Instructor's Manual for

An Introduction to International Economics:

New Perspectives on the World Economy

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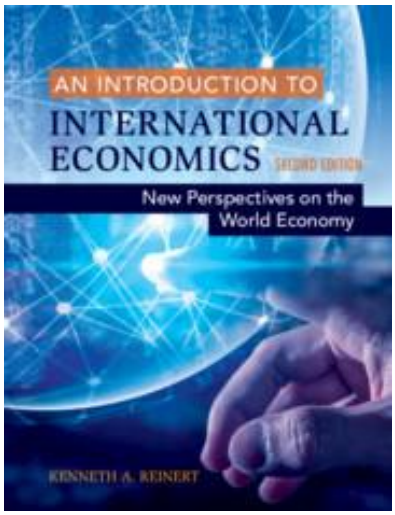

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Note to the Instructor

An Introduction to International Economics introduces the student or professional reader to the basic concepts of international trade, international production, and international finance. Its only prerequisite is an introductory-level understanding of *micro*-economics. The book draws upon principles-level concepts such as the circular flow diagram, the supply and demand model, the production possibilities frontier, and the value chain, each of which is developed using real-world examples. These basic concepts should be familiar to nearly all readers.

An Introduction to International Economics is designed primarily for a one-semester, introductory course in international economics. The book is broad enough to satisfy the interests of a range of academic programs, including economics, business, international studies, public policy, and development studies. Also, despite its introductory-level nature, *An Introduction to International Economics* covers some often-neglected, but important topics in international economics. These include intra-industry trade, intra-firm trade, foreign market entry, global value chains, and migration. The book also covers two the major institutions of the world economy in an historical perspective: the World Trade Organization and the International Monetary Fund.

This instructor's manual is designed to help you to teach a one-semester course that introduces the student to international economics, including international trade, international production, and international finance. In what follows, we take up each part of the book and each chapter within each of the three parts. We provide chapter objectives, teaching notes, and answers to the review questions.

For past users of *An Introduction to International Economics*, there have been *significant changes* in this second edition in response to numerous referee reports from both users and non-users. A few development-related chapters have been removed due to a lack of interest among instructors. The comparative advantage chapter has been split in two, one on the Ricardian model and a second on the Heckscher-Ohlin model. The chapters on international production have been consolidated into one fewer. A new chapter on global capital flows has been included. Overall, the book is more compact and actually *less costly* for your students than the previous edition.

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In teaching a survey course of this kind, there will be a few places where you find yourself outside of your comfort zone. One source that might be helpful to you is *The Princeton Encyclopedia of the World Economy* (Princeton University Press, 2009), a 2-volume set that covers a vast array of topics in an accessible manner. Each entry contains an annotated list of references.

The book's web-site is http://iie.gmu.edu. Please contact Kenneth Reinert at kreinert@gmu.edu if you have any questions, comments, or ideas concerning the textbook or instructor's manual. Every effort will be made to address your reactions is subsequent editions and on the website.

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Suggested Chapter Use by Program

Chapter	*Economics*	*Business*	*International Studies*	*Development Studies*
1 Introduction	X	X	X	X
Part I International Trade				
2 Absolute Advantage	X	X	X	X
3 Ricardian Model of Comparative Advantage	X	X	X	X
4 Heckscher-Ohlin Model of Comparative Advantage	X	X	X	
5 Intra-Industry Trade	X	X		
6 The Political Economy of Trade	X	X	X	X
7 Trade Policy Analysis	X	X	X	X
8 The World Trade Organization	X		X	X
9 Preferential Trade Agreements	X	X	X	X
Part II International Production				
10 Multinational Enterprises and Foreign Direct Investment	X	X	X	X
11 Global Value Chains		X		
12 Engaging International Production		X		X
13 Migration	X		X	X
Part III International Finance				
14 Accounting Frameworks	X	X	X	X
15 Global Capital Flows	X	X		
16 Exchange Rates and Purchasing Power Parity	X	X	X	X
17 Flexible Exchange Rates	X	X	X	X
18 Fixed Exchange Rates	X	X	X	X
19 The International Monetary System	X		X	X
20 Crises and Responses	X	X	X	X
21 Monetary Unions	X		X	
22 Growth in the Open Economy	X	X	X	X

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CHAPTER 1
Introduction

Chapter Objectives

Many students will come to your course with a general interest in "globalization" or "the world economy." The purpose of Chapter 1 is to build on these interests and to communicate some empirical realities for the student to consider. The chapter also introduces the student to the three realms of international economics, namely: international trade, international production, international finance, and international development. As an instructor, you have your own interests, views, and important information concerning these topics. I invite you to view Chapter 1 as a *complement* to your own agenda and encourage you to bring your own cases, concerns, and anecdotes to the class session related to Chapter 1. Students will greatly appreciate this.

The chapter also begins to introduce the student to a set of concepts that are important to his or her understanding of international economics. These include international trade, trade in services, international production, foreign direct investment, multinational enterprises, international finance, balance of payments, and international development. Each of these will be developed in more detail in subsequent chapters, but an initial introduction to these concepts is helpful.

The chapter introduces the student to concerns outside of the typical realms on international economics. These include culture, the environment, politics, and technology. They are introduced using the abbreviation CEPT for students to better retain these concepts.

Finally, the chapter introduces the student to the analytical elements used in subsequent chapters. These include: countries, sectors, tasks, firms, factors of production, currencies and financial assets. They are used in different combinations in subsequent chapters.

Because the second edition of the book went into press before the COVID-19 pandemic struck. It will be important for you to address this in class and to let the students know that many of the data series presented in Chapter 1 were altered significantly by the pandemic.

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Chapter Outline

International Trade
International Production
International Finance
Impacts on International Development
Larger Realms
    Box: ICT in the World Economy
Analytical Elements
Conclusion

Teaching Notes

The chapter tries to arm you with some basic data related to globalization in the areas of trade, production, and finance. As new data become available, updates will be posted on the book's website (iie.gmu.edu). In my experience, the class session devoted to Chapter 1 will elicit a number of reactions from the students, including *both* comments *and* questions. This is a good time to foreshadow future topics and chapters on your syllabus: "That is an issue we will take up when we discuss…."

This is also an important time to orient students towards fundamental concepts in international economics. For example, many students cannot distinguish between international trade and foreign direct investment or between international trade (the exchange of merchandise and services) and international finance (the exchange of assets). It is probably a good idea not to over-estimate your students' understanding of these key concepts. It is not unusual, for example, for students to think that foreign direct investment is equivalent to international trade.

The chapter also stresses the potential for the realms of trade, production, and finance to be inter-related. Your own personal take on this would be very helpful to your students. While there are a few examples in the chapter, hearing about an additional example from you will be very important to the students. This is particularly important in the areas of culture, the environment, politics, and technology (CEPT) and can be tailored to your program.

Finally, the *analytical elements* can be a useful tool to orient students to your course. Defining each of these carefully will be beneficial for many of them. For example, a careful definition of an *asset* is illuminating.

Comments on Review Exercises

1. Why are you interested in international economics? What is motivating you? How are your interests, major, or profession affected by the world economy?

   For smaller classes, this can be used for classroom introductions and discussion. If your class in online, this can be part of an initial discussion board thread.

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2. What are the three realms of the world economy addressed in this book? Define each of them *carefully*.

   International trade, international production, and international finance. This seems perhaps trivial, but many students will benefit from spending time on these distinctions.

3. What is the difference between *trade in goods* and *trade in services*?

   Trade in goods involves tangible and storable items (things you can drop on your toe), while trade in service involves intangible and non-storable items (things you cannot drop on your toe). Note that Chapter 8 goes into specific categories of trade in services.

4. What is the difference between *international trade* and *foreign direct investment*?

   International trade involves the cross-border exchange of goods and services, while FDI consists of the ownership (of over 10 percent) of a foreign firm. FDI can influence trade substantially but is a separate process. This is a key distinction that is often lost on students.

5. What is the difference between *international trade* and *international finance*?

   International trade involves the cross-border exchange of goods and services, while international fiancé involves the cross-border exchange of assets. The exchange of assets is the defining feature of international finance (and the capital account) as opposed to international trade (and the current account).

6. Identify one way in which the activities of international trade, finance, and production could *positively* contribute to international development. Identify one way in which these activities could *negatively* contribute to international development. How could you demonstrate that the activities have either a positive or negative impact on development?

   This question is very open-ended, but important. The question also gets to the issue of indicators and is worth classroom discussion. FDI that transfers technology could contribute to development. Primary product trade in the face of declining commodity prices could have a negative impact on development.

7. Take a look at the websites of major venues of the global business/financial press such as *The Economist* and the *Financial Times*. Spend a little time browsing.

   This is more important than it looks. Having the students understand that there are important venues for discussion of economics, financial, and business issues in the world beyond Google searches is helpful for students.

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Part I

International Trade

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CHAPTER 2
Absolute Advantage

Chapter Objectives

The purpose of this chapter is to start the student thinking about international trade within the comfort zone of the supply and demand model. The chapter initially defines absolute advantage in a way that will help transition to the Ricardian model of comparative advantage in Chapter 3. It then considers absolute advantage in the supply and demand model. This helps the student to visualize imports as an excess demand (shortage) at world prices and to visualize exports as an excess supply (surplus) at world prices. It will also help the student to visualize an adjustment of world prices to bring about equilibrium where the excess demand (imports) and excess supply (exports) for a particular good are equal. The student will understand the notion of the "gains from trade." Changes in quantities supplied in the movement from autarky to trade are also an opportunity to give an initial sense of the political economy of trade. Throughout, there is an emphasis on trade arising from differences on the supply sides of the countries of the world.

Analytical elements for this chapter:

Countries, *sectors* and *factors of production*.

Chapter Outline

Defining Absolute Advantage
    Box: Robot Kingdom: Japan's Advantage in Industrial Robots
Absolute Advantage in Supply and Demand
    Box: Rare Earth Elements
Gains from Trade
Limitations
    Box: Illicit Trade
Conclusion
Appendix: Review of Supply and Demand

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Teaching Notes

As stated above, the purpose of this chapter is to start the student thinking about international trade within the comfort zone of the supply and demand model. Two caveats are in order here, however. First, you should not assume that the students remember the supply and demand model. A quick review of the model (movement along curves vs. shifts of the curves) is in order, and the students will be grateful to you if you take the time to do this. You can point them to the appendix here. Second, it is important to emphasize to the students that the absolute advantage model of this chapter describes only a tendency. Actual trade patterns are determined by comparative advantage as discussed in Chapters 3 and 4.

That said, emphasize to the students that the absolute advantage model is used by trade policy analysts in anti-dumping and countervailing duty cases (discussed in Chapter 7), particularly where the product category involved is narrow. They are learning something practical!

The absolute advantage model also helps the student to understand the gains from trade using consumer surplus and producer surplus. Again, do not assume the students remember these concepts. Take a few minutes to review the concepts, and the students will be appreciative. Be sure to emphasize that the gains from trade are *mutual*. Students are used to thinking in terms of zero-sum games, and the potential mutual benefits of trade might be new to them. That said, if you are teaching in a developments studies program, mentioning how colonial trading relationships obviated mutual gains from trade might be important.

This chapter contains a box on "Japan's Advantage in Industrial Robots." For your classroom preparation, it would be helpful for you to prepare a "box" of your own on absolute advantage in an area in which you have some knowledge and interest. It would also be useful for you to prompt the students to think of their own examples. The chapter also contains a box on "Rare Earth Elements," which have been very newsworthy. This example relates to "realist" trade policies discussed in Chapter 6.

There is also a third box on "Illicit Trade." This is a very active area of research across many disciplines, from economics to criminology. This is an opportunity to discuss the presence of illicit activities in the global economy and to note limits to the gains from trade concept.

To shift the students from a passive to an active mode, have them develop their own diagrams, like those of this chapter, for two countries and a good for which they have some knowledge. If you want to push them a bit further, have then consider an increase in supply in the exporting country and explain how this affects the equilibrium world price of the good.

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Comments on Review Exercises

1. Use Figure 2.5 in the appendix to consider the following changes: a fall in incomes due to a recession; an increased preference for rice consumption; an increase in input prices for rice production; and an improvement in rice production technology. Use diagrams to analyze the effects of these changes on equilibrium price and quantity.

   The fall in income shifts the demand curve to the left; the increased preference for rice consumption shifts the demand curve to the right; the increase in input prices for rice production shifts the supply curve to the left; and the improvement in rice production technology shifts the supply curve to the right.

2. Create an example of an absolute advantage model by choosing two countries and a single product.

   a. Draw a supply and demand diagram describing *autarky* and a *pattern of absolute advantage* for your example.

   b. Show the transition from autarky to trade in your diagram, label the trade flows, and demonstrate the *gains from trade.*

   c. In a new diagram, and starting from a trading equilibrium, show what would happen to the world price if *income increased* by exactly the same, small amount in both countries.

   This question can be done as an in-class exercise to shift the students from passive to active mode. In "c," when income increases by exactly the same, small amount in both countries, exports in one country will fall, and imports in the other country will rise. This will cause global excess demand, so the world price needs to rise to bring the market back into equilibrium.

3. Can you recall from introductory microeconomics the nations of the price elasticity of demand and price elasticity of supply? If so, can you say what would happen to the gains from trade as supply *and* demand in Vietnam *and* Japan become more and more *inelastic*?

   Inelasticity of the supply and demand curves tends to shrink the gains from trade triangles B and D in Figure 2.4.

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CHAPTER 3
The Ricardian Model of Comparative Advantage

Chapter Objectives

This chapter introduces the student to the concept of comparative advantage using the Ricardian model and its linear production possibilities frontier (PPF). The concept is introduced using the example of trade in rice and motorcycles between Vietnam and Japan. Later in the book (in Part II), the motorcycle example will be extended to foreign market entry via foreign direct investment. The chapter describes a chain of determination from supply-side characteristics, to a pattern of comparative advantage, to a pattern of trade and the gains from trade. Going through this chapter slowly is very important for your students and for your relationship to them. This chapter can be quite challenging to the average student, and they will need your help here. Don't assume that the students remember the PPF from their introductory microeconomics class. Even if they do, the use of relative prices in the chapter (covered in the appendix) will probably be new for them.

Analytical elements for this chapter:

Countries, *sectors* and *factors of production*.

Chapter Outline

From Absolute Advantage to Comparative Advantage
Autarky and Comparative Advantage
    Box: Ricardo's Larger Project
International Trade
Gains from Trade
Appendix: The Production Possibilities Frontier

Erratum

There is a mistake in Figure 3.5 that has been corrected in the PowerPoint slides on iie.gmu.edu. The correct figure is on the next page.

