1 Introduction

In the late 1990s I met an anthropology student who had just returned from a year in Senegal. As soon as she learned that I was an international economist, she asked, "Can you tell me about the CFA franc devaluation? Why was it necessary? It has made life very difficult in Senegal." Some years later, I met a religion student who had just returned from a semester spent in Haiti working in a health clinic. As soon as he learned that I was an international economist, he asked, "Can you tell me about structural adjustment programs? I'm concerned about how they are being applied to Haiti." Subsequently, one of my children's school bus driver quizzed me about the Doha Round of multilateral trade negotiations, and a college professor wanted to know the exact distinction between trade and foreign direct investment.

These are not rare incidents. International economists receive such inquiries from all sorts of people. Increasingly, it seems, more and more of us need to know something about the world economy—religion students and bus drivers, as well as economics and business students. Why is this? Put simply, the world economy impacts us all in increasingly significant ways. It has become very difficult to take shelter in our respective majors and professions without being knowledgeable about the basics of international economics. Increasingly, trade flows, exchange rates, and multinational enterprises matter to us all, even if we would prefer that they did not. The 2008 global financial crisis (GFC) made this apparent in the most dramatic way, as did the 2016 Brexit vote in favor of the United Kingdom leaving the European Union.

As a consequence of these changes, students and professionals, but also citizens more broadly, have significant concerns about "globalization." Shortly before the failed Seattle Ministerial Conference of the World Trade Organization (WTO) in December 1999, for example, I received a phone call from a former student. She was about to travel to Seattle to join in the protests against the WTO—the "Battle of Seattle," as it was called. She knew that I had spent a brief amount of time at the WTO, and, before she set off, she wanted to raise her concerns with me about globalization and the impact it was having on rural economies in the United States. The Seattle Ministerial was a failure in part because of the efforts of my former student and her fellow protesters. The same was true of other subsequent WTO Ministerial Conferences.

Since that time an anti-globalization movement has increased in strength.[1] It has drawn attention to the distributional impacts of increased global integration but has also at times questioned the entire integration of the world economy in broad-brush terms. Are the concerns of my former student and the anti-globalization movement well placed? Is globalization the evil that some contend it is? Or is it the unmitigated good that others contend it is (e.g. Wolf, 2004)? Most likely, the actualities of globalization are *more nuanced* than the good/evil dichotomy that is often invoked. For example, in an analysis of the effects of various globalization processes on the development processes, Goldin and Reinert (2012: 1) state: "The relationship between globalization and poverty is not well understood.... By examining both the processes through which globalization takes place and the effects that each of these processes has on global poverty alleviation, current discussions can be better informed."

Better informing students and professionals about globalization is an important component of this book, and exploring key aspects of globalization is one of the tasks we take up here. We will try to explore the world economy and globalization in as balanced a manner as possible. This will help us develop informed views and opinions, whatever they might be. Developing informed views and opinions, in turn, requires a serious study of international economics. This field of study is typically divided into two parts: international trade and international finance. Indeed, these two parts often constitute the only two courses in a standard "core course" series. In this book, however, we are going to approach things slightly differently. Acknowledging some new perspectives on the world economy, we are going to explore three different aspects or realms of the modern world economy. These are: international trade, international production, and international finance. Let us briefly consider each of these in turn.

International Trade

Our first realm of the world economy is **international trade**.[2] International trade refers to the exchange of *both* goods *and* services between the countries of the world. We typically picture international trade as taking place only in *goods*, such as steel, automobiles, wine, or bananas. This view is incomplete, however. It is important to acknowledge that a significant portion of world trade is composed of trade in *services*. For example, financial services, architectural services, and

[1] See, for example, Ayres (2004), Dunkley (2016), and *The Economist* (2016a).
[2] Every time you encounter a term in boldface in this book, you can find its definition in the glossary.

engineering services are all traded internationally. In fact, trade in services composes about one-fifth of total world trade.[3] Indeed, trade in goods and trade in services can be *intertwined*, as the process of trading in goods requires service inputs in the form of transportation, logistics, and customs clearance. Indeed, the process of manufacturing itself is becoming increasingly service-intensive.[4]

