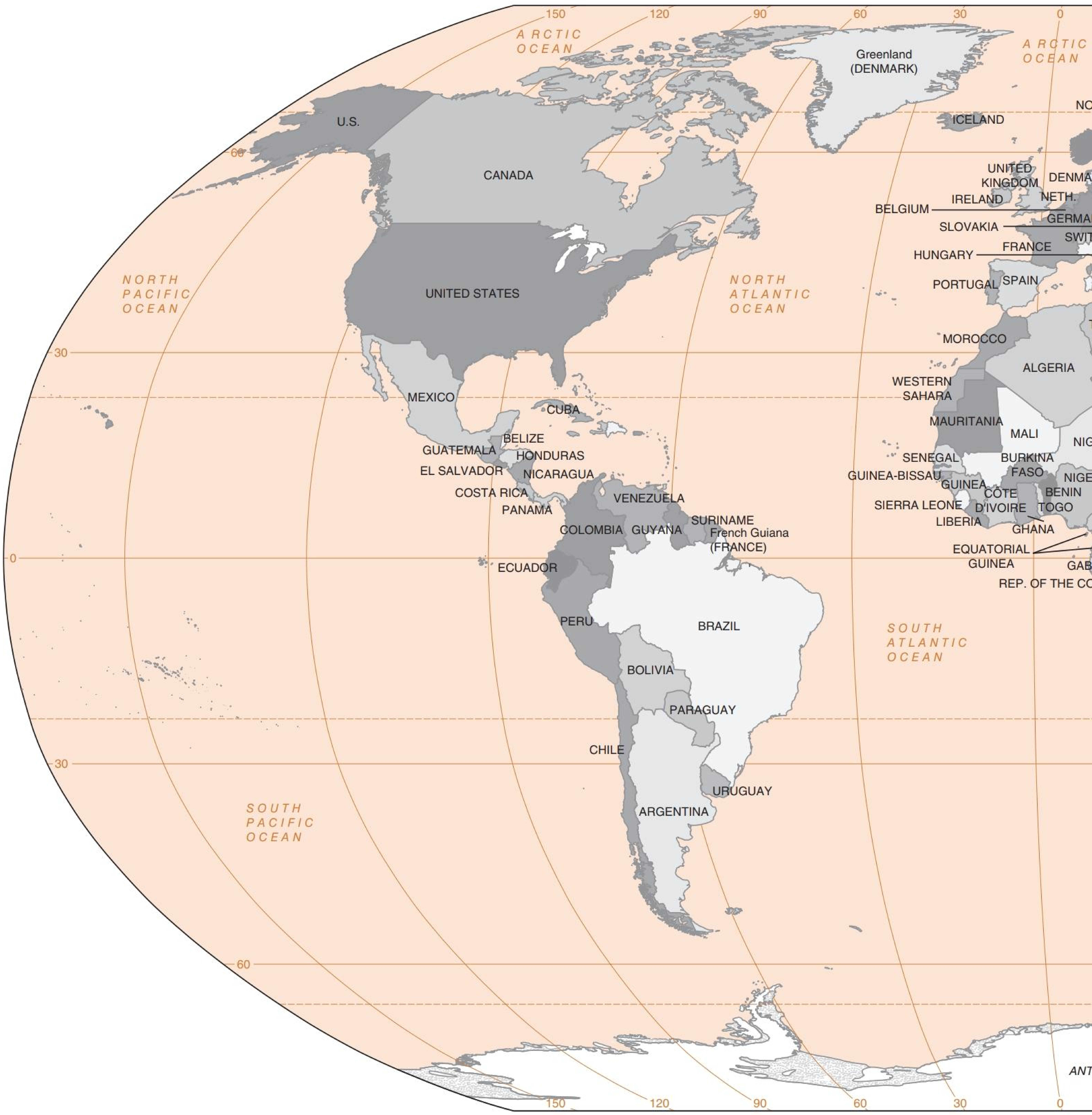
INTERNATIONAL ECONOMICS

SEVENTEENTH EDITION

ROBERT J. CARBAUGH



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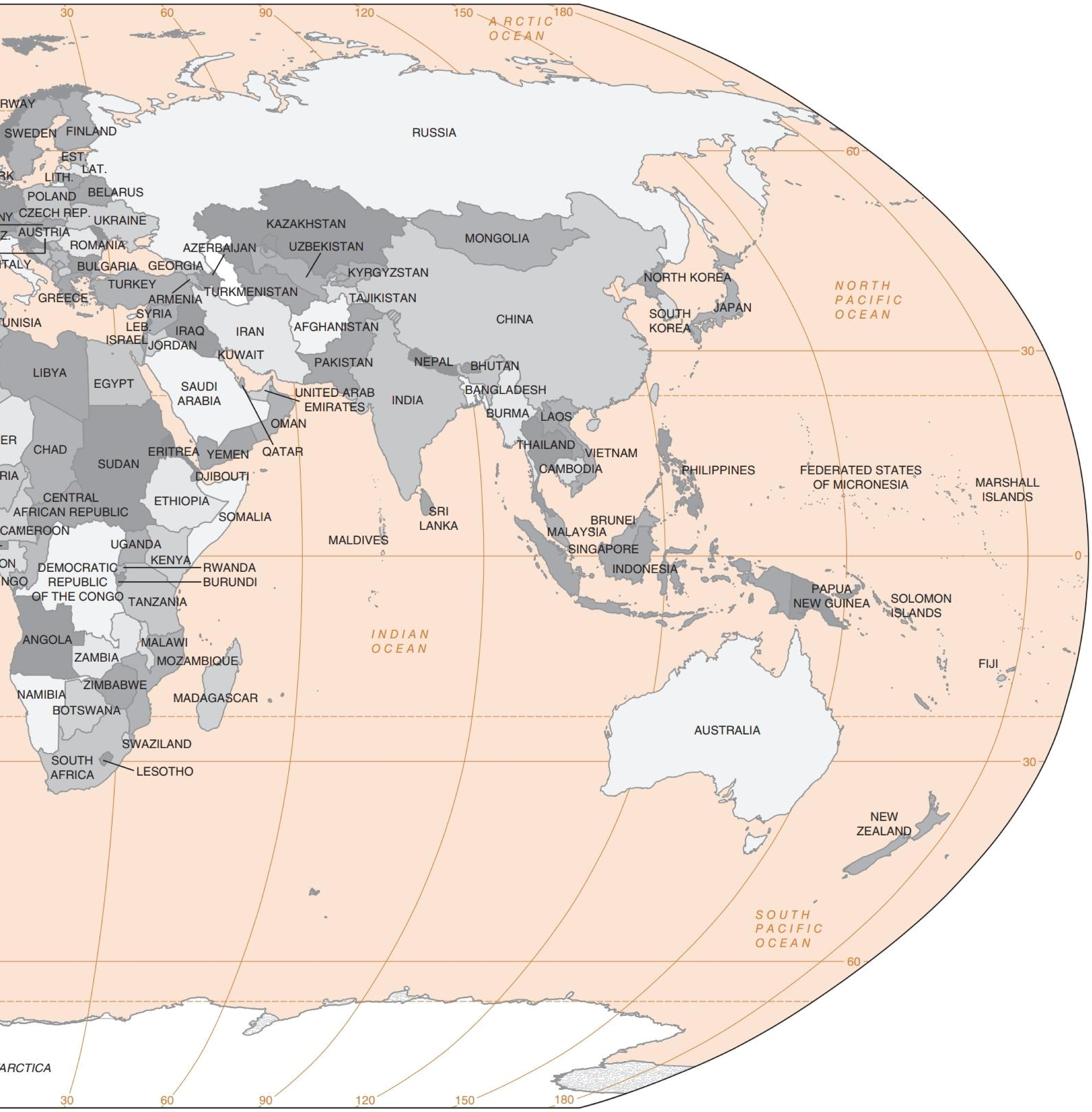
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International Economics

SEVENTEENTH EDITION

ROBERT J. CARBAUGH
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***International Economics,*
Seventeenth edition**

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Brief Contents

Contents

Preface

I believe the best way to motivate students to learn a subject is to demonstrate how it is used in practice. The first sixteen editions of *International Economics* reflected this belief and were written to provide a serious presentation of international economic theory with an emphasis on current applications. Adopters of these editions strongly supported the integration of economic theory with current events.