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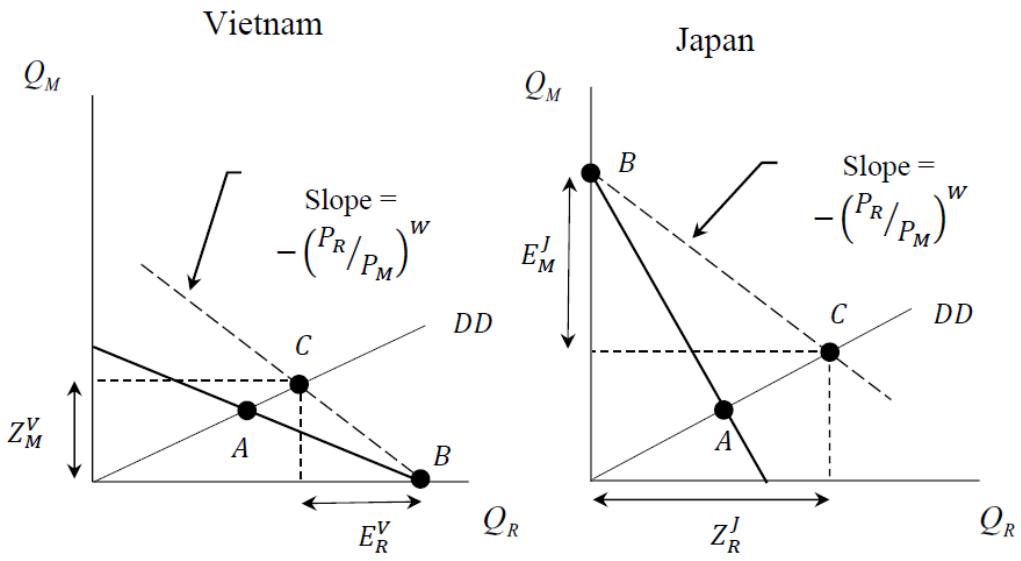

Teaching Notes

Introducing the student to comparative advantage is not easy. The concept is perhaps the most important thing they will take away from your course, but appreciating it requires a degree of comfort with production possibility frontiers. The appendix will help here, but you need to emphasize that the linear PPFs in this chapter are a special case of what is covered in the appendix.

To make things easier, this text does not use indifference curves, which some students will never have seen. Instead, the text utilizes a demand diagonal line. Emphasize two things here: 1. the line is not the demand curve (it has the symbol DD and not D and slopes up and not down) and 2. the line is not necessarily a 45 degree line.

In the end, the most important insight from this chapter is given in a box:

> Differences in technology-determined supply conditions among the countries of the world give rise to complementary patterns of comparative advantage. These patterns of comparative advantage, in turn, make possible complementary patterns of international trade.

Then, let the student know that, in order to understand supply conditions, she must understand PPFs, a concept they learned in introductory economics. Next, for most students, a visit to the appendix under your guidance is in order. It might seem like a waste of time to you, but they *will appreciate* your taking the time! A key concept to keep reinforcing is that the slope of a PPF gives the opportunity cost of the good on the *horizontal* axis. Relate this opportunity cost to the *relative* price of the good on the *horizontal* axis.

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With the PPF in hand, you can begin to lead them through the body of the chapter using the Vietnam-Japan example or one of your own choosing. What you are communicating to the student is the following:

Supply-side technology characteristics

$\Rightarrow$ Pattern of comparative advantage

$\Rightarrow$ Pattern of trade

$\Rightarrow$ Gains from trade.

Note, if you feel you are losing your students, acknowledge that they might be out of their comfort zone in this chapter (some students will be). You can encourage them with comments like, "This is what Ph.D. trade theory students do, and you are doing it!"

Don't get lost in the algebra. Keep coming back to the concept of opportunity cost as reflected in the slope of the Ricardian PPF.

Comments on Review Questions

1. What is the difference between *absolute* and *comparative* advantage?

   Absolute advantage involves only one product and the comparison of only two autarky prices. Comparative advantage involves two products and, therefore, the comparison of four autarky prices in the form of relative prices. Comparative advantage is depicted using production possibilities frontiers, which allow for two goods, rather than supply and demand diagrams, which only allow for one good.

2. Create an example of a comparative advantage model by choosing two countries and two products.

   a. Draw a diagram describing *autarky* and a *pattern of comparative advantage* for your example.
   b. Show the transition from autarky to trade in your diagram, label the trade flows, and demonstrate the *gains from trade*.

   This question can be done as an in-class exercise to shift the students from passive to active mode. In "b," students can have a difficult time identifying the trade flows, and often can mistakenly measure them using the autarky point, which is no longer relevant under trade. Assistance might be necessary here.

3. Think about the movements along the PPFs in Figure 3.4 from points A to B. What is actually happening in these economies to allow these specialization processes to take place? Are there any institutional realities that you can think of that would get in the way of these specialization processes?

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Particularly given ongoing concerns about international trade and its impacts on domestic markets, this is a relevant question. Emphasize that smooth adjustment is not usually possible, and that labor needs to move from one sector to another, losing one job and seeking and hopefully finding another. These issues will be considered again in Chapter 6 on the political economy of trade.

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CHAPTER 4
The Heckscher-Ohlin Model of Comparative Advantage

Chapter Objectives

This chapter builds on Chapter 3 but shifts the focus from technology in the Ricardian model to factors of production in the Heckscher-Ohlin model. It also sets the stage for the use of the Heckscher-Ohlin model in Chapter 6 on the political economy of trade. It tries to communicate that we should take an eclectic approach to comparative advantage, understanding that it can be based both on technology differences among the countries of the world and on factor endowment differences among countries. The common denominator here is a focus on the supply side of global markets.

The chapter also introduces two empirical measures used extensively in trade policy analysis, revealed comparative advantage (text box) and the gravity model (appendix). This will be relevant for some courses of study.

Analytical elements for this chapter:

Countries, *sectors* and *factors of production*.

Chapter Outline

Factors of Production
From Factor of Production to Comparative Advantage
International Trade
    Box: Revealed Comparative Advantage
Gains from Trade
FDI, Migration and Comparative Advantage
Limitations
    Box: Comparative Advantage and the Environment
Appendix: The Gravity Model

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Teaching Notes

Having taught this material at a much more advanced level than presented in this chapter, I know that even Ph.D. students in Economics sometimes have difficulty conceptually separating out the notions of factor endowments and factor intensities. For this reason, it will be important for you to emphasize the following visual association for your students:

Factor endowments ⇔ Countries

Factor intensities ⇔ Sectors

Without this association, sorting out the Heckscher-Ohlin model becomes difficult. Return to this visual as often as necessary.

You can then set the stage with the boxes from the end of the chapter. The purpose of the chapter is to understand that there are *two* sources of comparative advantage:

> *Ricardian model:* Differences in *technology-determined supply conditions* among the countries of the world give rise to complementary patterns of comparative advantage. These patterns of comparative advantage, in turn, make possible complementary patterns of international trade.

> *Heckscher-Ohlin model:* Differences in *factor endowments* among the countries of the world give rise to complementary patterns of comparative advantage. These patterns of comparative advantage, in turn, make possible complementary patterns of international trade.

From here, you can work through the rice-motorcycles example of the chapter or one of your own choice. You will need to emphasize that, in this chapter, the opportunity costs are *increasing* rather than constant, and that these increasing opportunity costs are what give the PPF its "normal" shape. This property of the PPFs is also what makes specialization of production incomplete, rather than complete in the Ricardian model.

Spending a bit of time on revealed comparative advantage will let the students know that trade theory carries over into empirical practice. Mentioning or covering the gravity model discussed in the appendix will also help students understand that there are important empirical aspects to trade theory.

Throughout, keep referring Figure 4.3 as yet another visual for what is going on in this chapter. Figure 4.3 will be taken up again in Chapter 6 on the political economy of trade where it will be expanded. It is therefore a good touchstone for the students in this part of the course.

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Comments on Review Questions

1. Create an example of a comparative advantage based on factor endowment by choosing two countries, two products, and two factors of production. Make one of the factors labor.

    a. Draw a diagram describing *autarky* and a *pattern of comparative advantage* for your example.
    b. Show the transition from autarky to trade in your diagram, label the trade flows, and demonstrate the *gains from trade*.

    This question can be done as an in-class exercise to shift the students from passive to active mode. In "b," students can have a difficult time identifying the trade flows, and often can mistakenly measure them using the autarky point, which is no longer relevant under trade. Assistance might be necessary here.

2. For your example in Question 1 above, and in words, take yourself through the logic of Figure 4.3. Do this for both countries, describing endowments, comparative advantage, the patterns of trade, and specialization in production.

    This can continue as a class exercise and helps to develop the intuition of Figure 4.3. Having the students translate their graphs into words here will be helpful in developing intuition.

3. For your example in Questions 1 and 2 above, use the autarky PPF diagrams to describe how migration from the relatively labor abundant country to the relatively labor scarce country will impact the PPFs of the two countries and their autarky price ratios.

    This question is an opportunity to give students an understanding of shifts of PPFs resulting from changes in factor endowments. It also gives a sense that factor endowments and, therefore, patterns of comparative advantage are not fixed for all time but respond to economic changes.

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CHAPTER 5
Intra-Industry Trade

Chapter Objectives

The purpose of this chapter is to introduce the student to the important difference between *inter*-industry trade and *intra*-industry trade, a topic neglected in some international economics textbooks. Motivate your students by letting them know that they are about to understand and *important* topic regarding patterns of trade in the world economy. Also motivate them by letting them know that this is a topic considered to be important by "real" trade policy analysts (no exaggeration here). Students like to know they are getting something special.

The chapter makes an important distinction between horizontal *intra*-industry trade and vertical *intra*-industry trade. The latter is a link between trade and international production and foreshadows the discussion of global production networks in Part II of the book. Making this link for your students is important.

Analytical elements used in this chapter:

Countries, *sectors*, *tasks*, *firms* and *factors*.

Chapter Outline

Intra-Industry and Inter-Industry Trade
Global Patterns of *Intra*-Industry Trade
    Box: Intra-Industry Trade in East Asia
Intra-Industry Trade under Monopolistic Competition
The Smooth Adjustment Hypothesis
    Box: Computer Products Trade
Conclusion
Appendix: The Grubel-Lloyd Index

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Teaching Notes

If the student takes nothing from this chapter and your lecture other than Table 5.1, its main purpose will be served. These distinctions are central to applied trade policy analysis. For this reason, keep referring your students to this table.

Table 5.1: Types of Trade

Type of Trade	**Phrase**	**Meaning**	**Source**
Inter-industry	Either/or	*Either* imports *or* exports in a given sector of the economy	Comparative advantage
Horizontal intra-industry	Both/and/ same	*Both* imports *and* exports in a given sector of the economy and at the *same* stage of processing	Product differentiation
Vertical intra-industry	Both/and/ different	*Both* imports *and* exports in a given sector of the economy and at *different* stages of processing	Fragmentation (comparative advantage in some instances)

The distinction between horizontal and vertical intra-industry trade is relatively new. Exaggerating a bit, you can tell your students that this distinction is a "frontier" topic and that research is ongoing.

The chapter introduces the monopolistic competition model of intra-industry trade. Do not assume that your students have seen the monopolistic competition model before. Describe the concept to them and take it step-by-step as done in the chapter. Throughout, emphasize that what is important about the monopolistic competition model is its handling of *product differentiation*, and that this is what sets it apart from the comparative advantage models of Chapters 3 and 4.

The chapter also introduces the issue of the *smooth adjustment hypothesis* associated with intra-industry trade. This foreshadows the subject of the political economy of trade taken up in Chapter 6. This is worth mentioning to your students in your discussion. The research on this topic is not conclusive. That is why it is a *hypothesis* and not a *result*. Opinions very as to the validity of the hypothesis, and this might be an opportunity to talk about how issues are debated and (hopefully) settled empirically.

If you are going to introduce your students to the Grubel-Lloyd index covered in the appendix, there is an easy way to make it clear to them. First have them consider a case in which both imports and exports are equal (say 10). Have them calculate the index, and they will see it has a value of 100, its maximum value indicating pure *intra*-industry trade.

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Then have them calculate the index with only imports or exports (again either being 10). They will see it has a value of 0, its minimum value indicating pure *inter*-industry trade.

Comments on Review Questions

1. In your own words, please explain the difference between inter-industry and intra-industry trade.

   Answers here should be compared to Table 5.1, reproduced above.

2. How is the phenomenon of horizontal intra-industry trade related to product diversification?

   Horizontal intra-industry trade takes place in differentiated products. If all products were the same, there would be no reason to both import and export them. Trade would revert to the inter-industry trade of the comparative advantage model. As quoted from van Marrewijk (2002) in a footnote in this chapter, "A satisfactory theoretical explanation (of intra-industry trade) should… be able to distinguish between goods and services which are close, but imperfect substitutes" (p. 183).

3. Create your own example of a horizontal intra-industry trade by choosing two countries and a product. Explain how product differentiation makes horizontal intra-industry trade in this product possible.

   This question can serve as a classroom exercise to shift the students from passive to active mode. Such a shift helps to reinforce the material.

4. Create your own example of vertical intra-industry trade by choosing two countries and two stages of production of a product. Explain how fragmentation makes vertical intra-industry trade possible in this case.

   This question also can serve as a classroom exercise to shift the students from passive to active mode. Such a shift helps to reinforce the material. The key difference here is for the student to relate the example to different tasks or stages or processing. Make sure that they understand this.

5. Explain why the adjustment process stemming from intra-industry trade might be easier for a country to accommodate than the adjustment process stemming from inter-industry trade.

   Increases in inter-industry trade based on absolute or comparative advantage involve import sectors contracting and export sectors expanding. This, in turn, requires that productive resources, most notably workers, shift from contracting to expanding sectors in order to avoid unemployment. The adjustment process in the case of intra-industry trade is very different. A given sector experiences increases

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in imports and exports simultaneously. Therefore, workers are less likely to need to shift between sectors.

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CHAPTER 6
The Political Economy of Trade

Chapter Objectives

The main purpose of this chapter is to answer the question: If there are gains from trade, why do we observe opposition to trade? This leads to an investigation of the political economy of trade. The chapter begins broadly, identifying some main paradigms in Table 6.1. It then focuses on the distinction between the standard Heckscher-Ohlin analysis of this subject, with its associated Stolper-Samuelson theorem, and an alternative specific factors analysis. Rather than engaging in formal analysis, the chapter develops logical chains using flow charts. It also extends the Stolper-Samuelson theorem to the domain of North-South trade and wages. For advanced classes, there is an appendix with a simple, graphical treatment of endogenous protection.

This chapter follows directly from Chapter 4 on the Heckscher-Ohlin model of comparative advantage. As such, it is based *inter*-industry trade. As emphasized in Chapter 5, the politics of *intra*-industry trade tends to be less stark.

Analytical elements for this chapter:

Countries, *sectors*, *firms* and *factors of production*.

Chapter Outline

Approaches to the Political Economy of Trade
Comparative Advantage, Trade, and Factors of Production
Trade and Factors of Production
North-South Trade and Wages
    Box: Trade and Wages in Latin America
The Role of Specific Factors
    Box: US Steel Protection
Globalization and Inequality in High-Income Countries
Conclusion
Appendix: Endogenous Protection

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Teaching Notes

Most students find this chapter to be of interest. It gives them an analytical handle on the politics of trade they hear so much about. Keep in mind that your students will have a wide range of opinion on these matters that are not entirely coincident with their political orientations. Anti-globalization students might agree with protectionist conservatives on trade policy. Emphasize that you are just providing them with a *framework* to inform their views. At the end of the day, their views are their own.

The purpose of the discussion related to Table 6.1 on the approaches to the political economy of trade is to allow for courses in varied programs. Pick and choose what you want to emphasize for your program. Most international economics programs emphasize only the factor-based and sector-based approaches, but international relations programs might require a wider view.

The key concepts of this chapter are summarized in the following box. You can keep referring to this box as you proceed through the chapter's material. You must make clear that the distinction between mobile factors of production and specific factors of production is one concerning the degree of *domestic* mobility. International mobility of capital is was briefly addressed in Chapter 4 on the Heckscher-Ohlin model and is also addressed in Part II. Also, make sure to emphasize that, while the distinction might seem mundane at first, it is key to understanding how the politics of trade manifests itself under different conditions.

Mobile factors of production: The Stolper-Samuelson theorem applies. The abundant factor of production (used intensively in the export sector) gains, while the scarce factor of production (used intensively in the import sector) loses. *Specific factors of production:* The Stolper-Samuelson theorem does *not* apply. The factor of production specific to the export sector gains, while the factor of production specific to the import sector loses. The fate of mobile factors is uncertain.