International trade in goods and services is playing an increasing role in the world economy. Consider the data presented in Figure 1.1. This figure plots two series of data for the years 1970 to 2018. The first series, represented by a dashed line, is inflation-adjusted world **gross domestic product** (GDP), a measure of world output. It has been normalized so that the value in 1970 is 100, and the values for each subsequent year are measured relative to 1970. The second series, represented

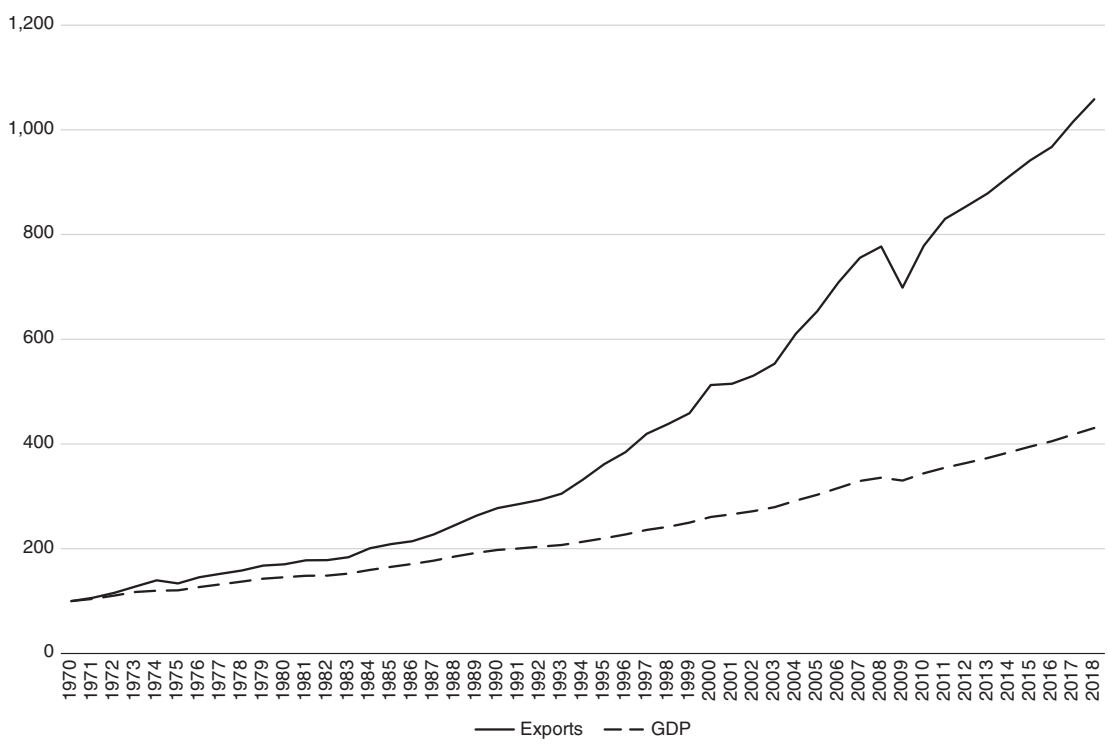

Figure 1.1 Gross domestic product and exports in the world economy, 1970 to 2018 (1970 = 100)
Source: World Bank, World Development Indicators, and author calculations.

[3] It is sometimes said that the word "goods" refers to things you can drop on your toe. Therefore, "services" refers to things you *cannot* drop on your toe! More formally, goods are tangible and storable, whereas services are intangible and non-storable. On trade in goods, see Reinert (2017b); and, on trade in services, see Francois and Hoekman (2010) and Chanda (2017).

[4] See, for example, Lodefalk (2015). Chanda (2017: 45) states: "Manufacturing firms today are buying and producing more series than ever before. 'Servicification' of manufacturing refers to the fact that services are becoming important as both inputs and outputs for manufacturing."

by a solid line, is inflation-adjusted world exports.[5] This series has been normalized in the same way as the GDP series. As you can see in Figure 1.1, over the decades considered trade activity increased more rapidly than production activity in the world economy. This is one of the main features of globalization: the expansion in the exchange of goods and services between the countries of the world. You can also see that trade decreased more quickly in 2009 than did production in response to the 2008 GFC before recovering its previous trajectory. What Figure 1.1 encapsulates is a near-half-century of the increased trade intensification of the world economy.