The seventeenth edition has been revised with an eye toward improving this presentation and updating the applications as well as including the latest theoretical developments. Like its predecessors, this edition is intended for use in a one-quarter or one-semester course for students having no more background than principles of economics. This book's strengths are its clarity, organization, and applications that demonstrate the usefulness of theory to students. The revised and updated material in this edition emphasizes current applications of economic theory and incorporates recent theoretical and policy developments in international trade and finance. Here are some examples.

INTERNATIONAL ECONOMICS THEMES

This edition highlights five current themes that are at the forefront of international economics:

■ GLOBALIZATION OF ECONOMIC ACTIVITY

- Is international trade an opportunity or a threat to workers?—Ch. 1
- U.S. apple growers and competition from China—Ch. 1
- Is international trade responsible for the loss of American jobs?—Ch. 3
- Shifting competitiveness in shipping routes—Ch. 3
- How containers revolutionized the world of shipping—Ch. 3
- Factor mobility, exit barriers, and trade—Ch. 2
- Dynamic gains from digital trade—Ch. 2
- Wooster, Ohio bears brunt of globalization—Ch. 2
- Comparative advantage and global supply chains—Ch. 2
- Caterpillar bulldozes Canadian locomotive workers—Ch. 9
- The Tax Cuts and Jobs Act of 2017: Apple Plans to Build a New Campus—Ch. 9
- Diesel engines and gas turbines as engines of growth—Ch. 1
- Waves of globalization—Ch. 1
- Constraints imposed by capital flows on the choice of an exchange rate system—Ch. 14

FREE TRADE AND PROTECTIONISM

- Does trade with China take away blue-collar American jobs?—Ch. 3
- Would a tariff wall protect American jobs?—Ch. 4
- Donald Trump's border tax: How to pay for the wall—Ch. 4
- Vaughan Basset Furniture and dumping—Ch. 5
- U.S. lifts its restrictions on oil exports—Ch. 6
- U.S. Export-Import Bank avoids shutdown—Ch. 6
- Whirlpool agitates for antidumping tariffs on clothes washers—Ch. 5
- Wage increases and China's trade—Ch. 3
- Should shoe tariffs be stomped out?—Ch. 4
- Element Electronics brings TV manufacturing back to the United States—Ch. 1
- Government procurement policies and buy American—Ch. 5
- Carbon tariffs—Ch. 6
- Carrier agrees to keep jobs in India—Ch. 6
- Lumber imports from Canada—Ch. 6
- Bangladesh's sweatshop reputation—Ch. 7
- Does the principle of comparative advantage apply in the face of job outsourcing?—Ch. 2
- Trade adjustment assistance—Ch. 6
- North Korea and economic sanctions—Ch. 6
- Boeing outsources work, but protects its secrets—Ch. 2
- WTO rules against subsidies to Boeing and Airbus—Ch. 6
- Does wage insurance make free trade more acceptable to workers?—Ch. 6
- China's hoarding of rare earth metals declared illegal by WTO—Ch. 6
- The environment and free trade—Ch. 6

