Instructor's Resource Manual (Download Only) for International Economics: Theory and Policy

Revised by
Hisham Foad & Mike Casey

International Economics: Theory and Policy

Twelfth Edition, Global Edition

Paul R. Krugman
Maurice Obstfeld
Marc J. Melitz

Pearson

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International Economics: Trade and Money

■ Chapter Overview

The intent of this chapter is to provide both an overview of the subject matter of international economics and to provide a guide to the organization of the text. It is relatively easy for an instructor to motivate the study of international trade and finance. The front pages of newspapers, the covers of magazines, and the lead reports on television news broadcasts herald the interdependence of the U.S. economy with the rest of the world. This interdependence may also be recognized by students through their purchases of imports of all sorts of goods, their personal observations of the effects of dislocations due to international competition, and their experience through travel abroad.

The study of the theory of international economics generates an understanding of many key events that shape our domestic and international environment. In recent history, these events include the causes and

consequences of the large current account deficits of the United States; the dramatic appreciation of the dollar during the first half of the 1980s followed by its rapid depreciation in the second half of the 1980s; the Latin American debt crisis of the 1980s and the Mexican crisis in late 1994; and the increased pressures for industry protection against foreign competition broadly voiced in the late 1980s and more vocally espoused in the first half of the 1990s. The financial crisis that began in East Asia in 1997 and spread to many countries around the globe and the Economic and Monetary Union in Europe highlight the way in which various national economies are linked and how important it is for us to understand these connections. These global linkages have been highlighted yet again with how a bust in the American housing market rapidly spread throughout the world, turning into a global financial crisis through linkages across international capital markets. At the same time, protests at global economic meetings and a rising wave of protectionist rhetoric have highlighted opposition to globalization as exemplified by both Brexit and the recent U.S. presidential campaign. The text material will enable students to understand the economic context in which such events occur.

Chapter 1 of the text presents data demonstrating the growth in trade and the increasing importance of international economics. This chapter also highlights and briefly discusses seven themes that arise throughout the book. These themes are (1) the gains from trade, (2) the pattern of trade, (3) protectionism, (4) the balance of payments, (5) exchange rate determination, (6) international policy coordination, and (7) the international capital market. Students will recognize that many of the central policy debates occurring today come under the rubric of one of these themes. Indeed, it is often a fruitful heuristic to use current events to illustrate the force of the key themes and arguments that are presented throughout the text.

Chapter 2

World Trade: An Overview

■ Chapter Organization

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Summary

■ Chapter Overview

Before entering into a series of theoretical models that explain why countries trade across borders and the benefits of this trade (Chapters 3–12), Chapter 2 considers the pattern of world trade that we observe today. The core idea of the chapter is the empirical model known as the gravity model. The gravity model is based on the observations that (1) countries tend to trade with nearby economies and (2) trade is proportional to country size. The model is called the *gravity model,* as it is similar in form to the physics equation that describes the pull of one body on another as proportional to their size and distance.

The basic form of the gravity equation is $T_{ij} = A \times Y_i \times Y_j/D_{ij}$. The logic supporting this equation is that

large countries have large incomes to spend on imports and produce a large quantity of goods to sell as exports. This means that the larger that either trade partner is, the larger the volume of trade between them. At the same time, the distance between two trade partners can substitute for the transport costs that they face as well as proxy for more intangible aspects of a trading relationship such as the ease of contact for firms. This model can be used to estimate the predicted trade between two countries and look for anomalies in trade patterns. The text shows an example where the gravity model can be used to demonstrate the importance of national borders in determining trade flows. According to many estimates, the border between the United States and Canada has the impact on trade equivalent to roughly 1,500–2,500 miles of distance. Other factors such as tariffs, trade agreements, and common language can all affect trade and can be incorporated into the gravity model.

The chapter also considers the way trade has evolved over time. Although people often feel that globalization in the modern era is unprecedented, in fact, we are in the midst of the second great wave of globalization. From the end of the 19th century to World War I, the economies of different countries were quite connected, with trade as a share of GDP higher in 1910 than in 1960. Only recently have trade levels surpassed pre–World War I trade. The nature of trade has changed, though. The majority of trade is in manufactured goods with agriculture and mineral products making up around 25% of world trade. Even developing countries now primarily export manufactures. A century ago, more trade was in primary commodities as nations tended to trade for things that literally could not be grown or found at home. Today, the motivations for trade are varied, and the products we trade are increasingly diverse. Despite increased complexity in modern international trade, the fundamental principles explaining trade at the dawn of the global era still apply today. The chapter concludes by focusing on one particular expansion of what is "tradable"—the increase in services trade. Modern information technology has expanded greatly what can be traded as the person staffing a call center, doing your accounting, or reading your X-ray can literally be halfway around the world. Although service outsourcing is still relatively rare, the potential for a large increase in service outsourcing is an important part of how trade will evolve in the coming decades. The next few chapters will explain the theory of why nations trade.

■ Answers to Textbook Problems

1. According to the gravity model, trade exchanges are positively affected by the size of the trading economies and are negatively affected by their distance. Other conditions being the same, the two countries should trade more with their neighbors than with the countries far away from them. When trade is either much more or less than a gravity model predicts, economists search for the explanation, such as role of transport costs and geography in determining the volume of trade.

2. According to the gravity model, with other things being equal, the value of trade between any two countries is proportional to the product of the two countries' GDPs and diminishes with the distance between the two countries. In the given situation, Ireland's trade with the United States lies in the cultural affinities because the same language is spoken and there are a large number of Irish immigrants in the United States. Ireland also hosts many US-based corporations. Traditionally, Belgium has been the point of entry to much of northwestern Europe's trade with the United States; also Antwerp in Belgium ranks as the second most important port in Europe, as measured by the tonnage handled. Thus, the large trade suggests that transport costs and geography are important factors in explaining Belgium's volume of trade with the United States.
3. No, if every country's GDP were to double, world trade would not quadruple. Consider a simple example with only two countries: A and B. Let country A have a GDP of $6 trillion and B have a GDP of $4 trillion. Furthermore, the share of world spending on each country's production is proportional to each country's share of world GDP (stated differently, the exponents on GDP in Equation 2-2, *a* and *b,* are both equal to 1). Thus, our example is characterized by the table below:

Country	GDP	Share of World Spending
A	$6 trillion	60%
B	$4 trillion	40%

Now let us compute world trade flows in this example. Country A has an income of $6 trillion and spends 40% of that income on country B's production (spending 60% on their own production). Thus, exports from country B to country A are equal to $6 trillion × 40% = $2.4 trillion. Country B has an income of $4 trillion and spends 60% of this on country A's production. Thus, exports from country A to country B are equal to $4 trillion × 60% = $2.4 trillion. Total world trade in this simple model is $2.4 + $2.4 = $4.8 trillion.

What happens if we double GDP in both countries? Now GDP in country A is $12 trillion, and GDP in country B is $8 trillion. However, the share of world income (and spending) in each country has not changed. Thus, country A will still spend 40% of its income on country B products, and country B will still spend 60% of its income on country A products. Exports from country B to country A are equal to $12 trillion × 40% = $4.8 trillion. Exports from country A to country B are $8 trillion × 60% = $4.8 trillion. Total trade is now equal to $4.8 + $4.8 = $9.6 trillion. Looking at trade before and after the doubling of GDP, we see that total trade actually doubled, not quadrupled.
4. The gravity model of trade states that the value of trade between two countries is proportional to each country's GDP. As GDP in East Asian countries has increased relative to other countries, we should