up’ clusters to understand why they continue to be so important in an era of globalization and advanced information and communications technologies. As noted in Box 12.2, there is the risk of missing vital extra-local connections if we focus too much on what is going on within clusters. Clusters are also *relational* places, exhibiting important connections across space, as well as localized networks of traded and untraded interdependencies. We thus need to understand how the concentration of certain economic activities in particular places is part of the very same processes that are seeing other kinds of activities dispersed across the world through the formation of global production networks (described in Chapter 4). Within the production system for a particular product or service, there are some operations, such as corporate decision-making, which need to be located in agglomerations. Other corporate activities, such as production, sales and marketing, and customer support, can be more spatially disparate. Put another way, the spatial decentralization of economic activity facilitated by space-shrinking technologies *requires* the very kinds of control and coordination that can only be achieved through locating certain important corporate functions in key global cities.

More specifically, this dispersion creates different challenges of integration and coordination for global lead firms (Coe and Yeung 2015). Information has to be acquired about what is going on across the production system as a whole. Social interaction is required to allow important interpersonal relations such as trust to develop. Finally, firms somehow have to keep up with innovations in both products and processes within their industry. Clusters offer a solution to these problems by acting as centres of tacit knowledge transfer and control within wider global networks, for example, through the interaction of corporate headquarters, government departments, and industry-specific media. Clusters act as centres of sociability, places where interpersonal relationships are created and maintained. They act to provide a critical mass to help generate innovations through the intense ongoing interaction of numerous users and suppliers of technologies. Such processes can be seen to underpin the continued dominance of leading financial centres such as London and New York, for example, which if anything has increased over time despite processes of globalization and innovation in information technologies (see Chapter 8). Clusters, then, should not be considered on their own, and purely in terms of the local relationships they contain, but as *nodes in global networks*, where certain kinds of local relationships are used to facilitate and support other kinds of non-local relationships.

In some cases, these global networks may facilitate the transfer of tacit knowledge that is argued by many to depend on physical proximity. While the

knowledge ‘buzz’ of clusters may rely to a significant extent upon face-to-face and everyday interactions, it can also be achieved through modern communications technology, and through the mobility of knowledgeable individuals. In this way, proximity is achieved through combinations of interpersonal and electronic communication, and travel. Similarly, many TNCs routinely bridge across clusters in different national territories through both the use of technologies – for example, knowledge management systems designed to act as repositories of knowledge and share best practice – and the circulation of key staff such as managers and trainers between different sites. They may also develop partnerships with firms in other clusters to achieve similar benefits. In reality, therefore, the ‘buzz’ of local clusters is also combined with various ‘global pipelines’ (see Figure 12.12) that connect and transfer knowledge between clusters. In some cases, separate clusters may develop in a symbiotic manner through their interconnections. In the diamond industry, for example, the manufacturing and trading clusters of Surat (India) and Antwerp (Belgium) developed in tandem during the mid-to-latter decades of the twentieth century through the movement of transnational entrepreneurs and the establishment of family business networks that facilitated mutually beneficial cross-cluster knowledge flows, exchanges of technology, and access to markets (Henn and Bathelt 2018).

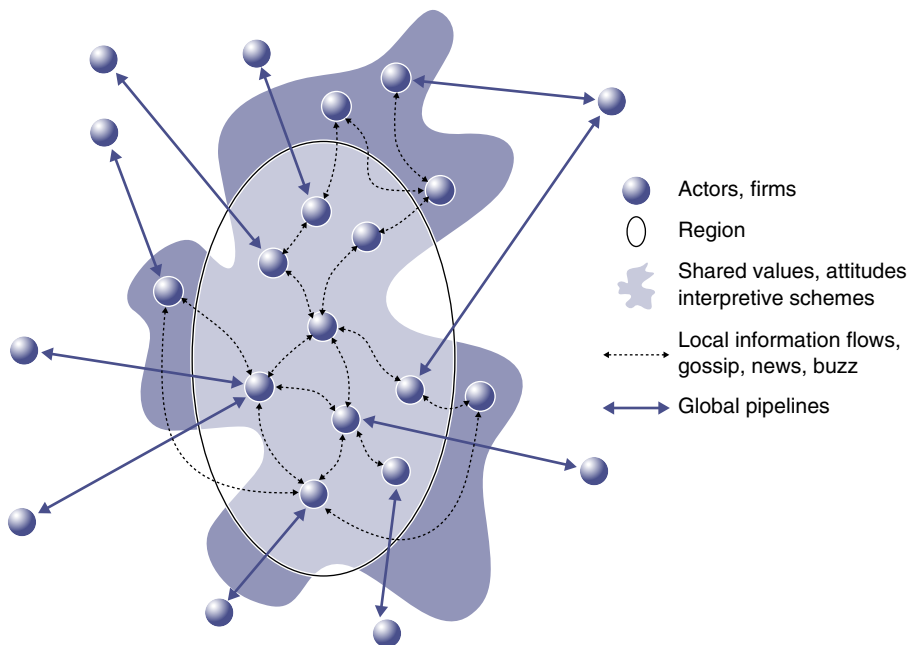


Figure 12.12 Local buzz and global pipelines

Source: adapted from Bathelt et al. (2004), figure 1. Reproduced with permission of Sage Publications.

12.6 A Dynamic Approach to Clusters

So far in this chapter we have looked at clusters in somewhat static terms. We have profiled various types of clusters and the different types of ‘glue’ – in the form of traded and untraded interdependencies – that bind firms together within those clusters. We have also highlighted the role of non-firm organizations, regional economic cultures, and global pipelines as important shapers of clusters. But that leaves some important questions unanswered, such as: how do clusters form in the first place? How do they develop over time? And why do some clusters disappear over the longer term while others go from strength to strength?

Over the past 15 years, and as noted in Chapter 3, evolutionary economic geographers have become increasingly concerned with how spatial patterns of economic activity develop in a path-dependent manner. This perspective suggests that clusters pass through a *life cycle* consisting of four phases – emergence, growth, sustainment, and decline (see Figure 12.13). As firms learn from one another, over time the benefits from being in the cluster will diminish, as their capabilities start to converge due to ongoing processes of interaction and knowledge exchange. In essence, it becomes harder to stand out from the crowd, and over time the *specialization* of the cluster in a particular area of economic activity changes from a strength to a weakness, as a process of lock-in occurs and established ways of doing things start to stagnate. If the issue is unaddressed, the cluster will then decline unless it can launch a process of renewal that sustains the cluster or, more radically, a transformation process that launches another life cycle entirely (see the two arrows in Figure 12.13).

We can use this general framework to start to address some of the questions we posed above. How clusters are ‘born’ or emerge has been a longstanding area of interest for both academics and policymakers alike, given the perceived economic

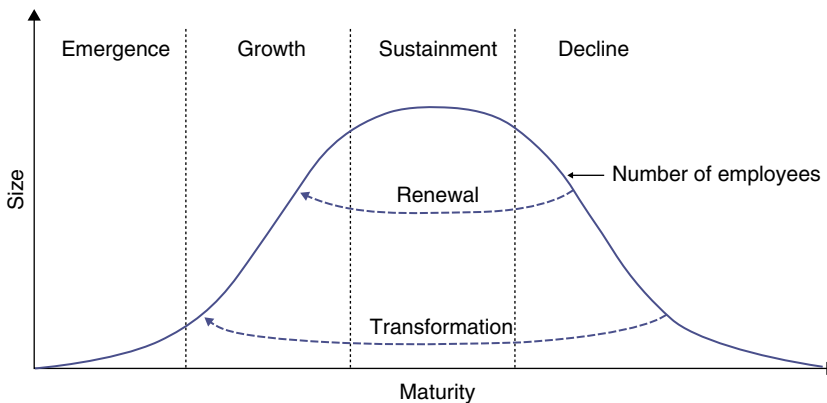


Figure 12.13 A cluster life cycle?

Source: adapted from Menzel and Fornahl (2010), figure 4. Reproduced with permission of Oxford University Press.

development benefits of clusters. Sometimes a cluster is created through accidental events, such as an unplanned innovation or an arbitrary location decision of a company or an entrepreneur that acts as a ‘trigger’ for growth. More often than not, however, a cluster emerges due to a mixture of pre-existing conditions and certain trigger events, which may be either local or non-local in origin. One example is provided by the biogas industry in the Scania region of southern Sweden (Figure 12.14), where a cluster of some 40 firms that developed from the 1990s onwards now produces 20 per cent of the country’s biogas (Martin and Coenen 2015). The preconditions for growth were established in the 1990s through investments in natural gas infrastructure and some local biogas experiments. When the national Swedish Environment Protection Agency launched its Climate Investment Programme over the period 2002–2008, local firms were well placed to take advantage of funding aimed at local initiatives that would reduce greenhouse gas emissions and increase energy efficiency. Scania alone received half of the national funding targeted at biogas. Emergence evolved into sustained growth

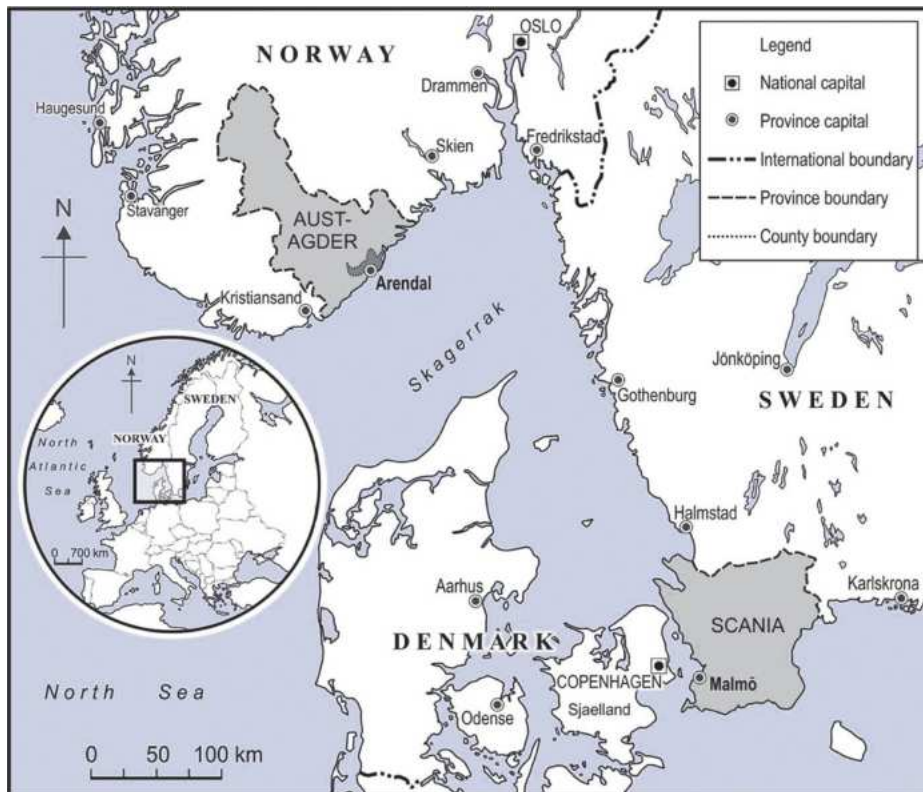


Figure 12.14 Two Scandinavian clusters – biogas in Scania, Sweden and leisure boats in Arendal, Norway

Source: the authors.

from the late 2000s onwards, propelled by the decision of the regional government to make all public transport carbon free by 2020 and through synergies with Scania's high levels of agricultural production (i.e. the inputs for biogas production). In this case, we can see how trigger events at both the national and regional scales – in this case policy initiatives – interacted with the pre-existing knowledge and infrastructure base to drive cluster emergence and expansion.

The life-cycle model then suggests that, after a period, decline will set in and clusters will contract due to the limits to specialization. Indeed, the economic landscape is littered with cases of former clusters that have gone into inexorable decline. Another Scandinavian example provides a good example of this process. From the 1960s onwards, the Arendal area of southern Norway (see Figure 12.14) emerged as the country's leading cluster for the production of glass fibre leisure boats, driven by its heritage of producing wooden boats in combination with some inward investments in glass fibre technologies (Isaksen 2018). By 2000, the area accounted for 75 per cent of Norway's production of such leisure boats, and the cluster encompassed 800 jobs across 30 boatyards and their supplier networks. Initial signs of decline were then exacerbated by the global financial crisis of 2007–2008, which saw demand fall significantly. In this new context, boatyards were unable to adapt their expensive craft assembly methods, and by 2018, there was only one significant firm left in the cluster, with the rest having either shut or moved their production to cheaper sites overseas. The case of Arendal's leisure boat industry thus nicely conforms to the cluster life-cycle model, while illustrating that decline is not only related to 'local' processes of lock-in but rather, as with cluster birth and emergence, is also shaped by external triggers, in this case a financial crisis.

So how, then, can clusters avoid lock-in and decline through the processes of renewal and transformation shown in Figure 12.13? Renewal tends to be driven by sustained innovation within the same sector of the economy. In terms of IT, for instance, Silicon Valley has led the development of different cutting-edge technologies since the 1980s, from personal computers to software to the digital economy. Similarly, southern Germany has been home to several clusters of world-leading innovation in the automobile industry for many decades. Specialization, therefore, does not necessarily lead to cluster decline if the firms within it, and the wider organizational mix and regional culture, can sustain new waves of innovation. Transformation processes, in turn, can take two forms. First, if growth can be generated in a related activity to the core business of the cluster, this can be thought of as a *branching* process. German automotive firms in Munich or Stuttgart developing electric cars in addition to their traditional petrol variants would be an example of such branching. Second, if growth can be generated in an entirely new area, this can be characterized as the process of *path creation*. The latter developments are far more challenging and less commonplace, and are most likely to occur in broad-based agglomerations, such as Silicon Valley or global cities. For instance, the rise of Tesla (electric vehicles and battery technology) and

other green technology firms in Silicon Valley represents a new path from the traditional focus on IT. The internet search giant Google has similarly started charting a new path in terms of its development of autonomous vehicles.

The notion of *related variety* has been developed by economic geographers to capture the potential benefits of loosely connected clusters in cognate industries driving wider growth. In other words, in contrast to specialization, there may be benefits to diversification and heterogeneity. Related variety aims to capture the extent to which firms are related to another in terms of underlying technologies and/or markets. The argument is that, within an agglomeration, firms that are different but somewhat related may have the potential to combine knowledge through their interactions in ways that can be innovative and thereby drive economic growth. Unrelated variety, by contrast, describes a situation in which economic activities are too disparate for such knowledge interactions to be productive. As we saw in the Norway boat-building example, where places are small and dominated by a single cluster, there is limited potential for related variety to drive processes of branching or path creation. Most clusters, however, are embedded in wider agglomerations, and in those contexts the extent to which synergies between clusters in the same or related industries can sustain growth or generate new branches and paths becomes an important question. In London, for example, the combination of advanced knowledge in both finance and software is driving the development of a world-leading ‘fintech’ node in East London’s Tech City.

12.7 Can Clusters Be Temporary?

As this chapter has made clear, economic geographers quite rightly continue to be fascinated by the importance of spatial proximity – i.e. people being in the same place at the same time – in enabling socio-economic interaction. But what if we think more about the temporal aspects of clusters? Put another way, do firms have to be permanently located in clusters in order to benefit from the associated agglomeration economies and knowledge spillovers? Recent research has suggested that there are forms of *temporary* cluster as well as the more permanent forms usually recognized in the literature. On the one hand, *project-based* forms of economic organization are becoming increasingly prevalent across a range of industries, with specialized teams of workers being brought together, from both within and across different firms, to work on a particular task for a given time period (see Box 12.3 for more details). On the other hand, it can be argued that professional gatherings, such as conferences, conventions, and trade fairs, can be viewed as temporary clusters in that they exhibit some of the knowledge transfer mechanisms found in clusters, but in a more short-lived and intensive form.

The leading global trade fairs are truly massive, with some mega-events straddling multiple industries. The Canton Fair in China, for example, takes place over two 3-week periods each year and covers a wide range of potential export goods, including electronics, building materials, clothing, office goods,

FURTHER THINKING

Box 12.3 Project working

Projects – the bringing together of a set of people to fulfil a complex task – are a long established way of working in industries organized around one-off schemes, such as architecture, advertising, construction, ship-building, and film-making. There is evidence, however, that they are spreading into new sectors (e.g. automobiles and chemicals), while many new industries (e.g. software, new media, or business consulting) are dominated by project working. Projects can be thought of as temporary social systems in which people of varied professional and organizational backgrounds work together in an environment insulated from the other ongoing activities of the firm or organization. Projects can vary greatly in their constitution, duration, and location. In terms of their constitution, they may be made up of a range of different skilled professionals from within a single corporation or from a range of different firms. In the latter case, the project team can be thought of as a virtual firm. In terms of their duration, a project may range from a few weeks (e.g. the filming of a TV movie-of-the-week on location) to many months and even years (e.g. a large-scale software project for a major multinational client).

In terms of the location, a project team may be based within a firm's office network, on a client's site, at a neutral site, or even in cyberspace (e.g. a team of far-flung specialists working simultaneously or in sequence on a particular piece of software or an architectural blueprint). Many will combine both face-to-face and electronically mediated forms of communication. While project members may be drawn from within a single office building or a national subsidiary of a company, firms are increasingly assembling *transnational* project teams to meet the needs of their clients. Whatever the precise configuration of different project teams may be, two things are certain. First, projects represent an increasingly pervasive form of working that is extremely flexible in both time and space, and one that facilitates the transfer of various forms of tacit 'know-how' within and across organizations. Second, projects pose an important challenge to economic geographers by blurring the boundaries of key analytical categories, such as 'firms' and 'clusters'. Indeed, even just positioning 'where' economic activity is taking place can be problematic in the world of project working. See Sunley et al. (2011) and Tokatli (2011) for more on project working in the advertising and fashion design industries, respectively.

and apparel. The October–November 2017 event received over 200,000 visitors, hosted 25,000 exhibitors, and generated around US\$30 billion worth of business. Other trade fairs are industry specific. The weeklong CON-EXPO construction industry trade fair in Las Vegas in 2017, for instance, attracted

2,800 exhibitors and 130,000 attendees from over 150 countries across five days, while the Light + Building architecture and building technology event in Frankfurt in 2018 drew in 2,700 exhibitors and 220,000 visitors over a five-day period. Below these big headline global gatherings, however, are thousands of regional, national, and macro-regional meetings all performing a similar function in terms of facilitating interactions of various kinds within different business communities. Trade fairs in turn are big business for popular destination cities such as Las Vegas, which – as we saw in Box 12.1 – hosts some 20,000 such events each year.

But how can such brief events replicate the benefits of permanent clusters? Importantly, trade fairs not only provide an opportunity for attendees to conduct business and make deals but also enable them to share product and market information through their interactions. In this way, knowledge can be exchanged both ‘vertically’ (i.e. between suppliers and customers) and ‘horizontally’ (i.e. between competitors in the same line of business). The temporary proximity of the trade fair creates a forum for the exchange and circulation of both codified and tacit knowledge about new and existing products, production processes, and market dynamics. The outcomes of these interactions can encompass enhanced understanding of market trends, effective maintenance or establishment of customer relationships, awareness of new technological developments, and the sourcing of new partners in research, production, and marketing. Some of the interaction is pre-planned and strategic, but much will be accidental, with chance meetings occurring in the corridors, cafés, bars, and restaurants surrounding the formal meetings.

In effect, trade fairs can create a form of ‘global buzz’. They can exhibit some of the same knowledge generation and transfer mechanisms that we associate with permanent clusters, albeit over a condensed timeframe. But what are the geographical implications of such an analysis? First, and referring back to Figure 12.12, trade fairs can provide a mechanism through which the global pipelines of permanent clusters actively get constructed. If we were to animate the diagram over time, as firms return to the cluster after successful visits to trade fairs, the density of the web of global pipelines connecting to the cluster would increase. Firms may attend a mixture of national, macro-regional, and global meetings in order to forge extra-local pipelines of differing extents. Given that even the most self-contained cluster will need to access external markets for the goods and services it produces, pipelines of this kind will be especially important. Second, it might help explain how certain firms are able to remain successful even if they are based some distance away from the leading clusters in their industry, with trade fairs providing enough buzz for them to remain innovative and competitive despite their location. For most firms, however, this will not be an either/or situation, with trade fairs being used to augment and develop the agglomerations economies inherent in their home location.

12.8 Summary

It is well over a century since the economist Alfred Marshall (1890: 225) famously argued the following:

When an industry has thus chosen a locality for itself, it is likely to stay there long: so great are the advantages which people following the same skilled trade get from near neighbourhood to one another. The mysteries of the trade become no mysteries; but are as it were in the air... Good work is rightly appreciated, inventions and improvements in machinery, in processes and the general organization of the business have their merits promptly discussed: if one man starts a new idea, it is taken up by others and combined with suggestions of their own; and thus it becomes the source of further new ideas.

These words are still remarkably relevant today. The forces driving the clustering of economic actors are as powerful as ever, with patterns of uneven development continuing to be characterized by overlapping and interconnected clusters of specialized activity. Large urban areas offer firms powerful agglomeration economies deriving from the access to shared resources and markets, while within urban centres, specialized clusters allow firms to reap further economies within their particular area of activity. There is thus a wide variety of cluster forms in the contemporary global economy. For example, a central business district of a global city and a coastal EPZ both represent clusters of economic activity; they are very different, however, in their constitution and in terms of the forces driving and sustaining the co-location of firms within them.

As we have seen, the agglomeration economies binding clusters together can be both traded and untraded in nature. Post-Fordist production techniques have created a renewed propensity for related firms to agglomerate in order to reduce the costs of transacting with one another. In many industries, however, firms also come together to benefit from the local 'buzz' and ongoing processes of social interaction that allow crucial forms of knowledge to circulate. As Marshall evocatively describes, such benefits seem to be 'in the air' of successful clusters. The precise combination of agglomeration economies will differ from sector to sector and from place to place. Over time, such dynamics can stabilize into regional cultures of production, such that certain places are associated with certain ways of doing business. Equally, the fortunes of individual clusters will wax and wane depending on the extent to which they are able to adapt to changing circumstances. Some will follow a classic life-cycle trajectory, while others will go through processes of renewal and transformation.

In turn, it is important to recognize the potential limitations of the clustering concept. Clusters need to be seen as open nodes in global networks and, with globalization processes, they are more intensely interconnected than ever

before. Economic activity clearly does not only take place through local economic and social interactions. Rather, it is constituted by complex combinations of local and non-local relationships, of face-to-face contact and electronically mediated communication, of people who largely remain in one place and those who circulate between places, and of tangible production processes and intangible exchanges of knowledge. Trade fairs provide one example of how some of the benefits of clustering may be achievable through temporary forums that bring people together for intense interaction.

Notes on the references

- Dicken and Lloyd (1990) offer a comprehensive yet accessible guide to the classical theories of industrial location.
- Scott (1988) is a key reference on traded interdependencies, while Storper (1997) introduces the notion of untraded interdependencies. Amin and Thrift's (1992) classic evocation of 'nodes in global networks' had stood the test of time well.
- The following studies provide more details on the film industry in North America and China (Scott 2002, 2005; Foster et al. 2015; Zhang and Li 2018) and the motorsport industry (Pinch and Henry 1999; Pinch et al. 2003; Jenkins and Tallman 2010, 2016).
- Also, see interesting studies of: design agencies in London (Sunley et al. 2011), fashion design in New York/Paris (Tokatli 2011), biomedical clusters in Beijing (Bathelt and Zhao 2016), call centres in Manila (Kleibert 2017), and trading centres in the diamond industry (Henn and Bathelt 2018). For a comprehensive overview of how Italian industrial districts have evolved in recent times, see De Marchi et al. (2018).
- On cluster evolution, see Menzel and Fornahl (2010), Martin and Coenen (2015), and Isaksen (2018). For more on trade fairs as 'temporary' clusters, see Maskell et al. (2006), Bathelt and Zeng (2015), and Bathelt et al. (2014).

Sample essay questions

- What are the different factors that may cause agglomerations to develop?
- In what ways, and to what extent, is spatial proximity important to economic processes?
- What does clustering reveal about the sociality of the economy?
- Explore the limitations to the cluster concept for explaining contemporary economic development processes.
- What role can temporary clusters play in processes of knowledge generation and transfer?

Resources for further learning

- clustermapping.us is the website of the US Cluster Mapping initiative.
- www.clusterobservatory.eu: explore clusters at the European scale at the website of the European cluster observatory.
- <https://www.unido.org/our-focus/advancing-economic-competitiveness/supporting-small-and-medium-industry-clusters/clusters-and-networks-development>: provides helpful insights into UNIDO's approach to clusters from a development perspective.
- <http://www.lboro.ac.uk/gawc>: check out the *Globalization and World Cities* (GaWC) website hosted by Loughborough University for a huge range of resources on clusters within world cities and the networks that connect them.
- <https://www.cityoflondon.gov.uk/Pages/default.aspx>: a good website for finding out more about one of the world's pre-eminent finance clusters. www.thecityuk.com is another rich source of data on the City of London.
- www.jointventure.org: the Joint Venture Silicon Valley Network provides a range of perspectives on this world-renowned high-tech cluster.
- There are several excellent videos on YouTube exploring the stories of the clusters covered in this chapter and many others besides. For instance, for a short or longer perspective on Silicon Valley, see <https://www.youtube.com/watch?v=UO-8CMdeSHA> and <https://www.youtube.com/watch?v=r44RKWyfcFw>, respectively. For a detailed account of the entrepreneurial culture in the Waterloo region of Ontario, Canada, watch <https://www.youtube.com/watch?v=Q4EzYAB8Q4A>. Always watch such videos critically and think about who is producing them and why.