A box in the chapter introduces the reader to the case of US steel protection. This subject has a long history that you can make use of in class. It has also been part of a dispute settlement case at the World Trade Organization that you can take up in Chapter 8. This is a good example to get into the nitty-gritty of labor unions, US presidential politics, technology (integrated- vs. mini-mills), and the export prospects of developing countries.

The chapter is cast in terms of trade between Japan and Vietnam. Developing your own example will both impress your students and give them an alternative to the text.

Do you have political scientists in your class? Find out. If so, let them know that their field makes substantial contributions to the material in this chapter. Direct them to the

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endogenous protection appendix. If you take up this subject in your class, feel free to develop your own small example with 5 to 10 individuals rather than 100 or just 5 as illustrated in the footnote.

Finally, note that we are now in an era of increasing (ethno-)nationalism. For this reason, some of the classroom discussions on these matters might be a little more heated than in the past.

Comments on Review Questions

1. Use daily news sources to identify aspects of *realism* or international power politics in trade or technology. Try to describe the issues as accurately as possible. What are the concerns of the players involved? To your mind, are they valid concerns?

   These issues are growing every more salient, particularly in the case of US-China trade relations. The obvious case to discuss here is Huawei, but there are others as well.[1]

2. Consider the trade between Germany and the Dominican Republic. Germany is a capital abundant country, and the Dominican Republic is a labor abundant country. There are two goods, a capital-intensive good chemicals and a labor-intensive good clothing.

   a. Draw a Heckscher-Ohlin, comparative advantage diagram such as Figure 6.1 for trade between Germany and the Dominican Republic, labeling the trade flows along the axes of your diagrams.

   b. Using the Stolper-Samuelson theorem, describe who will support and who will oppose trade in these two countries. Use a flow chart diagram like that of Figure 6.2 to help you in your description.

   This question makes a good classroom exercise to shift the students from a passive to an active mode. While the students might be nodding "yes" as you explain the comparative advantage and Stolper-Samuelson ideas, having them actually write down the PPF and flow chart diagrams is another matter entirely. As they work on this in class, circulate around the room helping them along. Alternatively, suggest that students take on this question outside of class in study groups.

3. As mentioned in Chapter 3, in the early 1800s in England, a debate arose in Parliament over the Corn Laws, restriction on imports of grain into the country. David Ricardo, the father of the comparative advantage concept, favored the repeal of these import restrictions. Consider the two relevant political groups in England at that time: land owners and capital owners. Who do you think agreed with Ricardo? Why?

[1] See, for example, *The Economist* (2020) "Endgame: Sino-American Commercial Relation," August 15.

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This question provides a little economic history relating to the father of comparative advantage. This question could be answered in terms of either the Stolper-Samuelson theorem or in terms of the specific factors model, the latter perhaps being the more accurate. Increased imports of grain lowers the rental rate on land, as Ricardo, a landowner himself, understood. It increases rental rates on physical capital.

4. Use daily news sources to identify a political economy of trade issue. Can you also identify the factors or production involved in this issue? Are they mobile factors as in the Heckscher-Ohlin model, or are they specific factors? Alternatively, are there any elements of technology involved?

Here is where you can bring in recent news articles to help the discussion along. Preparing this sometime ahead will be important to ensure quality examples that are of interest to you.

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CHAPTER 7
Trade Policy Analysis

Chapter Objectives

Chapters 2, 3 and 4 introduced students to the absolute and comparative advantage approaches to international trade, helping them to understand how market forces generate imports and exports of goods and services in the world economy. Chapter 6 introduced students to the ways in which increased trade can generate winners and losers in each country involved. In Chapter 7, the student is introduced to the market effects of government interventions in trade flows to meet demands for protectionism from losers. For the most part, the entire chapter is set out in a supply and demand framework rather than in terms of production possibilities frontiers. For this reason, the students should feel relatively comfortable with this chapter.

The most important understanding that your students can take from this chapter is the effect of a tariff. The contrast between a tariff and a quota is the next-most important objective of the chapter. Here, the important distinction is between a domestic-allocated quota and a foreign-allocated quota. Terms of trade effects are also described using the case of a tariff.

For continuity purposes, the chapter is set out in terms of Japan's rice protection, which has been substantial. Other examples that you bring to class could be equally or even better suited to interesting discussions that can illuminate the complex of interests and effects surrounding any protection policy. For example, the chapter takes up anti-dumping policies, and many of these provide good examples for class analysis.

Some professional students involved in trade policy analysis need to be familiar with the imperfect substitutes model and with tariff rate quotas. If this is the case in your class, you can draw upon the appendix addressing this topic to meet these needs. Tariff rate quotas are covered in a second appendix.

Analytical elements used in this chapter:

Countries, *sectors* and *factors of production*.

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Chapter Outline

Absolute Advantage Revisited
Trade Policy Measures
    Box: Used Automobile Protection in Latin America
A Tariff
Terms of Trade Effects
A Quota
Anti-Dumping and Countervailing Measures
Comparative Advantage Models
    Box: The Global Trade Analysis Project
Conclusion
Appendix: The Imperfect Substitutes Model
Appendix: A Tariff Rate Quota

Teaching Notes

While it might seem redundant, a brief review of the absolute advantage model is useful for the students who have spent a lot on attention of the comparative advantage model. Having done this, then use Table 7.1 on non-tariff measures as a starting-point and add more detail where you can based on your own knowledge, perhaps in the area of anti-dumping, using an example or two with which you are familiar. One thing I sometimes say in class is that "trade policies are only limited by the imagination of the policymaker." The used automobile case in Latin America is an example of this.

The key diagram is Figure 7.2 analyzing the tariff. Here is a good place to review the concepts of *change in quantity demanded* and *change in quantity supplied*, mentioned in Chapter 2. The chapter conducts in analysis in terms of Japanese rice imports, but you can introduce another example instead. The terms of trade effects of a tariff can be initially difficult for students to understand. You might have to repeat a few times, "A Japan's imports of rice decrease, there will be *excess supply* in the *world* market for rice." Excess supply, of course, requires a fall in the world price.

The quota analysis assumes that there is *no* terms of trade effect. The key concept here is that of quota rents. You can ask you students, "Suppose you had the right to buy Z_{quota} of rice at P^W on the world market and to sell it at P_{quota} in Japan? How much would you earn?" This would be area C in Figure 7.4. The remaining question is: Where do these quota rents go? This is the domestic-allocated and foreign-allocated distinction made by trade economists.

The text summarizes this discussion with the following important box:

Tariff: unambiguous net welfare loss due to consumer surplus loss outweighing gains in producer surplus and government revenue.

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Tariff with terms of trade effects: ambiguous net welfare effect due to terms of trade gain (fall in world price) potentially outweighing the efficiency loss.

Domestic-allocated quota: unambiguous net welfare loss due to consumer surplus loss outweighing gains in producer surplus and quota rents.

Foreign-allocated quota: unambiguous net welfare loss that exceeds that of the domestic-allocated quota case and equivalent tariff.

Turning your students' attention to this box as a study aid would be helpful.

The text contains a new section of anti-dumping and countervailing duty measures. Particularly in the case of AD, there is a lot of activity at the national government level. I often let students know that, in the trade policy community, there are people who identify themselves as AD/CVD people. This gives a sense of how professional specialization can take place in international economic policy.

Most international texts analyze trade policy in a general equilibrium, comparative advantage diagram using production possibilities frontiers. This is not easy for students of varied backgrounds to follow. For this reason, the text discusses the comparative advantage approach to trade policy analysis using examples but introduces the concept of applied general equilibrium modeling and the Purdue-based Global Trade Analysis Project (GTAP). You can find examples of AGE analysis on the GTAP web-site (gtap.agecon.purdue.edu).

Comments on Review Questions

1. Consider Figure 7.2. For a given *T*, what would be the impact of an *increase in supply* (a shift of the supply curve to the right) on government revenue? What would be the impact of an *increase in demand* (a shift of the demand curve to the right)?

   An increase in supply would reduce the amount of imports under the tariff, reduce the government's tariff revenue, and increase the amount of producer surplus generated by the tariff. An increase in demand would increase the amount of imports under the tariff, increase the government's tariff revenue, and increase the amount of consumer surplus lost due to the tariff.

2. In Figure 7.3, we introduced the terms of trade effects of Japan's tariff on imports of rice. The terms of trade effect (area E in the diagram) was positive for Japan. In a new diagram similar to Figure 7.1, show that these terms of trade effects adversely affect the welfare of Vietnam.

   The fall in the world price of rice lowers Vietnam's exports and reduces its gains from trade triangle in the left-hand-side diagrams of Figure 7.1.

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3. Consider our diagram of a quota in Figure 7.4. Suppose the government reduced the quota to below Z^{J}_{quota}. What would happen to the *quota premium*? Can you say with certainty what would happen to the total *quota rent*? What would this depend on?

   The quota premium would increase, but the import volume falls. Whether the total quota rent increases or not depends on the price elasticities of demand and supply. The more inelastic are demand and supply, the more likely the total quota rent will increase.

4. Trade protection is often used to maintain employment in a sector. Given our analysis, what do you think of this approach to maintaining employment? Can you think of any other measures that might also maintain employment in a sector?

   There is no single correct answer here. Production or employment subsidies are alternative policies that would maintain employment in a sector.

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CHAPTER 8
The World Trade Organization

Chapter Objectives

The World Trade Organization has become a crucible for concerns about globalization. This is not entirely appropriate, but it is a fact. Chapter 8 introduces your students to the WTO, and Chapter 19 does the same for the International Monetary Fund. The main objective here is to historically inform the students about the actual roles of these institutions in "globalization" processes. These actual roles are distinct from the alleged roles that most students will have absorbed, and most students will have much to learn in this area. These chapters attempt to facilitate this process while maintaining a critical perspective.

For most students, the marginal gains of transmitting the material of this chapter are large. Some of the essential concepts to be transmitted are: nondiscrimination (including the sub-principles of most-favored nation and national treatment), binding, the WTO as "tripod" (GATT 1994, GATS, and TRIPs), WTO dispute settlement procedures, and trade-and-the-environment at the WTO. Any common, analytical ground you can open up between "free-trade" and "anti-globalization" in the discussion of the WTO will be very useful. Also, for students from powerful high-income countries, notions of multilateralism versus unilateralism are particularly important.

The chapter is very compressed. Entire courses can be (and are) designed on the subject of the WTO and its legal intricacies. For this reason, it is possible to devote as many class sessions to this chapter as you wish. For example, a thorough treatment of just agricultural trade under the WTO can fill entire class session. Let your interests guide you here.

Analytical elements used in this chapter:
Countries and *sectors*.

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Chapter Outline

The General Agreement on Tariffs and Trade
The World Trade Organization
Trade in Goods
Trade in Services
    Box: Telecommunication Services in the GATS
Intellectual Property
    Box: Access to Medicines
Dispute Settlement
    Box: The "Bananarama" Dispute
The Environment
Doha Round
    Box: Trade Negotiations
Conclusion
Appendix: Tariff Reduction Formulas

Teaching Notes

Students will appreciate this chapter and your lecture derived from it. They have a strong interest in this material. As always, take subjects step-by-step, bringing in your own examples where you can. For your own background, consult the Hoekman and Kostecki (2009) volume cited in the book, relying on the table of contents. Draw from the WTO web-site, which is quite user-friendly. You could even give the students a tour of this web-site in class. Since students can have strong feelings on some of the subjects of the chapter, you might need to play the two-handed economist: "On the one hand, some groups claim X. On the other hand, some groups claim Y. You will have to come to your own conclusions."

If nothing else, your students should come away from the chapter/lecture with an understanding of nondiscrimination, described in Figure 8.1. Secondly, the students must have an appreciation of the WTO as covering the three elements of goods, services, and intellectual property. This is the notion of the WTO "tripod."

Students have strong opinions with regard to the access to medicines issue discussed in a box. This is one area where issues of intellectual property and development come together in a controversy. If you are so inclined, make good use of it!

Dispute settlement is another critical component of the WTO, with a great deal of case law developed since its inception. At the time of this writing, the US government has rendered the WTO's dispute settlement mechanism (DSM) inoperable. This is an assault on one of the most robust, multilateral dispute settlement processes and is worth taking up during your classroom discussions on this chapter.[2]

[2] See, for example, my editorial: https://thehill.com/opinion/international/500122-the-united-states-needs-the-world-trade-organization.

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Do you have budding lawyers in your classroom? They should know that trade law is a well-defined and growing field. Point them to the *Journal of International Economic Law* and the Matsushita, Schoenbaum, Mavroidis and Hahn (2015) volume cited in the text. Let your students know that this is one chapter where law and economic come together.

Students might be interested in the WTO trade barometer, which distinguishes trade in goods from trade in services: https://www.wto.org/english/res_e/statis_e/wtoi_e.htm. The WTO's response to COVID-19 is here: https://www.wto.org/english/tratop_e/covid19_e/covid19_e.htm. A useful article published after the book went into press is:

Koopman, R., J. Hancock, R. Piermartini and E. Bekkers (2020) "The Value of the WTO," *Journal of Policy Modeling*, 42:4, 829-849.

Comments on Review Questions

1. What is meant by *nondiscrimination* in international trade agreements? Be as specific as you can.

   This question relates to Figure 8.1. The key insight is that nondiscrimination has two parts: one related to border measures (most-favored nation) and the other related to behind-the-border measures (national treatment).

2. One criticism of the Agreement on Agriculture is that it involves something known as *dirty tariffication*. Dirty tariffication involves quotas being converted into tariffs that are larger than the actual tariff equivalent of the original quota. Draw a diagram like that of Figure 7.4, illustrating dirty tariffication.

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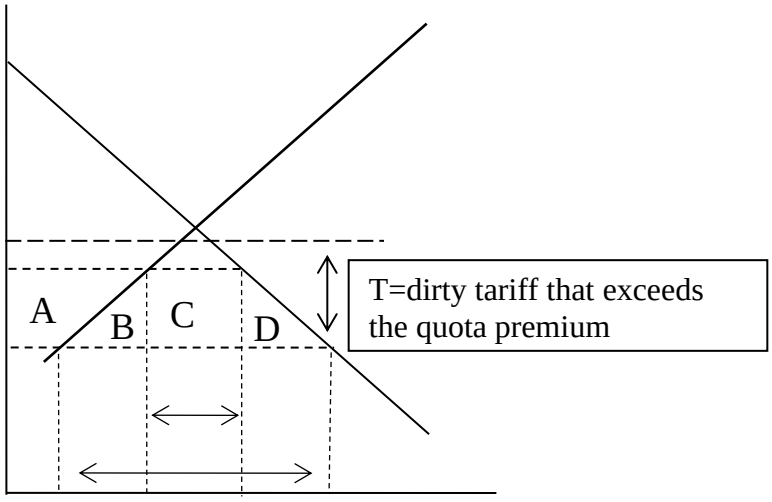
Figure 7.4. A Quota on Japan's Rice Imports



3. The chapter mentioned the four modes by which trade in services can occur: cross-border trade; movement of consumers; foreign direct investment; and personnel movement. Try to give an example of each of these modes. The more specific the better.

   Cross-border trade is a mode of supply that does not require the physical movement of producers or consumers. For example, Indian firms provide medical transcription services to US hospitals via satellite technology. Movement of consumers involves the consumer travelling to the country of the producer and is typical of the consumption of tourism services. Foreign direct investment is involved for services that require a commercial presence by producers in the country of the consumers and is typical of financial services. Finally, the temporary movement of natural persons involves a non-commercial presence by producers to supply consulting, construction, and instructional services.