There are many reasons for the expansion of world trade illustrated in Figure 1.1. One way of thinking about this is in terms of "three Ts," namely transportation, technology, and tariffs. The first "T" is transportation. During the 1970s a revolution began in global goods shipping using containers, with ships being built to carry thousands of increasingly standardized containers, and ports being redesigned to efficiently handle these ships and containers. Advances in container shipping continue to this day. The largest container ships now carry over 15,000 containers, and there are ongoing experiments in new materials (e.g. carbon fiber composites), new security scanning technology, and new means of embedding container transport histories.[6] Recent statistical evidence suggests that container transport has indeed had a significant, positive impact on increased globalization via trade flows.[7]

The container shipping revolution was followed by significant changes in air freight, beginning in the mid-1980s. This mode of transportation is more expensive than container shipping. The reason air freight is important, however, is that it is so much faster. As noted by Baldwin (2016: 85), "air cargo allows manufacturers to know that intermediate goods could flow among distant factories almost as surely as they flow among factories within a nation." This new reality also helped to promote international trade flows.

The second "T" is technology, specifically in the form of **information and communication technology**, or ICT. A revolution in ICT has greatly enhanced the ability of firms to coordinate both international trade logistics and, more generally, international production systems. Advances in ICT also greatly facilitated some types of services trade via electronic commerce. ICT enhanced the development of container shipping to such an extent that we can say, to paraphrase Levinson (2006: 267), the container, combined with the computer, opened the way to modern globalization. All indications suggest that this technological transformation is still taking place.[8]

[5] Note that world imports track world exports very closely, so we can use the level of exports as a proxy for the overall level of world trade.

[6] On some of these new container shipping technologies, see *The Economist* (2014).

[7] See *The Economist* (2013) and Bernhofen, El-Sahli, and Kneller (2016).

[8] For example, in a review of technological change in global value chains, *The Economist* (2019) refers to artificial intelligence, cognitive analytics, deep-learning algorithms, self-learning algorithms, and 3-D printing.

The third "T" is tariffs. The time period of Figure 1.1 coincided with an era of trade liberalization, begun with the lowering of tariff barriers both unilaterally and via regional and multilateral initiatives. For example, Hoekman and Kostecki (2009: 138) report that, as a result of multilateral trade liberalization, the weighted average tariff on manufactured products imposed by high-income countries fell from approximately 20 percent to 5 percent though the 1990s. So tariffs, or trade liberalization more broadly, helped spur global trade integration.[9]

In sum, the three "Ts" of transportation, technology, and tariffs all helped to contribute to a world economy in which international trade relations have grown increasingly important.[10] They also had impacts on patterns of international production, to be discussed below.

One recent and significant change in the global trading economy has been the entry of China, as a result of its embrace of market reforms beginning in the late 1970s, as well as its joining the WTO in 2001. China's substantial increase in exports, particularly manufactured exports, was an unprecedented event that had significant implications for what we will call the *political economy of trade* throughout much of the world.[11] To gain some perspective, it is helpful to look at China's exports as a percentage of GDP and compare this with another large exporter, Germany. We do this in Figure 1.2. You can see in this figure that China's exports as a percentage of GDP are substantially *lower* than those of Germany and have been decreasing since 2006. Indeed, in 2018 China's exports as a percentage of GDP were substantially below what they had been in 2000, while Germany's increased steadily over the time period considered in the figure. Indeed, as of 2016 Germany had the largest trade surplus in the world.[12]

You will begin to understand the major factors underlying international trade in Part I of this book. We will apply standard microeconomic thinking to analyzing both trade and trade policies. In doing this, you will become acquainted with the powerful concept of **comparative advantage**. You will also be introduced to a set of key policy issues surrounding the management of international trade, including issues pertaining to the World Trade Organization and to **preferential trade agreements** such as the North American Free Trade Agreement (NAFTA) and the Association of Southeast Asian Nations (ASEAN). A full understanding of the factors underlying international trade will also require an understanding of international production, however, and this is taken up in Part II of this book.