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CHAPTER 13

IDENTITIES

Are economies gendered and racialized?

Aims

- To explore how our personal identities are influential in various economic processes and experiences.
- To examine how gender, ethnicity, and race shape access to economic opportunities unevenly across the world.
- To see how identity affects experiences in labour markets and workplaces.
- To trace the influence of ethnic economies in urban spaces and transnational networks.

13.1 Introduction

As a country, Canada takes some pride in its positive attitude towards ethnic diversity and its enlightened views on gender equality. In many ways, this collective pride is well founded. The country has long-standing legislation and institutions that promote multicultural diversity and outlaw discrimination. The Canadian Charter of Rights and Freedoms, for example, provides constitutional protection against discrimination based on various grounds such as sex, race, ethnic origin, religion, and (later) sexuality.

Yet, even in Canada, there are very clear inequalities that follow gendered and race-based lines of difference. For example, in 2015, women with full-time

employment income for the full year earned only 75 per cent of the average male wage (Statistics Canada 2016a). Even among those in senior management positions, there was a clear disparity. The average annual salary of a female senior manager in 2015 was C\$116,141, but for a man in a similarly high-level position, it was C\$189,658. There are also disparities that seem to follow race-based differences. In 2015, the average senior manager who was both a woman and from a minority race earned C\$102,666, while a racial minority man earned C\$122,435. It is hard to escape the conclusion that both gender and race play an important role in explaining income disparities.

We also find that gender and race-based identities affect the types of jobs that people tend to hold. For example, in Canada in 2015, 78 per cent of those working in the manufacturing of transportation equipment (e.g. auto assembly) were men, but 75 per cent of clothing store employees were women. At the same time, despite being only 1.6 per cent of the total workforce, black women represented 7 per cent of all employees working in nursing and residential care facilities. South Asian men, meanwhile, were 2.9 per cent of the Canadian workforce, but 31 per cent of all taxi and limousine drivers. Self-employment and entrepreneurship also exhibit some distinctive patterns. For the workforce as a whole, 12 per cent of people were self-employed, but among Korean-Canadians the figure was 21 per cent (all data from Statistics Canada 2016b).

If the situation in Canada suggests gender and race shape economic opportunities, then in other countries the picture is even more stark. Globally, there is a highly uneven geography of employment income, shaped by the diverse ways in which gender and race are understood and mobilized in particular places – and how they affect economic processes. Among wealthier countries, for example, South Korea has the widest gender wage gap, with women earning on average 36.7 per cent less than men. Estonia and Japan come next, with gender wage gaps of 28.3 and 25.9 per cent, respectively. Yet, in Denmark, the gender wage gap is just 5.7 per cent (OECD 2018).

Ethnicity and race also have clear impacts on how individuals fare in the labour market, but the impact around the world is complex, place-based, and historically specific. Few would now suggest that an Irish or Italian ethnicity would be an impediment to advancement in North America, but 100 years ago that would certainly have been the case. In contemporary Europe, where communities originally from North Africa or Turkey have been settled for several generations, they continue to experience discrimination in the labour market. In the Netherlands, for example, one study has found that Turks and Moroccans born and raised locally had significant difficulties both in terms of finding work and moving up into more secure employment (Witteveen and Alba 2018). In short, they suffer from what has been called an ‘ethnic penalty’.

In some cases, a reaction to discrimination has been to rely more closely on co-ethnic ties for economic security. Minority groups will often reside together in a city, forming neighbourhoods, such as Little Havana in Miami, Africville in

Halifax, Nova Scotia, or Chinatowns all over the world. These urban places provide cultural familiarity and (often) goods and services delivered in minority languages. But they also provide a refuge from prejudice and a network of employment opportunities without racial discrimination. Co-ethnic ties might also be mobilized when minority groups seek to do business across borders – again as a form of protection against discrimination, and risk minimization based on trust. The same can be said for other minority communities who have long suffered from discrimination. For example, even in societies more open to diverse sexualities, gay and lesbian communities and their businesses have clustered in more sympathetic urban neighbourhoods to find solidarity and acceptance.

Despite these examples, there is a tendency to see gender, race, and other aspects of identity as somehow non-economic. That is, in situations of work, production, and consumption, people are assumed to perform as purely economic actors, disconnected from the personal identities that they embody. A key task in this chapter, then, is to show that identity does shape the ways we experience economic life, including the type of work we find, the amount that we earn, and how we do business. Moreover, we will seek to show how geographies – connections across space, places constructed at various scales, and uneven spatial patterns – are central to understanding the role of identity in economic life.

In Section 13.2, we start by noting some of the ways in which economic processes are often taken to be ‘blind’ to gender and race. As we will show, these ideas do not withstand much scrutiny. Section 13.3 then focuses primarily on how gendered and racialized identities shape experiences of, and outcomes in, the labour market. We acknowledge geographical patterns by recognizing that gender roles can play out quite differently across the world. We then examine in Section 13.4 the ways in which the daily lived connections across space between work and home are often different for men and women. Section 13.5 shows that place also matters in this account as *workplaces* become associated with certain gendered or racialized identities while being exclusionary for others. In Section 13.6, we move on to examine the role of ethnic identity in business transactions. This applies first at the scale of urban neighbourhoods and on a much larger scale as transnational business relationships follow pathways of ethnic commonality. At the same time, we end the chapter on a note of caution, highlighting that gender, race, and other categories of identity must be viewed carefully and in combination with each other, not in isolation.

13.2 Seeing Gender and Race in the Economy

The role of gender in economic life is often brushed aside as reflecting fundamental biological differences between men and women. When asked to explain why men and women tend to hold different kinds of jobs, for example, the usual explanation will start with physical differences between the sexes. The argument would

be that men are more likely to work in construction, mining, and warehousing, for example, because of superior physical strength. To a limited extent, there is some truth to this idea, but it hardly explains why men dominate among electricians and drivers, while nurses and elementary school teachers are overwhelmingly female. The conventional explanation might then move on to suggest that there are certain aptitudes associated with gender – women are supposedly good at detailed and painstaking work, while men have a better grasp of how to use advanced technological apparatus. This kind of view was famously (and controversially) exemplified by a memo circulated by a senior software engineer at Google in 2017. The memo suggested that women are biologically more interested in people (than things), more cooperative, and more prone to anxiety, all of which make them less suited to a tech-based workplace (*The Economist* 2017). The author was fired a few days later. Still, Google's workforce is around 69 per cent male, and 80 per cent of its tech jobs are held by men (Lien and Pierson 2017).

The argument that certain kinds of work are attuned to gendered characteristics starts to collapse when specific examples are considered. The intricate work of watch repair and tailoring a suit, for example, are conventionally male domains, and yet they utilize what might be seen as female traits in other sectors or contexts. Although elementary school teachers or nurses are overwhelmingly female, there are enough men doing those jobs to demonstrate that their gender is perfectly capable of performing such work. Similarly, if the CEOs of two of the world's best-known corporations have been women (Mary Barra of General Motors and Indra Nooyi of Pepsi), why do women represent only 5 per cent of CEO positions in the 500 top American companies?

Explanations of why women are less represented in the upper echelons of the workforce, and are often paid less than men, can also be unpacked. A common rationale would be that women tend to curtail their ambitions, or pull out of the workforce entirely, when they decide to have children or care for their ailing family members. This in turn affects their ability or capacity to work their way up the career ladder. But this argument is also rather unsatisfactory. If workplaces and employment relations were more commonly structured in such a way that family commitments could be combined with career development, then there would be no need to make such a choice. The idea that women make the choice to curtail their own careers is therefore ignoring the circumstances in which those choices are made. These circumstances can indeed be changed, for example, through generous parental leave allowances, workplace day cares, provisions for working from home, and so on. It is no coincidence that the countries with the highest levels of female workforce participation and the lowest gender pay gaps are also those where governments provide these kinds of supports.

The same applies to ethnic and racial differences (see Box 13.1 for a discussion of these terms). In 2017, Black employees held only 1 per cent of tech jobs at Google, and Latinos held only 3 per cent, despite being 6 and 32 per cent of California's population, respectively. Asian Americans, meanwhile, are approximately 11 per cent of the

KEY CONCEPT

Box 13.1 Ethnicity, race, and racialization

Ethnicity is about difference, marked or coded in various ways. When we talk about Chinese entrepreneurship, we are generally not talking about businesses in China itself, but about the business practices of the ethnic Chinese diaspora around the world. Chinese ethnicity only becomes significant when juxtaposed with different groups outside majority-Chinese societies. In that sense, ethnicity is always a relational concept, and as a collective identity it includes *and* excludes at the same time. Ethnicity is based upon a common (real or imagined) historical experience, ancestry, or a set of cultural practices – for example, due to language, regional origins, or religion. Ethnicity does not refer simply to minority groups, although it is often used in that way. To be ethnic is not to be somehow outside the mainstream or abnormal. In fact, everyone has an ethnicity. In that sense, a British pub in Bangkok owned by a Caucasian expatriate is no less an ethnic enterprise than a London restaurant owned by a Thai. Ethnic identities are not necessarily stable and unchanging. Different aspects of ethnic identity may be brought to the fore in different circumstances, and the strength of an ethnic identity may only emerge over time. For example, Italian immigrants may have arrived in North America in the twentieth century with small-scale loyalties to villages and regions, but once there, they developed an ethnic identity as Italian-Americans. It is important to distinguish ethnicity from race. Race refers to the visible characteristics of human beings (hair, skin pigmentation, and bone structure), but is a very unhelpful analytical category because most ‘races’ are poorly defined and show as much internal diversity as they do distinctiveness. The notion of race tends to be used when groups with a particular appearance are racialized – that is, categorized and attributed certain characteristics by other groups. For this reason, ‘race’ is often placed in quotation marks to acknowledge that it is a social construction. The concept of racialized groups is a more useful idea, as it does not speak to any fundamental biological difference, but to the *assumptions* made based on outward appearances (see Mullings 2017; Skop and Li 2017).

state’s population, but occupy 39 per cent of tech jobs (Lien and Pierson 2017). Again, two popular assumptions dominate discussions of these kinds of labour market discrepancies. First, it is generally believed that firms will simply hire the best person for the job, and it is not their fault if they end up with a workforce non-representative of the population at large. In other words, the labour market simply sorts and ranks people according to their skills, experience, and qualifications for a job.

Second, it is often said that the reason the best candidates for a job come from certain backgrounds is because of a ‘natural’ aptitude in that particular group. The idea that Asian Americans have a higher aptitude for science and mathematics is decades old. These assumptions ignore several important points. When individuals seek employment, they are judged on far more than their skills; most importantly, they are also assessed for their ‘fit’ with the culture of the firm. That assessment is far from being blind to race, ethnicity, gender, religion, and other axes of identity. Also, when an applicant pool is not representative of a society at large, we have to ask questions about the social processes that guide certain students along particular educational trajectories. Socio-economic class backgrounds, family structure, quality of schools, and stereotypical assumptions made about likely aptitudes and trajectories – these are far more likely factors to shape which skills and interests manifest themselves than any hard-wired genetics.

Another area of ‘identity blindness’ in popular understandings of economic processes holds that business transactions are driven solely by the profit imperative. Any social or cultural motivations for establishing or patronizing an enterprise or forging a business relationship are obscured. Economic processes, in this form of technical analysis, become anonymous, universal, and rational. There is no room for personal ties, social relations, loyalty, discrimination, or culturally distinct practices. Indeed, it is often assumed that modern capitalism sweeps aside these social and sentimental bases for economic action, and they are taken to be leftovers of ‘traditional’ small-scale, artisanal, or even agrarian societies.

The urban landscape, however, tells another story, that is much more complicated, ‘irrational’, and socially embedded. For any business, there may be advantages to be gained from clustering together with similar firms (as discussed in Chapter 12), but the social geography of many cities reveals a pattern in which it is not just similar firms clustering together but also businesses owned and patronized by people with similar ethnic backgrounds. Clearly, there are networking processes at work that go beyond either economic logic or the less tangible economic benefits of agglomeration. The same is true when we look at how business relationships are established across national borders. We need, then, to look more broadly to find explanations of why gender and ethnic or racial identity might play such a profound role in economic life.

13.3 Uneven Geographies of Gender and Work

The scale of the home is an important starting point to understand how labour markets are gendered. In particular, much else hinges on the ways in which work within the household is divided up between men and women, and how certain tasks then become associated with femininity or masculinity. These are not, however, universal patterns and show a great deal of variation across different places around the world.

Studies based on large-scale surveys suggest that a significant portion of our lives is spent on unpaid labour. On average, across the world's largest and wealthiest countries, around 43 per cent of working minutes every day are spent on unpaid tasks (OECD 2011). Interestingly, there are significant differences around the world. For example, people in Japan work some of the longest hours in total, but carry out unpaid work for one of the shortest proportions of those hours, at around 30 per cent of their total working time. In Germany, on the other hand, total working hours are shorter, and at almost 48 per cent, a much higher proportion of them is spent on unpaid tasks. In both Turkey and Australia, just over 50 per cent of work time is spent on unpaid activities. This tells us something about varied cultural patterns of life and work in different settings. The general pattern is that a great deal of work is being done that does not (as we noted in Chapter 2) get counted as productive economic activity.

What kinds of tasks and functions are being carried out by people doing unpaid work? Figure 13.1 shows the breakdown of unpaid labour tasks in various countries. Here again we see some intriguing differences, which reflect how unpaid work might vary with different cultural contexts. A great deal of time is spent caring for household members in Ireland, for example, while a higher than average amount of volunteer work is done in New Zealand and Turkey. One estimate suggests that if all unpaid work were carried out at the average national hourly wage in each country, then it would account for 35–75 per cent of GDP in the countries shown (OECD 2011).

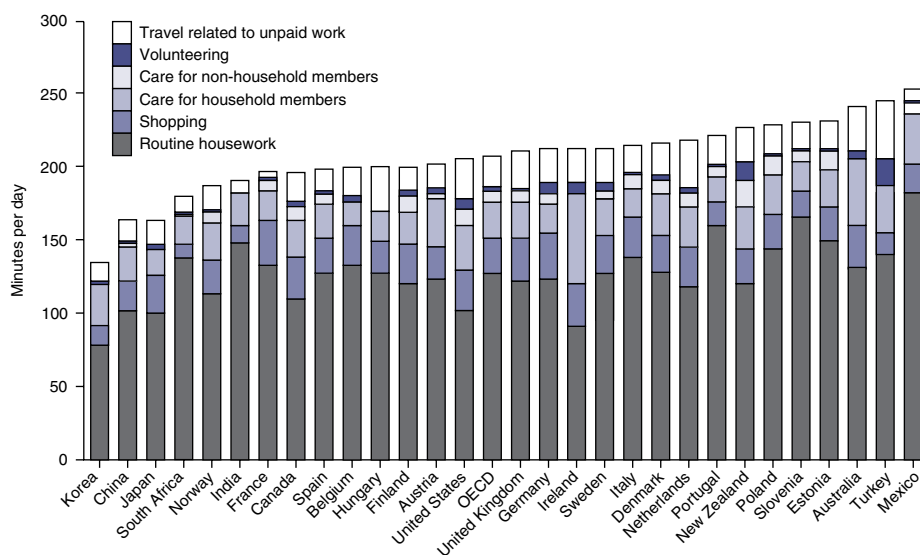


Figure 13.1 Main categories of unpaid work in various countries, ranked according to time spent on unpaid work (in minutes per day)

Source: OECD (2011), <http://www.oecd.org/social/soc/societyataglance2011.htm>.

The most important issue for this chapter, however, is the question of *who* is doing all of this unpaid work? The answer, overwhelmingly, is that it is being done by women. Figure 13.2 shows that in most countries, women do twice or even three times as much unpaid labour as men. There is, however, a great deal of geographical unevenness in gender roles in different places around the world. In Scandinavian countries, men do less unpaid work than women, but the gender gap is much smaller. In countries with lower rates of female participation in the waged labour force and different cultures of gender relations, we see a very wide gap. In India, South Korea, and Japan, for example, men do just a small fraction of the unpaid labour done by women.

Overall, we see a general global pattern in which unpaid work tends to fall primarily to women. This is critical because, as we will see later, the association of femininity with domestic spaces and domestic work shapes a great deal of what women experience when working *outside* the home. The most obvious influence is the limitation that expectations of motherhood and marriage place on women. Even in societies that consider themselves to be the most liberal and emancipated, it is undoubtedly true that the role of the primary parent and domestic worker is still a gendered one. While they vary across cultures, these expectations often keep women from entering the workforce at all.

Participation in the labour force is defined as the number of people in the waged workforce – either employed, self-employed, or looking for work – as a percentage of the total population of working age. Figure 13.3 shows that the trend over the last few decades has been a general, but not universal, movement towards greater participation for women. The pattern is still very uneven, with

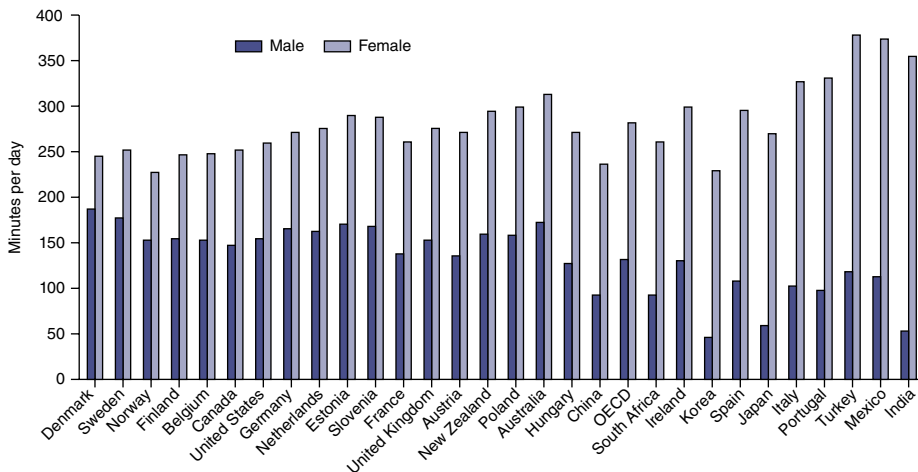


Figure 13.2 Minutes spent on unpaid work per day in various countries, ranked according to male–female disparity

Source: OECD (2011), <http://www.oecd.org/social/soc/societyataglance2011.htm>.

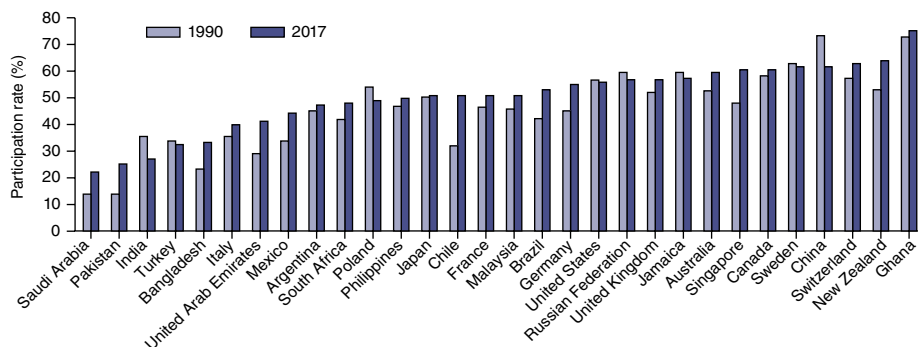


Figure 13.3 Female labour force participation in selected countries, 1990 and 2017

Source: World Bank (2018).

Ghana, New Zealand, Switzerland, China, Canada, Singapore, and Sweden having some of the highest levels of female participation (all over 60 per cent). Conversely, India, Italy, Turkey, Pakistan, Bangladesh, and Saudi Arabia are much lower (all below 40 per cent).

In the wealthier countries of the Global North, high levels of women's participation in the labour force represent the continuation of a trend starting in the mid-twentieth century. In some newly industrializing countries, on the other hand, the trend is more recent. In Malaysia, for example, the female participation rate grew from just over 30 per cent when the country achieved independence from British colonial rule in 1957, to just over 50 per cent by 2017. Moreover, this increased participation is not due to larger numbers of women entering traditionally female occupations, such as running market stalls or working as elementary school teachers. Instead, much of this participation results from the rapid development of export-oriented garments and electronics sectors in the 1970s and the 1980s, which drew young rural women into labour-intensive factories.

With some exceptions, we see increases in women's participation in the labour force over the last few decades. This is true in both the 'developed' and 'developing' countries. These parallel changes are different in nature but ultimately part of the same process. The key is the restructuring of the global economy (see Chapter 3). One component of this has been the deindustrialization of the developed world and a structural shift towards service-sector employment. With this change, the secure and well-paid industrial work of the Fordist era, which supported male-breadwinner families and stay-at-home mothers, has largely disappeared. As levels of pay and job security have declined, dual-income families are increasingly the norm in developed countries and larger numbers of people are employed in part-time work or temporary jobs. This change also came about at the same time as women's roles in broader society were changing from the 1960s onwards, with greater participation in the public sphere and higher levels of education increasingly available. Partly because of this and partly causing it too, there

has been a trend towards later marriage and childbirth, and the greater social acceptability of doing neither.

At the same time, certain kinds of manufacturing jobs from the developed world have moved to Mexico, China, India, Bangladesh, and other developing countries. In these places, it has primarily been women who have been the rank and file of the industrial workforce. In many industrial estates around the world, where clothing, toys, electrical appliances, and computers are assembled, at least three-quarters of the workforce is female (see Figure 13.4). Asking why this is so would elicit different answers depending upon who was asked. Factory managers usually note a series of personality traits that are assumed to be distinctively feminine, and that are useful to them given the specific labour process involved: a high tolerance for boring, repetitive work; manual dexterity and precision (the infamous ‘nimble fingers’); and a submissiveness towards authority, usually in the form of older supervisors or male managerial staff.

Understanding the specificities of places in the developing world has often led critics of labour conditions to frame the situation somewhat differently, arguing that gender-based power structures are recreated as a disciplining mechanism in the workplace so that the workforce is kept under tight control. They would also point out that workers are usually paid a very low wage, often so little that it barely covers their cost of living. Employers are able to do this essentially because



Figure 13.4 Women workers leaving the largest industrial estate in the Philippines, the Cavite Economic Zone

Source: the authors.

their workforce is often young and single, without a family to support. Indeed in many cases, support is provided by rural families to assist industrial workers, rather than the other way around. These contrasting perspectives have led to much debate about whether employment in the labour-intensive factories of the developing world is actually liberating for young women, or if it just represents further capitalist exploitation and oppression (see Table 13.1).

A further point that should be made about the increasing participation of women in the workforce is that their household work is not usually taken up by men, but by other women. Many countries that have seen growing female participation have also accommodated migration flows to supply low-cost domestic workers who will perform domestic cleaning and childcare functions for working mothers. As we noted in Chapter 6, in many countries domestic workers arrive from poorer rural areas, while in cities such as Singapore and Dubai, they arrive as temporary foreign workers. Overall, we see a process of increasing women’s participation in the workforce worldwide, but often in subordinate roles. Nevertheless, it is not gender alone that shapes the devaluation of women’s work.

Table 13.1 Contrasting views on the emancipatory potential of industrial employment for women

Female industrial work as emancipation	Female industrial work as oppression
• Working hours and conditions are better than in agriculture or domestic work. • Wages are good in terms of local purchasing power. • Some employers are looking for longer-term commitment and skills development for employees. • Employment provides participation and respect in the public sphere and a chance to associate with other women. • Income gives a greater social role and respect within the household, and greater control in terms of delaying marriage and childbirth.	• Low wages and benefits, sometimes below subsistence levels. • Often debilitating or dangerous working conditions and harsh factory discipline. • Insecure employment – jobs may disappear with changing international circumstances; women may be laid off if they marry or have children. • Few opportunities for upward mobility or skills development. • Women are confined to particular job categories, especially those involving repetitive, boring, manual work. • Patriarchal dominance and discipline is often reproduced inside the factory. • Waged work may not mean a reduction in household responsibilities; and wages may become the property of male household heads.

Whether their participation in the labour market is as factory labour, domestic workers, or caregivers, the subordination of women is also importantly related to race and ethnicity. This is seen most graphically in cases where the bodies, and even the lives, of 'Third World women' are devalued. Box 13.2 illustrates the inseparability of gender from other aspects of identity, with femininity being used in the workplace as a form of devaluation in conjunction with race and nationality.

FURTHER THINKING

Box 13.2 Devaluing the 'Third World Woman'

In the contemporary global economy, women in poorer countries appear to be especially favoured as employees by international investors in the manufacturing, tourism, and hospitality businesses. They are also favoured in wealthier societies as the nannies and maids who carry out the domestic chores of those women who have entered the waged workforce. But being favoured does not necessarily mean they are valued. Their work is generally lowly paid and they are treated as unskilled. In some cases, they are viewed as being *incapable* of skilled work, and the intersection of ethnicity, gender, and nationality creates strong stereotypes. These stereotypes include the ability to do tedious and repetitive work without complaint, to work with close attention to detail, and to acquiesce to managerial control without the resistant pride of masculinity. This devaluation has been especially and tragically evident in the factories of Mexico's northern border, known as *maquiladoras* (see Box 5.2). In the 1990s and the 2000s, the border town of Ciudad Juarez gained notoriety when hundreds of female corpses were discovered in the surrounding desert. The killings reached a peak in 2010–2012. It has been argued that these murders were indicative of the worthlessness accorded to women's bodies, lives, *and* work, in the factories of the region.