4. The chapter also gave an example of the way that the "theft" of intellectual property in the case of pharmaceuticals suppresses trade in this product. Try to give another example of such trade suppression in intellectual property.

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Pirated streaming services is an example with meaning to many students.[3] *Cases surrounding Apple's trademarks would also be of interest.*[4]

5. Can you think of any ways in which trade issues and environmental issues interact? Try to be as specific as you can.

   There is no single correct answer here, and this question would be good for class discussion. Trade in hazardous waste and its regulation by the Basel Convention is one example. Pesticide application in export agriculture is another.

[3] See, for example, https://www.forbes.com/sites/emmawoollacott/2020/06/11/pirate-streaming-service-with-two-million-customers-shut-down/#1277cc342278.
[4] See, for example, https://www.apple.com/legal/intellectual-property/trademark/appletmlist.html.

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CHAPTER 9
Preferential Trade Agreements

Chapter Objectives

This chapter on preferentialism follows Chapter 8 on multilateralism. The quote at the beginning of the chapter from the Canadian trade official, "When multilateralism falters, regionalism picks up the pace" sets out this tension in the world trading system. The purpose of this chapter is to put the preferential/regional channel of trade liberalization into some perspective for the student. Awkwardly, prominent trade economists have very different postures towards the role of PTAs in the world trading system. Try to use this to your advantage. Despite this lack of consensus, there are some key concepts that can be communicated to the students. These include types of PTAs, trade creation and trade diversion, and the tensions between regionalism and multilateralism.

Within space constraints, the chapter gives examples of major PTAs. Your own interests can guide you on drawing from these examples and adding additional material. Students will appreciate this.

Analytical elements for this chapter:

Countries, *sectors* and *tasks*.

Chapter Outline

Types of Preferential Trade Agreements
Rules of Origin
    Box: NAFTA Automobile ROOs
The Economic Effects of Preferential Trade Agreements
The European Union
The North American Free Trade Area
    Box: NAFTA, Wages, and Industrial Pollution
Mercosur
The FTAA
ASEAN and AFTA
The Trans-Pacific Partnership

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Regionalism and Multilateralism
GATS-Plus and TRIPS-Plus
Conclusion

Teaching Notes

The first important task of the chapter is to allow the students to distinguish among types of PTAs. This is done in Tables 9.1 and 9.2. Table 9.1 takes the WTO classification approach (that includes some double counting). Pay a visit to the WTO website to see if these data have been updated (http://rtais.wto.org/UI/PublicMaintainRTAHome.aspx). Table 9.2 is a more process-oriented view. Note that NAFTA, a "free trade area," has one feature of a common market: liberalization of FDI among the three members. Mercosur (nominally a common market) does not actually reach the common market goal. These discrepancies can muddy the waters a bit for students and might take some explaining.

It is important to make your students aware that, as stated in the text, WTO oversight is entirely absent in the case of PTAs. It is also important to sensitize your students to the role of ROOs in PTAs. To some real extent, the effects of FTAs (not CUs) are determined by ROOs. Of course, trade creation and trade diversion are central to the analysis of PTAs. Proceed slowly through Figures 9.1 and 9.2, using these as another opportunity to hone your students' analytical skills.

Note that monetary aspects of the EU are taken up in Chapter 21. You might need to ask students who want to discuss the euro to be patient, saying something like "We need to first understand exchange rates before we can adequately take up the issue of monetary unions and the euro. Hang in there a bit longer! We *will* get to that topic."

The experience of the Trans-Pacific Partnership in the transition from the Obama to the Trump administration in the United States is instructive for the politics of trade. And Brexit has been an important issue since 2016. The textbook could not keep up with the most recent Brexit events, so you will have to rely on the financial press for this. At the time of this writing (September 2020), relations between the UK government and the EU are at a low over the Northern Ireland border issue.

Comments on Review Questions

1. What distinguishes a customs union from a free trade area? What distinguishes a common market from a customs union?

   A customs union, unlike a free trade area, has a common external trade policy (or common external tariff) adopted by member countries. A common market, unlike a customs union, allows for the free movement of labor and physical capital among member countries. There is a truth in advertising problem here. For example Mercosur is not a common market; it is a FTA attempting to be a customs union.

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2. What is the difference between trade creation and trade diversion? Can you provide an example of each?

   The box in the chapter sums this up:

   > *Trade creation: switching of imports from a high-cost source to a low-cost source.*
   >
   > *Trade diversion: switching of imports from a low-cost source to a high cost source.*

   If, as a result of NAFTA, the US imports clothing from Mexico rather than from the Dominican Republic where it is more expensively produced, then trade creation has occurred. If, as a result of NAFTA, the US imports clothing from Mexico rather than from the Dominican Republic where it is more cheaply produced, then trade diversion has occurred.

3. Do you support regionalism and PTAs as a legitimate trade policy option? Why or why not?

   There is no single correct answer here. It depends on the quality of the students' arguments either for or against regionalism. This can be used for classroom discussion. It is worthwhile, however, given current trends in global trade politics, to remind students of the benefits of multilateralism.

4. We mentioned above that the size of Brazil's tariff against El Salvador affects the amount of trade diversion that occurs in a PTA. Use a version of Figure 9.2 to demonstrate that the lower is *T* against El Salvador, the more likely it is that the PTA will improve welfare. Show that if the *T* on imports from El Salvador were eliminated, the PTA would unambiguously improve welfare.

   If the tariff on imports from El Salvador were eliminated along with the tariff on imports from Argentina, Brazil would continue to import even larger amounts from El Salvador, causing even greater welfare gains for Brazil.

5. Pay a visit to the WTO's web site on regionalism. From www.wto.org, follow the link to "Trade Issues" and, from there, to "Regionalism." Spend some time perusing the WTO's materials on this issue.

   You can give your students of tour of this in class if you wish.

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Part II

International Production

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CHAPTER 10
Multinational Enterprises and Foreign Direct Investment

Chapter Objectives

This chapter has four purposes. First, it will help the student to visualize international trade as one of a number of alternative means of for foreign market entry. Second, it helps the students to begin to understand firms' motivations for international production and considerations regarding entry mode choice, including the concepts of firm-specific assets (including knowledge capital) and dissemination risk. Third, it introduces the student to the broad patterns of global FDI. Fourth, it familiarizes students with issues of MNE organizational design, including the home base, joint ventures, and R&D.

While much of the chapter appears to be elementary, you need to keep in mind that some students have a difficult time distinguishing international trade from FDI. The two are merged in their minds. Hopefully, the material of Chapter 1 was a good antidote to this tendency. If that was not the case, however, the present chapter is a second opportunity for the student to gain a clear picture of the trade-contracting-investment menu facing every international firm.

One important aspect of the transition from Part I to Part II of the book that takes place in this chapter is a change in focus from *countries* to *firms*. You can let your students know that this is a recent shift among researchers in international economics and brings the realms of international business and international economics closer together.

Analytical elements for this chapter:

Countries, sectors, tasks, firms and *factors of production.*

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Chapter Outline

Foreign Market Entry
Motivations for International Production
Entry Mode Choice
Patterns of FDI
    Box: SAB and the Emergence of a South African MNE
MNE Organizational Design
    Box: The End of Corporate Imperialism?
The Home Base
Joint Ventures
    Box: Beijing Jeep
Research and Development
    Box: TRIPS and International Production
Conclusion

Teaching Notes

If nothing else, the student should take from this chapter and your lecture an understanding of Table 10.1 on foreign market entry. *Do not rush through this table*. Lead the students on a tour through it, with examples where you can supply them. This is your chance to give the students a clear picture of the trade-contracting-investment menu facing every international firm. The second priority is the notion of firm specific assets and Table 10.2 relating to dissemination risk. Here, you should ask the students to put themselves in the place of a corporate manager who must set a foreign market entry strategy. It is worth pointing out a few times during the semester/quarter that empirical analysis of FDI indicates that firm specific assets in the form of intellectual property (a particular kind of knowledge capital) is an important explanatory variable.

The chapter does contain boxes with examples of international production. Without a doubt, any additional examples that you bring to class, and in particular examples that make it possible to discuss the motivations and strategies of firms' foreign market entry, will be greatly appreciated by your students.

Many discussions of "globalization" take it for granted that multinational enterprises view location decisions through the single lens of cheap labor. This is a very incomplete view that is not sufficient to understand the modern, global economy. Taking your students through the four motivations discussed in the text (resource seeking, market seeking, efficiency seeking, and strategic asset seeking) will help greatly in giving your students a more sophisticated understanding of the behavior of MNEs. If your class is small, you can break it up into groups to come up with examples of each, which they can briefly report to the entire class.

It is worthwhile to introduce your student to UNCTAD's transnationality index (TNI) reported it Table 10.5. It is a useful measure and one that gives students a sense of the limits of the "globalized" firm concept. UNCTAD's *World Investment Report* website

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will be an important resource both for you and for your students. See: http://www.unctad.org/wir/.

Joint ventures compose an interesting but complicated realm. Refer to the box in this chapter on the iconic case of Beijing Jeep as an example. Try to also bring a second example into class that is of interest to you.

Regarding the home base and R&D, there is no "one way" to manage these. R&D links the field of science and technology to international business. The role of scientific and engineering talent in the FDI-migration choice is an excellent link from this chapter to the Chapter 13 on migration (particularly high-skilled migration). This is also an important point to spend a short while on the emerging roles of India and China in the world economy.

Comments on Review Exercises

1. Why should a firm move beyond trading relationships into international production? What is its motivation for doing so?

   Exporting to the foreign market is not fully satisfactory in all cases of foreign market entry. For example, a firm might need to engage in some final product finishing, service, or sales to address local demand conditions in the foreign country. This could include after-sales services such as repair. Or it might simply need to engage in some trade-related services itself in that country.

2. Suppose a firm's competitiveness was based on its proprietary knowledge, perhaps in the form of a patent on a product or process. What can you say about its considerations with regard to foreign market entry?

   A firm for which proprietary knowledge is important will be concerned with dissemination risk. Dissemination risk is lowest for the international trade mode of foreign market entry, as well as the subsidiary (not joint venture) form of FDI.

3. In what ways have advances in information and communication technology (ICT) made international production more common?

   ICT has made the coordination of international production much easier and helped to develop what became known as flexible manufacturing. It has also had revolutionary impacts on transportation and logistics. It has enabled some diffusion of R&D activities outside of home bases.

4. For each of the four motivations for international production, please try to provide an example. The more specific your example, the better.

   There are no "correct" answers here. This is a question that lends itself to classroom, group activity in the form of brainstorming.

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5. Please use an internet search to identify a *joint venture* that is currently in operation. Can you gain some insight into the motivation for this JV?

   There is no correct answer here, but this is an opportunity to bring examples into the class. This is also a potential topic for a short student briefing paper.

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CHAPTER 11
Global Value Chains

Chapter Objectives

This chapter introduces students to a set of tools commonly used in corporate strategy as they are applied to the analysis of international production. The key concept here is the value chain and its generalization to global value chains (GVCs). Along the way, the concepts of firm-specific assets, firm-level economies, and internalization are considered. The chapter proceeds in a step-by-step fashion, aided by visual depictions of GVCs. The entire chapter is presented using the example of the semiconductor firm Intel, and this should help sustain student interest.

The analysis helps the student to appreciate, within the GVC framework, the phenomenon of intra-firm trade. This understanding is important. As stated in Chapter 1, approximately one third of world trade takes place *within* MNEs. The chapter allows students an understanding of how this important category of world trade arises.

These threads are tied together in an informal framework of task, location, and mode (TLM) that is relatively easy for the student to remember.[5]

Finally, the GVC concept is used to consider the issue of value added in GVCs, including trade in value added, a new and important topic in international economic policy with implications for how we think about trade balances.

Analytical elements for this chapter:

Countries, *sectors*, *tasks* and *firms*.

Chapter Outline

Tasks and Value Chains
    Box: The Semiconductor Industry in Taiwan

[5] The previous edition of the textbook used the standard OLI framework, but my experience with this in the classroom is that students' eyes glazed over every time I presented this. It just does not seem to work! Hence the new approach.

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From Value Chains to Global Value Chains
Firm-Specific Assets and Internalization
Intra-Firm Trade
A Cost View of Internalization
Inter-Firm Relationships
Tying Things Together: The TLM Framework
Box: Labor and Environmental Issues within GVCs
Value Added in GVCs
Trade in Value Added
Trade Policy and Global Value Chains
Conclusion

Teaching Notes

Since most of the chapter is set out in terms of GVCs, it is important to guide the student through them in a step-by-step fashion. Unless this concept is well understood, the remainder of the concepts will not flow well. You can use the example in the text or one of your own. The flow of the concepts is as follows:

Global value chain (GVC)

$\Rightarrow$ Firm-specific assets

$\Rightarrow$ Firm-level economies

$\Rightarrow$ Internalization

One issue that comes up is how the intra-firm trade concept relates to the distinction between inter-industry trade and intra-industry trade made in Chapter 5. Indeed, this can be complicated for the student. Here you need to refer the students to Table 11.1, presented in the text and on the next page. The key distinction here is between an industry dimension and a firm dimension. Any example of trade will fit in one of the four cells defined by these dimensions in the table. Intra-firm trade can be inter-industry trade or intra-industry trade.

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Table 11.1: Industry and Firm Dimensions of Trade

	Firm Dimension:	
Industry Dimension:	*Inter-firm*	*Intra-firm*
Inter-industry	Trade that takes place between two different industries and two different firms.	Trade that takes place between two different industries and within a single firm.
Intra-industry	Trade that takes place within a single industry and between two different firms.	Trade that takes place within a single industry and within a single firm.

If you wish to build on your students' understanding of cost concepts, then walk them through Figure 11.4 on a cost view of internalization. This has grounding in standard make-buy analysis in managerial economics and can tie things together for the more economic minded. It is also a good review of the notion of fixed versus variable costs.

While the above considerations of GVCs are a lot for the student to take on, the chapter considers a few more issues, beginning with inter-firm relationships. There is no "one way" of viewing these, but it is important for students to understand that these relationships populate GVCs and can take on many forms and characteristics. Regarding inter-firm relationships, the framework of Gereffi, Humphrey and Sturgeon (2005) is very helpful. This links economic sociology to international business in a useful way. If you can bring in examples of one or two of these relationships, students will appreciate it.

Before moving on to value added considerations, the chapter ties things together a bit in the form of the task, location, and mode (TLM) framework. The student can remember this easy framework for firms' decision-making regarding GVCs in its three aspects:

- Task: what part of the value chain to engage in
- Location: in which countries to do so
- Mode: *how* to engage

At this point in your presentation of the material of this chapter, you should let your students know that they have absorbed some key concepts of *international corporate strategy*. It will be helpful for them to know that they have accomplished something important that is recognized by this important field. You might also you're your students that they have digested material that is not present in most international economics

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textbooks, to make them feel that they have done something "special." A little motivation always helps!

The box on labor and environmental standards in GVCs will be of keen interest to some students. This can be a segue to a discussion of corporate social responsibility in MNEs, labor standards, corporate governance, and the like. If you can bring an additional example to class, that would be very helpful.

Finally, the chapter turns to some new and important topics, namely value added in GVCs. The "smile curve" in Figure 11.5 is worth considering because most students will never have thought about the issue at all. In the transition to trade in value added, let the students know that this question and the TiVA indicators are considered very important among trade economists, including those at the WTO. Turning to trade policy, having students consider the difference between protecting final goods and intermediate goods is a good first step in being familiar with trade policy issues in a global economy in which GVCs play a very important role.

