Introduction

The world economy, that collection of human activities spanning national borders, touches us all. The banking executive organizing global financial services and the poor agricultural worker cultivating an export crop are both strongly influenced by global economic forces beyond their control. The banking executive operates within a financial services protocol of the World Trade Organization and in financial markets that increase in importance with every passing year and yet remain stubbornly volatile in new and not always predictable ways. The agricultural worker sees her fortunes rise and fall with the world price of the export crop she produces and the remittances she receives from her son who works abroad in a country she will never visit. The value of these remittances changes with her country's exchange rate, as well as with the business cycle where her son works. The banking executive and the agricultural worker do not know one another, but both are participants in what we call the world economy.

This work conceives of the world economy as the interaction among countries in four broad areas: international trade, international finance, international production, and international economic development. Some decades ago, considerations of the world economy neatly fit into only two of these four areas, namely international trade and international finance. Not today. Significant changes in the way production is taking place in the world, the emergence of new regions as active locations of this production, and conceptual and theoretical advancements in our understanding of economic growth necessitate a more inclusive view. What we conceive of as the "world economy" here is more than just traditional international economics. Integration among countries in the four broad areas considered here has progressed to the extent that it is appropriate to conceive of the world as having characteristics of a single global economy.

Despite the importance of the modern world economy, people around the globe face a number of challenges in their attempts to understand it. Foremost among these challenges is a tendency for the relevant published works to be either too general or too specialized to suit the needs of students in economics and the broader social sciences, public policy and public affairs, international studies, and business, as well as the large and growing number of professionals working in international economic policy. Works intended for a popular audience tend to focus on broad themes and theories, often with a political point of view. Articles in academic journals often use terminology and mathematics beyond the reach of the nonspecialist.

This encyclopedia is intended to bridge the gap between the general and the specialized. It explains the structure and workings of the world economy, summarizes issues and debates related to economic globalization, and provides suggestions for further reading on more than 300 topics. With a few necessary exceptions, the entries in this book eschew the broad sweep. Instead, we have chosen topics we consider essential to a real understanding of forces at play. The entries for the most part do not employ advanced mathematics or highly technical language. Their aim is to accurately educate and inform, not overwhelm.

Structure and Coverage

The entries fall into six major categories: concepts and principles; models and theory; institutions and agreements; policies and instruments; analysis and tools; and sectors and special issues. Our selection of topics in the last of these categories, sectors and special issues, was based on policy relevance rather than on theoretical considerations. We have not included biographical entries, but individuals who have played a significant role in the world economy are mentioned in the relevant topical entries; their names also appear in the index.

The *Encyclopedia* is informed by the modern history of international economic relations since the introduction of the gold standard in the late 19th century. This is widely considered to be the beginning of the modern era of economic relations and, as such, offers a useful starting point. We have tried to select topics that will continue to be important—essential concepts, perennial issues, and long-term trends—regardless of the particular future course of the world economy.

International Trade

Around 1980, our understanding of international trade—the exchange of merchandise and services among the countries of the world—began to change. In response to emerging patterns of trade within (rather than between) manufacturing and service sectors, new theories emerged based on imperfect competition and economies of scale, supplementing the old stories of comparative advantage based on factor or resource endowments in which, for example, a country with a relatively large amount of labor would export labor-intensive goods. At the same time, trade policy agendas rapidly expanded into new areas such as trade in services, intellectual property, a new generation of preferential trade agreements, and the settlement of disputes. Trade economists and trade lawyers became acquainted. Unforeseen issues emerged out of or alongside of trade negotiations such as trade and the environment, trade and labor, and trade and public health.

Trade-related entries in this *Encyclopedia* reflect this new reality. Standard models of international trade (the Ricardian model, the Heckscher-Ohlin model, and the specific-factors model) are given their due by world-renowned trade theorists. New Trade Theory (i.e., based on oligopoly and monopolistic competition) also receives attention, as do its applications in areas such as the New Economic Geography. We supplement these core models with entries on a large set of basic concepts, from absolute and comparative advantage to terms of trade and fragmentation. A host of trade policy instruments are covered, from basic tariffs to nontariff measures, including quotas, tariff rate quotas, and technical barriers to trade. A large number of institutions and agreements are covered, from the obvious (e.g., the World Trade Organization) to the less well known (e.g., the Convention on Biological Diversity and the Convention on International Trade in Endangered Species). We also give attention to commonly used tools of analysis, such as revealed comparative advantage, effective protection, and gravity models. Finally, we cover a range of special issues such as access to medicines, gender, and the illegal drugs trade.

International Finance

Changes have been even more dramatic in the realm of international finance than in international trade. The liberalization and integration of global financial markets began in the 1980s, but accelerated significantly in the 1990s. For example, data from the Bank for International Settlements indicate that global foreign exchange turnover increased from U.S. $620 billion in 1990 to U.S. $3.2 trillion in 2007. Potential benefits that can emerge from these changes include improved resource allocation from countries specializing in financial services; increased portfolio diversification; improved competition in the financial sector; and increased market discipline on policymakers. Such changes can have positive effects on the overall growth and development of the countries involved.