Within the factories, they are seen as unskilled, untrainable, and docile, and yet women constitute about 70 per cent of labour-intensive assembly line workers. Managers and supervisors see themselves as the brains behind the operation, with women simply acting as robotic manual workers. As a result, it is seen as pointless to try to train such workers, and, in any case, they are viewed as far too inclined to resign or switch jobs to make it worthwhile. In essence, female Mexican workers are seen as entirely disposable and replaceable – a piece of the factory that eventually will become worn out (with stiff fingers, tired eyes, and aching backs) and discarded. Outside the factory, newly independent women are often seen as sexually promiscuous, dangerously liberated, and on the same level as the prostitutes for which the city has long been known. In this way, it is argued that it was the devaluation of Mexican womanhood in general that was happening in Ciudad Juarez, and not just of factory employees in particular. The low pay,

poor conditions, and lack of upward mobility for women factory workers were part of a more general devaluation of Mexican womanhood. Where industrial production called for a 'disposable' kind of worker, northern Mexico became an ideal location. For more on this example, see Wright (2006); for a more recent study pursuing similar themes in Haiti and the Dominican Republic, see Werner (2016).

13.4 Gender, Race, and the Labour Market

We have seen how, in many societies, women take on most of the burden of household work. This is true even where both halves of a heterosexual couple are working. This has implications for the manner in which women participate in the workforce. In particular, the integration of paid and unpaid work into the everyday lives of women can have an effect on the type of employment available. Furthermore, a person's place of residence in an urban area is often also shaped by aspects of ethnic and racial identity. This information allows us to apply a geographical lens on the question of how identity can shape people's experiences of the labour market. Most importantly, it is the geographical link between workplaces and homes that plays an important role in determining employment outcomes.

Several studies of specific cities in the United States and elsewhere have shown the different ways in which women and men enter into labour markets:

- Women are often constrained in the distance they can commute because of the need to be at home when children arrive from school, to collect them from school, or to incorporate shopping trips or other activities into their days (Rapino and Cook 2011). As a result, studies have shown that women tend to have shorter commuting times than men. There are exceptions though. A study in New York found that black and Hispanic women in particular commuted much further than either white women or men, largely because ethnic minorities resided in urban centres far from the major centres of employment, which had moved to the suburbs (Preston and McLafferty 2016). The quality of public transportation can also be a factor. For example, a recent study of Tirana, the capital of Albania, shows that low investment in public transport has left many women dependent on walking to get to work. For families that do own cars, they are far more likely to be used by men. This kind of 'transport poverty' severely constrains access to employment among women (Pojani et al. 2017).
- In searching for jobs, there is some evidence that women tend to use personal networks, while men rely more on formal processes, such as advertisements or employment agencies. Also, women's job search information networks tend to consist overwhelmingly of other women, and such social networks are

often neighbourhood-based (Joassart-Marcelli 2014). This means that their job opportunities are often highly localized and limited, thereby reproducing the unintended concentration of women in certain jobs, and in workplaces that are close to home. This is especially so when women are also members of a racial or ethnolinguistic minority and especially dependent on their immediate social networks for job search information.

- Employers may locate in particular neighbourhoods in order to access specific pools of labour, and may deliberately recruit through existing employees in order to ensure a locally resident workforce. This might in some cases be a tactic to ensure a stable, undemanding, and non-disruptive workforce. These concentrations of female employment in the suburbs of large cities have been referred to as *pink collar ghettos*.
- Women may find their jobs after a household has decided where to live. This decision is often made on the basis of the husband's employment. Thus, women tend to be looking for work locally without actually having selected their residential location with a view to the possibilities for employment.
- Finally, it is important to emphasize that racial differences intersect with gender when it comes to linking home and work in urban space. In particular, the racialized segregation of residential patterns, and uneven access to public transport in those neighbourhoods (a feature, especially, of American cities), can lead to very uneven access to employment opportunities (Shabazz 2015; Parks 2016).

The key point to note here is that gender, race, and space all shape peoples' experiences in the labour market. The home is often treated as a place of feminine responsibility, social networks used for job searching are gendered, and residential location has to be reconciled with employment location. All of these factors demonstrate how the geographies of labour markets and home-work linkages can lead to uneven employment outcomes for men and women and for different racialized groups. There is, however, unevenness in the manifestation of these issues, which will depend on urban residential structure, transport facilities, the role of ethno-racial segregation, and cultures of masculinity and femininity. Thus, there is no universal pattern regarding the interplay between gender and space, and it will have its own uneven geographical manifestation in different cities around the world.

13.5 Identity and the Workplace

It is not just domestic spaces, and the jobs associated with them, that become gendered. Similarly, race is not just a factor because of residential segregation. Workplaces can also become gendered and racialized environments, resulting in the exclusion of groups who are not seen as fitting in. We noted earlier the controversy that has swirled around the particular profile of the workforce in the high-tech sector, using the example of Google. This sector provides a useful illustration of how gendered workplaces can be exclusionary through everyday

practices, many of them quite minor when viewed in isolation, that add up to an exclusionary environment.

A study of high-tech firms in Cambridge (United Kingdom) and Dublin (Ireland), for example, found that workplaces were highly masculine environments in a variety of ways (Gray and James 2007; James 2017). Women at such firms are more likely to be part-time employees because of pressure to combine work and family responsibilities. They are therefore less likely to socialize with colleagues during working hours as they focus on getting their work done. As a result, the social atmosphere of the firm becomes more male dominated, with lengthy discussions revolving around football, cars, and other classically male concerns. In turn, the maleness of the social atmosphere further discourages women from attending social events, such as coffee mornings, parties, or after-work drinks. This might seem like a minor issue, but it has two major consequences. The first is that female employees are participating less in the informal exchange of knowledge in the firm and so their ability to contribute is reduced. This may reduce the overall productivity of the firm by creating exclusionary spaces of knowledge exchange and innovation. The second consequence is that women are participating less in the networking and knowledge gathering that are essential to career advancement both within their current firm and in the broader labour market. The maleness of work-based social networks may place limits on women's upward mobility, and this further augments the general maleness of the atmosphere in the high-tech sector.

Similar cases are also found in the financial sector. Research in Singapore, for example, shows that there are both gendered and racialized norms that set expectations in the financial sector workplace, and create exclusions for those who do not conform. This is seen most explicitly in relations to race. In one study, a female British-Indian bank executive working in Singapore described the treatment given to applications from Indian applicants:

I found it quite interesting because the people in HR didn't realize I was of Indian origin since my name was Nelson and maybe I looked Latino or South American. We were hiring and they were going through the CVs ... and every time an Indian CV came through, they threw it into the bin without even looking at it (Ye 2016: 140).

Gender also sets up bodily norms in the workplace. In the same study, a male executive noted that:

For women, you have to be on it. You have to look really good, unless you are really that great in your work, and there are very few of those. Female counterparts dress perfect. They dress to impress on the trade floor, especially those with good bodies ... they can be Chinese Singaporeans or expats or whatever. Hot is hot! (Ye 2016: 147)

Interestingly, the bodily types apparently required of women in this instance are exemplified with reference to ‘Chinese Singaporeans’ and ‘expats’ (by which the interviewee meant ‘white’). The dress and self-presentation of others, such as Muslim Malay women, were implicitly excluded. This represents a reminder that femininity intersects with other dimensions of identity, but it also highlights the fact that workplaces become associated not just with masculinity or femininity but also with specific kinds of gender performance. The quotation strongly implies that in the case of the banking industry there are heterosexual gender identities that must be exhibited to gain acceptance. The same could, of course, be said of many other industries and workplaces.

This brings us to a further point about the ways in which jobs increasingly require the performance of certain kinds of femininity or masculinity. This is especially so in work that requires some form of social interaction with a customer or a client. The demeanour, including the gender and sexuality of the provider of a service, is thus crucially important, and indeed is a fundamental part of the ‘product’. For example, it is common for international airlines to emphasize the attentive and caring demeanour of its flight attendants. Similar requirements are found in a wide range of occupations, including investment banking, real estate, bartending, healthcare, and academia – that is, any job that requires a component of social interaction. These jobs are increasingly widespread in service-oriented economies and require not just technical skills but also an embodiment of certain characteristics. Gender and racialized identity are especially important, but other bodily features, such as height, shape, weight, skin tone, grooming, dress, comportment, accent, elocution, emotional presence, and so on, are also significant – in other words, the full range of ways in which the body is presented in a social interaction (McDowell 2009). The key point is that gender and race are *performed* in the workplace. These performances create certain roles for men and for women and for different racialized groups, which are difficult to transcend.

An example is provided by the nursing profession in the United Kingdom, with a workforce that involves both gendered and race-based performances (Batnitzky and McDowell 2011). Gendering in nursing is very clear, with the performance of caring work associated with stereotypically feminine and maternal traits, such as patience, gentleness, selflessness, and emotional sensitivity. To be considered a good nurse (by colleagues, patients, and managers) is necessarily to perform these traits. But nursing work is also defined by aspects of racial identity. When the National Health Service was created in the late 1940s, nurses were recruited from across the British Commonwealth (the former Empire), but they were often channelled into lower paid and less desirable segments of the nursing profession. The legacy, which continues to the present, is a set of assumptions and stereotypes that associates women of colour (Caribbean, South Asian, and Filipino especially) with the menial, dirty, and lower status tasks that are required within nursing workplaces. Furthermore, an association with these kinds of work is often internalized by workers themselves so that it feels ‘natural’ for certain bodies to do certain tasks within the workplace.

A separate, but related, aspect of identity in the workplace relates to queer gendering and non-normative sexuality. For example, being gay or lesbian may have a significant impact on the types of jobs that are available, the places where an individual or couple would want to live, and the type of workplace that feels safe. Heteronormative or homophobic places of work may present significant barriers to professional advancement for young gay workers. A study of gay men in Ottawa and Washington, DC, for example, highlights the varied ways in which sexuality shapes engagement with the labour market (Lewis and Mills 2016). Gay individuals or couples may deliberately seek work in cities known to have large gay communities where they will feel both safe and supported. They may also target sectors (such as government work) that are perceived to be more accepting. Nevertheless, within the workplace of even the most tolerant institutions, there may still be expectations that gay men who are ‘out’ will not be too open about their sexuality. In many places, even where gay identity is legally accepted, only a narrow range of employment options realistically exist.

We have noted the processes that tend to exclude women, racialized minorities, and non-normative sexualities in the labour market, but it is also important to acknowledge that economic life is no longer quite as positive for heterosexual white men in the labour market either. While secure employment might once have been the expectation of most young men, economic restructuring in the developed world is increasingly removing the kinds of jobs that they would once have occupied. Box 13.3 examines this phenomenon in the United Kingdom in particular.

FURTHER THINKING

Box 13.3 Redundant masculinities

In the developed world, urban labour markets have become increasingly polarized. At one end there are high-status, well-paid, and technology-intensive jobs in what is often termed the ‘knowledge economy’. They usually require high levels of formal education, and many are in the business services sector, such as law, accountancy, marketing, and various kinds of consultancies, as well as creative employment in design, entertainment, advertising, and journalism. Senior bureaucratic jobs in the public sector would also enjoy some of the same privileges. Although there are barriers to women in some of these fields, as we have seen in this chapter, they are increasingly open, at least at the entry level, to men and women equally. The other pole comprises low-paid, low-status, and insecure jobs, largely in the service sector. These jobs exist, for example, in the retail, clerical work, food services, cleaning, and hospitality sectors. In these jobs, contact with the public is often a requirement, and many are socially constructed as feminine

jobs. The classic attributes of masculinity effectively disqualify young men from such jobs.

Meanwhile, traditionally masculine jobs in the manufacturing and resource sectors are declining in number as global restructuring takes such employment abroad to locations with lower labour costs. Secure employment at a factory, in a mine, or at a pulp and paper mill is now difficult to find in Western economies. The result, in British society, for example, is that the traditional sources of employment for young working class men with low levels of formal education are now very scarce. With those jobs the traditional sources of employment that affirmed masculine identities have also disappeared. Not only are young men finding themselves redundant – that is, out of work – but the ‘laddish’ masculinity from which they develop their self-esteem and identity is also increasingly redundant and out of date. For some this will mean a ‘portfolio career’ in which they move from one short-term job to another. For many, masculine identities will no longer be derived from the work that they do, but rather from the consumption decisions that they make – for example, the clothes they wear, the music they listen to, and the drinks they consume. In short, while economic restructuring has brought women into the workforce in subordinate roles, in some contexts it has also led to the exclusion of young men and the removal of traditional bases for masculine identity. (For more, see McDowell 2003, 2014; Hardgrove et al. 2015).

13.6 Ethnic Clusters and Networks

Ethnic Enterprises and Clusters

We have seen the ways in which people are differentially sorted into various kinds of jobs in urban labour markets and how this often leaves women and racialized groups in more disadvantaged positions. In some cases, ethnic and racial minorities have responded to marginalization in the labour market by establishing their own businesses and their own commercial neighbourhoods. This is an entrepreneurial process with a long history, but it is a phenomenon that has become even more prevalent with increasing flows of migration since the last quarter of the twentieth century (see Chapter 6). Major immigrant cities may now have a distinctive Chinatown, Koreatown, Little India, Little Tokyo, Greektown, Little Italy, Portuguese Village, and so on (part of Singapore’s Little India is shown in Figure 13.5). The most visible ethnic businesses would be restaurants, grocery stores, laundrettes, travel agencies, and other enterprises on the urban landscape. Beyond these activities, ethnic enterprises may also extend into



Figure 13.5 Singapore's Little India

Source: the authors.

a full range of less visible activities, including banking, real estate, construction, and manufacturing.

Different ethnic groups have varied in their tendency to establish businesses in their host societies. Where immigrant groups have been quickly assimilated into the waged labour force (for example, British, Jamaican, or Filipino immigrants to Canada arriving with the necessary linguistic skills), then levels of self-employment are generally low. But where the cultural barriers to employment are difficult to surmount, self-employment has been more common. This has been especially true where immigrant communities have also arrived with sufficient capital – for example, in the case of recent South Korean or Taiwanese immigrants to the United States. Indeed, it is with resources from within the ethnic community that enterprises are often established. Box 13.4 relates the story of Korean convenience store owners in Ontario, Canada, and highlights the importance of these ethnic resources.

Co-ethnic networks may provide capital for the initial establishment of a business, and credit during its operation, but they may also offer important information on how to navigate the bureaucratic intricacies of establishing a new business, market intelligence on where opportunities are to be found, as well as the suppliers, employees, and customers that a new business needs. Such ethnic resources might amount to nothing, however, if the *opportunity structure* for establishing a business is not conducive. This relates to the opportunities

CASE STUDY

Box 13.4 Ontario's South Korean convenience stores

South Korean immigration to Canada was minimal until new immigration laws in 1967 made the process less biased in favour of white European immigrants. Immigrants from South Korea started to arrive in the early 1970s, but it was in the 1990s that a significant immigration stream emerged. Of almost 130,000 Korean immigrants living in Canada by 2016, just over 80 per cent had arrived in the previous 25 years, reflecting a huge surge in immigration following a financial crisis in South Korea in the late 1990s. In 2016, more than 20 per cent of ethnic Koreans in the Canadian labour force were self-employed (compared with 12 per cent for all Canadians), reflecting the fact that nearly half of all Korean immigrants in the 1990s had entered Canada through a business immigrant program. Many of these Korean entrepreneurs established video rental shops, restaurants, dry cleaners, and, in particular, convenience stores. By 2010, there were estimated to be over 2,000 convenience stores operated by Korean immigrants in the province of Ontario alone. Figure 13.6 shows one such convenience store in Toronto.



Figure 13.6. Korean convenience store

Source: the authors.

Why did so many Korean immigrants establish convenience stores? On one side of the equation, from the late 1980s onwards a restructuring in the retail sector led several corporate owners of chains of convenience stores to sell off their retail outlets – hence, a business opportunity presented itself at precisely the time when Korean business immigrants were arriving. It was also a business on a scale that could be operated by a family, required no specific technical know-how, supplied a modest but reliable daily cash income, and could be acquired for about the required investment under Canada’s business immigration program (C\$300,000–\$400,000 depending on the place of settlement). But why Koreans in particular? In part this reflects the relatively low levels of English language fluency among Korean immigrants, which made only certain kinds of business possible. But a large part of the explanation relates to the co-ethnic support networks created by the Korean immigrant community. As noted earlier in this chapter, when a particular group gains a foothold in a particular sector of the economy or the labour market, it can lead to deepening concentration as new arrivals are guided by previous immigrants into the field that they themselves have entered. In the Korean case, this was also institutionalized through the Ontario Korean Businessmen’s Association (OKBA). The OKBA was established in 1973 and emerged to become a major factor in channelling new Korean immigrants into retail enterprises, providing information, credit, and wholesale services to convenience store owners. Less tangibly, the OKBA also created a social environment in which members could find mutual respect and solidarity – a reinforcement of self-esteem in a Canadian context of de-professionalization and cultural difference (for more, see Kwak 2002; Chan and Fong 2012). Since 2016, the life of a Korean-Canadian family running a store has been portrayed through the popular Canadian sitcom, *Kim’s Convenience*. An earlier, and more serious, documentary film on the family and gender dynamics in a Korean convenience is provided by Sun-Kyung Yi’s *Scenes from a Corner Store* (Yi 1996).

and barriers that a host society presents. There may, for example, be government policies concerning the establishment of businesses in a particular sector. The general economic climate will also affect whether small businesses are able to take root and grow. Also, the size of an ethnic community and its spatial distribution might determine whether businesses can be established that will serve co-ethnics alone.

In some cases, ethnic minority groups may be forced into certain kinds of businesses or sectors. In the early part of the twentieth century, Chinese immigrants in North America, for example, established restaurants and laundry businesses

because they were largely excluded from all but the most menial of tasks in the waged labour force. This motivation for self-employment is often referred to as the *blocked mobility thesis*. In many Southeast Asian countries, such as Indonesia and the Philippines, where Chinese traders had settled for hundreds of years, citizenship was often denied and legislation in the 1950s explicitly excluded non-citizens from land ownership or any form of retail business. This forced many ethnic Chinese into wholesaling, banking, and manufacturing industries, which, ironically, proved to be far more profitable and dynamic sectors over the subsequent decades. The same has been true for Jewish immigrants in North America, and elsewhere – exclusion from land ownership and skilled worker guilds in Europe forced many Jewish entrepreneurs to take on roles as ‘middleman’ traders, retailers, and moneylenders.

By the early twenty-first century, such institutionalized racism is less common, but ethnic differences (including, for example, linguistic and religious differences) are still a basis for the marginalization of some groups in immigrant-receiving societies. In addition, several major destination countries had put in place ‘business immigrant’ programs that granted residency or citizenship to individuals with entrepreneurial experience and large amounts of financial capital to invest. In Canada, Australia, and New Zealand, for example, many ethnic Chinese from Greater China (China, Hong Kong, and Taiwan) took advantage of these programs and were thereby obliged to establish businesses.

A further feature of these businesses is their congregation in spatially defined *clusters*, forming identifiable commercial districts, such as a Chinatown or a Little India. It would seem that *place* therefore plays an important part in the emergence of an ethnic economy. There are several dimensions to the process. First, ethnic business clusters are usually located in the heart of residential neighbourhoods associated with the same ethnic group. The neighbourhood is likely a source for employees, who may have been attracted to the area in the first place because of employment opportunities in ethnic enterprises. The advantage of such employment for new immigrants is that barriers such as non-recognition of credentials, linguistic limitations, and discrimination are much less likely to present problems than in the mainstream labour market. Where a business is specifically targeting co-ethnics (for example, a restaurant or grocery store), it also clearly benefits from this concentration of potential customers.

Second, there may be *agglomeration economies* (described in Chapter 12) that generate benefits for businesses locating close to their competitors. Restaurants, for example, might collectively benefit from customers (especially those from other ethnic groups) who are attracted to the neighbourhood as a whole as much as to an individual shop or restaurant within it. Large Chinatowns in New York, San Francisco, London, Manchester, and Sydney, for example, are tourist attractions in their own right and locating within them offers access to a wealthy tourist clientele, as well as ethnic Chinese clients living, working, or studying in these cities. In the United Kingdom, Manchester’s ‘Curry Mile’ in Rusholme and the

Bangladeshi restaurants of London's Brick Lane similarly benefit from the agglomerations they form (see Figure 13.7).

Third, ethnic business clusters enable enterprises to access the ethnic resources mentioned earlier. Networks that provide capital, know-how, and market information are often based on face-to-face interaction, which requires spatial proximity. These networks have been shown to be critical in a variety of settings where ethnic minorities have successfully established businesses, and for them to work effectively, the clustering of related businesses is often a necessary prerequisite.

Finally, a spatial enclave collectively forms a tangible basis for the nurturing and maintenance of an ethnic identity. The architecture, languages spoken, products sold, and even faces seen in an ethnic business cluster ensure that identities are reinforced and positively affirmed. In other words, to be Chinese in Chinatown is to be reminded of one's 'Chinese-ness', which in turn increases the likelihood that one will continue to demand Chinese goods and services.

There has been much debate concerning the desirability of spatial clustering and enclave formation among ethnic groups in major immigrant-receiving cities. On the positive side, the ethnic economy is seen as providing opportunities for new immigrants, access to particular market segments, and an array of mutual support mechanisms. On the negative side, however, ethnic economies are seen as marginalized, providing poor wages and working conditions, and holding limited opportunities for expansion. These various positions are summarized in Table 13.2. It is, however, important not to assume that the movie-induced stereotypes of an



Figure 13.7 Brick Lane in London

Source: reproduced with permission of mattjeacock/Getty Images.

Table 13.2 The two sides of ethnic enterprise

Dimension	Positive	Negative
Causes for entrepreneurship	• Market opportunities • Entrepreneurial initiative	• Discrimination • Blocked mobility
Networks and organizational structure	• Ethnic resources • Organizing capacity of ethnic groups • Cooperation in raising capital	• Excessive internal competition • Dependence on networks • Commodification of ethnicity
Networks and labour	• Job opportunities for immigrants • Efficient labour recruitment • Advantages due to low-cost labour • Returns to human capital	• Containment and segregation of ethnic groups • Poor pay rates and exploitative working conditions • Low returns to human capital
Networks and markets	• Access to protected markets • Successful business transactions	• Limitations of a closed ethnic market
General outcomes	• Internal support mechanisms and social mobility	• Exploitative labour relations and broader structural marginalization • Spousal exploitation

Source: adapted from Walton-Roberts and Hiebert (1997), table 1. Reproduced with permission of Canadian Journal of Regional Science.

ethnic economy hold true in all cases. Informal contract arrangements, small-scale businesses, and low-skilled, low-paid work might still exist in some places and for some groups, but a more complex picture must now be acknowledged. Many ethnic communities in the largest immigrant gateway cities now have sophisticated and formalized forms of business.

We should also note that ethnic economies have proven to be dynamic and mobile phenomena. In recent years, with a new generation of wealthier immigrants, older downtown ethnic neighbourhoods in some cities have been joined by new ethnic residential and commercial concentrations in the suburbs. Dubbed *ethnoburbs* by some researchers, these are often not marginalized spaces of ghettoization, but are thriving concentrations of ethnic business that depend to a large extent on the ability of ethnic banks to finance their development. In Los Angeles, the ethnic Chinese banks mentioned above have, through both mortgage lending

and commercial loans, brought about an increased concentration of ethnic Chinese in particular neighbourhoods, including both the downtown Chinatown and the Chinese ethnoburb of Monterey Park. Similar dynamic processes are occurring in the San Francisco Bay area. In Toronto (as well as in Vancouver's Richmond and Sydney's Chatswood), suburban neighbourhoods have become the major destinations of new, and often wealthy, immigrants from Hong Kong, Taiwan, and China. Toronto's two downtown Chinatowns are now relatively minor residential and business concentrations for the Chinese population, and the presence of other groups such as the Vietnamese has increased in these areas. The primary centres of Chinese commercial activity are now the city's northeastern suburbs, where numerous Chinese shopping malls have been developed.

Transnational Ethnic Business Networks

Aside from the clusters that emerge in urban neighbourhoods to serve local ethnic minority populations, bonds of ethnicity can also give rise to transnational business networks. Such networks connect global economic space together through relationships founded on a common ethnic identity. Often, these are not the powerful transnational corporations discussed in Chapter 5, but small enterprises that nevertheless transcend national borders.

In recent years, the business practices associated with transnational ethnic firms have received increasing attention. Ethnic Chinese entrepreneurs have been a particular source of fascination, largely because the rise of China itself as an economic force has been paralleled by the great success of ethnic Chinese communities around the Pacific Rim and elsewhere across the world. From Sydney, to Singapore, to San Francisco, ethnic Chinese immigrant communities (or, more accurately, some segments within them) have thrived economically, in part based on the global networks forged by bonds of co-ethnicity.