Comments on Review Exercises

1. Choose any production process that might be of interest to you. Both merchandise and services are appropriate. As best you can, draw a value chain for this production process, illustrating a relevant set of tasks.

   There is no single, correct answer here. This question can be a simple take-home assignment or can be expanded into a semester research assignment requiring detailed analysis of the value chain of a global firm. This is up to you.

2. Next, for this production process, choose two countries. Place the value chains for these two countries side by side in a GVC. Show how FDI by a firm based in the first country in the second country can be depicted for the cases of horizontal FDI, backward vertical FDI, and forward vertical FDI.

   Again, there is no single correct answer here. The point is to have the student correctly differentiate among the three types of FDI.

3. Make a list of as many firm-specific assets you can think of, both tangible and intangible.

   Once again, there is no single correct answer here. This question could be included in your classroom discussion at the appropriate time. It is important to try to extend students' thinking beyond standard economic concepts into the business realm. For example, even an effective HR system might be an important firm-specific asset.

4. Recreate your own version of Figure 11.6 using an example that interests you. As best you can, draw distinctions between gross trade and value-added trade.

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Again, there is no singly correct answer here. However, this is not necessarily an easy assignment. Some students will not absorb Figure 11.6 quickly and easily. Be encouraging and let them know that trade in value added is a new idea that they are beginning to master.

5. Using an internet search, find an example of FDI or international contracting. Do some further research to describe the FDI or contracting in terms of the TLM framework.

   Like question 1 above, this question can be a simple take-home assignment or can be expanded into a semester research assignment requiring detailed analysis of the value chain of a global firm. This is up to you.

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CHAPTER 12
Engaging International Production

Chapter Objectives

From the point of view of mainstream international economics, there is not much purpose to this chapter. As one reviewer put it, "FDI is always a net benefit." However, there is much discussion in both the fields of international business and development policy of how to make the most of international production in general and FDI in particular. Additionally, this is a key concern of international development organizations such as the World Bank. This chapter summarizes this important area for your students, taking a broad cost/benefit approach to FDI and identifying the key policies that can help to tilt the ratio towards benefits. In this, emphasis is placed on supporting backward linkages to domestic firms.

Opinions on the role of FDI in development differ widely, from viewing MNEs as inherently evil to viewing them as the only saving grace for developing countries. Your students' opinions with regard for the subject will fall anywhere on this continuum, so there is substantial room for disagreement in the material of this chapter. We hope that the framework offered (and summarized in Table 12.1) will allow you to frame your students' opinions in an analytical framework to make your classroom discussion productive.

This chapter provides an opportunity to consider the broad issue of the institutional environment of countries, something that is taken up again in Chapter 22 on growth. It also provides an opportunity to consider the global governance of MNEs.

Analytical elements for this chapter:

Countries, sectors, tasks, firms and factors.

Chapter Outline

Attracting International Production
Benefits and Costs
    BOX: The Petroleum Industry in the Ecuadorian Amazon
Policy Stances
Entering Global Value Chains
Promoting Linkages

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Box: Lessons from FDI in Ireland
Governing International Production
Box: Transfer Pricing
Conclusion

Teaching Notes

The chapter begins with an anecdote regarding FDI in Costa Rica, and the chapter refers intermittently to this case. In class, you can use this case, or you can frame your discussion in a different context with which you have interest or experience. Alternatively, you can use two cases, one where the benefits of FDI are readily apparent and one where the costs are more prominent (perhaps a resource extraction example).

This would also be a good time to review some of the basic characteristics of FDI presented in Chapter 1. Students might need reminding of the orders of magnitude of these flows.

You need to spend some time walking your students through Table 12.1 on the benefits and costs of inward FDI. *Feel free to expand or modify this table in any way you see fit.* It is not sacrosanct. By making this table the centerpiece of your classroom discussion, the various ideas and opinions of your students will find an analytical reference point, one that is widely accepted in international business education.

It is perhaps best for you to be honest with your students about the range of disagreement among international economists regarding the role of FDI in development and the balance of costs and benefits reflected in Table 12.1. The studies cited in Table 12.2 are one way of doing this.

The short section of the chapter on "policy stances" takes up the issue of trade-related investment measures (TRIMs), a topic related to the WTO as discussed in Chapter 8, as well as export processing zones (EPZs). You can extend this discussion much farther beyond that contained in this section if you or your students have a special interest in these matters. This could be particularly important in some development studies programs.

The section of the chapter on "promoting linkages" is important and is often absent from many discussions of FDI available to your students. The key point of this section is that there is an information gap that can be filled by *coordinative* government policy. This would be a chance for you and your class to brainstorm on the various ways, beyond those mentioned in the text, that host governments could fulfill this function. In larger classes, this can be done in smaller groups that report their ideas to the full class. The World Bank report by Taglioni and Winkler (2016), *Making Global Value Chains Work for Development* can be helpful to you here.

Transfer pricing and general MNE behavior are controversial topics that have been involved in recent discussions of globalization. Here, a reference point worth discussion in

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class is the non-binding OECD Guidelines for Multinational Enterprises, which has both received attention and been active in addressing many cases.

Finally, this book went to press before the COVID-19 pandemic. There is a great deal of discussion about the impacts of the pandemic on GVCs, particularly in medicines and medical equipment. Some of these topics will be of interest to your students.

Comments on Review Exercises

1. What institutional elements do you think would make it more likely for an MNE to locate in a particular country?

   Hints are given in the first section of the chapter. Relevant factors include democracy (although China and Vietnam are counterexamples), good governance and the rule of law, absence of corruption and intellectual property protection. The Anyanwu (2017) chapter can be very helpful here.

2. Table 12.1 lists a set of benefits and costs of hosting foreign MNEs in the areas of employment, competition, education and training, technology, balance of payments, health and the environment, and culture. Are there any additional benefits and costs that you think are important? Are there additional considerations that a host government should address before hosting foreign MNEs?

   There is no single correct answer to this question. As mentioned above, this question can be used as a class exercise, including in groups for large classes. This is to bring out the concerns of students in the class.

3. The Agreement on Trade-Related Investment Measures (TRIMs) of the Marrakesh Agreement requires WTO members to phase out local content requirements. Do you think this is a good idea? Why or why not?

   Again, there is no single correct answer to this question. Clearly, local content schemes will be a disincentive to inward FDI but could also promote backward linkages. The question is whether the promotion of backward linkages in best promoted by local content requirements or coordinative approaches as describe in the chapter.

4. Should there be multilateral agreements either constraining the behavior of governments towards MNEs or constraining the behavior of the MNEs themselves?

   This is definitely a discussion question rather than a technical question. Use it in class to raise issues regarding the governance of international production. This chapter suggests that a multilateral approach is favorable, but there are arguments against this. As with Chapter 8 on the WTO and Chapter 19 on the IMF, this is a chance to consider the role of "global governance."

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5. In what ways can the *task-based* participation in GVCs be considered a "game changer" relative to old-style, *sector-based* economic activities?

   Chapter 11 began with a consideration of tasks in developing the idea of GVCs, and the task notion has become important for new thinking in both international trade and international production. The question of how to engage a world of international production in tasks is very different than how we used to conceive of hosting FDI. The "slices" of GVCs that countries might capture can be very small but still important.

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CHAPTER 13
Migration

Chapter Objectives

The purpose of this chapter is to introduce the student to the rudiments of international migration primarily from an economic perspective. The chapter introduces students to different types of migration. Then it turns to the central issue is that of the *migration decision*, and the main tool here is basic supply and demand analysis. The supply and demand analysis is applied to both low-skilled and high-skilled migration. Migration policy is also discussed with a contrast made between bilateral and multilateral approaches. This chapter has implications for development policy, particularly in the realm of remittances, the brain drain, and temporary migration.

Analytical elements for this chapter:

Countries, *firms* and *factors of production*.

Chapter Outline

Types of Migration
    Box: Irregular Migration
The Migration Decision
High-Skilled Migration
Low-Skilled Migration
    Box: Migration Gone Wrong: The Morecambe Bay Cockle Tragedy
Remittances
Migration Policy
    Box: GATS Mode 4: The Temporary Movement of Natural Persons
Conclusion

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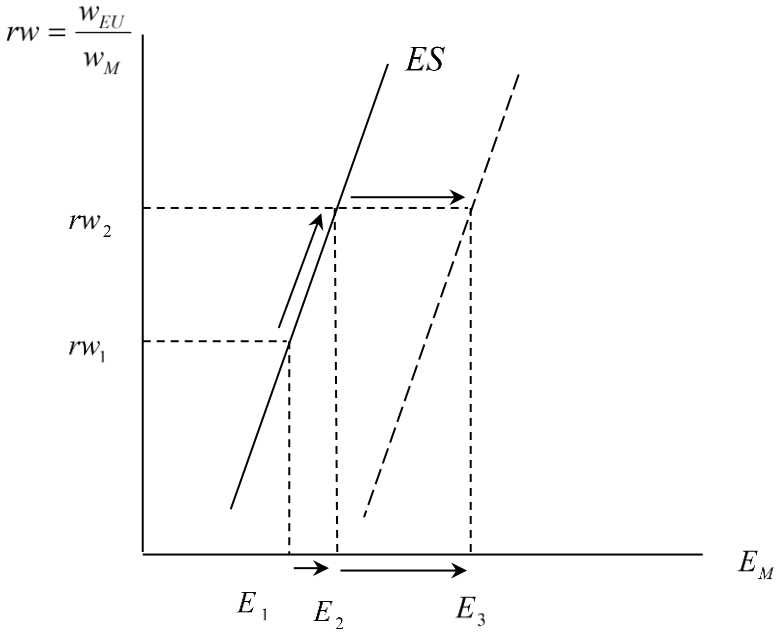
Teaching Notes

The chapter begins with a typology or categorization of types of migration. Obviously, this is not the only possible categorization, and you should feel free to use your own if you have a background in this area. In international relations oriented programs, it might make sense to spend more time on the non-economic types of migration at this point than in economics oriented programs. For the latter, moving quickly to the issue of the migration decision might make more sense.

The section of the chapter on the migration decision is the most important. Students will be familiar with supply and demand analysis from Chapter 2 or other courses but might not have seen it applied to this context. Don't rush through it. The most important point is to delineate the "move along" and "shift" factors in Figure 13.1. As you do this, remind the students of the "move along" vs. "shift" discussion in Chapter 2.

Figure 13.1 The Migration Decision



The next topics of high-skilled and low-skilled migration are usefully contrasted with each other. In principle, they are both valid dimensions of globalization, but they are given differential treatment both from other globalization dimensions and relative to each other. The case of high-skilled migration needs to be tied back to the discussion of R&D in Chapter 10. The case of low-skilled migration can be more controversial for some

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students, particularly in its illegal form. Drawing on Pritchett (2006) and World Bank (2018) might be helpful here.

This chapter also provides a venue for dealing with the more negative aspects of globalization, namely human trafficking. You can use the box on the Morecambe Bay tragedy as a lead-in to this subject. This could also be an opportunity to discuss issues of human rights as they relate to globalization processes.

The discussion of remittances is important. This is a growing flow in the world economy with potentially large development implications. Stress that, for some countries and regions, remittance inflows can be larger than FDI inflows. The chapter on migration in Goldin and Reinert (2012) can be helpful here for background.

There is the possibility that some parts of your classroom discussion with regard to migration policy will generate controversy. There are contemporary and strident policy conflicts on these issues. If these controversies arise, it might be helpful to contrast the issue of labor mobility with that of FDI and discuss the reasons why global policy communities have pursued what Pritchett (2006) referred to as "everything but labor globalization."

You can also remind students of the question of migration and comparative advantage discussed in Chapter 4. This is a way to tie the international trade and international production parts of the book (and your course) together.

Comments on Review Exercises

1. Do you know any migrants? To what extent and how does their experience fit into the discussion of this chapter? To what extent and how does it differ?

   There is no correct answer here. It is worth noting, however, that in a historical sense, we are all migrants. This point is made in Goldin, Cameron and Balarajan (2011).

2. Can you identify *reasons* why the liberalization of the trade, FDI and finance components of economic globalization have proceeded much faster than for labor migration?

   This reflects the rise of the nation state and the accompanying increase in border controls. It also reflects the identity characteristics of nation states. It is important for students to understand that, historically speaking, these restrictions on migration have been quite recent. In the globalization expansion of 1870 to 1914, migration was a significant component. This was the famed "Great Migration."

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3. We discussed the political economy of trade policy in Chapter 6. Can you identify any insights from that chapter that could be used in thinking about the political economy of migration policy?

   Inflows of migration increase the labor supply and can put downward pressures on wages in specific labor categories. The opposite is true for outflows. Also, where trade leads to real income gains for labor (via Stolper-Samuelson effects in labor abundant countries), these income gains might help provide the resources for emigration, shifting the curve in Figure 13.1 to the right.

4. Can you identify any benefits for relaxing sovereignty in favor of multilateral policy coordination of migration?

   The multilateral setting of migration policy would have the same standardization effects as those in trade (via the World Trade Organization), finance (via the International Monetary Fund), and development finance (via the World Bank). It can thereby improve upon piecemeal, disjointed policies set at the national level and reduce the injustices and abuses suffered by some migrants (e.g., via human trafficking).

5. Pick a country of interest. A large country might be easier. Conduct an internet search to describe this country's migration policy in as much detail as possible.

   There is no one correct answer here. This could be the basis of classroom discussion or presentations if the students come prepared with their responses. It can also be expanded into a small research project as an assignment for the class.

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Part III

International Finance

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CHAPTER 14
Accounting Frameworks

Chapter Objectives

This chapter introduces students to open economy, macroeconomic accounts and to balance of payments accounts, both crucial to understanding the modern, world economy. It does so by first using a visual flowchart approach to open economy accounts before moving on to balance of payments accounts. An application of these accounts to global imbalances gives some sense of their usefulness. With this chapter, the textbook brings the student into the realm of international finance. A first appendix covers social accounting matrices, an increasingly-common means of representing accounting information, and one that can be extended in a number of directions. A second appendix develops a simple, open-economy macroeconomic model illustrating the relationship between spending and the current account, and a third appendix contrasts GDP with GNI. Use these in the ways best for your program.

Analytical elements for this chapter:

Countries, *currencies* and *financial assets*.

Chapter Outline

Open-Economy Accounts
Balance of Payments Accounts
Analyzing the Balance of Payments Accounts
Global Imbalances
Conclusion
Appendix: Accounting Matrices
Appendix: An Open-Economy Model
Appendix: Gross Domestic Product and Gross National Income

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Teaching Notes

This chapter might not be on the top-10 list for your students. It is about accounting, and many students need some motivation to make them enthusiastic. Nevertheless, I have seen students have "aha!" moments in going through this material. They have heard of these concepts but might not have been taken through them in a user-friendly manner. One motivator is to have the students think of themselves as *analysts* in either the private of public sector, with the job of assessing the state of a particular national economy. Let them know that is nearly impossible to accomplish their task without an understanding of the material of this chapter.

In the case of the circular flow diagram, it is worth mentioning that the open economy diagram lies beneath the macroeconomic accounts of any economy, as reported by the central government to the IMF, for example. These macroeconomic accounts have the same accounts listed in Figure 14.2: production, consumption, investment, government, and rest of the world. It is possible to show them this using the accounts of a country of your choice.

The key message of the open economy accounts section of the chapter is summarized in the fundamental accounting equations box below:

Fundamental Accounting Equations

Domestic Investment – Domestic Savings = Foreign Savings = Trade Deficit

Domestic Savings – Domestic Investment = Foreign Investment = Trade Surplus

If the student understands this box, he or she will have come a long way towards understanding open economies. If you can give them a feeling of having understood a "special key" to unlocking certain open-economy "mysteries," then so much the better.

