

1 Windows on the World Economy



## 2 WINDOWS ON THE WORLD ECONOMY

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 of working in a health clinic in Haiti. 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." More recently, my son's school bus driver quizzed me about the Doha Round of multilateral trade negotiations.

These are not rare incidents. I receive such inquiries on a routine basis from all sorts of people. Increasingly, it seems, more and more of us – religion students, bus drivers, as well as economics and business students – need to know something about the world economy. 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 academic majors and professions without being knowledgeable about the fundamentals 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 global financial crisis that began in 2007 made this apparent in the most dramatic way.

As a consequence of these changes, students and professionals, and, more broadly, citizens now have significant concerns about "globalization." Shortly before the failed Seattle Ministerial Meeting 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. 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 about globalization and the impact it was having on rural economies in the United States with me. 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 the Cancún Ministerial Meeting of 2003.

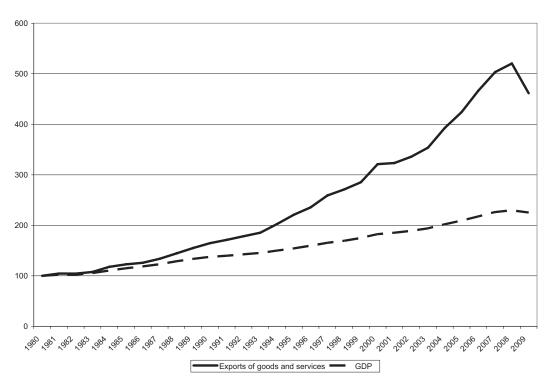
Were my student's concerns well placed? Is globalization the evil that some contend it to be? Or, is it the unmitigated good that others contend it is? Most likely, the actualities of globalization are more variegated than the good—evil dichotomy that is often invoked. For example, in an analysis of the effects of various globalization processes on the developing world, Goldin and Reinert (2007) stated that, "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" (p. 1).

Better informing students and professionals about globalization is an important component of this book; 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 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 approach things differently. Acknowledging the diverse interests of students and professionals, as well as the diverse aspects of the world economy, we explore four different *windows* on the modern world economy. These are international trade, international production,



### INTERNATIONAL TRADE

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**Figure 1.1.** Gross Domestic Product and Exports in the World Economy, 1980 to 2009 (1980 = 100). *Source:* World Bank, World Development Indicators and author calculations

international finance, and international development. Let us briefly consider each of these in turn.

## **INTERNATIONAL TRADE**

Our first window on the world economy is **international trade**.<sup>1</sup> International trade refers to the exchange of goods *and* services among the countries of the world. In the previous sentence, the "and" between "goods" and "services" is important. We typically picture international trade as involving only *goods*, such as steel, automobiles, wine, or bananas. However, this view is incomplete. It is important to acknowledge that a significant portion of world trade is composed of trade in *services*. Financial services, architectural services, and engineering services are all traded internationally. In fact, trade in services is about one-fourth the volume of trade in goods.<sup>2</sup>

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 1980 to 2009. 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 1980 is 100, and the values for each subsequent year are

<sup>&</sup>lt;sup>1</sup> Every time you encounter a term in **bold face** in this book, you can find its definition in the glossary.

<sup>&</sup>lt;sup>2</sup> 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 services, see François and Hoekman (2010).



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measured relative to 1980. The second series, represented by a solid line, is inflation-adjusted world exports.<sup>3</sup> This series has been normalized in the same way as the GDP series. As you can see in this figure, over the decades considered, trade activity increased faster than production activity in the world economy. This is one of the main features of globalization, namely the expansion of exchange of goods and services among the countries of the world. You can also see that trade decreased more quickly in 2009 than did production in response to the global recession of that year.

There are many reasons for the expansion of world trade, as shown in Figure 1.1. During the 1970s, a revolution in global goods shipping began with the use of containers; ships built to carry thousands of increasingly standardized, 20-foot containers; and ports redesigned to handle these ships and containers efficiently. This was followed by a revolution in information and communications technology (ICT) that 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 subsequently enhanced the development of container shipping to such an extent that, to paraphrase Levinson (2006, p. 267), the container, combined with the computer, opened the way to globalization. Furthermore, an era of trade liberalization began with the lowering of tariff barriers both unilaterally and through regional and multilateral initiatives. All these factors helped to contribute to a world economy in which international trade relations grew increasingly important.

You will begin to understand the major factors underlying international trade in Part I of this book. We will apply standard microeconomic thinking in analyzing both trade and trade policies. You will also be introduced to a set of key policy issues surrounding the management of international trade, including issues pertaining to the WTO 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, however, also requires an understanding of international production, which is discussed in Part II of this book.