One example of ethnic Chinese business networks facilitating cross-border economic connections is to be found in investments by Malaysian firms in Vietnam. Since the late 1980s, Vietnam's communist economic system has been increasingly opened up to private enterprise and foreign investment. At the same time, Malaysia has become a middle-income country with higher wages and industries that are restructuring to focus on higher-value production operations. As a result, many Malaysian firms have looked to move their labour-intensive activities to new locations. Vietnam has proved to be an attractive destination and, by 2016, Malaysia was among its top 10 sources of foreign investment projects (Vietnam 2018). Both Malaysia and Vietnam have significant ethnic Chinese minorities and these communities have been important in creating joint ventures, especially among smaller and medium-sized enterprises (SMEs) from Malaysia. These have included firms involved in retail, manufacturing, agriculture, and other sectors. One study found that almost two-thirds of Malaysian SMEs operating in Vietnam did so through an ethnic Chinese counterpart (Lim 2016).

It is useful, however, to note that such transnational entrepreneurship is not unique to the ethnic Chinese. In southern France's port city of Marseille, Mitchell (2011) shows that the city's trading networks converge towards Belsunce in the city centre. This ethnic neighbourhood is formed primarily by Algerian vendors and Sephardic wholesalers and continues to serve as the most important landing site for contemporary Maghrebi and sub-Saharan immigrants from former French colonies (e.g. Tunisia). Operating through a highly personalized and trust-based system, Belsunce now offers an excellent selection of specialty food items and other ethnic supplies to second- and third-generation immigrants in the local and regional markets in Southern France and even weekend customers from North Africa. This city centre-based trading node has deep and tightly linked transnational ethnic networks that connect it with the entire Mediterranean region and beyond.

There are a number of distinctive business practices that seem to prevail in such networks that are not always found in the mainstream market economy and that appear to have been especially well-adapted to competition in the contemporary global economy. These practices emphasize the importance of personalized trust and sociocultural connections in initiating and cementing what is otherwise a business relationship. In the case of ethnic Chinese business, this has become known as Chinese, or Confucian, or *guanxi* capitalism, referring to the Mandarin Chinese word for 'relationship'. Five characteristics in particular are seen to be competitive advantages of ethnic Chinese firms:

- Family ties are a significant component of business management. Even some very large multibillion-dollar ethnic Chinese businesses are controlled by sons, sons-in-law, brothers, and nephews of a founding father figure (and such managerial posts are, on the whole, the domain of male relatives alone). The advantage of family ownership is that it allows quick decision-making even across a transnational business organization.
- Business transactions outside of the family circle will often be based on other forms of cultural affinity: membership of the same clan, place-based identities, and linguistic commonality. There is, then, a social basis to business ties that cements the business relationship into one of mutual trust and reciprocity that goes well beyond a purely contractual relationship. Where joint business ventures with foreign partners are involved, this creates a reliable relationship where legal and contractual agreements may not be easily enforceable. This has been the basis for a great deal of the investment by Taiwanese and Hong Kong manufacturers in mainland China since the early 1990s.
- Both familial and cultural relationships point to the importance of reputation and trust in business practices. These might apply to relationships between competitors, between contractors and suppliers, and between employers and employees. The bond of trust in business relationships is especially effective in ensuring that contracts are honoured even when partners are oceans apart – a

relationship based on trust is far more easily stretched across global space than one based on legal contracts.

- The ability to raise capital for new business ventures through informal networks creates a great deal of flexibility. Instead of going through formal banking or stock market channels to raise money, a new venture can be financed through loans from members of the same co-ethnic network. In ethnic Chinese communities, such mutual aid has been a long tradition, largely on account of the discriminatory environments in which they found themselves initially and the lack of access to formal credit channels. In a contemporary transnational business operation, such sources of credit make the raising of capital for new ventures both relatively easy and inexpensive.
- In the exchange of market intelligence, relationships in networks can be cemented not just through business partnerships but also through binding indebtedness – not of a financial kind, but through the exchange of gifts and favours, including information. A cultural understanding of the ‘gift economy’ then dictates that a gift can never be exactly repaid, thus establishing an ongoing relationship.

In this section, we have seen how familial or co-ethnic bonds can operate at scales much greater than the neighbourhood scale of the ethnic economy in a particular city. Transnational ethnic enterprises represent a stretching of the same bonds and ethnic resources that create urban business clusters. In some cases, particularly the example of ethnic Chinese business networks, these bonds have proven to be well-adapted to the need for flexible and reliable business partnerships in the contemporary global economy.

13.7 Intersecting Identities

We have seen how various aspects of identity are important in shaping experiences of economic life. There are three final issues of importance that must be emphasized. The first is that many of the dimensions of identity are both place-based and relational. In other words, what it means, for example, to be a woman, to be Chinese, or to be gay is not universal and unchanging. Rather, it reflects how those identities are constructed in places. Even within a place defined at the scale of a city, there are spaces and times where various axes of identity take on different significance. To be a Black woman working in the music industry in a diverse metropolis in North America might not invoke a sense of workplace exclusion. But working in a downtown corporate law firm where white masculinity feels like the norm will prompt a quite different understanding of how you ‘fit’ into a place (see, for example, Roderique 2017). In other words, identities are relational – they become relevant and mobilized depending on the specific context.

As second point is that we should avoid making prior assumptions about what a particular gender, racial, or ethnic identity will mean. There may, in fact, be circumstances where identity is less important than is expected. In discussing ethnicity, for example, there is always an inclination to create groups and categories and to assume that they are both meaningful and homogeneous – that they will define behaviour and experiences because of some innate or essential characteristic. In reality, ethnicity does not determine practices; instead, practices are where ethnicity is to be found. This is a subtle distinction, but an important one. This liberates us from dead-end discussions that imply a person with a certain identity *will* therefore behave in a certain manner. In short, we should not assume that ethnicity predicts any particular forms of economic practice or exhibits any essential characteristics.

An example is found in the case of transnational business networks often assumed to be rooted in Chinese ethnicity. There are extensive linkages between the Hsinchu high-technology region in Taiwan and Silicon Valley in California, based on co-ethnic Chinese networks. But while co-ethnic bonds may facilitate relationships, such as subcontracting and sharing of information, many entrepreneurs remain cautious with respect to bonds of co-ethnicity (Saxenian and Sabel 2008). More important are the technological and economic logics for collaboration, rather than the pure cultural logics that supposedly shape ‘*guanxi* capitalism’. *Guanxi* is not the dominant organizational principle behind such relationships – it is the lubricant in the system, rather than the system itself. Ultimately, technological competencies and a market-based rationality are the determining factors in shaping these high-tech industries. This reminds us that we must not replace a simple economic logic with one that overemphasizes cultural and identity-based processes.

A final point to make is that gender, race, ethnic background, or sexuality are all, ultimately, mixed together in an individual. It is impossible to separate the ways in which any axis of identity shapes economic experiences in isolation from all of the others. To take a specific example, Ursula Burns was the CEO of the Xerox Corporation between 2009 and 2016. As such, she was the first black female CEO of a Fortune 500 company. Born in Panama and raised by a single mother in a low-income housing project in New York City, she overcame numerous assumptions about where she should fit within the corporate hierarchy of the United States. But it would be impossible to say whether being poor, black, female, or an immigrant was individually the major obstacle that she faced. Clearly the combination of all of these marginalized identities left her with a steeper hill to climb. In the same way, the social processes that underpin these obstacles are also interactive and overlapping: the inaccessibility of educational opportunities for children growing up in poverty; the racism and sexism that shape the experiences of women of colour; and the lack of social networks that immigrants can draw upon. All of these work together to limit economic opportunities, except for a fortunate few like Ursula Burns. For this reason, an integrated understanding of

multiple forms of advantage or oppression – often called intersectional analysis – is important (Mollett and Faria 2018).

13.8 Summary

This chapter has sought to establish the ways in which aspects of identity, and especially gender, race, and ethnicity, play a significant role in the operation and experience of economic processes. To assume that economic processes work according to some kind of ‘blind’ logic that ignores embodied identity is, in itself, a rather short-sighted perspective.

We started by tracing the uneven global geography of gender in terms of labour market participation and then argued that increasing female participation represents, in some cases, a devaluation of women’s bodies. In seeking to understand differential outcomes in the labour market, we showed that gendered divisions of labour within the home often lead to unequal access to employment opportunities outside it as well. The geographies of residential segregation by race also have an impact on labour market outcomes. In this way, the spatial linkage between home and work is a key geographical process that shapes gendered and racialized labour market outcomes.

Within the workplace, we have seen the ways in which gendered exclusions can operate but also how racialized bodies are often construed as fitting, or not fitting, certain kinds of work. This brought us to the issue of how identities of diverse kinds, including non-normative sexualities, are performed in the workplace.

We then turned to an extended discussion of ethnicity and the ways in which it becomes inscribed on the urban landscape through ethnic business enclaves. These are often a response to exclusions in the mainstream labour force. Ethnicity is also an active force in facilitating transnational business networks, especially where transactions require high levels of trust. It is important, though, not to overstate the significance of ethnicity. It should not be seen as some kind of essence that determines a person’s actions or destiny. Instead, it is place-based, relational, and always intersecting with other dimensions of embodied identity.

Notes on the references

- The extensive geographical work of Linda McDowell and her collaborators provides clear, insightful, and empirically rich accounts of gendered workplaces, the reworking of masculinity, and the intersection of gender, race, religion, and other identities in economic life, (e.g. McDowell 1997, 2003, 2009; Batnitzky and McDowell 2011; Hardgrove et al. 2015; Rootham 2015). A video of McDowell delivering a 2014 keynote lecture on her work is available on the *Economic Geography* website and is published as McDowell (2015).

- The *International Encyclopedia of Geography*, published by the American Association of Geographers, provides some useful recent overviews of the role of gender, race, ethnicity, and sexuality in relation to employment (see, for example, Mullings 2017; Skop and Li 2017; Wilson 2017).
- A growing body of literature exists on gender, race, and sexuality in tech-sector labour markets and workplaces. See for example, Wright et al. (2017), James (2017), and Cockayne (2018).

Sample essay questions

- How does the division of domestic labour within the household affect women's experiences of work in the waged labour force?
- How might workplaces become gendered or racialized in exclusionary ways?
- Does increasing access to the waged labour force represent liberation for women around the world?
- Are ethnic businesses beneficial for those who participate in them?

Resources for further learning

- Catalyst is a non-profit organization committed to expanding opportunities for women in business. It is based in Washington, DC, and has offices in Canada, Europe, India, Australia, and Japan. Its website, www.catalyst.org, provides a wealth of data and studies on gender in the workforce.
- The Organisation for Economic Cooperation and Development (OECD) focused its attention in 2011 on the issue of unpaid work. Its 'Society at a Glance' publication provides extensive data and discussion: www.oecd.org/els/social/indicators/SAG.
- The Maquila Solidarity Network has campaigns and further information concerning women's work in export factories around the world: <http://www.maquilasolidarity.org>.
- The United Nations, World Bank, European Union, and other international bodies, as well as national government statistical agencies, maintain extensive online statistics relating to gender, race, and work.
- There have been some very high-profile cases of gender-based discrimination in the workplace in recent years, with extensive media coverage. A web search for 'sexism in Silicon Valley' or 'gender pay gap' will generate numerous case studies.
- Issues of gender equity, workplace sexism, and anti-racism have been at the forefront of social movements in recent years, including the #MeToo movement and Black Lives Matter, both of which have been extensively discussed in the media.

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CHAPTER 14

ALTERNATIVES

Can we create diverse economies?

Aims

- To show the limits of capitalism dominating our thinking by profiling the diverse economy.
- To explore alternative capitalist and noncapitalist forms of economic practice.
- To demonstrate the strong place attachments of the diverse economy, but also some underlying spatial patterns, network connections, and territorial forms.

14.1 Introduction

In central London, just four miles from the financial district of the City of London, sales are made in local shops that do not use the United Kingdom's national currency. Instead they use the Brixton Pound (B£), which comes in a range of striking designs by local artists showcasing famous former residents of the area, such as David Bowie (see Figure 14.1a). The Brixton Pound was launched as a paper currency in September 2009 by a community organization called Transition Town Brixton, and two years later an electronic pay-by-text platform was introduced. There are now an estimated 500,000 B£ in circulation and some 250 local businesses accept the paper form of the money, while 200 have pay-by-text accounts. Residents can also pay their local municipal fees in the currency, and local employers can use it to pay wages. As the currency can only be accepted locally, the scheme seeks to



Figure 14.1 (a) The Brixton Pound and (b) the Bangla-Pesa – money that ‘sticks’ in a locality
Source: (a) Chris Ratcliffe/AFP/Getty Images. (b) From <https://cdsblogs.wordpress.com/2013/08/15/complementary-currencies-contrasting-fates-m-pesa-and-bangla-pesa-in-kenya>.

encourage spending in independent local businesses and stop the ‘leakage’ of money to firms based elsewhere. In so doing, it aims to give ‘local traders and customers the chance to get together to support each other and maintain the diversity of the high street and strengthen pride in Brixton’ (brixtonpound.org). Brixton is not alone in the United Kingdom context, where at least 10 other cities have established local currencies, including Bristol, Cardiff, Hull, Liverpool, and Plymouth.

In an informal settlement of 20,000 people on the outskirts of Mombasa, Kenya, a similar idea is at work. Since late 2013, residents have been able to pay for goods and services using Bangla-Pesa vouchers (see Figure 14.1b) as part of a local mutual credit scheme. ‘Bangla’ derives from the name of the settlement, while ‘Pesa’ means money in the local language, Swahili. Every member of the scheme is initially given 400 units of the currency (worth approximately US\$4 in exchange value), half of which must first be spent through community initiatives before joining the general circulation. Unlike the Brixton Pound, which can be exchanged for pounds sterling, the Bangla-Pesa cannot be converted into the national currency, the Kenyan Shilling. Instead, the scheme represents a form of ‘money creation’ in which the vouchers are given value through the shared willingness of the members to accept them in exchange for goods and services, and also to spend them in a reciprocal fashion. The scheme involves some 2000 members and 220 businesses and is designed to tackle several issues in the informal settlement’s economy, namely a general lack of money, market instability, low levels of investment, and a paucity of local businesses. Through interest-free credit and use of a currency that cannot travel beyond the borders of the area, the aim is to foster market stability, enhance local trade, build trust, and increase local jobs and business development. The Bangla-Pesa is now one of seven such schemes

across Kenya run by the Grassroots Economic Foundation, a non-profit organization, which has also supported the initiation of two local currencies in South Africa and one in the Congo (www.grassrootseconomics.org).

Worldwide, there are hundreds of alternative or community currencies in operation. In essence, they are trading networks that use a form of currency produced by non-state actors, in contrast to currencies issued and managed by national banks. They exist alongside national currencies as a supplementary form of exchange and are designed to address local economic development objectives. In short, community currencies provide a powerful example of an *alternative* way of organizing and running the economy. But an alternative to what? In Chapters 2 and 3 we saw, respectively, how the economy functions both as a dominant set of ideas (associated with mainstream Economics) and as a powerful system in the form of capitalism. We should not fall into the trap, however, of assuming that the mainstream economy is ubiquitous and all-powerful. At various points in this book we have already exposed various alternative ways of doing things: the ‘iceberg’ economy in Chapter 2; informal retailing in Chapter 7; Islamic finance in Chapter 8; community-based development schemes in Chapter 10; and the importance of domestic/reproductive labour in Chapter 13. What unites these seemingly disparate elements is a different set of goals to that of maximizing private wealth and profit for business owners, the central driver of mainstream capitalism. In some cases, such as the desire to enhance local economic development through an alternative currency, the goal will be complementary to conventional capitalism. In others, however, the alternative practice may be explicitly designed to be separate from, and even undermine, the profit motives of capitalism.

In this chapter we foreground these alternative economic practices and thus reveal the inherent diversity of economies. In doing so, we seek to mobilize three arguments. First, and most simply, we aim to show that alternative economic activities are not isolated, marginal cases, but are instead commonplace and take multiple forms in the contemporary economy. While a community currency seeks to provide an alternative means of economic exchange, we can also identify alternative forms of enterprise, work, and property ownership. Second, we will reveal the underlying geographies of these alternative economies. The two currencies introduced above are by design local and restricted to, and shaped by, particular places. The Brixton Pound, for instance, is intended to tap into the cultural diversity, community spirit, and history of activism within the area. As we will see in this chapter, however, other alternative economic practices – such as fair trade – have much more networked, global geographies. Third, alternative economies often sit uneasily alongside the mainstream, capitalist economy. While such practices are extensive and pervasive, at the same time it is extremely hard to achieve true autonomy from the wider capitalist and political systems in which, in most cases, they are ultimately embedded.

Our narrative in this chapter develops over six subsequent sections. First, in Section 14.2 we highlight the limits of the dominant view of the economy, and

establish the need for a diverse economies perspective that recognizes a wide range of alternative practices. In the subsequent four parts of the chapter (Sections 14.3–14.6), we then explore four different domains in which alternative approaches are evident, namely markets, enterprises, ways of working, and forms of resource/property ownership. Finally, Section 14.7 explores whether there are limits to alternative economic practices, most notably because of the tendency of the capitalist system to ‘coopt’ such endeavours into processes of profit generation. We therefore raise questions about the challenges of scaling up diverse economies into a meaningful alternative to capitalism.

14.2 Beyond a ‘Capitalocentric’ View of the Economy

As noted in Chapter 2, certain representations of ‘the economy’ predominate in academic, policy, and everyday discussions. What we might term the ‘taken-for-granted’ economy is commonly seen to revolve around capitalist firms, wage labour, market exchange, and private property relations, operating within the framework of a capitalist system. This ‘capitalocentric’ discourse arguably dominates the entire economic landscape, and often comes with associated terminology including free markets, consumer choice, economic efficiency, and trickle-down effects.

Capitalocentrism thus describes the way in which capitalism is placed centrally in economic debate, squeezing out or marginalizing alternative or noncapitalist modes of development that are assigned a lesser value. Such noncapitalist activities are seen as barriers to economic development on account of being ‘primitive, backward, stagnant, traditional, incapable of independent growth and development, and *opposed* to the modern, growth-oriented, and dynamic capitalist economy’ (Gibson-Graham 2006a: 41; emphasis in original). The Bangla-Pesa, for example, has met resistance from policymakers in Kenya, with a county commissioner arguing in 2017 that ‘It is just barter trade and it should be discouraged. We are in the 21st century. How can people still engage in what was done centuries ago?’ Indeed, the currency’s inventor, Will Ruddick, and five other members were arrested and charged in 2013 for what was seen as subversive activity. Although they were subsequently cleared and the charges dropped, these responses are revealing about the power of capitalocentric thinking and the way in which alternatives can be perceived as threatening and as leftovers from a previous era.

Challenging capitalocentrism requires two interlinked strategies. First, it calls for the development of a different language or narrative of the economy that does not normalize the central elements of the formal economy (i.e. capitalist firms, wage labour, markets, and private property). Second, it necessitates revealing the everyday scale and significance of alternative economies to show that, while dominant, capitalism is a partial and porous economic system that coexists with a

wide variety of other forms of economic activity. We will consider each element in turn, with the economic geographer J.K. Gibson-Graham and her colleagues providing the best guides to this terrain.

First, in terms of counter-narratives of the economy, a new framework is required to recognize that economic activities can be underpinned by varied and overlapping motivations in addition to, and perhaps distinct from, the imperative of capitalist profitability. Gibson-Graham et al. (2013) suggest that we try to ‘take back’ the economy through the notion of the community economy, which poses a tentative answer to the deceptively simple question of ‘what is the economy for?’ For them, a community economy concerns: ‘*surviving* together well and equitably; *distributing surplus* to enrich social and environmental health; *encountering others* in ways that support their well-being as well as ours; *consuming* sustainably; *caring for* – maintaining, replenishing, and growing, our natural and cultural commons; and *investing our wealth in future generations* so that they can live well’ (emphasis in original; xviii–xix). Importantly, rather than talking about the economy in detached and technical terms, there is an explicit set of human values at work here, evident in terms like ‘equitably’, ‘sustainably’, ‘well-being’, and ‘caring’. In effect what they provide us with is an ethical ‘checklist’ for assessing the goals driving different forms of economic activity. Alternative economic practices can thus be gauged in terms of the extent to which they address some of these broader ethical concerns.

Gibson-Graham (2006b) goes even further in developing the language of the community economy, counterposed to that of the mainstream economy. The latter might be thought of as global, large scale, based on competition, export-oriented, focused on short-term returns, management led, and amoral. The community economy on the other hand emphasizes place-attachment, small scales of production, cooperative relations, a local market orientation, long-term investments, and a community led and ethical approach. As we will see in this chapter, such binaries are not unproblematic. There are many shades of grey in between, for example, competitive and cooperative relations. We will also challenge the seeming relegation of the community economy to the scale of local places, which is ultimately somewhat limiting. The general point, however, about the need to reconsider our frameworks for describing economic activities, and think through the wider impacts of the language we use, is undoubtedly important.

Second, we can return to Figure 2.7 – depicting the iceberg economy – to remind ourselves that not all economic relations are capitalist, in fact far from it. Looking beneath the water’s surface reveals capitalism to be ‘just one particular set of economic relations in a vast sea of economic activity’ (Gibson-Graham 2006b: 70). In general terms, it is important to appreciate that capitalism has not been around for all of human history, but is instead a specific form of economic organization that emerged in Western Europe (and its associated empires) in the sixteenth and seventeenth century and has subsequently expanded across the globe, leaving few countries untouched by time of the collapse of the communist

Eastern Bloc in the early 1990s. Moreover, as we saw in Chapter 9, capitalism itself is not a homogenous system but rather exists in distinct national varieties that reflect the institutional configuration of the different states and territories. Here, though, we will largely focus on the fact that within predominantly capitalist economies there is a huge amount of economic activity that does not neatly conform to capitalist norms.

While such practices have always existed, many commentators suggest that in times of economic transition and crisis they become more prevalent and visible (Castells et al. 2017). Economic geographers have revealed, for example, how diverse economic practices enacted through familial, friendship, and neighbourly support networks were critical to households surviving the transition from state socialism to capitalism in Central and Eastern Europe in the 1990s and 2000s (Stenning et al. 2010). More recently, the period since the global economic crisis of 2007–2008 has proved to be a fertile one for studying such activities in countries like Greece and Spain that have suffered a prolonged and deep economic slump. Box 14.1 introduces a particular approach to community wealth building that originated in the deindustrializing cities of the northeast United States.

Table 14.1 provides a useful template for uncovering what Gibson-Graham (2006b) calls the *diverse economy*. The four columns detail separate domains under which economic diversity can be assessed, namely:

- Different kinds of transactions, with associated ways of assessing worth in the process of exchange.
- Different forms of enterprise, with associated ways of producing and distributing surplus value.
- Different types of labour, with associated ways in which workers might be compensated.
- Different forms of property ownership, with associated implications for how community resources can be managed.

The three rows, in turn, make useful distinctions between capitalist, alternative capitalist, and noncapitalist activities under each domain. ‘Alternative capitalist’ refers to activities that are to a certain extent capitalist but within which there is an attempt to do things somewhat differently, for instance, a firm that prioritizes environmental sustainability as its goal alongside profitability. ‘Noncapitalist’ speaks to activities that seek to disengage with capitalism to a greater extent and are driven by a different set of motivations and rationalities. Scanning Table 14.1 quickly reveals the wide range of activities that extend beyond the purely ‘capitalist’ category. In most cases these are not obscure, minority pursuits but rather hugely significant and commonplace activities such as housework, self-employment, state enterprises, gift-giving, and informal markets.

In Sections 14.3–14.6, we use Table 14.1 as a roadmap. Starting with alternative markets in Section 14.3, we will introduce the nature of each broad domain

CASE STUDY

Box 14.1 Community wealth building – the Cleveland model

In the early twentieth century, Cleveland, Ohio, was a boom town, leading the US economy in a range of industries including iron and steel, chemicals, paints, machine tools, and electrical machinery. It never recovered, however, from the financial shock of the 1930s' Great Depression and subsequent government efforts to disperse manufacturing industry, and a city population of 900,000 in the 1950s has fallen to less than 400,000 today. In the last decade, the city government in collaboration with other Cleveland-based organizations has pioneered a new approach known as community wealth building. This place-based strategy is based on two core principles. First, local anchor institutions – large, non-profit organizations such as hospitals and universities that are unlikely to close or leave the area – should be encouraged to spend as much as possible of their prodigious procurement budgets in the local area. Second, those goods and services should be provided wherever possible by local worker-owned cooperatives so that the wealth is retained locally within relatively poor, working communities. At the heart of the Cleveland scheme is the Greater University Circle Initiative in which three key anchor tenants – the Cleveland Clinic, University Hospitals, and Case Western Reserve University – have united to use their combined US\$3 billion annual budget to improve the fortunes of 60,000 residents in the surrounding districts, under the mantra of 'Hire Local, Live Local, Buy Local, and Connect'. Another much lauded success has been the establishment of the Evergreen Cooperative Initiative, which is coordinating the development of cooperative businesses, for instance, a locally owned laundry serving the Cleveland Clinic with 150 employees. What has become known as the Cleveland Model is now being pursued in over 20 cities across the United States.

The Cleveland Model is also travelling beyond the United States. In the United Kingdom, the leading proponent is Preston, a former mill town in the northwest of England that is home to 140,000 people. Since a £700 million redevelopment plan for the city centre collapsed in 2011, the council has tried to push for public sector anchor institutions to spend more money locally. Over the period 2013–2017, the proportion of procurement spent in Preston by six anchor institutions (two councils, the police force, two higher education establishments, and a housing cooperative) increased from 5 to 18 per cent (a £74 million increase) and the share spent in the wider county of Lancashire increased from 39 to 79 per cent (a £199 million increase) (Economist 2017). For an extensive range of resources on community wealth building in the United States and United Kingdom, respectively, see: community-wealth.org and cles.org.uk.