With regard to the balance of payments, the key insight is contained in the following material from the text:

- If the current and capital/financial accounts are both positive (negative), then official reserve transactions must be negative (positive).

- If the current and official reserve transaction accounts are both positive (negative), then the capital/financial account must by negative (positive).

- If the capital/financial and official reserve transaction accounts are both positive (negative), then the current account must be negative (positive).

Here again, the student can take a big stride towards increased understanding.

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Some instructors have used the material of the appendices to delve into simple, open economy modeling. Try to judge is your students are prepared for this material. Perhaps international relations students won't be, but economics students will be. For the open economy model, it is very important to stress that this is only a model a aggregate demand and does not account for the aggregates supply conditions of the economy.

Comments on Review Exercises

1. This book considers three elements of economic globalization: international trade, international production, and international finance. Looking back on this chapter, please identify where in the open-economy accounts and balance of payments accounts connections appear among these three realms.

   The key connection here is between trade, as it shows up in the current account and the capital/financial account which finances any trade deficit through direct investment (international production) and indirect investment (international finance).

2. Looking at the open-economy circular flow diagram of Figure 14.2, please explain how an increase in government expenditures, G, without any increase in tax revenues, T, would tend to impact the trade balance. You will need to use one of the fundamental equations to answer this question.

   Increases in G without an increase in T would tend to lower S_G. This decline in domestic savings, for any given level of domestic investment, would need to be made up for by additional foreign savings. As foreign savings, S_F, increases, there would be an expansion of the trade deficit.

3. Repeat the exercise of Question 2 for an increase in household consumption, C, without any increase in income, Y.

   In increase in C without any increase in Y would lower S_H. This decline in domestic savings, for any given level of domestic investment, would need to be made up for by additional foreign savings. As foreign savings, S_F, increases, there would be an expansion of the trade deficit.

4. Consider the global imbalances issue discussed in this chapter. Given your understanding of the issue, try to suggest policies that might address it. You are just at the beginning of your exploration of international finance but try to be as detailed as you can in your policy suggestions.

   There is no one correct answer here, but the answers will break down between the United States and China. In the case of the United States, increases in domestic savings (both household and government) will have to be part of the picture. In the case of China, decreases in domestic savings (both household and government) will

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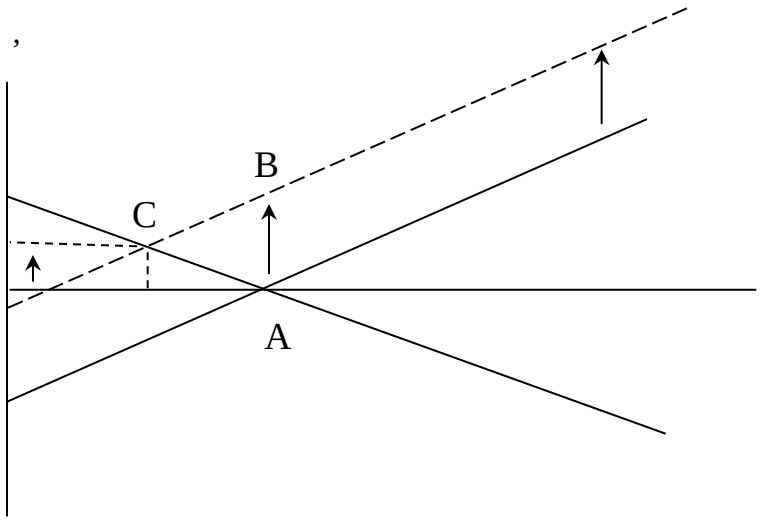
be necessary. At the time of this writing, the adjustment in China appears to be taking place, but not so in the United States in the case of government savings.

5. Using the open economy macroeconomic model of the appendix, graphically analyze an increase in either tax revenues or the entire $S_H(Y)$ relationship. To do this use a diagram like that of Figures 14.6 and 14.7.

   We begin at the same initial equilibrium below at point A. Suppose that, from this initial position, there is an increase in tax revenue. This shifts the $S_H(Y)+T-G-I$ *curve upward by the amount of the increase in government spending or investment from point A to point B. At point B, however, the net of domestic savings over domestic investment is above the trade surplus (still at zero). The only way for the fundamental accounting equation to be restored iv via a decrease in* Y *. As* Y *decreases, both* S_H *and* Z *decrease. The former decreases the net of domestic savings over domestic investment (a movement from B to C), while the latter reduces the trade surplus (a movement from A to C). The fundamental accounting equation and macroeconomic equilibrium are restored at point C, characterized by a trade surplus.*

An Increase in Tax Revenue



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CHAPTER 15
Global Capital Flows

Chapter Objectives

This is a new chapter in the textbook, suggested by referees. It takes seriously economic globalization in the form of capital flows and analyzes these in some detail. As it turns out, the aftermath of the 2008 global financial crisis inspired many international economists to focus on the global capital flows in a sense disaggregating the capital/financial account of the balance of payments and considering them in gross as well as net form. The distinction between net and gross flows has proved to be important.

The discussion of capital account liberalization and (market-friendly) capital controls takes the student into a realm of the "governance" of economic globalization and appropriate policies. The book tries to steer a middle course through market fundamentalism and interventionism on this issue.

Chapter Outline

Types of Capital Flows
Foreign Direct Investment
Equity Portfolio Investment
Bond Finance
    Box: Sovereign Debt
Commercia Bank Lending
Net Versus Gross Flows
Determinants of Capital Flows
    Box: Capital Flows and Migration
Capital Account Liberalization
Capital Controls
    Box: Variable Deposit Requirements
Balance of Payments Revisited
Conclusion

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Teaching Notes

The most important aspect of this chapter is Table 15.1. Go through it slowly. You might feel that you are repeating some things (such as describing FDI), but students will appreciate it. Remember that you are disaggregating the balance of payments for them in a way that is often glossed over. You are conveying information that has turned out to be important.

In doing this, it is worthwhile to say a few words about sovereign debt and "original sin." The latter is what often forces countries to issue debt denominated in foreign currencies with potentially dire consequences in crises.

The issue of net versus gross flows might first at seem to be a bit trivial, but this is not the case. Return to the statement by Guichard (2017) that, especially after the 2008 global financial crisis, "current accounts have likely become a less relevant predictor of crisis than in past decades and their monitoring needs to be complemented by a monitoring of *gross* international financial flows and positions" (p. 4, emphasis in original). This is indeed an emerging consensus. Use Figure 5.4 to provide the intuition to students and relate it back to intra-industry trade (Chapter 5) and the Grubel-Lloyd index.

There is no definitive model of the determinants of capital flows, so the discussion in the chapter of this topic is meant to be suggestive. Feel free to provide some more context and explanation of this if you have the interest and background.

There has been a tension in international economic policy regarding the liberalization of capital accounts, with lines periodically being drawn between groups of researchers and policymakers. This chapter takes up these issues without trying to be dogmatic and attempts to find a market-friendly middle path. You will no doubt have our own views, but hopefully you can use the sections of the chapter on capital account liberalization and capital controls as a starting point.

Comments on Review Exercises

1. Carefully distinguish first, equity investment from FDI, and second, bond finance from commercial bank lending.

   The distinction between equity investment and FDI is one of ownership shares, with ten percent being the typical cutoff mark. Both bond finance and commercial bank lending represent debt, but bond finance involves more easily tradable assets, so bonds are more transferable with more liquid markets.

2. We have stated that increasing amount of attention is being paid to the distinction between net and gross capital flows. Please carefully explain *why* this distinction is so important.

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There can be relatively small net flows that mask large gross flows. For this reason, a small current account balance can coexist with large capital account transactions. Because the financial markets behind large capital account transactions are characterized by having market imperfections, it is prudent to monitor gross flows as a precaution against incipient crises.

3. From a "free-market" perspective, why would we expect benefits from the general liberalization of global capital flows? Are there any other considerations that might limit the desirability of a "free-market" approach to global capital flows?

   From a "free-market" perspective, market decisions exhibit allocative efficiency and are therefore the best way of allocating resources, including in the financial realm. Therefore, liberalizing capital accounts should provide the best global allocation of capital. That said, financial markets are characterized by market imperfections mostly related to informational issues. Both theoretically and empirically, financial markets might not in practice allocate capital in the best manner. Some form of prudential regulation in the form of market-friendly capital controls might therefore be the better option.

4. What are the main objectives of ongoing experiments with capital controls? Please be as specific as you can.

   The main objectives of ongoing experiments with capital controls is to reduce volatility and the occurrence of crises by shifting the composition of capital flows from short-term to long-term assets. There is mixed evidence of their effectiveness in doing this, but they have been now endorsed by the International Monetary Fund.

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CHAPTER 16
Exchange Rates and Purchasing Power Parity

Chapter Objectives

It is difficult for any student or professional to have a good understanding of the world economy without an appreciation of exchange rates. Many, but not all, of your students will have an intuitive understanding of nominal exchange rates from their international travel. Not so for real exchange rates, however, no less for purchasing power parity. This chapter will try to take them through this material in a step-by-step manner.

We begin with the nominal exchange rate and its relationship to the value of the domestic currency through an inverse scale. We then move on to the real exchange rate as a modification of the nominal exchange rate using price levels. For students not familiar with price levels, there is an appendix that explains them intuitively. The purchasing power parity model of long-run exchange rate determination is presented, and is illustrated with *The Economist* Big Max Index. Next, nominal exchange rates are related to trade flows, and this culminates in a graph relating the value of a home country currency to its trade deficit. This graph will be used in Chapters 17 and 18 in models of exchange rate determination. Finally, the student is briefly introduced to hedging and foreign exchange derivatives. For more advanced students, there is also an appendix on the monetary approach to exchange rate determination.

Analytical elements for this chapter:

Countries, *currencies* and *financial assets*.

Chapter Outline

The Nominal Exchange Rate
The Real Exchange Rate
Purchasing Power Parity
    Box: The Big Mac Index
Exchange Rates and Trade Flows
Hedging and Foreign Exchange Derivatives
Conclusion

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Appendix: Price Levels and the PPP
Appendix: The Monetary Approach to Exchange Rate Determination

Teaching Notes

With regard to nominal vs. real exchange rates, the key differentiation you want students to be able to make is contained in the following box:

> *Nominal exchange rate:* The rate at which two countries' *currencies* trade against each other.
>
> *Real exchange rate:* The rate at which two countries' *goods* trade against each other.

This is a key insight, and if you have succeeded in conveying it, you have made some progress in your students' education in international economics.

With regard to the PPP model, it is good to emphasize that this is a point of reference for both analysts and market participants, albeit one that only applies in the *long run*. Again, the key insight is presented in a box:

> **PPP hypothesis:** The nominal exchange rate will adjust so that the purchasing power of a currency will be the same in every country.

For business programs, a case study on exchange rate exposure would be a helpful addition to the chapter's brief analysis of hedging and foreign exchange derivatives.

The next important relationship is given in Figure 16.3. This will become the supply curve of pesos in Chapters 17 and 18, so it is important that your students understand it. You can help them by considering movements up and down the curve, changes in the quantity supplied of pesos.

Comments on Review Exercises

1. Use supply and demand diagrams such as those we used in Chapter 2 to demonstrate why the relationships between the value of the peso and imports and exports illustrated in Figure 16.3 make sense. In doing so, keep in mind that $P_Z^M = e \times P_Z^W$ and $P_E^M = e \times P_E^W$.

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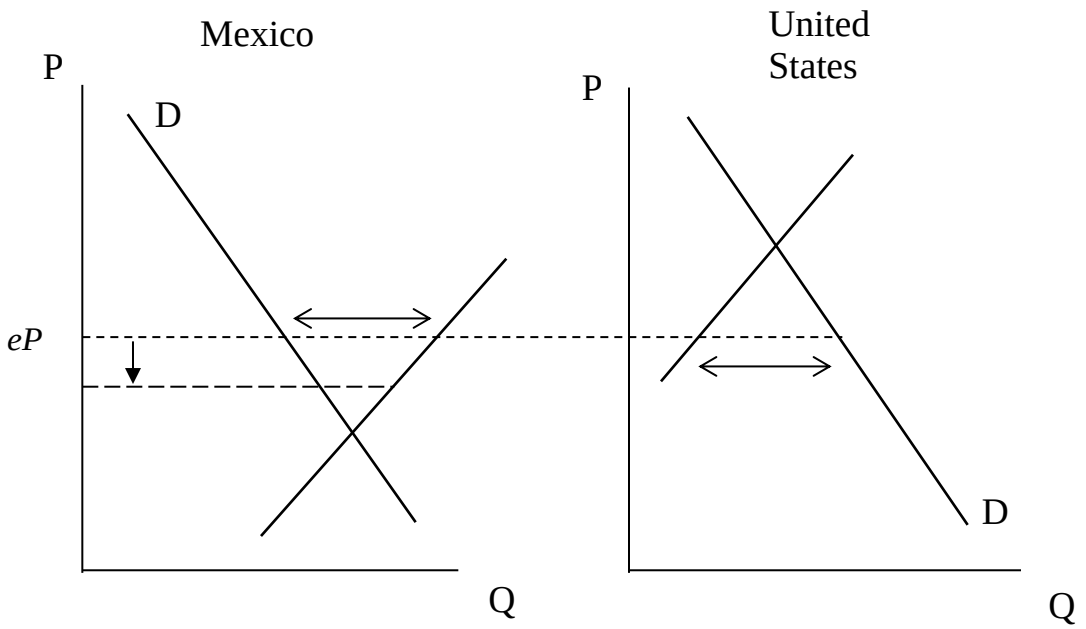

As the value of the peso increases, e falls. To take Mexico's export side as an example, we see above that Mexico's exports would decline as e falls, contributing to the expanding trade deficit.

2. Explain the *intuition* of how each of the following changes affect the real exchange rate, re: a fall in P^M, a fall in P^{US}, and a fall in e. In each case, describe the impact of the change on the rate at which Mexican goods trade against US goods.

   A fall in the price of Mexican goods implies that it takes fewer US goods to purchase Mexican goods. This means that the real value of the peso has fallen. A fall in the price of US goods implies that it takes more US goods to purchase Mexican goods. This means that the real value of the peso has risen. A fall in e implies that it takes fewer pesos to buy US dollars. This means that the real value of the peso has risen.

3. Use the PPP model of exchange rate determination to predict the impact on the nominal exchange rate of the following changes: a fall in P^M and a fall in P^{US}.

   A fall in the price of Mexican goods will, in the long run, cause a fall in e or an increase in the value of the peso as the nominal exchange rate falls to equate the purchasing power of the peso in each country. Similarly, a fall in the price of US goods will, in the long run, cause a rise in the value of the peso.

4. As shown in Table 16.1, the spot nominal exchange rate for the Canadian dollar was 1.37 in February 2016. What happened to the value of the Canadian dollar during the previous year? What would have to be true of the forward rate for the Canadian dollar to be at a forward premium? A forward discount?

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Between 2015 and 2016, the Canadian dollar decreased in value from 1.24 per US dollar to 1.37 per US dollar. For the Canadian dollar to be at a forward premium, the 2015 forward rate would have had to be below 1.37. To be at a forward discount, the value would have had to be above 1.37.

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CHAPTER 17
Flexible Exchange Rates

Chapter Objectives

Many international economics texts use supply and demand diagrams to depict exchange rate determination, and this is indeed taken up in this and the following chapter. However, after considering these "simple" models, the two chapters link the supply and demand analysis back to both the open-economy account of Chapter 14 and the assets-based approach to exchange rate determination as embodied in the interest rate parity condition. The goal is to communicate a realistic model of exchange rate determination within the comfort zone of supply and demand. A trade-based model precedes the asset-based model. Indeed, for students who are unable to absorb the assets-based considerations, a great distance can be covered with the trade-based model alone. For example, it is possible in a development studies class to show how capital inflows lead to an appreciation of the home country currency.