That said, these changes in the landscape of global finance have also been associated with repeated episodes of significant turbulence. For example, in 1992–93, Europe was faced with the very real possibility of a complete collapse of the European Exchange Rate Mechanism (ERM). In 1994–95, the Mexican currency crisis involved a steep devaluation of the peso and brought Mexico to the brink of default, with spillover effects on Argentina and Brazil. Between July 1997 and mid-1998, the world experienced the effects of the East Asian crisis, which started somewhat innocuously with a run on the Thai baht, but spread swiftly to a number of other regional currencies, most notably the Indonesian rupiah, Malaysian ringgit, Philippine peso, and Korean won. Other large emerging economies, such as Russia and Brazil, also experienced periods of significant market weakness and required the assistance of the International Monetary Fund. The Russian ruble was devalued in August 1998, while the Brazilian real's fixed rate to the U.S. dollar was eventually broken in January 1999. A number of other smaller emerging economies, such as Turkey and Ecuador, also experienced currency and financial crises in the 1990s.

Another striking change has been the reversal of capital flows from developed to developing countries. Due in large part to the emergence of a significant current account deficit (i.e. spending in excess of national saving) in the United States and involving the official transactions of central banks, the developing world is now an *exporter* of capital to the developed world rather than an importer. In fact, the flow of international capital from developing countries to developed countries is now one of the key paradoxes of the global economy, as is the fact that foreign governments and central banks have become major participants in global financial markets via the creation of sovereign wealth funds.

Finance-related entries in the *Encyclopedia* reflect these important changes. Standard models of international finance and open-economy macroeconomics are covered, including the interest parity conditions and the Mundell-Fleming model, and a host of basic concepts such as balance of payments, capital flight, currency crisis, and sterilization. These are supplemented with more recent theoretical contributions such as the New Open Economy Macroeconomics. Entries on policy instruments include capital controls, hedging, and foreign exchange intervention, to name a few. Coverage also includes the basic analytical tools of the field, such as early warning systems and exchange rate forecasting, as well as special topics such as financial services, sequencing of financial sector reform, recycling of petrodollars, and money laundering.

International Production

As mentioned earlier, a key change in the world economy has been in the structures of international production of goods and services, as multinational enterprises (MNEs) engage in varieties of foreign direct investment (FDI) with managerial influence over foreign-based productive enterprises. Drawing on both the work of earlier theory in international business and new developments in trade theory, economists have incorporated MNEs and FDI into the theory and practice of international economics. At the same time, issues such as outsourcing and offshoring have attracted public attention and increased political interest in this area. This has occurred both in high-income countries, where outsourcing has moved to white-collar as well as blue-collar occupation categories, and in developing countries, where new income-generating possibilities have emerged outside of manufacturing.

When deciding to become a MNE, a firm chooses the mode that maximizes its profits, typically considering such options as exporting and licensing a local firm (outsourcing/offshoring) as alternatives. Consequently, models usually revolve around the trade-offs between FDI and at least one alternative. In these models, the location of production differs between FDI and exporting, and whether transactions occur within the firm differs between FDI and licensing.

Like trade, much FDI occurs between similar, developed countries and is often two-way, but FDI has grown even more rapidly than trade. A large share of world trade (about 30 percent) occurs *within* firms and is known as intrafirm trade. MNEs tend to arise in industries with large research and development expenditures relative to sales, significant product differentiation, and substantial intangible assets such as intellectual property and brand value. FDI is mostly horizontal—with MNEs creating local production facilities in each country and selling within each country or region—rather than vertical, in which MNEs allocate production processes across countries and ship the products back home.

Our coverage of international production begins with issues of theory, from long-standing pursuits such as location theory to emerging issues of importance such as FDI under monopolistic competition and oligopoly. These more formal considerations are again supplemented with a set of entries on basic concepts, from FDI and MNEs themselves to intangible assets and technology licensing. Coverage of policy instruments includes entries on domestic content requirements, foreign equity restrictions, and trade-related investment measures more broadly. We also cover specific analytic tools such as market size and exchange rates as they relate to FDI. Finally, the book addresses several special issues related to FDI, such as FDI and export performance and FDI and labor markets.

International Economic Development

Due to the huge disparities in standards of living around the globe and the tremendous impact, for good or ill, of international economic transactions in the development process, the ideas and policies that shape economic development are subject to ongoing and highly charged debates. In entries on influential development institutions, such as the World Bank, and policy frameworks, such as import substitution industrialization and the Washington consensus, our goal is to explain these debates without attempting to resolve them. Entries on economic development and the evolution of development thinking are designed to provide the reader with a conceptual framework and a context for understanding the issues addressed in entries such as international migration, international trade and economic development, and technological progress in open economies.

Since the 1990s, development thinking has shifted toward recognizing the central importance of political processes in structuring and potentially limiting economic development. Reflecting this shift, the *Encyclopedia* attempts to view the economic processes of development in the broader context of political decision-making. This emphasis on political economy is apparent in many of the entries on economic policy and takes center stage in entries that address the linkages between economic and political systems, such as those on democracy and development, corruption, and international aid and political economy. Finally, while most of the development entries take the national economy as their starting point, entries on global poverty, global income inequality, and international income convergence take a deliberately transnational approach, reflecting the growing consensus that it is now meaningful to view some issues from the perspective of a single global economy.

Using the Encyclopedia

There are a number of ways to engage with the encyclopedia. Entries are arranged in alphabetical order. If you are uncertain of the particular entry that may be most appropriate to your interest, you can consult the Topical List of Entries, which groups the entry terms by category. You also can consult the index to find topics that are covered in related entries but do not have entries of their own.

At the end of most entries you will find "See also" references to other entries related to the topic at hand. Each entry concludes with an annotated Further Reading list to guide readers with an interest in additional research.

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