Table 14.1 The diverse economy

	Transactions	Enterprise	Labour	Property
1	Market	Capitalist	Wage	Private
2	Alternative market: • Fair trade and direct trade • Reciprocal exchange • Alternative currency • Local trading system • Barter • Underground market • Informal market	Alternative capitalist: • Green capitalist firm • Socially responsible firm • State-run enterprise	Alternative paid: • Self-employed • Reciprocal labour • In-kind • Internships	Alternative private: • State-owned • Tenanted • 99 year lease • Customary • Community-managed • Community trust
3	Nonmarket: • Household flows • Gift-giving • Gleaning • State allocations • Hunting, fishing, and gathering	Noncapitalist: • Cooperative • Social enterprise • Self-employed business	Unpaid: • Housework • Family care • Neighbourhood work • Volunteering • Timebanks • Self-provisioning	Open access: • Atmosphere • Water • Open ocean • Ecosystem services • Knowledge and technologies

Source: adapted from Gibson-Graham et al. (2013).

before providing examples of both alternative capitalist and noncapitalist forms of activity. For each case, we will seek to reveal the underlying geographies at work and assess the strengths and weaknesses of different practices.

14.3 Alternative Markets

Market exchanges that comply with the abstract laws of supply and demand are usually seen as central to the capitalist system. As we detailed in Box 2.4, this is a problematic view of how markets form and operate. Here, we will focus on how markets account for just a portion of all the transactions that circulate the goods and services underpinning human livelihoods. As the first main column of Table 14.1 demonstrates, there are a wide variety of other exchange mechanisms that need to be considered. Rather than being based on interactions between rational economic actors using externally determined prices, they reveal a range of other kinds of transactional relationships underpinned by varied motivations relating to, for instance, sharing, giving away freely, or fairly allocating resources. While the relative importance of these activities will vary both spatially and socially, many of these activities are very common and it would be hard to live our everyday lives without them.

In terms of *alternative market* mechanisms, we can think about, among others: sales of public goods and services by the state that are driven by policy goals rather than strict profitability criteria; local trading systems and alternative currencies designed, as we saw in the introduction to this chapter, to provide impetus to processes of local economic development; informal and underground markets in which goods and services are traded through very local, personalized arrangements (see also Chapter 7); bartering systems in which equivalence in goods is assessed by the participants and no money is required; direct trade organizations (e.g. Alter Trade Japan) and online forums (e.g. eBay, craigslist, and Carousell) that facilitate trade between businesses and individuals with minimal need for profit-making capitalist intermediaries; and ethical/fair trade initiatives in which producers and consumers agree on price levels that, in theory at least, should sustain minimum livelihood levels for those involved in the production of commodities. Here, we will explore this last example in more depth. Ethical consumption, which has by now become a broad-based movement in many advanced economies, speaks to the ways in which, through choices about commodity purchases, consumers demonstrate concern for the economic, social, and environmental conditions under which those goods were produced. Thus, and as we saw in Chapter 4, consumption is unavoidably a political act in the sense that it implicates and involves us in the wider production networks that underpin all commodities. Ethical consumption therefore entails exercising a ‘geography of responsibility’ that extends beyond the everyday and the local to incorporate notions of caring at a distance for others.

For an example of such an ethical trading initiative, we can consider the UK's Fairtrade Foundation, which was established in 1992 by a group of charities and NGOs. Its mission is to work towards 'a world in which all small producers and workers can enjoy secure and sustainable livelihoods, fulfil their potential and decide on their future' through the three goals of making trade fair, empowering small producers and workers, and fostering sustainable livelihoods (both socially and environmentally). The prime mechanism for tackling these goals is through targeting the economic returns that primary producers secure for their commodities, and applying the Fairtrade label to products sourced from the developing world that meet the standards of fair trade. As an organization, the UK Fairtrade Foundation accordingly undertakes a wide range of activities (www.fairtrade.org.uk, accessed 13 June 2018):

- Setting social, economic, and environmental standards for companies, farmers, and workers who grow and produce a range of commodities. For farmers and workers, the standards cover worker rights and environmental sustainability, while for companies they encompass the payment of the Fairtrade minimum price as well as an additional Fairtrade Premium that can be invested in business development or community projects.
- Independently certifying that products and ingredients are produced according to Fairtrade standards, and using the Fairtrade label as a way of signalling compliance to consumers.
- Working in partnership with other companies, most notably retailers, to help them develop their own ranges of Fairtrade products.
- Lobbying the UK government on a wide range of issues relating to ethical and fair trade, for instance, a 2018 campaign to promote Fairtrade gold.
- Working directly with farmers and workers on specific initiatives, for instance, the establishment of a women's leadership school among cocoa-growing communities in Côte d'Ivoire.
- Building public awareness of Fairtrade through working with communities, faith groups, educational institutions, etc.

Sales of Fairtrade goods have expanded rapidly in the United Kingdom over the past two decades. In 2016, £1.64 billion worth of Fairtrade goods were sold (double the amount in 2009), providing £32 million in Fairtrade Premiums to developing country producers. The label can be found on a range of foodstuffs, of which coffee, bananas, chocolate/cocoa, and tea are the most important, and non-food products such as cotton and cut flowers. Leading Fairtrade brands in the United Kingdom include Cafédirect (coffee and tea) and Traidcraft (food, drinks, crafts, and gifts), and the leading supermarkets such as Tesco now offer their own Fairtrade brands.

The UK Fairtrade Foundation is in turn part of the Fairtrade International network based in Bonn, Germany. In 2018, Fairtrade International was benefiting some 1.65 million farmers and workers in 1,226 Fairtrade-certified producer

organizations across 74 countries. It was responsible for £106 million of premium payments subsequently invested in education, infrastructure, productivity/quality schemes, and other such initiatives. In general terms, the geographical pattern of Fairtrade activity reflects traditional connections between developed country consumers and developing country producers, and it is important to remember that ethical consumption remains largely associated with high-income markets. Looking more closely, however, there are some distinct patterns and connections at work. Fairtrade International has three regional associations representing certified producer organizations in Africa and the Middle East (64 per cent of total workers), Latin America and the Caribbean (20 per cent), and the Asia-Pacific (16 per cent) (see Figure 14.2). East Africa alone accounts for 50 per cent of the global total of Fairtrade workers (800,000), while three countries in that region – Kenya, Tanzania, and Ethiopia – provide 693,000 workers or 43 per cent of the overall total. In terms of end markets for Fairtrade goods, in 2018, Fairtrade International encompassed 30 different national Fairtrade organizations: 19 were in Europe, 6 in Asia, 3 in the Americas (United States, Canada, and Brazil), and Australia and New Zealand. The UK market alone, however, is responsible for almost one-third of the global premiums provided for producer firms and workers. So, while Fairtrade International is one of the most established ‘global’ ethical trading organizations, its operations primarily reflect a particular set of

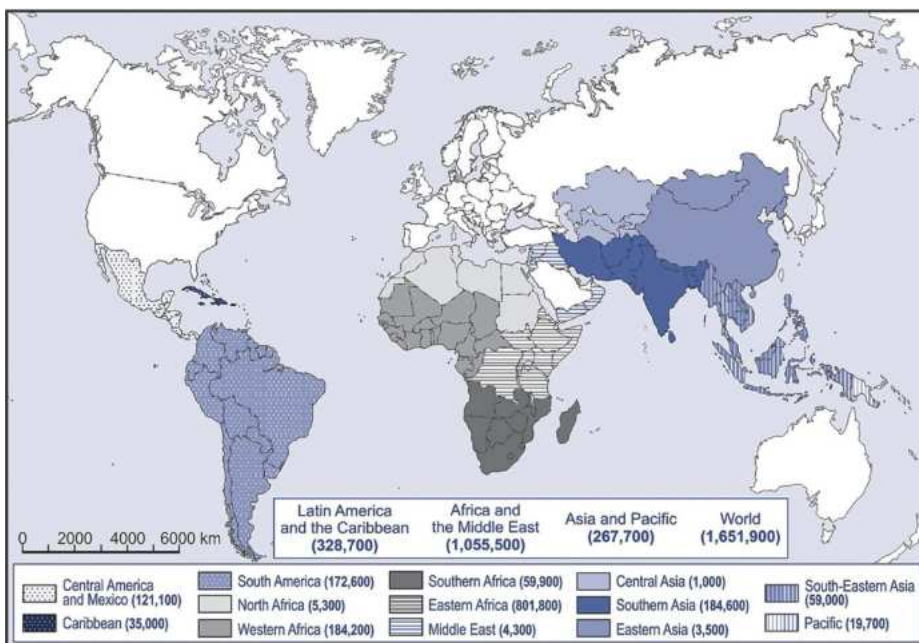


Figure 14.2 The global distribution of Fairtrade farmers and workers, mid-2010s

Source: adapted from Fairtrade International (2015), figure 3.5.

connections between leading consumer markets in Western Europe and former colonies in East Africa.

Within these global/national patterns there are also often strong local dimensions to ethical consumerism. Fairtrade Towns provide one interesting example of the place-based adoption of ethical consumption ideals. The status is awarded by the Fairtrade network to localities that have demonstrated support for fair trade through the local council, local retailers, media coverage, and events. The concept spread from the small Lancashire market town of Garstang in the United Kingdom which became the first Fairtrade Town in April 2000; by mid-2018 there were 631 Fairtrade Towns in the United Kingdom and over 2,000 in total across 32 countries (www.fairtradetowns.org). Again, the global geography is striking, with 1,160 Fairtrade Towns in just two countries – the United Kingdom and Germany – and just 100 outside Europe.

In addition to alternative market forms like Fairtrade, we can also think about clearly *non-market* types of exchange. Within the household, a huge range of goods and services (e.g. cooking, cleaning, and washing) are produced and shared through domestic routines and negotiations. We can also identify a range of other nonmarket forms of exchange, including: gift-giving based on norms of obligation or reciprocity; state allocations based on societal position/role such as old age pensions and parenting benefits; state appropriations such as non-negotiable income, property, and sales taxes; gleaning leftover agricultural crops; and hunting, fishing, and gathering based on negotiated access to certain areas. Here, we will look briefly at one specific form of gift-giving, namely the regular sending home of ‘balikbayan’ gift boxes by the more than 10 million Filipinos living and working overseas. We already know from Chapter 6 that remitted funds from such workers are a crucial contributor to households and indeed the economy of the Philippines as a whole. Balikbayan boxes are a related but different form of gift-economy at work.

The balikbayan box is the modern version of the traditional Philippine practice of ‘pasalubong’, in which travellers are expected to bring home gifts for family members, friends, and colleagues upon their return. The practice took off in the 1980s as a result of a government initiative designed to encourage overseas workers to spend as much of their earnings in the Philippines as possible. Once it became a struggle to transport the volume of purchased gifts in person, the balikbayan box was born. From 1987 to 2017 the boxes were exempt from import taxes and duties, and the decision to impose duties from 2017 onwards was politically very controversial. Balikbayan literally means ‘return to the nation’, and it is estimated that around 400,000 boxes arrive in the Philippines every month, with Christmas being the busiest time of the year. The corrugated boxes come in three standard sizes designed to stack effectively inside shipping containers, and are generally sent by sea using specialized logistics firms (see Figure 14.3), but they can also be carried in person by Filipinos returning by air. Firms offer a door-to-door service for as little as US\$40–\$80 per box, vastly cheaper than using a



Figure 14.3 A gift economy at work – packing balikbayan boxes in Hong Kong

Source: the authors.

regular parcel service or indeed posting a similar box within the originating country. The typical goods sent include clothes (both used and new), preserved foods, sweets/chocolates, cosmetics, cigarettes, electronic gadgets, vitamins/medicines, bags, toys, and shoes, regardless of their availability or not in the Philippines.

Balikbayan boxes have thus become an important part of the transnational ‘glue’ that connects overseas Filipino workers to their families back home. A study of Filipino workers in London reveals fascinating nuances associated with the practice (McKay 2016). Assembling balikbayan boxes may create strong connections to local informal economies, such as car boot sales in and around London that are a prime venue for sourcing items. While some migrant Filipinos will do extensive research into the specific needs of their families (e.g. for specific medicines), others will simply send what they want or what they feel befits their status as an overseas earner, potentially leading to unwanted goods arriving in the Philippines which may be regifted or resold at markets. Thus, the balikbayan box may also support alternative economic transactions in the places where they are assembled, and in the places to which they are sent. Overall, this example reveals an extensive, transnationally networked gift economy that is about demonstrating relations of care across great distances. Although market transactions may be involved in sourcing the goods and sending them, balikbayan boxes are fundamentally a cultural practice driven by a desire to show familial affection.

14.4 Alternative Enterprises

Dominant accounts of the economy tend to present the capitalist firm as being the most efficient entity for organizing production. In such a firm, all buildings and equipment are privately owned, employees are waged and work according to set schedules, commodities are produced and distributed through market mechanisms, and profits are captured by business owners or shareholders. A diverse

economy perspective, however, recognizes that there are many organizational forms in which ownership and production are arranged differently (an argument which we also made in Chapter 2).

Two important points need to be made at the outset. First, there is no such thing as a 'pure' capitalist firm. All firms are likely to use noncapitalist practices to a certain extent, ranging from the use of interns as a form of cheap or unpaid labour, to benefitting from state grants and subsidies. Moreover, as we will see shortly, it is equally difficult for noncapitalist enterprises to disconnect entirely from capitalist practices. Second, there are varied categories of capitalist firms that will distribute profits in different ways: a family owned firm may prioritize family members, in a private firm the economic surplus resides with the business owners, while for public companies the board of directors will determine the balance of reinvestment versus shareholder dividends. As we saw in Chapter 9, firms will also differ according to the national variety of capitalism in which they operate, and depending on their specific corporate culture and management strategies (see Chapter 5).

With these initial observations in mind we can first of all think about *alternative capitalist* forms of enterprise (refer again to Table 14.1). As we saw in Chapter 9, state-owned enterprises of different kinds have become important players in the global economy and may pursue goals of a more strategic or distributional nature beyond profitability. Here, we will focus on firms who pursue social and environmental goals alongside their core mission. It is debatable to what extent these strategies are 'alternative' or rather have become mainstream, but it is certainly true that some firms pursue them more wholeheartedly than others. In some cases, such goals are derived from participation in multi-stakeholder codes of conduct, such as the UK's Ethical Trading Initiative discussed in Chapter 10, and the Fairtrade movement discussed in Section 14.3. Equally, however, firms may unilaterally decide to develop their own corporate social responsibility (CSR) programmes. These are corporate strategies, integrated into a firm's wider business model, that seek to mitigate the impacts of the core economic activities and which may moderate their pursuit of profit maximization. While CSR has a long history, it has increased in salience since the 1990s for several intersecting reasons associated with the globalization of corporations and their production networks (Hughes 2018):

- The rise of anti-corporate activism, first seen in anti-sweatshop movements in the apparel industry.
- The rise of corporate brands and reputation, making large companies vulnerable to negative publicity.
- An increase in public awareness of corporate activity and its impacts due to enhanced global communications.
- The growing importance placed by the financial/investment community on ethical performance.

The case of the consumer goods giant Unilever is illustrative here. The company has a proud tradition of social responsibility activities. For instance, around the turn of the twentieth century its predecessor company Lever Brothers developed the model village of Port Sunlight next to its soap factory near Liverpool. The village was designed to provide high-quality housing and community facilities for workers and their families. By 1914, 800 houses had been constructed along with an art gallery, hospital, schools, swimming pool, church, and hotel. It is more recent initiatives that are our primary interest here, however. In 2010, Unilever launched its Sustainable Living Plan, which they described as ‘a vision to grow our business while decoupling our environmental footprint from our growth and increasing our positive social impact’. Sustainable Living, in turn, was defined as helping to ‘create a world where everyone can live well within the natural limits of the planet’. The Plan revolves around three primary goals and nine associated ‘pillars’ (see Table 14.2), which in turn are built upon 13 of the 17 UN Sustainable Development Goals identified in Figure 10.3. Unilever undertakes a review every two years to ensure that the identified priorities are still appropriate, and each pillar is underpinned by detailed targets and metrics (see illustrative examples in Table 14.2). Some of the targets directly relate to sales of Unilever products (e.g. water purifying tablets), while others do not. The company’s website provides extensive information on every individual element, including honest assessment of failures. For example, Unilever’s greenhouse gas footprint per consumer use of its products actually increased by 9 per cent over 2010–2017, with a key driver being the consumption of hot water while using Unilever personal care products. Unilever’s approach to CSR is unusually comprehensive, and it is widely acknowledged to be a leader in the field.

For proponents of CSR, such a strategy offers a progressive middle ground wherein the economic performance and social/environmental sustainability of a business are seen as interlinked and mutually reinforcing. This is the position taken by Unilever’s leadership, for instance. Some business advocates, however, argue that ‘values’ have no place in business and that CSR activities will negatively affect the financial results of firms. More critical perspectives tend to view CSR as a public relations exercise, in effect a strategy to distract from ‘business as usual’ practices. While that is an oversimplification and it is important not to generalize, as seen in the case of Unilever there are certainly clear tensions between the central impulse of firms to sell more products and a desire to reduce the social and ecological footprints of their operations.

Second, we can consider forms of *noncapitalist* enterprise although, as noted earlier, the noncapitalist element is often more of an aspiration than a reality. By far the most important form, both historically and in today’s global economy, are cooperatives. In general terms, cooperatives are a specific type of organization owned and controlled by a membership group for mutually agreed goals. They are thus distinctive both in terms of ownership and management practices. There are now almost 3 million cooperatives worldwide, with 16 million employees,

Table 14.2 The building blocks of Unilever's Sustainable Living Plan

Improving health and well-being	Reducing environmental impact	Enhancing livelihoods
Goal: 'By 2020 we will help more than a billion people take action to improve their health and well-being' Pillars: • Health and hygiene • Improving nutrition Example target: 'Through our range of water purifiers, we aim to provide 150 billion litres of safe drinking water by 2020' Progress by end 2017: 'Pureit provided 96 billion litres of safe drinking water by 2017. In 2017 alone, Pureit provided over 11 billion litres'	Goal: 'By 2030 our goal is to halve the environmental footprint of the making and use of our products as we grow our business' Pillars: • Greenhouse gases • Water use • Waste and packaging • Sustainable sourcing Example target: 'By 2020, CO₂ emissions from our global logistics network will be at or below 2010 levels despite significantly higher volumes. This will represent a 40% improvement in CO₂ efficiency' Progress by end 2017: '31% improvement in CO₂ efficiency since 2010. 6% improvement in CO₂ efficiency in 2017 compared to 2016'	Goal: 'By 2020 we will enhance the livelihoods of millions of people as we grow our business' Pillars: • Fairness in the workplace • Opportunities for women • Inclusive business Example target: 'We will build a gender-balanced organization with a focus on management' Progress by end 2017: 'The percentage of women managers in Unilever reached 47% in 2017'

Source: compiled from <https://www.unilever.com/sustainable-living> (accessed 14 June 2018).

11 million worker-members, and 253 million self-employed producer-members (the vast majority in agriculture). Up to 950 million more people are user-members of cooperatives, bringing the total number of people with some direct relationship to cooperatives to around 1.2 billion (data from www.cicopa.coop).

Within this overall picture, four sectors dominate, namely agriculture and food (28 per cent of global cooperative revenues), insurance (23 per cent), finance (18 per cent), and wholesale/retail (12 per cent). This is also reflected in Table 14.3, which lists the largest cooperative organizations by revenue, and also demonstrates that the leading cooperatives are based in developed country contexts, although the overall contribution to national economies can be far higher in developing countries that export agricultural products.

Table 14.3 The 15 largest cooperative and mutual organizations by turnover in 2015

Rank	Organization	Country	Sector of activity	Turnover (US\$bn)
1	Groupe Credit Agricole	France	Banking and financial services	70.89
2	Kaiser Permanente	USA	Insurance	67.44
3	State Farm	USA	Insurance	64.82
4	BVR	Germany	Banking and financial services	56.26
5	Zenkyoren	Japan	Insurance	49.17
6	Groupe BPCE	France	Banking and financial services	49.07
7	REWE Group	Japan	Wholesale and retail trade	48.18
8	Groupe Credit Mutuel	France	Banking and financial services	46.65
9	Nippon Life	Japan	Insurance	44.10
10	ACDLEC – E. Leclerc	France	Wholesale and retail trade	39.25
11	Zen-Noh	Japan	Agriculture and food industries	38.80
12	Nationwide	USA	Insurance	35.34
13	CHS Inc.	USA	Agriculture and food industries	34.58
14	NH Nonghyup	South Korea	Agriculture and food industries	33.94
15	Liberty Mutual	USA	Insurance	32.45

Source: World Co-operative Monitor (2017). https://monitor.coop/sites/default/files/WCM_2015%20WEB.pdf. Licensed under CC BY 3.0.

- Agriculture and food cooperatives: these tend to be producer cooperatives in which self-employed smallholders seek to achieve greater security and stronger prices for their crops by clubbing together. The largest such enterprise is Zen-Noh, a federation of almost 1,200 agricultural cooperatives in Japan.
- Insurance cooperatives: these are mutual organizations and cooperatives owned and democratically controlled by their insured customers. The biggest such organization globally is Kaiser Permanente from the United States.
- Finance cooperatives: this category covers cooperative banks and credit unions providing banking and financial services and which are democratically controlled by member-customers (i.e. borrowers and depositors). There are, for instance, some 68,000 credit unions in 109 countries serving 235 million members. They manage US\$1.4 trillion worth of savings and have a penetration rate of 13.5 per cent of the world's economically active population; in North America the penetration rate is 52 per cent, while in Asia it is 8 per cent (www.woccu.org). The activities of France's Groupe Credit Agricole in this area make it the largest cooperative in the world in revenue terms.
- Wholesale and retail cooperatives: these tend to be of the purchasing and consumer types. In terms of the former, independent small retailers may become part of a wider network to achieve a larger scale in terms of purchasing (sometimes called an enterprise cooperative). German retail group Rewe is the largest such organization. The UK's Co-op Group, by contrast, is a consumer cooperative owned by 4.5 million members who can directly influence the goods and services that are on offer.

It is also worth considering a fifth category, in which workers own the equipment and buildings of a productive facility, and take management responsibility themselves (as worker-members). A celebrated example is the Argentinean ceramic tile firm FaSinPat (a shortened form of 'factory without bosses' in Spanish), in which 250 workers occupied and then restarted a closed factory during an economic crisis in 2001–2002. The firm has weathered various storms since then, including a lack of local municipal support and the global financial crisis of 2007–2008, and currently employs over 450 workers. The occupation was formally recognized in 2009. Management roles are allocated through frequent elections and circulated among the employees, who receive no extra wages for taking them on. The largest industrial cooperative, however, is Spain's Mondragon Cooperative Corporation (MCC). The case is discussed in Box 14.2, which also explores some of the challenges of pursuing the cooperative model within the broader context of a capitalist global economy. As with capitalist firms, then, cooperatives should not be seen as a 'pure' organizational form, but rather as having different tendencies in terms of organizational structure and goals.

A final form of alternative business that we will consider in this section is the *social enterprise*. A social enterprise produces goods or services with the direct

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Box 14.2 The Mondragon Cooperative Corporation

The MCC was formed in the Basque area of Spain in 1955. Unhappy with the close relations between large businesses and the Spanish government in the aftermath of Spanish civil war, Father José María Arizmendiarieta set up the first cooperative in order to establish a degree of economic and political independence for the area. Since its creation, the cooperative has expanded greatly, and now encompasses over 260 separate units divided into four industrial groups – finance, industry, retail, and knowledge, the latter including a University – with total revenue of €12 billion in 2017. MCC is the fourth largest employer in Spain. In the same year, the MCC employed about 73,500 people, with 43 per cent of its workforce in the Basque region, 40 per cent in the rest of Spain, and 17 per cent abroad. Examples of its businesses are the Eroski retail group, which alone employs 33,000 workers across 1,800 stores, and Laboral Kutxa, a cooperative bank serving 1.2 million clients through 335 branches across Spain. Underpinning the whole endeavour are the four key principles of: (i) cooperative working; (ii) democratic participation in the business organization; (iii) social responsibility in terms of the distribution of wealth based on solidarity and community involvement; and (iv) constant innovation to drive business growth and the creation of jobs. Two brief examples demonstrate these principles in action. First, in 2017, the salary ratio between the highest and lowest paid worker was 9 as opposed to 129 for leading companies of the London Stock Exchange, showing a strong commitment to relative equality among so-called owner-workers. Second, when a leading domestic electronics branch of the MCC – Fagor Electrodomésticos – went out of business in 2013 with the loss of 1800 jobs, the vast majority of the workers were absorbed into other cooperatives within the group.