For more advanced students, there is an appendix linking exchange rate determination to monetary policies. This appendix can be used to extend this chapter into the monetary realm in a manner suitable for economics programs.

Analytical elements for this chapter:

Countries, *currencies* and *financial assets*.

Chapter Outline

A Simple Model of Exchange Rate Determination
A Trade-Based Model
    Box: Theory and Practice
An Assets-Based Model
Interest Rates, Expectations, and Exchange Rates
    Box: Covered vs. Uncovered Interest Rate Parity
Conclusion
Appendix: Monetary Policies and the Nominal Exchange Rate

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Teaching Notes

For students outside of economics departments, the simple model of exchange rate determination might be enough to communicate the essence of what is needed for your program. For others, this will not be enough. Evaluate this for your program and its students.

For most students, the chapter is an exploration of the following relationship from Chapter 14:

$$S_F = (Z - E)$$

Foreign savings or capital/financial account surplus is examined here as a demand for pesos, while the trade or current account deficit is examined as a supply of pesos as in Chapter 14. The interaction of these two components of the balance of payments results in an equilibrium value of the peso or $1/e$. The trade-based model is one where the demand for pesos is perfectly inelastic, and this serves as an introduction to market-based determination of exchange rates. These considerations are summarized in the following box:

S_F (foreign savings) $\Leftrightarrow$ *demand* for pesos (supply of dollars)
$Z - E$ (trade deficit) $\Leftrightarrow$ *supply* of pesos (demand for dollars)

This framework is used to help the student distinguish between appreciation and depreciation in flexible exchange rate regimes.

The assets-based model intuitively leads the student to the interest rate parity condition:

Interest Rate Parity Condition	
$r_M = r_{US} + \frac{(e^e - e)}{e}$	Mexico/United States
$r_H = r_F + \frac{(e^e - e)}{e}$	Home/Foreign

As you introduce this concept, let the students know that they are learning *one of the most central elements of international finance*. This will encourage them.

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To help your students understand how the interest rate parity condition translates into a downward-sloping demand for pesos in the assets based model, you must emphasize that *this demand curve is for a given* e^e. Changes in e or $1/e$ result in a movement along the demand curve, while changes in r_m, r_{US}, and e^e result in a shift of the demand curve. Thus, the chapter can be explained in terms of movements along curves (adjustment to equilibrium value of the peso) and shifts of the demand curve (requiring a new adjustment from an old equilibrium value of the peso).

It will be worth your while to take this material *slowly* in class, presenting each step in the process carefully. You can pick up your pace of bit in Chapter 18 after the students have absorbed the framework developed here.

It is important to note that the analysis of capital inflows is important from both a development perspective (many developing countries have struggled to manage these inflows) and from a developing country perspective (the capital inflows into the United States helped to precipitate the recent sub-prime crisis).

More advanced students will benefit from the appendix on monetary policies. This places the exchange rate determination issue within a larger monetary context.

Comments on Review Exercises

1. As we will discuss in some detail in Chapter 21, in 1999, the European Union introduced a common currency known as the *euro*. Take the EU as your home country and the United States as your foreign country. In this case, $e = {euros}/{dollar}$. Set up the equivalent of Figure 17.6 to show the determination of e. Next, use three additional diagrams to show the impacts on e of the following changes: a fall in the euro interest rate; a fall in the dollar interest rate; and a fall in the expected value of the exchange rate (e^e). In each case, *explain the intuition of your result*.

   A fall in the euro interest rate will shift the S_F *curve to the left as investors reallocate their portfolios into dollar-denominated assets. This will reduce the value of the euro or increase e. A fall in the dollar interest rate will shift the* S_F *curve to the right as investors reallocate their portfolios into euro-denominated assets. This will increase the value of the euro or decrease e. A fall in the expected future value of the euro, will shift the* S_F *curve to the right. This is because it lessens the expected future depreciation of the euro, so investors reallocate their portfolios into euro-denominated assets. This will increase the value of the euro or decrease e.*

2. In this and the previous chapter, we discussed the links between trade flows and the nominal exchange rate. All other things constant, what would an *increase* in a home country's interest rate tend to do to its exports, imports, and trade deficit? Explain the intuition of your answer.

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An increase in a home country's interest rate would increase the value of the home country's currency. This tends to increase imports, decrease exports, and expand the trade deficit. This is due to the fact that the increase in the value of the home country's currency lowers the domestic price of tradable goods. Imports are less expensive for domestic households, and there is less incentive to export.

3. In this and the previous chapter, we discussed the links between trade flows and the nominal exchange rate. All other things constant, what would a *decrease* in a home country's interest rate tend to do to its exports, imports, and trade deficit? Explain the intuition of your answer.

   A decrease in a home country's interest rate would decrease the value of the home country's currency. This tends to decrease imports, increase exports, and reduce the trade deficit. This is due to the fact that the decrease in the value of the home country's currency increases the domestic price of tradable goods. Imports are more expensive for domestic households, and there is a greater incentive to export.

4. For Appendix readers only. For the euro example of Question 1 above, set up the equivalent of Figure 17.10. Next, show the impacts in this figure of a contractionary monetary policy in the EU and a contractionary monetary policy in the United States. In each case, *explain the intuition of your results*.

   A contractionary monetary policy in the EU will increase the interest rate in the EU. This will shift the S_F *curve to the right as investors reallocate their portfolios into euro-denominated assets. This will increase the value of the euro or decrease e. A contractionary monetary policy in the US will increase the interest rate in the US. This will shift the* S_F *curve to the left as investors reallocate their portfolios into dollar-denominated assets. This will reduce the value of the euro or increase e.*

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CHAPTER 18
Fixed Exchange Rates

Chapter Objectives

Given the large number of crises involving fixed exchange rates and the recent concerns over China's undervalued currency, students need a good understanding of this approach to exchange rate management. This is the purpose of this chapter. It will also provide the student with the conceptual tools required to understand the history of monetary arrangements (Chapter 19), balance of payments and exchange rate crises (Chapter 20), and monetary unions (Chapter 21). If there is a bias to the text's treatment of fixed exchange rates (and there admittedly is), it is that they are generally not sustainable in the long run. If you disagree with this view, you might want to make that clear to you students so they can read with a critical eye.

The chapter explains alternative exchange rate regimes, before taking up fixed exchange rate regimes in particular. It explores the various ways that fixed exchange rate regimes can be maintained, and also explains the "impossible trinity" or "policy trilemma" that often comes up in the exchange rate policy literature. For students with a basic background in monetary theory or macroeconomics, the appendix continues the appendix to Chapter 17 and explores monetary policies under fixed exchange rates.

Analytical elements for this chapter:

Countries, *currencies* and *financial assets*.

Chapter Outline

Alternative Exchange Rate Regimes
A Simple Model of Fixed Exchange Rates
An Assets Based Model of Fixed Exchange Rates
    Box: Is China's Currency Undervalued?
Interest Rates and Exchange Rates
    Box: Defending the Brazilian *Real*, 1998-1999
The Role of Credibility
The Impossible Trinity

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Currency Boards
A Role for Fixed Rates?
Appendix: Monetary Policies and Fixed Exchange Rates

Teaching Notes

After you introduce your students to alternative exchange rate arrangements, you need to ensure they know the correct terminology for exchange rate changes in flexible and fixed exchange rate regimes. This is contained in Table 18.1. With that in hand, they are ready to begin learning about fixed exchange rates.

As with the previous chapter, for students outside of economics departments, the simple model of exchange rate determination might be enough to communicate the essence of what is needed for your program regarding fixed exchange rates. For others, this will not be enough. Evaluate this for your program and its students.

The chapter uses the balance of payments table from Chapter 14 to lead the students up to the following box:

> Overvaluation $\Rightarrow$ Excess supply of pesos (demand for dollars) $\Rightarrow$ Central bank draws down foreign reserves
>
> Undervaluation $\Rightarrow$ Excess demand for pesos (supply of dollars) $\Rightarrow$ Central bank builds up foreign reserves

However, these official reserve transactions are, in practice, not the only means used to maintain fixed exchange rates. Interest rates are part of the central bank arsenal. Consequently, the chapter brings the students back to the interest rate parity condition and its assets considerations. Some analysis leads the student to a second box:

> If a home country wants to maintain an *equilibrium* fixed exchange rate, it must set its interest rate equal to that prevailing in the foreign country whose currency serves as a peg for the home country currency.

This setting of an *equilibrium* fixed rate can be seen as an attempt to shift the S_F curve to the desired position along the $Z - E$ curve. As the box on the case of the Brazilian *real* shows, this is not always easy to do.

The impossible trinity, often invoked in the policy literature, is not always easy for students to understand and retain. For this reason, a visual is important, such as the triangle contained in Figure 18.4. If you walk the students through the triangle, they will always be able to return to it to check their understanding of it. A learning device that students might relate to: There are three cookies in the cookie jar; only two can be taken out and eaten; one must remain.

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The chapter takes a relatively harsh position on currency boards as a viable exchange rate arrangement. You might disagree with this stance. If so, contrasting your views with those expressed in the text would be useful for your students. This is another area that might promote classroom discussion. This could be part of a larger discussion on "dollarization," particularly in Latin America.

The appendix reinforces the result of the chapter that maintaining a fixed exchange rate regime requires giving up an independent monetary policy. If you include this appendix in your course, be sure to relate it back to the lower right-hand corner of the impossible trinity triangle.

Comments on Review Exercises

1. Until January 2002, the Argentine peso was pegged on a one-to-one basis against the US dollar in an arrangement known as a *currency board*. Suppose that, to begin with, this exchange rate is an equilibrium rate. Next, using a diagram such as Figure 18.3 to show how Argentina can respond to a decrease in the interest rate on the US dollar.

   The decrease in the interest rate on the US dollar will shift Argentina's S_F curve to the right, causing an increase in the value of the peso. Argentina must decrease its own interest rate to shift the S_F curve back to its original position.

2. Suppose that a country has a fixed exchange rate and that, over the past few years, it has been quickly accumulating foreign reserves. What does this tell you about the value of the pegged currency? Why?

   A fixed exchange rate that results in the country accumulating foreign reserves is undervalued. An undervalued currency results in excess demand for the domestic currency. The country's central bank meets this excess demand by buying foreign currencies, thereby increasing the supply of the domestic currency on foreign exchange markets.

3. Given what you have read in this book up to this point, can you say anything about the desirability of the three policy regime corners in the impossible trinity diagram of Figure 18.4? Please explain your reasoning.

   Since opinions differ on this matter even among prominent international economists, there is no one correct answer to this question. Students' answers should be evaluated according to the degree that they are well thought out.

4. For Appendix readers only. For the first exercise above, set up the equivalent of Figure 18.5. Next, show the actions required on the part of the Mexican monetary authority in response to: a decrease in income in Mexico; a decrease in income in the United States; and a contractionary monetary policy in the United States. In each case, *explain the intuition of your results*.

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In the case of a decrease in income in Mexico, Mexico would have to increase the money supply to offset the incipient decline in the Mexican interest rate. In the case of a decrease in income in the United States, Mexico would also have to increase the money supply in order to match the decline in the US interest rate. Finally, in the case a contractionary monetary policy in the United States, the Mexican would need to do the same to match the increase in the US interest rate.

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CHAPTER 19
The International Monetary System

Chapter Objectives

As in the case of the WTO, the IMF has become a central object of criticism of those with concerns about globalization, drawing the ire of Joseph Stiglitz in his 2002 book, *Globalization and Its Discontents*, for example. This chapter puts the IMF into an historical context, introduces the student to its operations, and makes an assessment of it as a global, monetary institution. It also introduces the student to recent research on the political economy of IMF lending, and its role in some notable crises. This role is taken up again in Chapter 20.

The marginal gains of transmitting the material of this chapter to the students are large. Students might have passionate interests in or opinions about the IMF, but few will know much about it. Most of what you communicate to your students will be a gain to their knowledge base in this area. As always, proceeding step-by-step will maximize these gains for the students.

Analytical elements for this chapter:

Countries, *currencies* and *financial assets*.

Chapter Outline

Some Monetary History
    Box: Views of the Bretton Woods Conference
The Operation of the IMF
    Box: IMF Conditionality
History of IMF Operations
    Box: Limited Liquidity in the Early Years
    Box: The Washington Consensus
    Box: The IMF in Ethiopia
The Political Economy of IMF Lending
An Assessment
Conclusion

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Teaching Notes

Think about the degree to which you want to present historical material on monetary history in your class. Then think about the way in which you want to present it. Timelines are a straightforward way of organizing the material for your students. While for some the gold standards are perhaps of more historical relevance, the Bretton Woods system is a key part of an adequate understanding of the international monetary system. The transition from the Bretton Woods system to what has become known as the "non-system" is worth emphasizing. That is where we have been ever since. Note that the Bretton Woods system was also the model of the European Monetary System (see Chapter 21).

Having described the basics of the IMF operations (don't make this too detailed), you again need to think about the degree to which you want to present historical material on IMF operations in your class. Then think about the way in which you want to present it. Again, timelines are a straightforward way of organizing the material for your students. However, here case studies (such as the Ethiopian case contained in the text) offer a useful alternative. Having prepared you own case here will impress your students and allow you to focus on a country in which you have a special interest.

It is worth spending some time on the Washington Consensus box. There is a great deal of misinformation about what this really is, and it is often identified with "neo-liberalism." Indeed, there are some elements of the Washington Consensus that diverge from "neo-liberalism," and some elements that have admittedly failed (financial and interest rate liberalization without prudential regulation).

The subject of the political economy of IMF lending is an important overlap between the fields of international economics, political economy, and international relations. For some programs, it will be worth expanding upon what is presented in this chapter. The recent book by Copelovitch (2010) referenced in this chapter is a very good place to start in this regard. Much of the literature in this area can be effectively assessed with reference to Figure 19.4.

Finally, your assessment of the IMF might differ from the one presented at the end of this chapter. That contrast might be instructive to your students.

Comments on Review Exercises

1. How did the gold exchange standard differ from the gold standard? How did the adjustable gold peg (Bretton Woods) system differ from the gold exchange standard?

   In the gold exchange standard, countries that were not important financial centers did not hold gold reserves as in the gold standard. Instead, they held gold-convertible currencies. In the adjustable gold peg, the US dollar was to be pegged to gold at $35 per ounce. The other countries of the world were to peg to the US dollar or directly to gold.

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Adjustments were only to occur under situations of "fundamental disequilibrium," a concept that was never carefully defined.

2. Why are post-Bretton Woods monetary arrangements referred to as a "non-system"?

   The term "non-system" refers to the range of allowable exchange rate arrangements, namely: 1. currencies fixed to anything other than gold, 2. cooperative arrangements for managed values among countries, and 3. floating. This "non-system" is with us to this day.

3. What is your reaction to the different visions of the Keynes Plan and the White Plan? If you had been a participant at the Bretton Woods Conference, which would you have supported?

   There is no one correct answer here. However, the Keynes Plan continues to be a point of reference in its call for a world reserve currency and the spreading of adjustment requirements between borrowing and lending countries.

4. Would you be in favor of expanding the role of the SDR to make it an international currency along the lines of Keynes' *bancor*? Why or why not?

   Again, there is no one correct answer here. Discussions of the role of reserves and the potential for a global central bank are relevant.

5. Choose an IMF member in which you have a special interest. Spend a little time perusing the "Country Information" section of the IMF web-site at www.imf.org by clicking the "Country" tab along the top of the home page.