[9] As we discuss in Chapters 6 and 7, there have been recent moves against global trade integration.

[10] Of these three factors (container shipping, ICT advances, and trade liberalization), Baldwin (2016) draws special attention to ICT, particularly in the decades since 1990. He sees container shipping and trade liberalization as reducing the costs of moving goods, but ICT as reducing the costs of moving ideas.

[11] See, for example, *The Economist* (2016a).

[12] See *The Economist* (2017a).

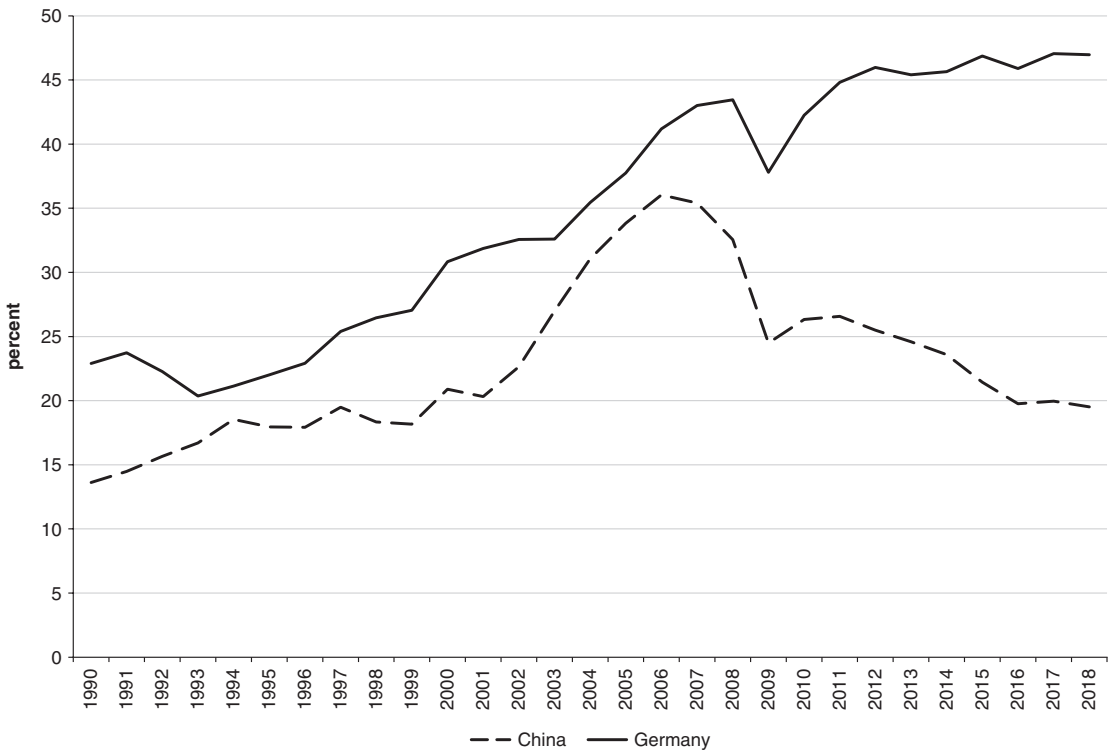

Figure 1.2 Exports as a percentage of GDP, China and Germany, 1990 to 2018
Source: World Bank, World Development Indicators.

International Production

A second important realm of the world economy is **international production**. Production patterns in the modern world economy can be relatively complex. For example, when my children were toddlers, one of their favorite books was *Bear's Busy Family*, published by the award-winning Barefoot Books. Featured in *Inc. Magazine* in 2006, Barefoot Books was founded in 1993 by Tessa Strickland and Nancy Traversy. It was initially run from their homes in the United Kingdom (where burgeoning inventory broke a table), but subsequently expanded with a flagship store in Cambridge, Massachusetts, in the United States. In the case of *Bear's Busy Family*, the color separation was done in Italy, and the actual printing took place in Malaysia. So the book my children held with such interest in their hands was a result of a production process that took place in four countries. The production of products (and their intermediate inputs) in multiple countries is what we mean by international production.