TRADE CONFLICTS BETWEEN DEVELOPING NATIONS AND INDUSTRIAL NATIONS

- Russia hit by sanctions over Ukraine—Ch. 6
- U.S. economic sanctions and Iran—Ch. 6
- Declining oil prices test OPEC—Ch. 7
- China's economic challenges U.S.–Mexico tomato dispute—Ch. 8
- Is state capitalism winning?—Ch. 7
- Canada's immigration policy—Ch. 9
- Is international trade a substitute for migration?—Ch. 3
- Economic growth strategies: Import substitution versus export-led growth—Ch. 7
- Does foreign aid promote the growth of developing countries?—Ch. 7
- The globalization of intellectual property rights—Ch. 7
- Microsoft scorns China's piracy of software—Ch. 6
- China's export boom comes at a cost: How to make factories play fair—Ch. 7
- Do U.S. multinationals exploit foreign workers?—Ch. 9

- **LIBERALIZING TRADE: THE WTO VERSUS REGIONAL TRADING ARRANGEMENTS**
- Modernizing NAFTA—Ch. 8
- Brexit and the Eurozone—Ch. 8
- Free-trade agreements bolster Mexico—Ch. 8
- Deflation and the Eurozone—Ch. 8
- Does the WTO reduce national sovereignty?—Ch. 6
- Regional integration versus multilateralism—Ch. 8
- Will the euro survive?—Ch. 8

- **TURBULENCE IN THE GLOBAL FINANCIAL SYSTEM**
- Foreign currency trading becomes automated—Ch. 11
- Is Trump's trade doctrine misguided?—Ch. 10
- Germany's current account surplus—Ch. 10
- The sinking of Russia's ruble—Ch. 14
- Swiss franc soars after exchange rate peg scrapped—Ch. 14
- Reserve currency burdens for the United States—Ch. 11
- Foreign exchange market rigging—Ch. 12
- Exchange rate misalignments—Ch. 12
- Does currency depreciation stimulate exports?—Ch. 14
- Currency carry trade—Ch. 11
- China announces currency independence—Ch. 15
- People's Bank of China punishes speculators—Ch. 11
- Currency manipulation and currency wars—Ch. 14
- Paradox of foreign debt: How the United States borrows at low cost—Ch. 10
- Why a dollar depreciation may not close the U.S. trade deficit—Ch. 13
- Japanese firms send work abroad as yen makes its products less competitive—Ch.13
- Preventing currency crises: Currency boards versus dollarization—Ch. 14

ORGANIZATIONAL FRAMEWORK: EXPLORING FURTHER SECTIONS

Although instructors generally agree on the basic content of the international economics course, opinions vary widely about what arrangement of material is appropriate. This book is structured to provide considerable organizational flexibility. The topic of international trade relations is presented before international monetary relations, but the order can be reversed by instructors choosing to start with monetary theory. Instructors can begin with Chapters 10–15 and conclude with Chapters 2–9. Those who do not wish to cover all the material in the book can easily omit all or parts of Chapters 6–9 and Chapters 14–15 without loss of continuity.

The seventeenth edition streamlines its presentation of theory to provide greater flexibility for instructors. This edition uses online *Exploring Further* sections to discuss more advanced topics. By locating the *Exploring Further* sections within

MindTap rather than in the printed textbook, more textbook coverage can be devoted to contemporary applications of theory. The *Exploring Further* sections consist of the following:

- Comparative advantage in money terms—Ch. 2
- Indifference curves and trade—Ch. 2
- Offer curves and the equilibrium terms of trade—Ch. 2
- The specific-factors theory—Ch. 3
- Offer curves and tariffs—Ch. 4
- Trump's American First Program: Steel and Aluminum Tariffs—Ch. 4
- Tariff-rate quota welfare effects—Ch. 5
- Export quota welfare effects—Ch. 5
- Welfare effects of strategic trade policy—Ch. 6
- Government procurement policy and the European Union—Ch. 8
- Economies of scale and NAFTA—Ch. 8
- Techniques of foreign-exchange market speculation—Ch. 11
- A primer on foreign-exchange trading—Ch. 11
- Fundamental forecasting–regression analysis—Ch. 12
- Mechanisms of International Adjustment—Ch. 13
- Exchange rate pass-through—Ch. 13
- International Banking: Reserves, Debt, and Risk—Ch. 15

REPOSITIONING OF TWO CHAPTERS

The sixteenth edition of *International Economics* included Chapter 13 ("Mechanisms of International Adjustment") and Chapter 17 ("International Banking: Reserves, Debt, and Risk"). In order to most effectively streamline the content of the seventeenth edition, these chapters have been repositioned as part of the *Exploring Further* sections that are discussed in the previous section of this preface.