   You can demonstrate these links in class and have the students do this on their own, perhaps translating the results into a short paper.

6. For the ten elements of the Washington Consensus (box above) and the ten elements of the "second generation reforms," give your own assessment of their appropriateness as policies.

   This question requires a long answer, and you might want to narrow it down a bit to elements of the Washington Consensus and the second-generation reforms you find most relevant to your course and/or program. These are matters on which international and development economists disagree, so it is best to be lenient in your assessment of students' answers.

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CHAPTER 20
Crises and Responses

Chapter Objectives

The purpose of this chapter is to apply the material developed in Chapters 14 to 19 to a subject that the students have both heard about and in which they have a particular interest—crises. Importantly, the chapter distinguishes among different *types* of crises, rather than lumping them altogether It also distinguished between what Barry Eichengreen terms "old-fashioned" crises (e.g., balance of payments and currency crises) and "high-tech" crises (e.g., the Asian and global financial crises). Appropriate policy response to the threat of ongoing crises is an issue about which international economists are in disagreement. I have attempted to be as judicious as possible without downplaying the degree of disagreement. You no doubt have your own opinions on these matters, and the hope is that the chapter will provide you a platform to both inform your students and to express these opinions. The role of the IMF in recent crises and a number of "solutions" to crises that are under discussion are presented in some detail.

Analytical elements for this chapter:

Countries, currencies, financial assets.

Chapter Outline

Types of Crises
    Box: Views of the Banking Sector
Contagion and Systemic Risk
Analyzing Balance of Payments and Currency Crises
The Asian Crisis
    Box: The Baht Crisis
The IMF Response to the Asian and Brazilian Crises
    Box: The Indonesian Crisis
The Global Financial Crisis
Prudential Regulation and the Basel Standards
Capital Controls
    Box: Capital Controls and the Iceland Crisis

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Teaching Notes

The most important thing you can accomplish for your students with this chapters if to distinguish among the types of crises listed in Table 20.1. This will take them beyond the financial press treatment of crises as a single entity into a more analytical realm. You should feel free to add your own examples to those listed in the table.

Table 20.1: Types of Crises

Crisis Type	**Characteristics**	**Example**s
Hyperinflation	A rapid increase in the overall price level of a country, typically defined to be 40 percent or higher on an annual basis.	Zimbabwe, 1998- 2009 Venezuela, 2016-
Balance of payments and currency crises	A large devaluation or rapid depreciation in the value of a domestic currency in response to balance of payments difficulties.	Mexico, 1994-1995 and Brazil, 1999
Asset price deflation	A sustained and large decline in the prices of financial assets.	Japan, 1990 and United States, 2007-2009
Banking crises	The occurrence of bank runs and/or the merger, closure or government takeover of banking institutions.	Argentina, 2001 Cyprus, 2012-2013
External debt crises	Sovereign default on debt obligations to *foreign* creditors or substantial restructuring of this debt.	Mexico, 1982 Greece, 2010-2015
Domestic debt crises	Sovereign default on debt obligations to *domestic* creditors or substantial restructuring of this debt.	Argentina, 1989

Sources: Eichengreen (1999) and Reinhart and Rogoff (2009)

With regard to balance of payments and currency crises, the starting point of the chapter is a look back at the fixed exchange rate model. This is a good opportunity for a quick review to help your students internalize the material of Chapter 18, including the fixed exchange rate implications for the interest rate parity condition. The next key issue is the contrast between Figures 20.4 (old-fashioned) and 20.5 (high-tech) crises. These figures put in words what is discussed in many places by experts in international finance using very technical language.

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No doubt that there is a crisis in which you have a particular interest. If you present a case study of this crisis to your students, it will both impress them and nicely complement the more general material of this chapter. There are lots to choose from!

The discussion of prudential regulation and Basel standards is an opportunity to visit the issue of the appropriate role of government in a market economy, including the issue of market failure. The Iceland case covered in a box is an iconic example of this. It is also a chance to take up the political economy of policy formulation in this area. This is also the case for the subject of capital controls in which the IMF's position on these measures has changed. Here the important distinction is between market friendly and less market friendly types of capital controls.

The material of this chapter dates *quickly*. Since its publication, there might even have been an additional crisis that is worth discussing with your students. Rely on the financial press to help you do this.

Comments on Review Exercises

1. What is the key difference between "old-fashioned" and "high tech" crises?

   High-tech crises involve, in some fashion, a loss of confidence in the financial sector of the economy. The source of this loss of confidence can and does differ from one country to another but is usually indicative of an absence of some appropriate type of prudential regulation.

2. In Chapter 18 we addressed fixed exchange rates. Polices to maintain fixed exchange rates fell into two categories. First, there were policies to address the excess demand or supply of the home country (official reserve transactions). Second, there were policies to change the equilibrium exchange rate (interest rate changes). Please answer the following questions with regard to the use of these policies in balance-of-payments crises.

   a. In a balance-of-payments crisis, what kind of official reserve transactions will be made?

      The central bank will have to address the excess supply of the domestic currency by purchasing it with foreign currency, drawing down its foreign reserves.

   b. What are the limits of the official reserve transactions approach to resolving balance-of-payments crises?

      The limits are set by the amount of foreign reserves of the central bank.

   c. In a balance-of-payments crisis, what kind of interest rate policies will be used?

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To attempt to shift the S_F curve to the right, the central bank will increase the domestic interest rate.

d. What are the limits of the interest rate approach to resolving balance-of-payments crises?

Higher domestic interest rates suppress domestic investment and therefore tend to be recessionary.

3. The argument in favor of current account convertibility (free trade) is that it leads to gains from trade. Are there any reasons you can think of why we might not be able to extend this argument to the financial transactions of the capital/financial account? Or to put it differently, are there any ways that financial markets differ from merchandise and service markets?

There is no one correct answer here. However, the recognition that financial markets are characterized by market imperfections and tend to be volatile will be a key part of any answer.

4. Take the crisis varieties in Table 20.1 and try to list the ways in which one can contribute to another.

There is no one correct answer here. But the answer should reflect the discussion in the text. Periods of hyperinflation can contribute to currency crashes. As significant degrees of inflation occur, asset owners move out of domestic-currency-denominated assets into foreign-currency-denominated assets to maintain the value of portfolios. This is a decrease in demand for the domestic currency relative to the foreign currency and puts downward pressure on the value of the domestic currency. Banking crises are often set off by asset price deflation or the bursting of financial bubbles such as land prices, capital inflow surges and financial sector liberalization, all of which can work in tandem with one another. National governments have historically turned to inflation to reduce the real (price-adjusted) value of domestic debt obligations. As with banking crises and external debt crises, preceding inflows of capital are often a contributing factor. Sudden stops interact with banking sectors to cause banking crises. It therefore appears that sudden stops, banking crises and contagion can all be related to one another.

5. Suppose you were tasked with the responsibility of developing a set of *leading indicators* of crises. What would you include in this set and why?

The potential leading indicators might focus on the bond finance and commercial bank lending balances of the capital account. They would consider gross flows as well as net flows, in particular gross inflows. These leading indicators could also keep track of the central bank reserves as well as some measure of the quality of prudential regulation of the financial sector.

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CHAPTER 21
Monetary Unions

Chapter Objectives

Every student wants to learn about "the euro," and many texts oblige with a chapter on "the euro." Here we take a slightly broader view of "monetary unions" and include the CFA franc zone and the rand zone as well. A discussion of optimal currency areas places these topics into some theoretical perspective. This chapter, in combination with the section of Chapter 9 on the European Union from the perspective of preferential trade agreements, completes the book's treatment of the EU. While there are sections on adjustment in the EMU and the current crisis, these will date quickly. Use the financial press for more recent events.

Analytical elements for this chapter:

Countries, currencies, financial assets.

Chapter Outline

The European Monetary Union at a Glance
Planning the European Monetary Union
    Box: Piere Werner
Implementing the European Monetary Union
    Box: Battles over the ECB Head
Optimal Currency Areas and Adjustment in the EMU
The EMU and the Global Financial Crisis
    Box: Poland, the EMU and the GFC
Monetary Unions in Africa
Conclusion

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Teaching Notes

In beginning your discussion of monetary unions in class, it would be useful to refer to preferential trade agreements (PTAs) as covered in Chapter 9. This will remind students that the topics are linked in the process of regional integration. Revisit Table 9.2 in doing this to place monetary unions in some context.

The initial material on the evolution of the EMU is historical. Space constraints prohibit a full-blown historical treatment, but your students will appreciate any additional historical depth you provide to them with regard to European monetary integration. You can especially draw from Dinan (2010) and Eichengreen (2008), referenced in the chapter. Be sure to draw students' attention to the levels of debt of Italy and Greece upon entry into the EMU (Table 21.1). These have implications for the current crisis. On adjustment within the EMU, it is worth spending time with Equation 21.1:

$$\text{Foreign currency wage for member } i = \frac{1}{e} x \frac{w_i}{P} \qquad (21.1)$$

For a recent consideration of the failure of the ECB to address deflation, see *The Economist* (2020) "Inflation: Off Target," September 19.

The case of Poland discussed in the box is worth considering to assist in the critical evaluation of monetary unions. Is it worth adopting a fixed exchange rate a part of a monetary union? Or does maintaining and independent currency under a floating exchange rate offer a better alternative?

For completeness and more global coverage, the chapter considers the CFA franc zone and the rand zone. In my experience, students do indeed have an interest in these arrangements. The CFA franc zone is also useful in that it contrasts with the EMU in handling the external rate via a fixed exchange rate with (conveniently for classroom discussion) the euro itself. Further, there were some important changes in 2020 that just made it into the book as it was going into production.

The material of this chapter will date very fast. It only covers the current EMU crisis through the end of 2019. You will need to provide updates to what is presented in the book.

Comments on Review Exercises

1. Imagine that, suddenly, the US dollar was abolished and each state of the United States introduced its own currency (the Arizona, the Montana, the Wyoming, etc.). Would this alter economic life in the United States? How so? What problems would it entail?

   There is no one correct answer here, but the student should focus on transactions costs in trade and investment, even if he or she does not use the term "transactions costs."

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2. Three European Union countries (the United Kingdom, Sweden, and Denmark) chose not to be part of the EMU. Can you think of any reasons why they would do so?

   Again, there is no one correct answer here. However, issues of sovereignty are key, as well as a "wait and see" regarding the euro and the operation of the ECB. For students in international relations programs, the role of "eurosceptics" will also be relevant. More generally, participation in the EMU significantly limits the policy space to respond to shocks.

3. Have you or your classmates had any experiences with the euro or the CFA franc? What are they?

   This is a good question for class discussion, as well as for travel tales among students.

4. Do you have any ideas for how the adjustment problems and current crisis in the EMU could be better addressed?

   Again, there no one correct answer. Current discussions of issuing joint debt instruments are relevant, as is the degree of "haircuts" required in some circumstances (e.g., recently in Greece). At a more detailed level, macroeconomic adjustment in surplus countries (e.g., Germany) comes into play. Is there a way to increase consumption in Germany and promote services sector? This is a perennial topic of discussion.

5. One region in which there are many discussion of monetary union is Latin America. Are there any countries in Latin American qualify as an optimum currency area?

   The answer here is "clearly not." However, the discussion is important and one that can be usefully done in class to illustrate the notion of optimum currency areas. This discussion is not just theoretical, since at one time, Latin American monetary union was a serious topic of discussion.

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CHAPTER 22
Growth in the Open Economy

Chapter Objectives

This is an important chapter that covers a lot of ground. Particularly for development studies programs, there is ample opportunity to delve further into any number of topics with supplementary readings. The main purpose of the chapter is to introduce the student to growth theory and its empirical assessment. It tries to do this in as straightforward manner as possible, eschewing most of the algebra (and calculus) of growth theory. In the process, it considers poverty and the important role of human capital (and therefore human development) for growth. It also considers the important role of institutions and "openness."

The literature in this area is vast, and research on this topic takes place in some central international organizations, including the World Bank, the International Monetary Fund, and (regarding "openness") the World Trade Organization. You should feel free to draw on research not cited in this chapter.

Analytical elements for this chapter:

Countries, factors.

Chapter Outline

Growth
Old Growth Theory
New Growth Theory and Human Capital
Trade and Growth
    Box: Trade and Growth in East Asia
Institutions and Growth
Conclusion
Appendix: Growth Theory Algebra

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Teaching Notes

Before diving into growth per se, it is worth communicating to your students the limits of the growth (per-capita income) perspective and some relevant alternatives, including the human development approach. If you wish to, you can make mention of the field of development ethics, which addresses various approaches to outcomes assessment. GDP per capita is only one such approach and is not meant to measure human welfare or well-being. It is also worth mentioning the distinction between GDP and GNI covered in the appendix to Chapter 14.

The chapter uses Ghana as a point of reference. If you were to bring another country to class as an additional point of reference, students would appreciate it.

The chapter begins with a treatment of old growth theory, in a simple graphical form. The key thing to differentiate for your students here is the difference between a movement along a curve and a shift of the curve. This is essential if they are to gain an intuitive understanding of growth theory issues. Make sure you spend the time so that they can make this distinction. The policy implication of this discussion is contained in the box:

> Increases in per capita incomes can come about through increases in the capital-labor ratio (capital deepening) or through other shift factors including, but not limited to, improvements in technological efficiency.

Understanding the role of savings in this process requires a quick glance back at open economy accounts of Chapter 14, and this is an opportunity for a bit of review of these accounts.

Regarding Solow residuals, it is worth a few minutes discussion in class to make a list of what possible could cause them. Referring to them as "a measure of our ignorance" reinforces for the student that there is much to learn regarding the determinants of growth.

The role of institutions and development is taken up using Table 22.1 as a reference point. The literature here is vast, and the discussion in the chapter is illustrative but not complete. In programs with a focus on development, international relations, and global political economy, this is an area in which you will want to expand. Feel free to use this table as a jumping-off device and to expand on it in ways that you see fit. There is much to explore here.

Comments on Review Exercises

1. Given the discussion of this chapter with regard to trade, education, health and institutions, what policies do you think countries ought to pursue to ensure that international trade supports increases in per capita incomes?

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While there is no one, correct answer here, the set of relevant policies (what the World Bank calls "complementary" trade policies) would be focused on human capital and human asset accumulation.

2. Are there any connections you can find between the discussion of this chapter and that on leveraging international production covered in Chapter 12? Look back at Chapter 12 and try to be as specific as you can.

   Human capital is key here. It is involved in growth but also involved in attracting certain kinds of FDI and participating in global value chains. The presence of human capital makes positive spillovers from international production more likely.

3. The World Bank suggested that there are important externalities associated with exports. In general, such positive externalities call for subsidies on the part of governments. Given our discussion of the GATT/WTO system in Chapter 8, do you detect any problems with the use of *export subsidies*?

   Export subsidies are problematic within the GATT/WTO framework. They are illegal, with a long-standing exception made for agricultural products.

4. This is one of the few chapters in which we mentioned *gender* issues in our discussion. Are there any other aspects of the world economy in which gender issues are important? How might these issues arise in the realms of international trade, international production, and international finance?

   To the extent that occupations are gender specific, the operation of comparative advantage can have impacts on gender issues. Some multinational enterprises favor women workers for their nimble fingers and "docile nature." Also, it has been observed in the development literature that women's time (or lack thereof) has been an important endogenous variable in macroeconomic adjustment to shocks.

5. Consider a country with which you have some familiarity. Using Table 22.1 as a rough guide, what can you say about the institutional qualities of that country?

   There is no one correct answer here, but this is a useful subject for student papers and, potentially, classroom presentations.