From its formation until the early 1990s, the MCC was able to use these principles to inform a model of growth that was widely lauded. Since then, however, it has gone through a period of expansion and restructuring driven by the logics of global competition that has challenged its founding principles. Traditional labour-intensive production methods have been steadily replaced by the greater use of technology and offshore production and markets. By 2017, the MCC had 140 foreign subsidiaries across 35 countries, and exports of €3.6 billion. As a result, the level of cooperative membership has slipped to 80 per cent of total workers, with the remainder being regular employees, resulting in a two-tier system of participation. The MCC's more than 1,600 workers at the Kunshan Industrial Park near Shanghai in China,

for instance, are not allowed to be members and work in conditions similar to regular foreign subsidiaries, with Spain-based arms of the MCC often being given preference in terms of high-value manufacturing and research investment (Errasti 2015). Growing involvement in global markets has thus ‘diluted’ the implementation of the MCC’s ideals. More generally, managers now find themselves wrestling with depressingly familiar dilemmas, such as whether to keep production in the Basque country, where pay rates are higher, and risk job losses and firm closures, or establish joint ventures or subsidiaries in countries where wages are low. For more, see: <http://www.mondragon-corporation.com/en>.

aim of serving a defined set of social and/or environmental aims. The distinction from the socially responsible capitalist firms we introduced above is that for these firms the social aims are the core focus. Again, however, drawing a precise boundary around the category is difficult: some will be non-profit organizations/charities, others will seek to generate profits and then use them for progressive goals, and in some cases social enterprises will overlap with the cooperative sector.

One of the most famous social enterprises is the Grameen Bank, a community development bank in Bangladesh that since its creation in 1983 by Muhammad Yunus has developed an extensive network of over 2,500 branches that make small loans (‘microcredit’) to the rural poor without the need for collateral. As of mid-2018 the Bank had loaned out US\$30 billion since its founding, and had a loan recovery rate of 96 per cent. Its services had reached 9 million members, of which 96 per cent were women, across 81,000 villages, and the bank provided direct employment for around 25,000 employees. The Bank – which is owned by its members – is driven by the philosophy that credit allows rural people, and specifically disempowered women, to chart their own path out of poverty. A more recent initiative is TOMS shoes, a for-profit business founded in 2006 in California by Blake Mycoskie. The company, which started out making simple canvas shoes, employs a ‘one-for-one’ business model in which for every pair of shoes bought in a shop it donates a pair to a needy child across 70, mainly developing, countries. As of 2016, 60 million pairs of shoes had been donated. For critics, the shoe donations do little to address the causes of poverty. In response, the company’s product range has expanded into spectacles, coffee, and bags, sales of which are linked to the provision of eye-care, water, and maternity care in developing countries, and 40 per cent of its shoe production has been concentrated in countries such as Kenya, India, Ethiopia, and Haiti where the shoes are donated. The sale of 50 per cent of the firm to private equity company Bain Capital in 2014, for an estimated US\$300 million, again highlights the blurred boundaries between capitalist and alternative forms of enterprise.

14.5 Alternative Working

We will now move on to consider alternative modes of working (see Table 14.1, third column). If the standard capitalist employment relationship is based on waged labour, it is important to note that this is a very varied category, ranging from high-skilled and professional jobs in which workers are given salaries that far exceed their everyday needs, through to a wide range of temporary, part-time, seasonal, and agency jobs in which terms and conditions are far more precarious.

Standing back from wage labour, however, as in Sections 14.3 and 14.4 we can again distinguish between *alternative* forms of paid employment, and *noncapitalist* types of unpaid labour. The former might include self-employment, in-kind exchanges of labour, and internships. The latter would include housework and family care, neighbourhood work, volunteering, and self-provisioning (e.g. growing your own food or Do-It-Yourself home maintenance). Such forms of work do not bring a wage but may instead yield other kinds of rewards, such as love, friendship, community support, protection, and self-worth. The key point is that there are many forms of working within the economy and a range of identities beyond simply ‘employer’ and ‘employee’. Here, we will consider the so-called sharing economy as a window onto the significance of self-employment, and then look at timebanks as a place-based form of unpaid reciprocal labour, while Box 14.3 profiles internships and volunteer labour in the ecological farming sector.

For many commentators, the sharing, ‘on-demand’, or ‘gig’ economy started to emerge in the context of economic crisis in the late 2000s. The movement towards this kind of work was driven by unemployment and underemployment in developed economies, combined with the take-off of widespread smartphone use and ‘app’ development. Some aspects of the sharing economy are about the sharing of assets such as accommodation and means of transport – for instance, Airbnb and competitors, and the wide range of car and bike sharing apps. Others, however, are task-based and therefore have important employment implications. While self-employment is far from new, these developments have facilitated the development of new forms of self-employment with different underlying geographies.

We can distinguish between two basic models in this context (Scholz 2017):

- *On-demand labour*: perhaps the most well-known firm in this category is Uber in the taxi sector, but Instacart (shopping delivery) and Taskrabbit (domestic tasks) are also leading examples. Uber has grown rapidly from a small start-up, rejected by most investors in 2010, to a company valued at almost US\$70 billion in 2017. Across 83 countries, Uber had provided over 2 billion rides by 2016 and was generating annual net revenues of US\$6.5 billion (though it had yet to reach profitability). While there have been attempts to develop new markets for high-skill labour such as doctors, lawyers, and management consultants, the model has proved most successful for more routinized and place-based forms of work.

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Box 14.3 'Will work for food' – non-wage farm labour in Ontario, Canada

The past decade has seen rising numbers of seasonal interns, apprentices, and short-term volunteers working on small 'ecologically oriented' farms in Canada, the United States, and Western Europe. In these kinds of non-wage labour, individuals work for minimal money and in return for varying combinations of training, food, and accommodation. Farmer-led organizations are often involved in coordinating such placements. In Canada, for example, the Collaborative Regional Alliance for Farmer Training (CRAFT) and the Atlantic Canadian Organic Regional Network (ACORN) are two such organizations. Detailed research in Ontario has explored the dynamics underpinning this phenomenon. These forms of non-wage labour represent the latest form of a long tradition of unpaid family labour on small farms. In these small, often economically marginal operations, the labour contributed by such workers can be crucial for the viability of the farms. At the same time, however, more-than-economic motivations are also clearly at work. Both farmers and interns/volunteers alike are part of a wider movement seeking to develop sustainable and organic farms as a viable alternative to the industrial agriculture sector. Workers often feel they are contributing their labour for this wider cause but also to gain experience and knowledge that will help them pursue their own career in the field. The elements of friendship and community building are also an important part of the process (Figure 14.4). Overall, the prevalence of non-wage labour of these kinds on small ecological farms raises an intriguing series of wider questions:

- How ethical, sustainable, and indeed legal is this rather precarious work system? Is it overly exploitative?
- Does the system provide an effective means of training future generations of farmers? Given that more women than men participate, what gender dynamics are at play?
- What are the risks for farmers of over-relying on a category of workers that may be less dependable than properly waged employees?
- What is the future of ecologically oriented farming more generally given its dependence on non-wage interns, apprentices, and volunteers?

For more, see Ekers et al. (2016) and Levkoe and Ekers (2017). On the general rise of internships across a wide range of professions, see Economist (2014).



Figure 14.4 An intern working on an Ontario farm

Source: reproduced with permission of Charles Levkoe.

- *Online labour brokerages:* here Upwork, Fiverr, Amazon Mechanical Turk, and Freelancer are some of the leading firms. As of 2018, Upwork had 12 million registered freelancers and 5 million registered clients. Three million jobs were posted annually, worth a total of US\$1 billion. In these forums, online work – such as software coding, translation, design, market research, etc. – is split into small tasks for which dispersed workers compete on the basis of price. There is a very different spatial pattern being created in this case, with distinct global labour markets for certain skills emerging. While demand for the tasks tends to be highest in the markets where the apps originate, notably the United States, outside of these markets freelancers are concentrated in certain emerging markets such as India and the Philippines (for similar reasons to the call centres discussed in Chapter 12).

There are different perspectives on the desirability of these new marketplaces for self-employment. For some, they offer much valued flexibility and employment potential for workers who are unable to take on full-time work, such as

students, the semi-retired, and people with parenting duties. For critics, a new version of informalized self-employment is spreading in which workers occupy a marginal position and may have no stability, pension, healthcare coverage, or workplace insurance, and have to take responsibility for their own training and career development. Uber provides a good example of these different facets. The company structures the whole car-hire process, while the drivers, termed 'independent contractors' by Uber, can determine how long they want to work for. Performance evaluation through online peer review adds another distinctive angle. The regulatory grey areas associated with these emerging modes of work are producing new geographic patterns as the services expand across cities and countries. Uber, in particular, has proven controversial, with government regulators keen to protect their incumbent taxi industries but also worried about the employment status of drivers. The company was banned in London in September 2017 for regulatory and safety concerns, for example, and its license was suspended in Denmark in 2017 after three years of operation. More generally, there is great variation in how freelancers and the self-employed are treated between different national territories, meaning the services and their associated impacts on modes of work are spreading geographically in uneven and distinctive ways.

A quite different form of alternative work is found in the example of timebanks. Timebanks are place-based initiatives in which members swap skills and labour through an exchange forum – usually online – based on the principle that every hour of work, whatever the activity involves, is of equal worth. Everyone is thus seen as an equal asset to the group, and the system is based on reciprocity and mutual respect. Timebanks can cover a wide range of activities, including child care, home repair, writing, tutoring, legal assistance, respite care, driving instruction, help with accounting, computer support, delivery services, and many others. In a timebank system there is no employer or employee, nor is there a wage, and as such it is an interesting form of unpaid labour relation for us to consider.

The foundational idea behind timebanking is co-production, which asserts that there is more capacity in economic systems than is recognized by the market. By 'unlocking' underutilized labour without the need for any additional finance, the approach aims to create multiplier effects within the local economy. Beyond these economic benefits, timebanks are designed to foster two further advantages. First, they strive to develop social justice and equality through the defining principle of 'an hour for an hour'. Marginalized people may feel enhanced self-worth through their involvement, which at the same time may give them access to skills and services that would otherwise be beyond their means (many members are from lower income groups). Barriers of class, gender, race, and so on should not matter in such a system. Second, timebanks are an exercise in community building through developing reciprocal networks of interaction and support. As they are locally run, they may empower individuals and groups to gain control over their lives.

There are many hundreds of timebanks worldwide, but the global geography is skewed heavily to advanced economies. In the United Kingdom, for example,

there are some 300 timebanks in operation, involving 5,000 organizations and approximately 41,000 people, with a similar number estimated to be in operation in the United States. The Wellington Timebank, established in New Zealand's capital city in October 2011, provides an interesting case study. Members use an online interface to post offers of labour and requests for tasks to be completed, including cleaning, gardening, and computer assistance. The scheme is funded by Wellington City Council and grants from other sources. By mid-2018, the timebank had 670 members, two-thirds of whom were women, and 20,000 hours of labour had been exchanged since it was started (wellingtonsouth.timebanks.org). In-depth research on the timebank has revealed both the possibilities and problems of trying to build a community in this way (Diprose 2016):

- The timebank was clearly underpinned by the positive ideals of forging reciprocal links and interdependencies between previously disconnected individuals. The sociality of the system was seen as important by members.
- The timebank was also seen positively as a way of incorporating marginalized individuals and building diversity into the community through placing value on all members' contributions.
- Concerns about safety and security when interacting with strangers, however, have led to the development of a range of entry criteria – a membership fee, an interview with the coordinator, provision of two references, and a police check. Membership of those with a prior criminal record is decided upon by a steering committee;
- A series of complaints led to the development of a list of 'safe trading tips' which are shared via the website and other communications.
- There are everyday tensions surrounding the principle that everyone's time is valued equally, reflecting that it is sometimes difficult to ignore the social norms operating outside the timebank.
- Members have had to negotiate views from outside the network that it is a 'hippie' or 'anarchist' project.

In conclusion, it is evident that 'the Wellington Timebank is neither a mythical utopia of commonality, or a perfectly functioning melting pot of diverse people who all get along' (Diprose 2016: 1424). Perhaps, the wider point here is that local communities, so central to many diverse economy initiatives, should not be overly romanticized and require intense ongoing processes of negotiation to sustain them.

14.6 Alternative Property

The final area we will consider in this chapter relates to the potential for alternative modes of property ownership and usage. Private property is a key foundation of the capitalist system, normally underpinned by an assumption that people who

have secure ownership of land and other resources will use it productively. However, once again we can use Table 14.1 (fourth column) as a reminder that private ownership of resources is just one type among many. First, certain resources can be thought of as *open access* as they are extremely difficult to establish ownership rights over. Indeed, our collective well-being on the planet ultimately depends on many things that are not formally owned, such as the atmosphere, sunlight, the various resources provided by the sea, and shared intellectual property (Gibson-Graham et al. 2013). The challenge with such open access resources, however, is that they are open to degradation and abuse, as seen, for instance, in debates about the rising levels of microplastics in the ocean. More generally, the dominant trend is for the privatization of open access resources through a process known as enclosure. An example would be the rising number of deep undersea mining contracts being awarded by the International Seabed Authority (ISA) – up from 6 in 2001 to 27 by the end of 2017. Indeed, contestation over ownership rights is becoming more acute due to pressures associated with expansion in mining, forestry, agriculture, and urbanization against a backdrop of climate change.

Second, in addition to open access resources we can also think of *alternative modes of private property ownership* that coexist alongside the model of the individual capitalist owner. The most important of these is public property which, as we saw in Chapter 9, is owned by governments and managed on behalf of citizens for their collective benefit (Cumbers 2012). Here, though, we will focus on the possibilities of community-managed property systems, which relate closely to the idea of the commons (see Box 14.4). This could relate to a tangible resource, such as land or a water body, or an intangible resource like a cultural practice or knowledge. Associated with the commons is the process of *commoning* through which the commons is produced and reproduced, in effect the opposite of privatization. Commoning is based on recognizing the interdependence of individuals, social groups, natural systems, cultures, and forms of knowledge. It can take many forms, such as protecting the commons we already share from privatization (e.g. public spaces in cities or genetic codes), reclaiming private property and expanding the commons to share things we need to sustain us (e.g. bringing a water system back into public ownership), or creating new commons (e.g. establishing community gardening in cities) (Amin and Howell 2016).

There are many contemporary examples of such dynamics in which community groups seek to ‘push back’ against the dominant processes of privatization and enclosure. Here, we will consider the establishment of a community fishery in the northeastern United States to illustrating commoning at work. The Maine Coast Fishermen’s Association (MCFA) was founded in April 2006 by a group of concerned fishermen in the small Maine town of Port Clyde (Snyder and St. Martin 2015). The community fishing initiative has subsequently expanded to encompass participants from 12 fishing towns along the coast of Maine (see Figure 14.5). The

KEY CONCEPT

Box 14.4 The commons

The commons refers to a resource or property that is under community management. More specifically, and drawing upon Gibson-Graham et al. (2013):

- Access to the property must be wide and shared.
- Use of the property must be negotiated by a community.
- Benefits must be distributed to the community and possibly beyond.
- Care for the property should be undertaken by community members.
- Responsibility for the property must be adopted by community members.

The question of who ‘owns’ the commons is a complex one. Although it is sometimes assumed that the community must own the resource in question, commons can actually be created from any kind of property, including privately owned, state-owned, or open access property. The idea of the ‘tragedy of the commons’ posits that open access resources will inevitably be degraded because people act in their own interest without thought for their impacts on others. However, the Nobel Prize winner Elinor Ostrom argued that actually the tragedy is the exceptional case, and showed that careful management can sustain different types of commons for very long periods. In the European Alps, for instance, farmers have successfully managed pasture land for centuries. The idea of a ‘global commons’ is sometimes invoked to highlight concerns about environmental destruction of the ocean, atmosphere, forests, and biodiversity. This raises thorny issues to do with geographic scale, however. For instance, should the rainforests of Brazil be seen as belonging to the tribespeople who live within them, the provincial government, the country of Brazil, or as a ‘green lung’ of global significance?

Traditionally, the commons was seen as cropland, grazing land, or forest that belonged to a community and benefitted all. Now, following the work of Ostrom and others, the notion has expanded to encompass four broad types of property:

- Biophysical commons: natural resources such as water, air, soil, rocks, sunlight, and plant and animal biodiversity.
- Cultural commons: a range of cultural forms such as language, music, religion, and art.
- Social commons: shared educational, health, legal, and political systems.
- Knowledge commons: a wide variety of indigenous and scientific/technological expertise.

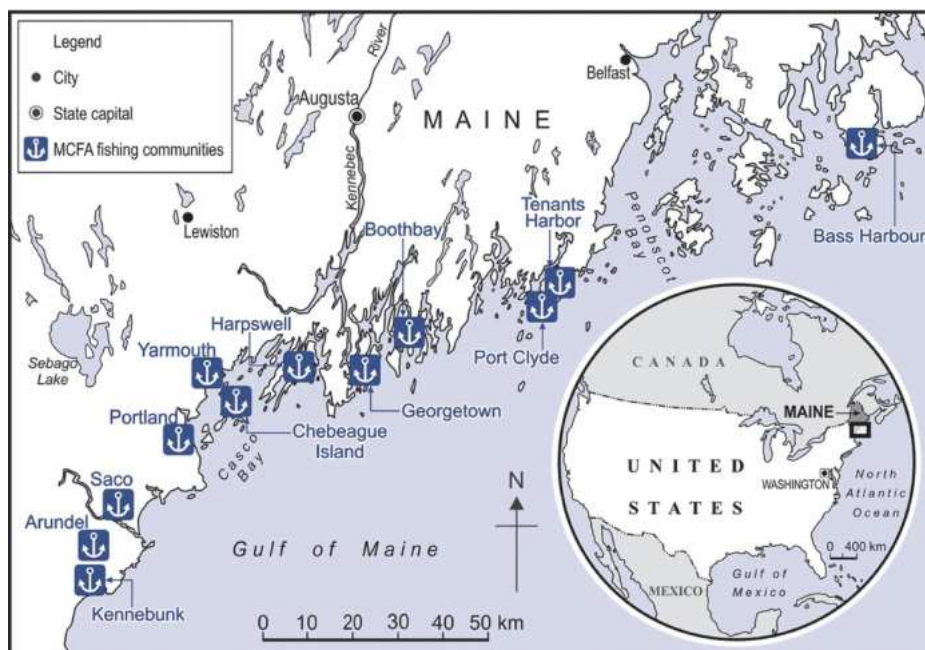


Figure 14.5 The fishing communities involved in the MCFA, Maine, United States

Source: own map, data from <https://www.maineoastfishermen.org/annual-report>.

membership consists mostly of groundfish (i.e. cod, flounder, and halibut) fishermen, but also includes fishermen in the shrimp, lobster, bluefin tuna, herring, whiting, monkfish, and scallop fisheries. The MCFA describes itself as ‘an industry-based non-profit that identifies and fosters ways to restore the fisheries of the Gulf of Maine and sustain Maine’s fishing communities for future generations’ (www.maineoastfishermen.org). While in part motivated by economic imperatives and simply trying to ensure the survival of small-scale fishing, their approach recognizes that ‘fishing is also a culture, heritage, family affair, and lifestyle to which fishers are resolutely dedicated’ (Snyder and St. Martin 2015: 33).

The MCFA has been motivated by several challenges facing self-employed fishermen along the Maine coast, including: the ongoing corporatization of fishing; waterfront gentrification processes associated with tourism that are restricting access for fishermen; the consolidation and/or closing of small processing facilities; and management measures designed to reduce overfishing. As elsewhere in the United States, such management measures have tended to use market logics to tackle overfishing, most notably through the implementation of total allowable catch (TAC) quotas that are allocated to ‘sectors’ of the coast and then to individual fishermen. These quotas, coordinated at the wider regional New England level, adversely affect small operators who cannot consolidate their allocation or trade it off across different sectors.

The response of the MCFA to the TAC quotas was to think creatively about how to work within the parameters of this externally imposed system, leading to the following range of initiatives:

- They formed a for-profit cooperative business – the Fresh Catch brand of seafood – and sought to sell its products locally rather than in larger centres such as Portland or Boston. A local church was enrolled to help distribute produce and a range of marketing and logistical schemes were established to distribute fresh seafood among local communities.
- They have experimented with on-boat camera technologies to monitor fish catches and make sure allocated quotas are being observed.
- They have collaborated with NGOs and research scientists on a range of research initiatives, for instance, to explore which kinds of fishing gear result in the least environmental damage, and to undertake detailed habitat mapping of fish stocks.
- They have worked with the Nature Conservancy and the Island Institute on a permit-banking scheme to ensure that permits are retained within Maine and not allocated to outside interests.
- The MCFA is also widely involved in lobbying activities at both the state and federal levels, and is increasingly seen as a role model for other US communities facing similar challenges.

Interestingly, and again illustrating the blurry boundaries between capitalist and alternative practices, one of their central strategies – the cooperative – was about establishing a market for their produce, but one with a distinct place-based geography.

14.7 The Limits to Diverse Economies?

In this chapter we have explored the importance of diverse economies on two interrelated levels. First, we have considered the need for a way of describing the economy that does not inherently assume the prevalence and dominance of capitalist activities. Second, uncovering and detailing diverse economies is important for reflecting the realities of contemporary economies in which a wide range of alternative practices sit alongside, and interact with, the dominant capitalist system. The importance of such activities varies both socially and spatially, but even in neoliberal contexts where capitalism is supposedly at its most pervasive, these activities are integral to the functioning of society as a whole. The huge amounts of economic activity that reside within the realms of the household, the informal economy, and the state are clear. Indeed, for many people around the world, alternative or noncapitalist practices will be their main form of economic activity on a daily basis, leading some to even suggest that we should view capitalist practices

as the anomaly and hence the label ‘alternative’ is misplaced (White and Williams 2016). These are intriguing arguments, but it is also important to consider some of the potential limits to these ways of thinking (Smith 2012). Here, we will explore three such lines of argument.

First, as we have seen at various points in the chapter, some forms of alternative economy are clearly progressive, but others may be far less so. Many are not really viable alternatives to capitalism, but rather are strategies of coping that reflect the marginality of the participants in relation to wider power structures. The fact that the intensity of alternative economic activities often maps closely onto places and times where the capitalist system is struggling or in crisis is revealing here. This can be seen in the deindustrializing cities of North America in past decades, the transition economies of Central and Eastern Europe since 1990, Western European countries struggling with austerity after the 2008 crisis, and across the developing world where the informal economy is often the dominant economic forum. Residents in informal settlements in cities such as Jakarta, Indonesia, for instance, often make extensive use of diverse economy practices before, during, and after evictions by the city government in order to cope with the trauma and dislocation the process causes (Leitner and Sheppard 2018). Many diverse economies are thus born out of the failures of the capitalist economy and the state to provide for citizens and are strategies of last resort for people struggling to get by (Amin 2009).

Second, we need to interrogate the geographies inherent in diverse economies. In many schemes, there is an intentional localism at work, as the aim is to produce a particular combination of community creation, reduced environmental impacts, and wealth retention within a place where people live and work. While it is important to celebrate successful local initiatives and analyze their merits and attributes, it is also important to assess their wider significance and connections. Zooming out to the national or the global scale may give a very different perspective, and the potential for ‘scaling up’ local schemes into bigger projects is worthy of more consideration. Indeed, we have uncovered several different geographies in this chapter beyond the local. Many place-based initiatives, if they become successful, quickly develop into wider projects. Think, for example, of the Fairtrade Town movement, or the spread of the Cleveland Model. Fairtrade more generally has grown into a significant international movement. Practices as varied as gift-giving, freelance work, volunteering, and cooperative businesses may all have significant transnational dimensions. Global communication technologies, for better or worse, have speeded up these processes of connection and exchanges of ideas, as seen in the explosion of the sharing/gig economy over the past decade. There is also nearly always a strong territorial imprint, particularly at the national scale, where key institutions underpinning the diverse economy – for instance, national Fairtrade foundations or federations of cooperatives – still tend to be organized. Rather than simply highlighting local alternatives to global capitalism, exploring the struggles to ‘scale-up’ place-based projects is therefore important in understanding the potential of the diverse economy.

Third, we need to be alert to the ways in which diverse economy activities may be captured, coopted, or ‘entangled’ by the capitalist system (Fuller et al. 2010). Fairtrade, for instance, has been interpreted by critics as a way for retailers to simply charge a large markup on certain products. In short, they may benefit more from selling Fairtrade goods than farmers and workers do. The case of Mondragon we considered in Box 14.2 demonstrated the challenges of being a competitive cooperative group in the context of a global capitalist economy. It has proved far from immune to the impacts of rising costs, technological change, and offshore competition. As Mondragon has globalized, it has diluted its cooperative ideals. Finally, those forms of sharing economy that initially provided individual flexibility and autonomy through self-employment have increasingly been seen as just the latest model of capitalist accumulation – the ‘platform’ economy (see Box 14.5). As such, rather than thinking in terms of alternative capitalist or non-capitalist activities, it might be more effective to think of *more-than-capitalist* practices that are always intertwined with capitalist dynamics but at the same time have the potential to reshape those dynamics within, and across, particular places (Sheppard 2019).

FURTHER THINKING

Box 14.5 The rise of platform capitalism?