SUPPLEMENTARY MATERIALS

MindTap: Empower Your Students MindTap is a platform that propels students from memorization to mastery. It gives you complete control of your course, so you can provide engaging content, challenge every learner, and build student confidence. Customize interactive syllabi to emphasize priority topics, then add your own material or notes to the eBook as desired. This outcomes-driven application gives you the tools needed to empower students and boost both understanding and performance.

Access Everything You Need in One Place Cut down on prep with the preloaded and organized MindTap course materials. Teach more efficiently with interactive multimedia, assignments, quizzes, and more. Give your students the power to read, listen, and study on their phones, so they can learn on their terms.

Empower Students to Reach Their Potential Twelve distinct metrics give you actionable insights into student engagement. Identify topics troubling your entire class and instantly communicate with those struggling. Students can track their scores to stay motivated toward their goals. Together, you can be unstoppable.

Control Your Course—and Your Content Get the flexibility to reorder textbook chapters, add your own notes, and embed a variety of content including Open Educational Resources (OER). Personalize course content to your students' needs. They can even read your notes, add their own, and highlight key text to aid their learning.

Get a Dedicated Team, Whenever You Need Them MindTap isn't just a tool, it's backed by a personalized team eager to support you. We can help set up your course and tailor it to your specific objectives, so you'll be ready to make an impact from day one. Know we'll be standing by to help you and your students until the final day of the term.

PowerPoint Slides The seventeenth edition also includes updated PowerPoint slides. These slides can be easily downloaded from the instructor's companion website (http://login.cengage.com).

Instructor's Manual To assist instructors in the teaching of international economics, there is an *Instructor's Manual* that accompanies the seventeenth edition. The manual contains brief answers to the end-of-chapter study questions and is available for download from the instructor's companion website (http://login.cengage.com).

Test Bank The test bank provides items for instructors' reference and use. It contains a variety of question formats in varying levels of difficulty. Cognero® software makes test preparation, scoring, and grading easy. Featuring automatic grading, Cognero® allows you to create, deliver, and customize tests and study guides (both print and online) in minutes.

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I would appreciate any comments, corrections, or suggestions that faculty or students wish to make so I can continue to improve this text in the years ahead. Please contact me! Thank you for permitting this text to evolve to the seventeenth edition.

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About the Author

When students take my economics courses at Central Washington University, on the first day of class I ask them to stand up, go around the classroom, and meet all of the other students in the class. I feel that we are a community of learners and that getting to know each other is very important. So allow me to tell you a little about myself and how I became the author of *International Economics*.

I was born in the year that the famous British economist, John Maynard Keynes died (you can look it up if you wish). I proudly remind my fellow economists that this allows me to be the successor of Keynes, and that since that time all great ideas come from me. However, I can't figure out why they are not impressed with my conclusion—to me, it seems obvious. But it should be noted that I was born without much hair, and I maintain this characteristic even today.

Growing up in Spokane, Washington, I came from a family of Mom & Dad and five brothers and sisters. We lived in a modest three-bedroom house with one bathroom and bunk beds for the kids. It was at this time that I first learned about productivity in terms of not tying up the bathroom. Also, I enthusiastically played baseball from little-league through high school. I was a pitcher who threw a fastball (it wasn't that fast), a roundhouse curveball, and a change-up. Being able to hit for a high percentage, I played left field while not pitching. I also played club hockey, competed in local golf tournaments, and eventually got into running 10K races.