# INTERNATIONAL PRODUCTION

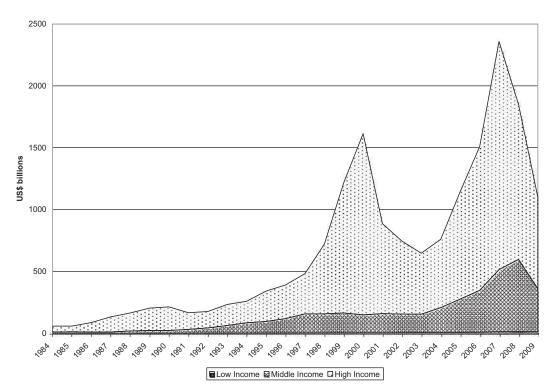
Our second window on the world economy is **international production**. Production patterns in the modern world economy can be relatively complex. For example, when my children were toddlers, one of their favorite books was *Bear's Busy Family*, published by Barefoot Books. Featured in *Inc. Magazine* 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 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. Production of a product in multiple countries is what we mean by international production.

<sup>&</sup>lt;sup>3</sup> 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.



#### INTERNATIONAL PRODUCTION

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**Figure 1.2.** Nominal FDI Inflows to Low, Middle, and High Income Countries, 1984 to 2009. *Source:* World Bank, World Development Indicators

At the broadest level, international production can take place through two modes: contracts (international licensing and franchising) and **foreign direct investment** (FDI) undertaken by **multinational enterprises** (MNEs). Contracting is an arm's length relationship across national boundaries that can be described as a low-commitment–low-control option. FDI involves firms based in one country, owning at least 10 percent of a firm producing in another country and thereby exerting management influence. It can be described as a high-commitment–high-control option. MNEs are now a major component of the world economy. To see this, consider the following facts:

- 1. MNEs account for approximately one-fourth of world GDP.
- 2. The sales of foreign affiliates of MNEs now exceed the volume of world trade.
- 3. MNEs are involved in approximately three-fourths of all world trade.
- 4. Approximately one-third of world trade takes place within MNEs.
- 5. MNEs account for approximately three-fourths of worldwide civilian research and development.

A series of data on global FDI inflows from 1984 to 2009 is provided in Figure 1.2. The inflows are broken down among low-income, middle-income, and high-income countries that host the FDI. It is clear that the 1990s experienced a large surge of FDI flows, mostly into high-income countries and partly reflecting an upturn in mergers and acquisitions activity. What is also clear, however, is that the middle-income countries of the world are hosting a growing amount of FDI. FDI inflows into low-income countries are both very low and stagnant, with these members of the global economic community



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largely excluded from this important part of economic globalization. Finally, as a result of the financial crisis and global recession, FDI flows decreased substantially in 2008 and 2009.

What has accounted for the long-term increase in FDI activity in middle- and high-income countries? Two relevant factors mentioned earlier in our discussion of international trade include improvements in transportation and ICT. Add to these factors an expansion of global mergers and acquisition activity, particularly in the services sector (finance, transport, and communications). Indeed, services began to account for approximately half of FDI flows in the 1990s. Furthermore, many countries in the developing world began to shift from a policy posture of antipathy toward FDI inflows to one of relative friendliness. For example, this accompanied the well-known rise of FDI flows into China.

As the preceding facts and data indicate, the operation of MNEs is another main feature of globalization. In Part II of this book, you will gain an understanding of MNEs and their role in international production. This includes an appreciation of the relatively complex decisions facing global firms, the function of **global production networks** (GPNs), and the management issues that arise when firms are spread across international borders. You will also gain an appreciation of the role of **migration** in international production.

# INTERNATIONAL FINANCE

Our third window on the world economy is **international finance**. Whereas international trade refers to the exchange of goods and services among the countries of the world, international finance refers to the exchange of **assets** among these countries. Assets are financial objects characterized by a monetary value that 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 portfolios. The way in which the prices of these assets change in response to these international transactions affects the countries of the world 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.

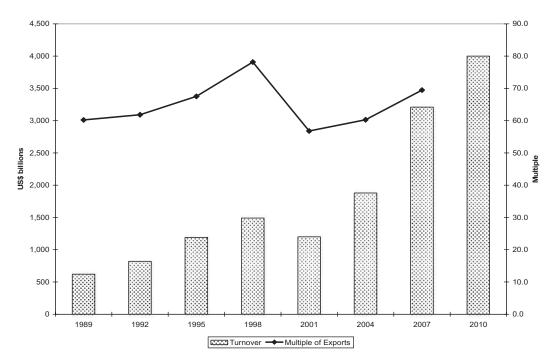
International finance plays an increasingly important role in the world economy. We can see this by considering foreign exchange transactions. Foreign exchange transactions are much larger than trade transactions. For example, Figure 1.3 plots two variables for 3-year intervals between 1989 and 2010. The first variable, plotted as the vertical bars in reference to the lefthand scale (lhs), is daily foreign exchange turnover as measured by the Bank for International Settlements (BIS) in its triennial April surveys. Despite a downturn in 2001, the total foreign exchange turnover increased substantially over time. Observers were amazed when it broke US\$1 trillion in 1995, but in 2010 it reached US\$4 trillion!