At the broadest level, international production can take place via two alternative modes. The first mode is non-equity contracting and includes foreign

outsourcing, licensing, and franchising. Contracting is an arm's-length relationship across national boundaries that can be described as a low-commitment/low-control option. The second mode is equity-based **foreign direct investment** (FDI) undertaken by **multinational enterprises** (MNEs).[13] FDI involves firms based in one country *owning* at least 10 percent of a firm producing in another country and thereby exerting management influence, a high-commitment/high-control option.[14] Both these options are important in the modern world economy.[15]

MNEs are particularly important actors in the world economy. To get a sense of this, consider the following facts.[16]

- MNEs account for approximately one-fourth of world GDP.
- The sales of foreign affiliates of MNEs exceed the volume of world trade.
- MNEs are involved in approximately three-fourths of all world trade.
- Approximately one-third of world trade takes place *within* MNEs.
- MNEs account for approximately three-fourths of worldwide civilian research and development (R&D).

A series of data on global FDI inflows from 1970 to 2018 is provided in Figure 1.3. The inflows are broken down between low- and middle-income countries (LMICs: bottom) and high-income countries (top) that receive or host the FDI. FDI flows to low-income countries are miniscule by global standards, so the vast bulk of inflows to LMICs are to the middle-income countries of that group. As you can see, the 1990s were characterized by a large surge of FDI inflows, mostly into high-income countries and partly reflecting an upturn in mergers and acquisitions (M&A) activity. What is also clear, however, is that the middle-income countries of the world are hosting a growing amount of FDI. As a result of the GFC, total FDI flows decreased substantially in 2008 and 2009. They subsequently recovered to approximately US$2 trillion, a value that had been reached in the mid-2000s in the previous FDI upturn. In the most recent years of Figure 1.3, however, they have fallen again, with the decline centered on inflows to high-income countries.

[13] A formal definition of an MNE by Dunning and Lundan (2008: 3) is: "A multinational or transnational enterprise is an enterprise that engages in foreign direct investment and owns or, in some way, controls value-added activities in more than one country." For a review, see Anyanwu (2017).

[14] The 10 percent ownership threshold for categorizing FDI is, admittedly, arbitrary, but it is a widely accepted standard in balance of payments accounting, used by the International Monetary Fund (IMF) and the Organisation for Economic Co-operation and Development (OECD).

[15] The popular term "offshoring" is used in different ways in the research and policy literature. In some cases (e.g. McIvor, 2005: chap. 2) it is used to mean, essentially, foreign outsourcing. In other cases (e.g. Feenstra and Jensen, 2009) it is used to refer to FDI itself. In still other cases (e.g. Baldwin, 2016) it is used to refer to both. Given these multiple meanings, we will not use the term in this book.

[16] For further discussion of the role of MNEs, see Dunning and Lundan (2008: chap. 2).