As for music, 1950s rock was fun. Looking back in life, I wish that I had learned to play a saxophone so I could have played in a Fifties rock band. However, the folk music of the late 1950s and 1960s had the biggest musical influence on my life, and it still does. Without musical background, my friends and I bought cheap guitars and we learned how to play folk songs while listening to 33 1/3 LPs (not CDs) by groups such as the Kingston Trio, Brothers Four, and New Christy Minstrels. One of my friends became the banjo player with the Brothers Four which still makes CDs and plays at concerts worldwide.

By the time I went to Gonzaga University, I was becoming quite serious about my education, and I enjoyed being challenged by my professors and fellow students. To help finance my college education, I worked at many part-time jobs: I washed dishes at the student dining hall, pumped gas and performed mechanical work at gasoline stations, stocked bottles of liquor on the shelves of the Garland Liquor Store, drove a delivery truck with cement blocks for the Spokane Block Co, bailed hay for farmers, and so on. These were learning experiences. In 1969 I graduated from Gonzaga with a bachelor's degree in economics and a minor in philosophy/theology. It was at this time that I met my wife, Cathy—we now have four daughters and nine grandchildren.

While attending Lewis and Clark High School, I thought about becoming a high-school social studies teacher. But along came economics classes at Gonzaga and I found a college major that I was very excited about. During my junior year, one of my professors had to miss two of his principles of economics classes. After my pleading with him, he allowed me to be his substitute teacher, and I presented lectures dealing with supply and demand. A “light bulb” turned on in my head, and I knew what career I wanted to pursue—a college economics professor. But this required getting an advanced degree in economics. So off I went to Colorado State University where I combined graduate education with a great outdoors environment. In the high altitude of Fort Collins, Colorado (5,003 feet above sea level), I could drive a golf ball a long way. I received my Ph.D. in economics in 1974.

My first college teaching job was at South Dakota State University in 1974 where I learned a lot about growing corn. This was followed by my teaching for ten years at University of Wisconsin–Eau Claire where I learned about the Green Bay Packers, brats and cheese, minus 40 degree winters, and humid summers. I returned to my home state of Washington in 1985 to teach at Central Washington University. Two memorable experiences include being featured on *Saturday Night Live* in 2000, when an actor impersonating Al Gore read from my *International Economics* textbook, and lecturing at Oxford University in England in 2004.

Concerning my *International Economics* textbook, I have not matched the success of J.K. Rowling and her *Harry Potter* books—Rowling’s magic is much better than mine. Yet I identify with some of her early experiences as an author, and perhaps the experiences of other authors. Aside from the difficulty in finding a house that was willing to publish our books, we had to learn how to deal with editors, marketing staff, and the business aspects of publishing. Success did not occur instantly and it was not easy.

My writing *International Economics* was motivated by my former students at the University of Wisconsin–Eau Claire in 1975. When I asked them what they hoped to get out of my international economics class, they indicated that they wanted to learn about the burning international economic issues at that time and that the materials used in the class should be concise, timely, and informative. Therefore, I set out to write the manuscript for *International Economics* long hand on a yellow writing pad (there were no computers at that time). Then I typed the manuscript using an ancient, black-colored Underwood typewriter with no self-correct mechanism. When a typing error occurred, I brushed white-colored Liquid Paper over the typo; I had to wait for it to dry before typing the correct key. Ugh, what an effort! But life seemed good at that time, particularly because I thought that I was on the cutting edge. This resulted in the first edition of *International Economics* appearing in 1980. Since that time, I have been most fortunate to have many opportunities to revise and improve this text, resulting in the current seventeenth edition. It has been a long journey but also a labor of love. I hope that you find this edition to be interesting and user friendly. Best wishes.

Bob Carbaugh

P.S. My students have mistakenly identified me as driving a Hummer around Central Washington University. Rather than driving a Hummer, I usually walk or ride a single-speed, imported Schwinn bike (Schwinns are now manufactured in China) to and from my office. When I do drive, it is usually in a rapidly deteriorating 1997 Dodge Caravan—something appropriate for an aging and cranky economics professor.