The second variable plots the annualized foreign exchange turnover (assuming constant turnover each day) as a multiple of total world exports in reference to the right-hand scale (rhs), but only up to 2007. As you can see, foreign exchange turnover is 60 to 70 times the value of exports. This makes it strikingly clear that, on an annual basis,



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**Figure 1.3.** Daily Foreign Exchange Market Turnover and Annualized Multiple of Exports (billions of U.S. dollars on lhs and multiple of exports on rhs). *Sources:* Bank for International Settlements Triennial Central Bank Surveys and World Bank, World Development Indicators. *Note:* The multiple of exports assumes a constant foreign exchange turnover each day of the year.

global transactions in foreign exchange dwarf global trade transactions. International finance matters.

Another important feature of international finance has emerged in recent years. A typical expectation in the field of international finance is that developing countries will naturally receive net inflows of capital and invest them at relatively high rates of return, with this capital being supplied by developed countries with relatively low rates of return. Since 2000, however, this pattern has been reversed. Largely as a result of deficits in the United States (U.S. citizens spending in excess of national savings), the developing world is now a significant exporter of financial capital rather than an importer. As of 2008, the capital exports of the developing world exceeded US\$500 billion. This is a major new development in international finance.

The importance of international finance, seen in Figure 1.3, became very evident in the later part of the 1990s. During this time, investors quickly sold assets in Mexico, Thailand, Indonesia, the Philippines, Russia, and Brazil, causing **balance of payments** and financial crises. This was a process known as **capital flight**. Capital flight involves investors selling a country's assets and reallocating their portfolios into other countries' assets. Beginning in mid-2008, the power of international finance again became evident in the form of a global crisis with roots in the United States housing market. Losses in housing mortgages were transmitted around the globe via a pyramid of financial instruments related to this sector. This was the result of banks taking loans that would have traditionally remained on their books, repackaging them in the form of asset-based securities, and trading these securities internationally. This provided a mechanism for a crisis involving new financial products that originated in one country to take on a global



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Table 1.1. Measures of living standards (2008, except where indicated)

Country	PPP GDP per capita (U.S. dollars)	Life expectancy (years)	Adult literacy (percent)	Human development index (0 to 1)
Ethiopia	869	55	36 (2004)	0.414
India	3,032	64	63 (2006)	0.612
China	6,195	73	91 (2000)	0.772
Costa Rica	11,250	79	95 (2000)	0.854
South Korea	26,875	80		0.937
United States	47,210	79		0.956

Source: World Bank, World Development Indicators and United Nations Development Program

profile that has yet to be resolved at the time of this writing. As noted in the *Financial Times* in 2008, "The global system has shifted from financing anything, however crazy, to refusing to finance anything, however sensible."

This crisis did not just affect the United States. Its most severe effects have been felt in Europe – first in the United Kingdom, and then in Portugal, Italy, Ireland, Greece, and Spain. The crises in Greece and Ireland have been particularly acute, and the European Union has struggled to contain the damage to its political and economic integration. Watching the United States and the European Union succumb to financial instability has given many experts and policymakers pause.

As we can see, international finance is a realm of increasing importance in the modern world economy. You will enter into this realm in Part III of this book. You will learn about open-economy accounting, exchange rate determination, the international monetary system, and financial crises. Throughout Part III, the asset considerations that set international finance apart from international trade will be paramount.

# INTERNATIONAL DEVELOPMENT

The fourth and final window on the world economy is **international development**. The processes of international trade, international production, and international finance reflect the many goals of their participants. From a public policy perspective, however, it is hoped that these three processes will contribute to improved levels of welfare and standards of living throughout the countries of the world. Two major issues are involved here. The first is how we conceptualize levels of welfare or standards of living. The second is how the processes of international trade, production, and finance support or undermine international development.

One inclusive, although not uncontroversial, measure of these differences in living standards is the **human development index** (HDI) measured by the United Nations Development Program (UNDP). For our purposes here, suffice it to say that the HDI reflects per capita income (adjusted for cost of living), average life expectancy, and average levels of education. Some data on these measures for the year 2005, as well as on the HDI itself, are presented for a small sample of countries in Table 1.1.

As we can see from the data presented in Table 1.1, there is a wide range in measures of well-being among the countries of the world. GDP per capita ranges from less than US\$1,000 in Ethiopia to approximately US\$47,000 in the United States, a factor of



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50 in this standard measure of economic development.<sup>4</sup> Life expectancies range from 55 years in Ethiopia to 80 in South Korea (and even 83 in Japan). Low life expectancies often reflect high mortality among infants and children – sadly, nearly 10 million of whom perish each year. Literacy rates range from less than 40 percent of the population in Ethiopia to near-universal literacy in other countries. When combined into the single measure of the HDI, we see a wide variance as well, with a variation of approximately 0.41 to 0.96. However we view development (income, health, or education), its level *varies widely* among the countries of the world.