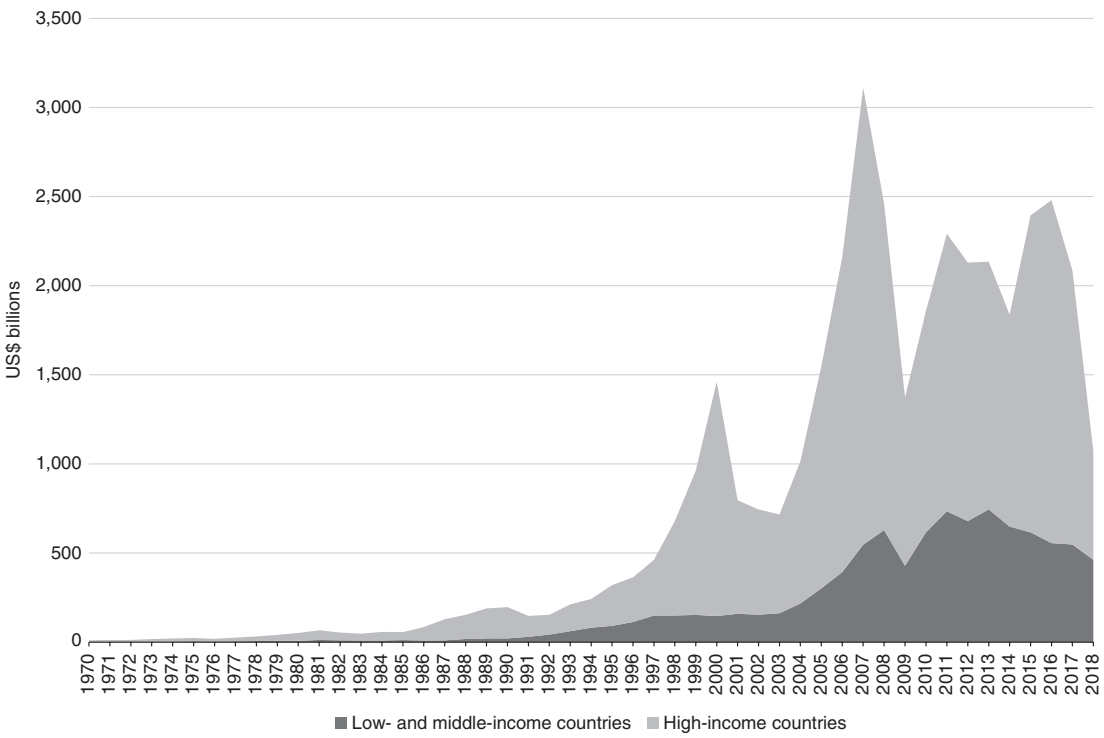

Figure 1.3 Nominal FDI inflows, 1970 to 2018
Source: World Bank, World Development Indicators.

What has accounted for the *long-term* increase in FDI activity in middle- and high-income countries? Two relevant factors are those mentioned above in our discussion of international trade, namely improvements in transportation and ICT. Add to this an expansion of global M&A activity, particularly in the services sector (finance, transport, communications). Indeed, services began to account for approximately one-half of FDI flows in the 1990s. Further, many countries in the developing world began to shift from a policy posture of antipathy towards FDI inflows to one of relative friendliness.[17] This, for example, accompanied the well-known rise of FDI flows into China, which helped spur its previously discussed export expansion.

Both contracting relationships and FDI are configured between countries in what are known as **global value chains** (GVCs). GVCs are systems of value chains linked together in buyer–supplier or ownership relationships across countries.[18] GVCs are further held together by trade relationships in both intermediate and final products. GVCs have been enabled by the innovations in container shipping

[17] See Anyanwu (2017), who notes a shift to a view of "FDI as a prerequisite and catalyst for sustainable growth and development" (134).
[18] See, for example, Gupta (2017).

and ICT described above, and their configuration affects the way countries are included or excluded from evolving patterns of modern globalization. So the lack of FDI in low-income countries in part reflects their exclusion from GVCs.

ICT-enabled GVCs have received increasing attention from researchers. Indeed, Baldwin (2016) suggests that ICT-enabled GVCs are the defining feature of modern globalization. Baldwin's observation is that ICT advances, along with advances in air cargo, made possible the coordination of production activities at a distance and, in this way, distributed factories across national boundaries. As he states, "The contours of industrial competitiveness are now increasingly defined by the outlines of international production networks rather than the boundaries of nations" (6). He and others have called this process "unbundling." By "unbundling," these researchers mean that stages of production processes are moved away from their original national location. This process is part of the modern evolution of GVCs.

Migration is also an important aspect of globalization.[19] This book considers migration to be a relevant part of international production, in that most migrants leave one country and enter into another for work purposes. Nevertheless, despite the fact that 3 to 4 percent of the world's population has migrated, there are significant impediments to this aspect of globalization. As barriers to the movements of goods, services, direct investment, and finance transactions have fallen over time, barriers to the movement of people have largely remained in place, or even increased. This has caused some international economists (e.g. Pritchett, 2006) to refer to "everything but labor" globalization. Nonetheless, migration is still an element of the world economy worth studying, and we will consider its role in international production via both low- and high-skilled migration.

As the above facts and data indicate, FDI, MNEs, GVCs, and migration are additional and important features of globalization. In Part II of the book, you will gain an understanding of these additional features of the modern world economy from both business and economic perspectives. This is a vast area of research, policy-making, and international business activity, but we will present the material in an organized and accessible manner to familiarize you with these new perspectives on the world economy.