In contrast to the rise of the sharing or gig economy, some commentators have charted a broader mode of growth called ‘platform capitalism’ (Srnicek 2017). The term is intended as an antidote to sharing economy discourses that celebrate the liberation of individual workers and users through the networking power of new technologies. Instead, platform capitalism denotes a new mode of capitalist growth that is increasingly focused on capturing and using data to generate profits. In effect, data becomes the latest raw material for the capitalist system. As more and more industries move important functions online, they become amenable to platform development. Platforms have emerged most decisively in the period since 2010, and are now apparent across a wide range of domains including social media, online marketplaces, crowdsourcing, and crowdfunding (see Table 14.4). But what are platforms? We can think about them as having four characteristics. First, and at the simplest level, they are digital technologies that provide an intermediary function between different groups of users, such as advertisers, customers, producers, and suppliers. They often come with embedded tools allowing users to generate their own goods, services, and marketplaces, e.g. Apple’s App Store. The intermediary function allows platforms to generate and analyze huge amounts of data about interactions between users. Second, platforms generate and in turn rely

Table 14.4 Dimensions of the platform economy

Domain	Platform type	Leading examples
Online market exchanges	Marketplace for sale of products and services through physical distribution, downloads, and streaming	Amazon, Apple, Spotify, eBay, Alibaba, Craigslist, Taobao, Rakuten, Flipkart, etc.
Social media and user-generated content	Host for user communities to post content	Facebook, YouTube, Flickr, Twitter, etc.
Sharing economy	Marketplace for hire of assets and services that would be otherwise be underused	Uber, Airbnb, Turo, JustPark, Lyft, etc.
Crowdsourcing	Marketplace for transactional and contractual work, freelance and informal labour, and know-how	TaskRabbit, Upwork, Amazon Mechanical Turk, Clickworker, Freelancer, etc.
Crowdfunding and peer-to-peer lending	Marketplace for donation, pledging, lending, or investing money	Kickstarter, Indiegogo, Lending Club, Prosper, etc.

Source: adapted and updated from Langley and Leyshon (2017), table 1.
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upon what are called ‘network effects’. This means that as more users join a platform, the more useful it becomes for everyone, as the quality of the data allows the service to be improved. Over time, these effects create monopoly tendencies as dominant platforms emerge in different market segments. In some cases, platforms can benefit from multiple network effects, e.g. Uber benefits from the reinforcing network effects of increasing numbers of both drivers and users. Third, platforms are often based upon cross-subsidization of different activities, e.g. Google uses advertising to allow it to offer search and email services for free. Fourth, and importantly, platform owners – usually private companies – set the rules of the game for interaction, e.g. Uber in the taxi industry. In effect, they shape the nature of markets, which is a political role and can lead to fierce clashes with both incumbent firms and government regulators. Together, these various attributes allow platform companies to extract significant profits in what may be a distinctive characteristic of contemporary capitalism. For more, see Langley and Leyshon (2017) and Srnicek (2017).

14.8 Summary

In this chapter, we have come full circle and returned to some of the arguments outlined in Chapter 2. Logically, there is no reason to assume the existence of one dominant economic system that is totally hegemonic and geographically consistent. The fact that we even start to think that way is perhaps more revealing of the power structures inherent in contemporary society than any real-world reality. The economy is a sociocultural system as well as being an ‘economic’ one, and from that perspective, one would expect tremendous diversity both within and between economies in different places. This chapter has sought to explore that diversity, profiling a range of alternative forms of market exchange, enterprises, ways of working, and property systems. Some of these can be portrayed as alternative capitalist practices that seek to do things differently while still being intensively engaged with the mainstream capitalist economy. Others endeavour to be noncapitalist and operate with a higher degree of detachment from capitalism although, as we have seen, in reality that is difficult to achieve. The common trait shared by all these activities, to a greater or lesser extent, is that they are driven by a set of aims that go beyond the narrow capitalist drive for profit maximization. Assessing the degree to which those aims are met, and how beneficial that is and for whom, necessarily brings us into the ethical terrain that is at the heart of the community economies idea.

Our analysis has allowed us to make three sets of arguments. First, and most simply, we have shown the many varied forms of diverse economy activities. Second, we have considered the different geographical dimensions of these practices, ranging from what goes on within a particular household or workplace, to global initiatives and the social responsibility efforts of huge transnational corporations. Third, we have highlighted the always present entanglements of the diverse economy with wider capitalist dynamics in order to offer a measured perspective on the transformative potential of such alternatives.

Notes on the references

- Gibson-Graham (2006a) provides the original critique of capitalocentrism, while Gibson-Graham (2006b) and Gibson-Graham et al. (2013) offer foundational analyses of diverse/community economies. Roelvink et al. (2015) deliver a wide range of case studies. For a challenging account of the geographies of collective action that underpin diverse economies, see Roelvink (2016).
- Smith (2012) provides a clear overview of the work of economic geographers on diverse economies; see also Fickey (2011) for another highly readable review.
- For more on the notion of geographies of responsibility, see Massey (2004).
- For recent assessments of the international development of the MCC, see Errasti (2015) and Bretos et al. (2018).

- For excellent work on Fairtrade and Corporate Social Responsibility, see Hughes (2018) and a range of other articles by the same author, notably on the South African flower industry (Hughes et al. 2014).
- For recent contributions by geographers to diverse economies debates, see Davies et al. (2017) on the sharing economy, Holmes (2018) on provisioning, and Krueger et al. (2017) on 'de-growth' agendas.

Sample essay questions

- Why is capitalocentric thinking so dominant in contemporary society?
- To what extent does fair trade offer a meaningful alternative to regular trade?
- What are the key differences between capitalist and cooperative enterprises?
- Is the 'sharing economy' a progressive or regressive development?
- What does thinking in terms of geographic scale reveal about the diverse economy?
- Can there ever be truly noncapitalist economic activities?

Resources for further learning

- www.communityeconomies.org: the website of the Community Economies Collective (CEC) and the Community Economies Research Network (CERN) offers resources, both academic and practical, relating to alternative economies.
- For more on alternative currencies, and the two specific cases with which we started the chapter, see: complementarycurrency.org, brixtonpound.org and www.grassrootseconomics.org.
- ica.coop/en: the website of the International Cooperative Alliance provides access to information and data on cooperatives around the world, while www.woccu.org does likewise for credit unions.
- <https://www.mondragon-corporation.com/en>: has a wealth of information on the MCC. See also <https://youngfoundation.org/projects/humanity-at-work> for an extended evaluation of the model.
- For further information on timebanking, the Timebanking UK website offers a wide range of resources: www.timebanking.org. Likewise, the US equivalent: timebanks.org.
- www.onthecommons.org: a rich website hosted by a group developing strategies in relation to the commons.
- www.sustainable.org: Sustainable Communities Online is a US-based forum for communities looking to looking to share information on sustainability initiatives.

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PART V

CONCLUSION

CHAPTER 15

ECONOMIC GEOGRAPHY

Intellectual journeys and future horizons

Aims

- To trace the development of ideas in the field of Economic Geography.
- To place these ideas in the social and intellectual context of their development.
- To think about how new contexts and circumstances will change Economic Geography in the future.

15.1 Introduction

In 2018, two quite different countries announced that they would be planning a package of ‘stimulus’ spending to boost growth in their respective economies. The United Arab Emirates (a federation that includes Abu Dhabi and Dubai) unveiled its plan in June 2018. The plan involved spending US\$13.6 billion on new housing and transportation projects, educational investments, support for small businesses, cash for tech companies, and promoting research and development centres. The UAE holds around 6 per cent of the world’s oil reserves, but lower crude oil prices and regional political tensions since 2014 had forced the state to cut spending, suspend public construction projects, and retrench thousands of government jobs (where, as we noted in Chapter 6, most Emirati citizens are employed). More broadly, the stimulus package was part of a longer-term programme to diversify the UAE economy away from a dependence on oil revenues.

Economic Geography: A Contemporary Introduction, Third Edition. Neil M. Coe, Philip F. Kelly and Henry W. C. Yeung.

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A few months later, in September 2018, South Africa also announced a stimulus package to boost its economy. Without the UAE's oil wealth to draw upon, the South African package was more modest. Some of it did not involve stimulus spending at all and instead focused on policy reforms, such as easing visa conditions for skilled foreign workers, giving telecom companies access to new frequencies, and lowering business expenses, such as power, rail, and port costs. But the package did also include a reorientation of spending towards agriculture and rural areas, including support for Black commercial farmers and a new infrastructure fund for township and rural projects. The country's President, Cyril Ramaphosa, announced that these measures would all be funded within the government's existing budget. In that sense, the package did not involve stimulus for the economy as a whole – just reallocation of resources targeting at certain sectors.

What was significant about the announcements in both the UAE and South Africa is that they were both presented as 'stimulus packages' – that is, planned programmes through which government spending would boost demand in the economy and avert or counteract a recession. In this way, both countries were joining a trend in economic policy that had begun about a decade earlier. After the 2008–2009 financial crisis, the Group of 20 leading industrialized and emerging economies (G20) vowed to 'use fiscal measures to stimulate domestic demand to rapid effect'. Within a few months at the end of 2008 and beginning of 2009, dozens of countries had created spending programmes that collectively pumped trillions of dollars into the domestic economic system. What is remarkable, however, is that these countries (and, later, the UAE and South Africa) were collectively subscribing to a set of economic ideas that had been previously out of favour for several decades. In fact, since the mid-1970s, governments in the West (and governments influenced by the international financial institutions, such as the World Bank and IMF) had generally adhered to the idea that during economic downturns, governments must cut back their spending, otherwise public money would crowd out productive spending and investment by the private sector.

The policies since 2008–2009 represent a return to ideas that had held sway through most of the mid-twentieth century, having first been proposed in the 1930s by the British economist John Maynard Keynes. As we noted in Chapter 2, it was his work that provided comprehensive evidence that economies could be (and needed to be) managed in order to avert crisis and chaos (Mann 2017). A part of this management regime would be exactly the kind of stimulus spending to counteract economic cycles that were being planned in the UAE and South Africa in 2018. Keynes (1936) would doubtless have taken great satisfaction in seeing the rejuvenation of his ideas. After all, he had written in 1936 that 'practical men [sic], who believe themselves to be quite exempt from any intellectual influence, are usually the slaves of some defunct economist' (p. 383). In this case, Keynes himself was the 'defunct economist' whose ideas were influencing world leaders.

An important lesson we can learn from this resurgence of interest in Keynes is that ideas about how the economy works are very much a product of the specific

time and place in which they are developed. Their popularity and influence are reflective of circumstances (and, it should be added, the power of different interest groups). While Keynes developed his ideas in an inhospitable intellectual climate of the Great Depression during the 1930s, they were quickly adopted in the context of postwar reconstruction from the late 1940s to the mid-1970s. In the face of difficult economic times since 2008–2009, they are again deemed to be relevant.

The ideas of economic geographers have never been as influential as those of Keynes, but we can certainly see the ways in which the development of concepts has reflected the times in which scholars were working, and the challenges to which they applied themselves. For the most part, this book has explored the work of economic geographers without making specific reference to the debates and ideas that have driven the intellectual journey of the discipline. But it is possible to see many of the ideas presented in this book as part of an intellectual journey that the field of Economic Geography has taken over the last half century. In this concluding chapter, we will review the ways the field has changed, to reflect the different circumstances and contexts (both intellectual and worldly) in which it was working. We will then look to the future to see what challenges lying on the horizon will likely shape the future of Economic Geography.

15.2 A Changing Field

During the second half of the twentieth century, the field of Economic Geography saw the emergence of several different styles of inquiry or intellectual traditions. Each of them asked distinctive questions and developed particular ways of uncovering answers. Telling the story of these different traditions is difficult for several reasons. First, it is all too easy to place tidy labels on schools of thought that were internally diverse and overlapping with each other. The reality is that intellectual history is always messier than the categories that we impose with hindsight. Second, it is tempting to construct an intellectual lineage that implies the redundancy of ‘old’ ways of thinking and the enlightenment of current approaches (especially those favoured by the author!). In fact, we can usually learn a lot from approaches that were once the cutting edge of scholarship, and, in any case, many do not disappear, but instead become integrated into the mainstream practices of the discipline. Third, any disciplinary history will tend to create ‘periods’ that are all too neat, with the implication that scholars moved forward collectively and in unison. In reality, the new frontiers of inquiry at any given time likely do not actually reflect what the majority of Economic Geography students are learning about in their classrooms. There is always a time lag effect in what you learn in texts like this and what cutting-edge economic geography research is actually doing!

Notwithstanding these caveats, it is worthwhile to give a sense of how Economic Geography has changed over the years, and to note how this has reflected the times and places in which it was being practiced. The influence of the wider social

context has been important since the very beginning, both for Economic Geography and for the discipline of Geography as a whole. The earliest institutions of Geography in the English-speaking world emerged in the late nineteenth century as a part of the British colonial project. Scholarly learned societies such as the Royal Geographical Society in the United Kingdom, the journals they published, and the meetings they organized were all focused on supporting colonialism in intellectual and practical ways. Economic geographers' contributions consisted of assessing the resource potential of colonial territories and analyzing commerce and trade patterns within the empire. Much of Economic Geography was then known as Commercial Geography. Continuing through the first half of the twentieth century, a tradition of regional description dominated the discipline. Although the linkage with colonial knowledge production became less direct over time, the purpose was still largely one of integrated analysis of resources, and resource use, in a given region. It was in the post-World War II years that this tradition was challenged and the story of modern Economic Geography begins.

In the following three sections, we organize the intellectual twists and turns of Economic Geography of the last 70 years into three broad categories: positivism, structuralism, and post-structuralism (based in part on Sheppard 2006). These categories reflect different philosophies that have shaped the types of questions asked by economic geographers and how answers were sought through research and publications. In order to see how they are different, it is important to understand something about how a philosophy of knowledge is constructed through the concepts of ontology, epistemology, and methodology (see Box 15.1).

Positivism: Science and Quantitative Economic Geography

The decades after World War II provided a very different social context for Economic Geography as a field of inquiry. It was a period in which European empires were giving way to independent states in the developing world, while the developed countries of North America, Europe, and Australia/New Zealand were experiencing a prolonged boom of economic growth, urban expansion, and, as noted earlier, a Keynesian style of national economic management.

In these circumstances, economic geographers turned their attention to questions that addressed the times and places in which they lived and worked (just as they had in the era of colonialism). Issues of industrial location, patterns of urban growth, changes in land use, the development of transportation networks, and the dynamics of trade were all primary concerns in a context of rapid growth. Furthermore, given the Keynesian strategy of economic management and the deep involvement of governments in planning and reconstruction after the war, there was also a strong sense that these were processes that could be shaped and directed through state interventions informed by academic research.

KEY CONCEPT

Box 15.1 Ontology, epistemology, and methodology

The philosophy of knowledge consists of several distinct concepts. *Ontology* refers to a set of philosophical beliefs about what exists in the world and therefore what it is possible to know. When we use categories such as economy, nature, and culture, we are making ontological claims that these are objects that exist in the world and are therefore knowable. When we debate the existence of these objects (as we have at several points in this book), then we are engaging in ontological discussions.

Epistemology is a set of philosophical beliefs about what constitutes knowledge and how it can be obtained. Some economic geographers, for example, might argue that knowledge is derived from objectively constructed data that can be replicated by other researchers, while others would insist that subjective interpretations provide truly meaningful understanding of the economic world. Obviously, an epistemological position is closely linked to ontology, but they are not necessarily the same thing. One might believe, for example, that something exists without believing that it is knowable or how we should go about knowing it.

A methodology is a framework for evaluating knowledge claims made about the world; in particular, it provides the principles by which specific techniques of data collection are chosen and evaluated. For example, a feminist economic geographer would likely want to employ data collection techniques that empower the women involved and allow careful reflection on the relationships created in the research process.

At the same time, there was an increasing desire for systematic and ‘scientific’ modes of knowledge production in Economic Geography. This took the form of: (i) seeking universal ‘laws’ or principles that underpinned spatial patterns of economic activity; (ii) using quantitative data to identify such patterns; and (iii) applying statistical techniques to derive mathematically rigorous proofs of the patterns being identified. These practices were applied to patterns of urbanization, regional growth, and industrial location, and flows and interactions through space.

The quantitative tradition in Economic Geography had two major strands (Scott 2000). One strand focused on spatial analysis using mathematical models, and utilized early computer technology for analytical purposes. Scholars who lived through those times will tell stories of punch cards (to feed data into main-frame computers) and tedious computer analysis that could take several days to perform – something we can easily do on our smartphones today. While advances

in computational technology formed one context for these approaches, government funding for scientific and military research during the Cold War was also a key factor (Barnes 2015).

The other strand of the quantitative tradition sought ways of integrating space and location into neoclassical models of economic theory. This line of work became known as regional science and forms the basis for the contemporary work of economists who analyze geographical economics. The most famous of these is Paul Krugman, whose Nobel Prize in Economics in 2008 recognized his contributions to understanding how space, location, and distance are fundamental for trade and the agglomeration of economic activities.

In both spatial analysis and regional science, earlier classics in the German tradition were rediscovered. The agricultural land use theories of Johan von Thünen, originally published in 1826, were used to create models of optimal land use patterns. Walter Christaller's central place theory (from 1933) inspired models of urban system formation and consumer behaviour. Alfred Weber's industrial location theory (published in 1909) informed approaches to understanding how manufacturing facilities were optimally sited (see Chapter 12). While these classics provided an important foundation, the rise of quantitative Economic Geography generated its own classics. The intellectual excitement of a new style of knowledge that seemed to sweep away the fuzzy vagueness and descriptive regional analysis of a previous generation was very appealing to a new generation of bright young scholars. Among them, charismatic and extremely capable leaders emerged who defined the field and in turn attracted the best young graduate students. In a relatively small discipline such as Geography, internal sociologies of this kind can have a significant influence (Barnes 2012). By the late 1960s and early 1970s, a quantitative, model-building, 'scientific' approach to Economic Geography might not have been universal, but it was certainly dominant in the leading centres of research.

What bound together these various approaches was a positivist 'scientific' approach to knowledge production. This implied that a truth about the world could be uncovered by directly observing and measuring phenomena. Moreover, the things being measured were believed to display a consistency across time and space. Such consistency meant that it was possible to develop and test general principles/laws/models from empirical observations.

It would be a mistake to believe that positivist Economic Geography is a thing of the past. As noted above, the science of spatial relations has energized a new generation of economists, and the connections between Economics and Economic Geography are perhaps stronger now than they have ever been in several decades (for example, the *Journal of Economic Geography* was launched in 2001 to publish the research of both economists and geographers). Economic geographers continue to find mathematical and model-building approaches relevant, especially where large data sets provide answers to research questions on issues such as international trade patterns, regional development, and housing or labour market trends.

Structural Approaches

A second set of approaches takes a quite different view of the world than the positivist/scientific philosophy. Rather than understanding the world through observation and measurement, they see underlying structures that are not necessarily directly observable. Furthermore, these structures are believed to shape and constrain people's actions in the world and create differences of power. The structures and inequalities created by capitalism/class, gender, and race have been especially important in Economic Geography (a structural approach to economic power was discussed in some detail in Chapter 3). In addressing these issues, economic geographers have been influenced (but also, inspired, angered, moved, and stimulated) by the pressing social issues of the world around them. They have also sought to develop normative agendas, meaning that they do not simply wish to describe and analyze the economic world but also to shape and change it for the better. For many economic geographers, this has meant a concern with social justice, economic inequality, and environmental sustainability.

The reason for this progressive normative agenda becomes evident when we examine the roots of structural approaches to economic questions. While quantitative geography and locational analysis emerged to address the needs of growing post-war national economies in the mid-twentieth century, various social movements took hold in the late 1960s and economic growth began to slow down in the early 1970s. In the United States in particular, civil rights protests, feminist and environmental movements, and the anti-Vietnam War campaign all gave rise to alternative and anti-establishment thinking. In Economic Geography, the scientific certainties of the quantitative approach seemed less capable of addressing the clear social problems that these movements highlighted. In North America and Western Europe, urban poverty and segregation, gender inequalities, uneven international development, and deindustrialization were all pressing issues. They demanded an understanding of the structural processes that underpinned observable economic phenomena, and a political agenda to change them.

The most celebrated conversion to a politicized and radical approach to economic-geographical questions was found in David Harvey. Harvey was trained in Britain in the descriptive tradition of historical geography, but made his name through contributions to the quantitative revolution in the 1960s. His book, *Explanation in Geography* (1969), was seen by many as the high point of quantitative geography, as it laid out the philosophical fundamentals of scientific method for geographers. Within just a few years, though, Harvey's intellectual approach had changed dramatically. Moving from Britain to Baltimore in the United States in 1969, he came face-to-face with urban poverty, race-based segregation, and deindustrialization and turned to Marxist theory to understand how the economy was fundamentally driven by class relationships.

Over the following decades, Harvey's impact on the discipline through his students, and his students' students, has been significant. His writings, including

over 20 books, have also been highly influential across the social sciences and humanities. Seeing the economy as tending towards crisis rather than equilibrium and as driven by class antagonism not harmonious divisions of labour, Harvey and others provided a perspective on structural power that was not available through positivist Economic Geography. While the approach was controversial initially, many aspects have gradually become part of the mainstream, even among scholars who do not subscribe to the entire framework provided by Marxian theory. Our ability to think about the structural logics of capitalism, to identify class-based power relations in economic processes, and to conceptualize uneven development are all dependent on the legacies of Marxist theory in the field of Geography.

While Marxist thought sees crises as the inevitable outcome of capitalism's fundamental contradictions, one branch of Marxian thought in Economic Geography asked instead how capitalism has been able to avert crises. Known as *regulation theory*, and emerging in the 1970s, this line of inquiry sought to find out how institutions have been created to divert or delay crises effectively. Of particular interest to regulation theorists were the three decades following World War II, when a period of sustained economic growth was maintained in Western Europe and North America under the regime of Fordism (see Chapters 3 and 7). What came after Fordism – post-Fordism or flexible specialization – was also a subject of close analysis by economic geographers. The new geographies of production in clusters or high-growth regions (see Chapter 12), and the local social and institutional foundations for these success stories, have energized economic geographers for the past 20 years or more. An understanding of the role of the state and other key institutions in 'regulating' or governing economic processes at multiple scales has been especially important (see Chapters 9 and 10).

As the dynamics of capitalism led to a decline of manufacturing and loss of jobs from the 1970s onwards in parts of North America, Europe, and Australia, economic geographers paid increasing attention to the effects of economic restructuring in specific places and regions. Theorizing the dynamics of capitalism was not the central focus of such work, but it provided the context for understanding more immediate and local dynamics. Doreen Massey was a key figure in developing a nuanced understanding of regional change under capitalism – seeing local characteristics constantly interacting with larger structural forces (Massey 1995). As we noted in Section 3.5, one contemporary area of research that builds out from this focus on localities and regions has been 'evolutionary economic geography' (EEG). EEG highlights the influence of past development on future trajectories, and the ways in which local social relations help or hinder pathways of development (Martin and Sunley 2015).

The analysis of global production networks is another strand of inquiry that has been built on the careful analysis of the institutional foundations of capitalist growth (see Chapter 4). By understanding corporate and noncorporate actors and the ways in which they interact, such analyses have tried to explain how specific sectors organize their activities across global economic space and their

implications for developmental trajectories in specific places. The institutional forms of corporate organizations (see Chapter 5), and their relations with the state and other regulatory institutions, have been central to this area of research. Although rooted in an attempt to understand capitalism and uneven development, research on global production networks has moved a long way from Marxian theories of class relations and crises. Like other institutional approaches, it falls within the broadly political-economic approach that Marxist geography inspired, while downplaying the centrality of capitalist fundamentals and logics in explaining all observable phenomena.

Another spin-off from Marxist geography was the emergence of a subfield focused on labour. This field took two forms (see Box 6.2). The first examined the geographical strategies of organized labour in the trade union movement. It came in the 1990s, at a time when the trade union movement had seen its power significantly reduced by deindustrialization and antagonistic government policies, especially in the United States and the United Kingdom. It was therefore a period when strategizing about new ways to organize labour and to reach out to 'nontraditional' groups, such as immigrants, women, and ethnic minorities, was a growing imperative. As corporate entities got bigger, it also became important to think about the scale at which labour organizing would occur. A second strand in labour geography took Marxian analyses of institutions to the local scale and sought to understand how labour markets were shaped and regulated. This line of inquiry took on particular relevance at a time when governments across the developed world were adopting neoliberal policies.

One of the strongest lines of critical inquiry in Economic Geography in recent decades has come from feminist approaches (see Chapter 13). The wider social context for this development was in the growth of a feminist movement, the increasing participation by women in the labour force, and, not coincidentally, the greater representation of women among the ranks of academic geographers and leading female economic geographers focusing their attention on gender issues (e.g. Doreen Massey in the United Kingdom and Susan Hanson in the United States). These circumstances meant that questions around gendered structures of power in economic life came to the fore – questions, it should be noted, that had always been relevant but were very seldom asked. If class and gender are two fundamental structures of uneven power, then ethnic and race-based difference represents a third. A critical Economic Geography that has been explicitly anti-racist has therefore been an important thread of scholarship in recent years, examining labour markets, workplaces, and housing markets. While attention to race has reflected the small but increasing number of non-white scholars teaching and researching in Anglophone Economic Geography, it has also reflected the extent to which ethnic difference now plays a part in everyday economic life, in part because of the labour migrations described in Chapter 6.

The approaches mentioned here – from Marxism, to institutionalism, to regionalism, to feminism and anti-racism – are certainly diverse and have occasionally

been in profound disagreement with each other. What their manifestations in Economic Geography have in common, however, is that they have generally shared a belief in the existence of underlying structures of power that are described in theoretical writing and revealed through empirical research. The flourishing of these diverse approaches has also coincided with a turn towards greater concern for the intersection of economic and cultural processes – a so-called ‘cultural turn’ in Economic Geography (discussed further in Box 15.2).