The variation in development indicators reflects the fact that economies around the world differ in their productive capacities. For example, Florida (2005) constructed a world map that proxies productive capacities with nighttime light emissions in which higher emission levels appear as raised surfaces above the earth. Florida described the result as follows: "U.S. regions appear almost Himalayan on this map. From their summits one might look out on a smaller mountain range stretching across Europe, some isolated peaks in Asia, and a few scattered hills throughout the rest of the world" (p. 49). Florida refered to this pattern of development as "spiky globalization," a pattern that confronts the world with a significant and persistent development challenge to raise productive capacities.

You will begin to understand how the activities of international trade, production, and finance affect international development in Part IV of this book. In Part IV, we consider alternative concepts of development, the way trade can contribute to economic growth, the process of hosting MNEs, and the role of the World Bank and structural adjustment in developing countries. These intersections of our windows on the world economy are critical for improving the well-being of (literally) billions of individuals worldwide.

## **CONNECTING WINDOWS**

Each of our four windows on the world economy – trade, production, finance, and development – offers a view, but each has a frame. That is, each window offers some insight into the world economy, an insight that needs to be supplemented by one or more of the other windows. Let me give you an example. In 1991, I was working for the U.S. International Trade Commission (USITC) in Washington, DC. At that time, most of my efforts were dedicated to analyzing the *trade* effects of the North American Free Trade Agreement (NAFTA). Based on the narrow trade window, I was excited about Mexico's prospects. One day, the USITC received a delegation from Mexico, and I had an hour-long appointment with a Mexican economist accompanying the delegation. As it turned out, he was as worried about Mexico's prospects, even as I was excited. During our conversation, he said, "I am very worried about the future. All of the excitement over NAFTA is causing an inflow of portfolio investment. It is very short term, and it is financing a large trade deficit. It could turn around in a day! And then where will we be?"

As it turned out, this Mexican economist was right. The portfolio investment did turn around and cause a crisis in late 1994 and early 1995. My window on the Mexican

<sup>&</sup>lt;sup>4</sup> The GDP per capita measures are purchasing power parity measures, which adjust for differences in costs of living among countries (see Chapter 20).



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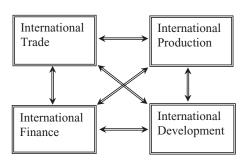


Figure 1.4. Connecting Windows

economy was insufficient to allow me (and many other trade economists) to appreciate where Mexico was heading. The Mexican economist was more attuned to the realities of the Mexican economy because he was viewing it through more than one window. He was using the window of international finance as well.

I want to suggest that you take the integrated view illustrated in Figure 1.4. In the figure, the four windows of our book are represented with four boxes. More important, there are six *connections* among the windows, represented by double-headed arrows. These are the connections among our four windows that we must keep in mind. NAFTA was an agreement for liberalizing trade and investment among the countries of North America, but its effects went beyond the trade and production windows to the finance window. The financial crises of the 1990s took place in the realm of international finance, but the effects were strongly transmitted to the realm of international development: standards of living fell. So as you proceed through the remainder of this book, it will be important for you to identify connections among the four windows.

Figure 1.4 helps us to be cognizant of the connections among the four aspects of international economics that you will explore in this book; however, we must keep in mind that there are additional realms that affect the way in which the world economy evolves over time. These are *technology*, *politics*, *culture*, and the *environment*. At various points in the book, we discuss how these factors play important roles. It is fair to say that the boxes and arrows in Figure 1.4 should be thought of as being strongly influenced by technological, political, cultural, and environmental factors. The accompanying box takes up technology in the form of ICT. We must also say a few words about politics, culture, and the environment.

# ICT in the World Economy

As a dynamic, driving force for global economic change, technology is central. Indeed, a large part of the globalization process can be attributed to revolutions in information and communication technologies (ICT). It is ICT that allows an employee of Philips, the Dutch consumer-electronics firm, to use the Internet in order to adjust a television assembly line process in the Flextronics factory in Guadalajara, Mexico. It is ICT that allows a fund manager in London to quickly buy or sell equities on the Johannesburg stock exchange. Most recently, new ICT technologies in the area of "telepresence" (e.g., Hewlett-Packard's Halo system) allow teleconferencing to move into a new era in which it appears that participants half a world away are sitting across the table, greatly enhancing global coordination and reducing the need for international travel.

In the realm of international production, ICT has had a somewhat unusual impact of moving production in two opposing directions: toward greater global integration and