International Finance

A third important realm of the world economy is **international finance**. Whereas international trade refers to the exchange of goods and services between the countries of the world, international finance refers to the exchange of **assets** between these countries. Assets are financial objects characterized by a monetary value that

[19] See, for example, Goldin and Reinert (2012: chap. 6) and Omelaniuk (2017).

can change over time. They make up the wealth portfolios of individuals, firms, and governments. For example, individuals and firms around the world conduct international transactions in currencies, equities, government bonds, corporate bonds (commercial paper), and even real estate as part of their management of international portfolios. The way in which the prices of these assets change in response to these international transactions impacts individual countries in important ways. Additionally, as we will see, these transactions can provide a source of savings to countries over and above the domestic savings of their households and firms.

International finance plays an increasingly important role in the world economy. We can see this by considering foreign exchange transactions. As it turns out, foreign exchange transactions are *much larger* than trade transactions. For example, Figure 1.4 plots two variables for three-year intervals between 1989 and 2016. The first variable, plotted as the vertical bars in reference to the left-hand scale (lhs), is daily foreign exchange turnover, as measured by the Bank for

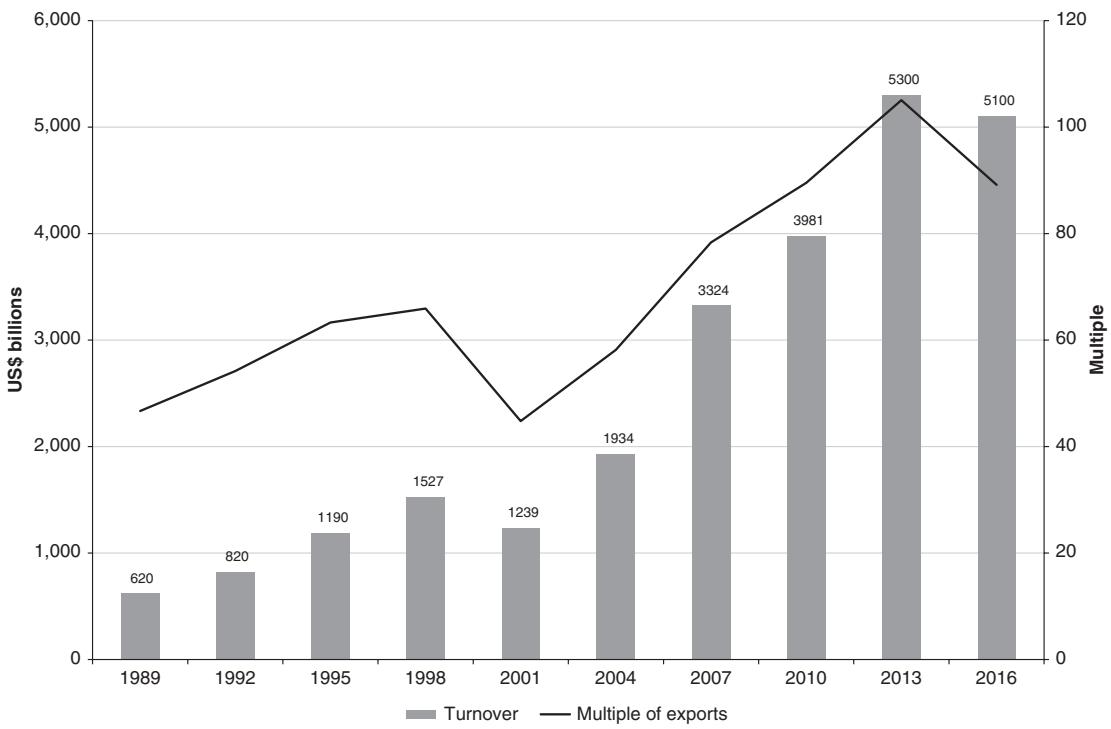

Figure 1.4 Daily foreign exchange market turnover and annualized multiple of exports, 1989 to 2016 (lhs: US$ billions; rhs: multiple of exports)
Note: The multiple of exports assumes a constant foreign exchange turnover each day of the year.
Sources: Bank for International Settlements, Triennial Central Bank Surveys, and World Bank, World Development Indicators.