FURTHER THINKING

Box 15.2 The ‘Cultural Turn’ in Economic Geography

This chapter distinguishes structural and post-structural approaches to Economic Geography because of their significantly different approaches to the production of knowledge. There has, however, also been a shift in the topics of research addressed by Economic Geography under both structural and post-structural frameworks. In particular, a concern with the implications of culture for economic processes has been rising since the 1990s. This has manifested itself in numerous ways.

- First, the role of culturally coded identities, such as gender, ethnicity, or sexuality, in workplaces and labour markets has been an important way of understanding how people experience economic life as embodied individuals, and not just as disembodied economic actors. This has become especially important as service-sector jobs, which involve an interactive ‘performance’, have become more and more common.
- Second, culturally prescribed ways of interacting have been shown to be essential in understanding how knowledge exchange and innovation occur in industrial clusters. Cultures of work are also important for understanding why certain technologies and work practices might be successful in some contexts but not others. More broadly, there has been much discussion of different ‘cultures of capitalism’, as researchers have realized that both business and government regulation are done quite differently across the world.
- Third, it has been clearly shown that firms themselves have a corporate culture. Employees, managers, and owners do not behave in a rational and objective manner, but are guided by their habits, assumptions, and prejudices – a set of cultural practices that are often cultivated and perpetuated within firms.
- Fourth, consumers do not buy products and services purely because of their utility but also because of the symbolic meanings that they embody.

This kind of ‘cultural capital’ increasingly shapes economic decisions. Furthermore, those sectors of the economy that produce purely cultural or symbolic outputs (such as movies, music, design, or advertising) have been a growing segment of most economies and an increasing focus of economic geographical research.

- Finally, there has been a growing realization that the ‘texts’ or representations that shape understandings of the economy need as much attention as the flows of capital, commodities, and labour that form the material reality of the economy. The role of think tanks, business schools, and even textbooks, all bear scrutiny for the realities that they construct.

Together, all of these factors have led to a greater concern on the part of economic geographers with the cultural context for economic life – and hence a ‘cultural turn’.

Post-structural Economic Geography

Approaches that trace underlying structures of power have taken geographers a long way from the positivist study of quantitative patterns in economic life. But structural approaches have weaknesses of their own, and a contrasting set of ideas has emerged that we will bundle together under the banner of post-structuralism. While positivism finds truth in measurable phenomena, and structuralism finds truth in the structures that underlie social processes, post-structuralism is an approach to knowledge that denies that an absolute truth is discoverable at all. Instead, there may be multiple ‘truths’ to tell about a given phenomenon. In this sense, any of the preceding intellectual approaches in Economic Geography has a truth to convey, but it will be partial and reflective of the thinker’s circumstances and perspectives. The argument that knowledge is partial, situated, and contingent is central to post-structuralism and has many implications.

This philosophical position started to gain traction in Economic Geography in the 1990s and was manifested in several ways. First, economic geographers began to pay attention to the powerful implications of how we understand and represent economic processes. Julie Graham and Katherine Gibson, for example, showed that the ways in which we conceptualize capitalism shape how we respond to it. They argued that instead of seeing capitalism as an all-encompassing and powerful structure, we could view it as vulnerable to being undermined and subverted. With our understanding liberated in this way, they argued that we could start to imagine alternative and diverse forms of economic life (Gibson-Graham 2006). This approach, then, is less a matter of analyzing capitalism as a structure, and more a questioning of the constraints created by our modes of thinking (such as the metaphors discussed in Box 2.2).

A second strand of post-structural thinking in Economic Geography is found in studies that explore the power of representation and discourse in economic life. The concept of discourse is explained further in Box 15.3 and its implications are widespread. Paying attention to discourses means being concerned less with material processes, such as class relations, poverty, or state regulation, and more with the ways these processes are rendered understandable. Economic geographers have taken this concept in many different directions:

- The discourses of gender and work that are circulated in business education have been shown to play a role in ‘legitimizing, reproducing and sustaining’ masculine cultures of work and workplace identities in the financial sector (Hall 2013: 222).

KEY CONCEPT

Box 15.3 What is discourse?

A discourse is concerned with the entire package of techniques that we employ to conceptualize ‘things’, order things, and make them comprehensible to ourselves and others. *The Order of Things* is, in fact, the title of a key text by the French philosopher Michel Foucault, who contributed a great deal to our understanding of how language affects our conception of the world and thereby affects how we act in the world. Foucault was especially interested in how people can be represented in certain ways (for example, as ‘criminals’, as ‘insane’, and as ‘abnormal’) using a range of language, technologies, and institutions.

To analyze a discourse, then, is to consider how our thinking on a particular subject is shaped by the accepted vocabulary used, the ways in which expertise in the subject is constructed, and how the analysis of a particular phenomenon is institutionalized (that is, how ideas get embedded in the institutions that organize our lives: governments, laws, customs, religions, academic disciplines, etc.). The institutionalization of discourses is important because it highlights the fact that discourses are not the conscious creations of a single author, but are collective understandings that must be constantly recreated (or ‘performed’) in order to continue. Not just any discourse, however, succeeds in becoming dominant. Discourses reflect, and recreate, configurations of power. They reflect them, as only the powerful can construct inclusions and exclusions, the normal and the abnormal, according to their own requirements; but they also recreate power, as a discourse powerfully constitutes and naturalizes the objects that it describes.

- Places are represented and branded in various ways that provide the basis for the tourism industry, or underpin the distinctions attached to particular products (e.g. Newcastle Brown Ale, Champagne, or FIJI water) (Pike 2015).
- One of the most potent economic discourses for many decades has related to ‘Development’ – and especially the notion that certain policy approaches will lead to a pathway towards growth, prosperity, and modernity (e.g. Radcliffe 2015).

A third strand of post-structuralist perspectives serves to question individual identities in economic processes. Rather than seeing a person’s identity as categorical (for example, as a worker, woman, Black, gay, or immigrant) and bound up in powerful structures, post-structuralism sees identities as much less fixed. These identity categories are constructed in particular circumstances and in the context of relationships with other people – they are therefore contingent and relational. Furthermore, identities are changeable because they amount to nothing more than the repeated performance of a particular role. Thus, in Chapter 13, we saw that women joining the workforce have performed particular versions of femininity, while the masculinities described in Box 13.3 constrain the economic opportunities of young men.

A final strand of post-structuralism questions who has the power to produce knowledge. In particular, a set of approaches termed postcolonialism examines the role of knowledge production in supporting the political, cultural, and economic dominance of the developed world over the developing (and formerly colonized) world. In opening up this issue, postcolonialism also highlights the link between where knowledge is produced and what kinds of understandings are created, paying particular attention to who benefits in the process. The study of economic development and poverty has been particularly affected by this line of thinking. Beyond the critique of existing models, postcolonialism implies a need for economic theories that are sensitive to culture, context, and alternative ways of knowing, rather than being imported from Western and Anglophone centres of knowledge. An example is provided by Gibson et al. (2018), who examine various economic keywords rooted in cultural contexts across Southeast and South Asia. They find that place-based economic concepts exist that may have no direct translation into Western ideas, and often imply alternative economic practices of sharing and reciprocity (see Chapter 14).

The emergence of post-structural approaches in Economic Geography is perhaps too recent to identify the broader historical circumstances that led to this intellectual direction, but a few guesses are possible. First, in an era where the Internet and other forms of communication have made a deluge of information so widespread and so accessible, it is perhaps not surprising that we increasingly ask ourselves where an idea or representation comes from, whose interests it serves, and how it shapes our thinking. With so many perspectives available, the idea of a fixed and absolute truth is understandably less convincing. Second, the

restructuring of the world economy means that the idea of a wealthy, developed West exporting knowledge and economic models to the poorer developing world of the South is less and less tenable. The world's most dynamic economies now are those that were once subjected to the diagnoses and 'assistance' of foreign development experts. It is perhaps to be expected that theories developed in the West are no longer seen as quite so infallible. In the words of one postcolonial scholar, we are now seeing a process of 'provincializing Europe' (Chakrabarty 2007).

What binds all of these post-structural approaches together is a view that scholarship is not about seeking a singular truth. While positivist approaches view truth as coming from empirical data, and structuralist approaches see it in the form of underlying structures of power, post-structuralism sees truth as altogether more difficult to pin down. Instead, post-structural approaches to Economic Geography ask how we are constructing our knowledge about the economic world and what are the consequences of understanding things in that way?

As we noted earlier, it would be wrong to suggest that the three sets of approaches discussed here – positivism, structuralism, and post-structuralism – represent a sequence of advancing knowledge in the field of Economic Geography. But it is also important to acknowledge that the account given here is very much focused on the Anglophone world and that the story of intellectual lineages in other linguistic contexts could look quite different. Box 15.4 emphasizes this point by highlighting how Economic Geography in the wider non-Anglophone world has moved to a different beat. In France, Germany, China, and elsewhere, the intellectual currents described above would be only partially recognizable.

FURTHER THINKING

Box 15.4 Economic Geography beyond the Anglosphere

While this entire book focuses almost exclusively on the English-language tradition in Economic Geography, the field has developed elsewhere as well, often in quite different ways. A few examples serve to illustrate these divergent approaches. The French tradition of geographical inquiry has been relatively influential in the English-speaking world at various times, but the unfolding of the 'quantitative revolution' passed largely unnoticed in French Geography, which retained a strong descriptive style. In Germany, a descriptive style of inquiry was evident in the early twentieth century (and influential in North America) and a strong quantitative tradition did also take off, but the more radical structural approaches were largely ignored. This might be partly attributed to fairly hierarchical academic institutions in which it was more difficult for young scholars to break into the mainstream than it was in North America and the United Kingdom. Ironically, though,

elements of German and French thought have been highly influential in the development of English-speaking Economic Geography. German location theorists of the nineteenth and early twentieth centuries were rediscovered by English readers in the 1950s and 1960s. As we have seen, the works of Johan von Thünen, Alfred Weber, and Walter Christaller were all key texts for the ‘scientific’ economic geographers of the 1950s and 1960s. French scholarship in critical theories has also been influential in a quite different way, as the non-geographical work of Michel Foucault, Jacques Derrida, Pierre Bourdieu, and others has informed the development of critical theoretical approaches since the 1990s, some of which have touched Economic Geography.

Outside of Western Europe, the Chinese tradition of Economic Geography highlights the importance of the broader social and political context for the type of scholarship being conducted. From the 1950s until reforms in the late 1970s, the Chinese government emphasized the development of heavy industry and physical infrastructure. Academic geographers were expected to work uncritically in the service of the state, and so their attention was focused on surveys of natural resources, the selection of sites for industrial plants and railways, land use planning in agriculture, and the integrated planning of industrial sectors and urban systems. Following reforms that opened the country up to trade and investment in the 1980s, economic geographers started to focus on the spatial distribution of industry and the restructuring of pre-existing patterns of industrial and urban growth into areas of rapid growth in the coastal provinces of Guangdong, Fujian, Zhejiang, Shanghai, and Jiangsu. As the environmental consequences of rapid growth have become apparent, the costing and amelioration of these impacts have also become a focus for economic geographers. In all of these endeavours, though, Chinese economic geographers have tended to play the role of planners and consultants to state authorities rather than critical social scientists. But as with scholars everywhere, this reflected the immediate institutional environments in which they worked, and the wider social and political context for their scholarship.

15.3 A Changing World

Just as the field of Economic Geography has evolved to reflect its wider social context in the past, it will no doubt continue to do so in the future. Without a crystal ball, it is hard to say what changing circumstances will shape this future evolution, but some present trends suggest important changes occurring that will demand attention by economic geographers. Here, we identify five such changes:

the disruptive shift in global economic power; new forms of global (dis)integration; new environmental challenges; continued dynamism in the development of new technology; and new forms of work.

A New Geography of Global Economic Power

At the turn of the twenty-first century, the US economy generated 20.5 per cent of global economic output (with GDP adjusted according to purchasing power in each country). This was despite having slightly less than 4.5 per cent of the world's population. By 2017, the US share of global output had fallen to 15.3 per cent (all data from IMF 2018). At the same time, China's economy expanded from 7.4 per cent of the global output in 2000, to 18.2 per cent by 2017, having surpassed the United States in about 2013. China has also launched its 'Belt and Road Initiative' (see Chapter 9) to spread its economic influence across a much larger part of the world. This rebalancing of geo-economic power is part of a wider and ongoing restructuring of the global economy. For the same reason, Europe's share is expected to have declined from 28.4 per cent of global economic output in 2000 to under 20 per cent in the mid-2020s, while South Asia's share will increase from about 5.5 to 11 per cent.

Although these figures still indicate a hugely uneven distribution of global wealth, there is clearly a reorganization of the global economic map under way (as noted in Chapter 3). The work of economic geographers will no doubt continue to reflect this change. In part, this will mean understanding how growth and decline are affecting different places around the world. But it will also mean understanding *how* and *where* economic growth occurs in new kinds of contexts. When wealth and economic growth were centred on the advanced developed countries, it was easy to assume that their ways of doing things would become universal. The restructuring of the global economy means that economic geographers in the English-speaking world will have to take different forms of organization and behaviour increasingly seriously. For example, different forms of corporate organization, consumer behaviour, and state regulation found in China, India, and elsewhere will need to be understood better. As we noted earlier, knowledge and understanding are time and place specific – existing ideas will no doubt be tested in new settings, and new ideas will emerge.

New Forms of Integration (and Disintegration)

As the global economic map changes, new forms of interdependency, integration, and disintegration are becoming apparent. Flows of migration, capital, and trade are intensifying alongside halting steps towards governance structures that reflect the regional and global scale of such flows. As noted in Chapter 6, increasing flows of migration, both permanent and temporary, have become a reality in many parts of the world. These migrations are both intra- and inter-national.

They will likely heighten issues of unequal access to economic resources on the part of minority populations who are marginalized because of the immigration/citizenship status, their ethnic difference, or their racialized identities. Economic geographers interested in labour issues will therefore be increasingly attentive to regimes of citizenship. The role of cultural difference will also be a significant issue as people of different ethnic, linguistic, racial, and religious origins coexist in the same spaces.

Even more so than labour, financial capital is becoming increasingly mobile (see Chapter 7). This has made national economies vulnerable to the exodus of investment, but the degree of debt ownership across borders means that one country is not immune to another's misfortune – they are increasingly interdependent. At the end of 2000, the two largest holders of US government debt (Treasury Bills) were Japan and China, with US\$317 billion and US\$60 billion, respectively. By 2018, both countries owned more than US\$1 trillion in US Treasury Bills. While these economies are competitors, they also exist in networks of deeply interconnected financial systems.

Trade flows have also created interdependencies across borders. When the Trump administration in the United States insisted on renegotiating the North American Free Trade Agreement (NAFTA) in 2018, it became apparent just how integrated the three economies had become. The United States, Mexico, Canada Agreement (USMCA) that emerged did little to change that. The difficult negotiations for the exit of the United Kingdom from the European Union similarly demonstrated the deep interdependencies that had taken root in that macro-regional context. But both Trump and Brexit illustrate the tension that will continue to play out between integration of large economic spaces for flows of people, trade, and capital, and the countervailing impulse to erect national(istic) barriers.

New Environmental Challenges

A further form of global interdependence is found in the natural environment upon which all economic activity depends. As governments have come to recognize environmental degradation and have tried to find ways of addressing it, some major stumbling blocks have emerged. As Chapter 11 made clear, the challenges of global warming in the coming decades will be very profound and pressing. The impacts on the earth's climate, biological systems, economic production, human health, migration, and infrastructure are going to have numerous serious implications. At present, action at the global scale to limit emissions seems unlikely, and in some countries environmental regulations are being scaled back rather than tightened. The consequences will shape our changing world for generations to come.

Aside from carbon emissions, the broader geography of waste will also shape the ways in which we think about our economic activities in the future. High mass consumption in the developed world and rapidly growing consumption in developing countries (notably China and India) are creating intensifying pressure on

the natural environment to absorb what we discard. As Chapter 1 showed, plastic waste is increasingly acknowledged as an enormous problem – affecting, especially, the aquatic, bird, and animal life in the world’s oceans. The disposal of municipal waste is also a growing problem and the rapid redundancy of electronic goods means that e-waste continues to proliferate rapidly at the global scale. There are, therefore, increasingly urgent questions to be asked in the years ahead about how we come to terms with the afterlife of the products we use and discard so readily (Lepawsky 2018). The geographies of waste may become as important as the geographies of production and consumption.

New Technologies

The role of new technologies in everyday life has changed dramatically in the last 20 years. When many student readers of this book were born, email and the Internet were just emerging, Wi-Fi was unheard of, Twitter and Facebook were non-existent, laptops and cell phones were much less common, and streaming videos, downloading files, or shopping online had not emerged as everyday activities. In many parts of the world, these information and communication technologies have now profoundly changed how we consume, what we consume, and how we work. At the same time, as dependence on web-based communication intensifies, the gulf between those with access to technology and those without gets deeper. What is clear, however, is that the rapid development of communication and production technology will continue to transform massively our economic world in the future.

In the production of many goods and services that we now use, there will be an increasing role for artificial intelligence (AI) and big data analytics. AI involves machine learning while computers process information and thereby becoming ever closer to human intelligence (and surpassing it in terms of speed, pattern recognition, memory, and other functions). It is clear that AI capabilities will increase dramatically and will affect many sectors. To take just a few examples: medical diagnoses will require less guesswork and judgement on the part of medical professionals as AI recognizes patterns in complex symptoms; language differences will become less of a barrier to communication as computers are increasingly able to translate with the nuance of a bilingual human brain; and the creative output of AI (stories, scripts, designs, videos, and images) will become ever more sophisticated. Central to AI, and to many other applications of computing power, is the role of big data. Increasingly, data itself is a significant commodity. Big data analytics lies behind the ways in which the advertising industry (and those who sell advertising venues) increasingly target very specific consumers with product recommendations. Data also underpin everything from the sophisticated trading algorithms in the financial sector, to risk analysis in the insurance industry, to the management of public services such as transportation and healthcare.

A key question for economic geographers will be how all of this disruptive technology will affect patterns of economic growth and the unevenness of wealth. For every retail store and newspaper that goes out of business because of online competition, there are also industries being created in software and hardware development. But the geographies of these emergent industries may be quite different and many will develop in clusters that are concentrated hubs of innovation (see Chapter 12). This seems likely to increase the spatial and social unevenness of wealth both within countries and globally. Another key question will be how different territories/states regulate and control these new sectors. There has even been speculation about the global Internet splitting into three separate regulatory regimes – a Chinese domain that is subject to state censorship and control, a European regime that follows the EU's rules about data protection, and the American-centred Internet from which the system first grew. The role of state regulation is also seen at smaller scales as governments try to respond to the disruption of established industries. The controversial development of Uber and Airbnb around the world, disrupting taxi and hotel industries, respectively, is an obvious example.

There are also interesting 'countermovements' facilitated by communications technology. Social media has fostered political mobilizations that address various forms of economic injustice. These social movements in turn affect workplace experiences and economic policy. The Black Lives Matter movement in North America has highlighted various forms of racial exclusion, including economic inequalities and workplace discrimination. Since 2017, the #MeToo hashtag has forced changes in the ways gender is performed in the workplace. The Occupy movement, initiated in 2011, has highlighted deepening income and wealth inequalities in many contexts around the world. The technology-driven integration of places across space has, therefore, fostered movements of resistance that are influential forces shaping economic life.

New Forms of Work

Technology and other changes are rapidly reshaping the nature of work in economies around the world. In some cases, AI is replacing human roles in the service sector, just as automation and robotics continue to displace hands in manufacturing. The effects are evident already, but in future there is the very real prospect that taxi drivers will be replaced by autonomous vehicles and call centre workers will give way to robots performing AI-driven interaction. One estimate suggests that by 2030, 20–25 per cent of jobs in high-wage economies, such as France, Japan, or the United States, could be displaced (McKinsey Global Institute 2018).

Technology is also changing the way in which labour markets work. For example, web-based 'microtask platforms', such as Amazon Mechanical Turk, CrowdFlower, and Clickworker, make it increasingly easy to enrol a global

workforce for small clerical tasks, such as transcription, content moderation, data processing, transcription, and translation (see Chapter 14). Electronic labour markets of this kind provide the ultimate form of work-on-demand, where employers and customers can access a flexible and global workforce around the clock, and competition means that wages are kept low. The fact that most digital workers employed on such platforms are working from home also highlights the progressively blurring line between the spaces of home and work. The creeping insertion of work into all dimensions of our lives seems likely to be increasingly prevalent. The precarious nature of these tasks and work is also a matter of major social concern.

Meanwhile, as noted in Chapter 6, the types of employment that are expanding tend to be in feminized and racialized forms of work. The US Bureau of Labour Statistics has projected the fastest growing job categories in the United States between 2016 and 2026. By far the largest increases in absolute numbers are among personal care aides, food preparation workers, registered nurses, and home health aides. Together, these categories will represent one-fifth of new jobs in the United States – and all are distinctly feminized, racialized, and (with the exception of registered nurses) low paid. They also point heavily towards the future challenges of an aging population structure in the United States and many other countries. An Economic Geography that pays close attention to how work is structured, how labour markets are constituted, and how identities relate to these processes will have to work hard to keep up with these changes.

15.4 Summary

For the most part, this book has avoided representing Economic Geography as an academic field, and has instead focused on the ideas that the field has contributed to our understanding of economic processes. This has meant that the internal debates within the field, and their development over time, have not been given much attention. In this chapter, we have pulled back the curtain to present a brief and simplified picture of the approaches that have held sway at various times, and continue to inform research activities today. By dividing the field into positivist, structural, and post-structural approaches to knowledge, we have highlighted the different strategies used by scholars to understand the world. In various ways, all of these approaches have been represented in this book. A key point of the discussion in this chapter, however, is that knowledge production in Economic Geography itself has a distinctive geography. In other words, it is only possible to understand why intellectual approaches have changed by also looking at the varied contexts (of time and place) in which they were developed. Given this argument, it is equally likely that Economic Geography in the future will change to reflect the times and places in which it will be practiced.

Projecting into the future, we have suggested that it is possible to foresee *some* (but only some) of what future contexts might hold in store. Patterns of economic power are being redistributed, with the emergence of China being the most obvious current trend. Flows of capital, people, and trade have all intensified and seem unlikely to abate significantly, although there are certainly political currents that favour nationalist and protectionist economic strategies. Environmental deterioration suggests the need to reorient many economies towards local production and lower consumption, and yet efforts to ensure environmental sustainability seem unlikely to succeed. A major feature of economic futures will therefore be dealing with the consequences of climate change, pollution, and other forms of environmental deterioration. Technological dynamism in areas of online communication, AI, and big data analytics will continue, but social movements that are facilitated by social media will also shape economic life in important ways. Finally, new forms of employment, and the disappearance of some kinds of jobs, will change the way in which work is organized (including its relationship to our non-work lives). Deepening levels of precarious employment will also continue to raise questions about the forms of difference (gender, race, citizenship, etc.) that serve to marginalize some groups in the economy. All of these future scenarios will demand the grounded analysis provided by economic geographers using the analytical lenses of spatial patterning, networks, place, and territory that have framed this book.

Notes on the references

- Barnes (1996) provides the most thorough account of the philosophical underpinnings of modern Economic Geography available, and an engagement with positivist, structural, and post-structural approaches. Excellent overviews of changing trends in Economic Geography over time, and the distinctions between different philosophical approaches, are provided by Scott (2000), Sheppard (2006), and Walker (2012). Barnes and Christophers (2018) provide a lively and accessible summary of Economic Geography's history and its breadth as a field.
- There are now several volumes that provide state-of-the-art research updates on Economic Geography as a field. See, for example, Barnes et al. (2012) and Clark et al. (2018).
- For more on different national traditions of geography, see various entries in the *International Encyclopedia of Human Geography*, for example, Hess (2009) on Germany and Benko and Desbiens (2009) on Francophone Geography. Hammett (2012) provides an account of South African Geography, and Liu et al. (2016) on Chinese language Geography. Hassink et al. (2019) argue for a poly-vocal Economic Geography and highlight themes found in Chinese, Portuguese, and Spanish language material.

- A ‘feminist upsurge’ in Economic Geography is recounted by Werner et al. (2017) and reflections on this approach are found in *Environment and Planning A*, volume 48 number 10 (2016). A collection of essays outlining a postcolonial economic geography is provided by Pollard et al. (2011).

Sample essay questions

- How have the ideas and frameworks of Economic Geography reflected the social and political circumstances of historical time periods?
- Should Cultural Geography and Economic Geography still be seen as separate fields?
- What role do quantitative approaches play in contemporary Economic Geography?
- What do you think will be the major subject headings in an Economic Geography textbook published in 2040?

Resources for further learning

- The work of David Harvey, including Harvey’s audio and video presentations, is featured on the blog davidharvey.org.
- The Economic Geography Specialty Group of the American Association of Geographers provides resources and links to the world of Economic Geography. See <https://egsgaag.wordpress.com>. The equivalent group in the United Kingdom is the Economic Geography Research Group of the Royal Geographical Society (with the Institute of British Geographers): www.egrg.org
- The Summer Institute in Economic Geography provides advanced training, mentoring, and professional development for early-career researchers entering the field. For further information: <http://www.econgeog.net>
- The Global Conference on Economic Geography is now a regular fixture that brings together researchers in the field from around the world. Started in Singapore in 2000, the conference has been held in Beijing, Seoul, Oxford, Cologne, and (in 2021) Dublin. The website for the conferences can be found here: <http://www.gceg.org>

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