CHAPTER

1 The International Economy and Globalization

In today's world, no nation exists in economic isolation. All aspects of a nation's economy—its industries, service sectors, levels of income and employment, and living standard—are linked to the economies of its trading partners. This linkage takes the form of international movements of goods and services, labor, business enterprise, investment funds, and technology. Indeed, national economic policies cannot be formulated without evaluating their probable impacts on the economies of other countries.

The high degree of **economic interdependence** among today's economies reflects the historical evolution of the world's economic and political order. At the end of World War II, the United States was economically and politically the most powerful nation in the world, a situation expressed in the saying, "When the United States sneezes, the economies of other nations catch a cold." But with the passage of time, the U.S. economy has become increasingly integrated into the economic activities of foreign countries. The formation in the 1950s of the European Community (now known as the European Union), the rising importance in the 1960s of multinational corporations, the market power in the 1970s enjoyed by the Organization of Petroleum Exporting Countries (OPEC), the creation of the euro at the turn of the twenty-first century, and the rise of China as an economic power in the early 2000s have all resulted in the evolution of the world community into a complicated system based on a growing interdependence among nations.

The Great Recession of 2007–2009 provides an example of economic interdependence. The immediate cause of the recession was a collapse of the U.S. housing market and the resulting surge in mortgage loan defaults. Hundreds of billions of dollars in losses on these mortgages undermined the financial institutions that originated and invested in them. Credit markets froze, banks would not lend to each other, and businesses and households could not get loans needed to finance day-to-day operations. This shoved the economy into recession. Soon the crisis spread to Europe whose banks were drawn into the financial crisis in part because of their exposure to defaulted mortgages in the United States. As these banks had to write off losses, fear and uncertainty spread regarding whether banks had enough capital to pay off their debt obligations. The financial crisis also spread to emerging economies such as Iceland and Russia that generally lacked the resources to restore confidence in their economic systems. It is no wonder that "when the United States sneezed, other economies caught a cold."

Recognizing that world economic interdependence is complex and its effects uneven, the economic community has taken steps toward international cooperation. Conferences devoted to global economic issues have explored the avenues through which cooperation could be fostered between industrial and developing nations. The efforts of developing nations to reap larger gains from international trade and to participate more fully in international institutions have been hastened by the impact of the global recession, industrial inflation, and the burdens of high-priced energy.

Over the past 50 years, the world's market economies have become increasingly interdependent. Exports and imports as a share of national output have risen for most industrial nations, while foreign investment and international lending have expanded. This closer linkage of economies can be mutually advantageous for trading nations. This link permits producers in each nation to take advantage of the specialization and efficiencies of large-scale production. A nation can consume a wider variety of products at a cost less than what could be achieved in the absence of trade. Despite these advantages, demands have grown for protection against imports. Protectionist pressures have been strongest during periods of rising unemployment caused by economic recession. Moreover, developing nations often maintain that the so-called liberalized trading system called for by industrial nations serves to keep the developing nations in poverty.

Economic interdependence also has direct consequences for a student taking an introductory course in international economics. As consumers, we can be affected by changes in the international values of currencies. Should the Japanese yen or British pound appreciate against the U.S. dollar, it would cost us more to purchase Japanese television sets or British automobiles. As investors, we might prefer to purchase Swiss securities if Swiss interest rates rise above U.S. levels. As members of the labor force, we might want to know whether the president plans to protect U.S. steelworkers and autoworkers from foreign competition.

In short, economic interdependence has become a complex issue in recent times, often resulting in strong and uneven impacts among nations and among sectors within a given nation. Business, labor, investors, and consumers all feel the repercussions of changing economic conditions and trade policies in other nations. Today's global economy requires cooperation on an international level to cope with the myriad issues and problems.

Economic Interdependence: Federal Reserve Policy Incites Global Backlash

Economic interdependence is part of our daily lives. When domestic economic policies have spillover effects on the economies of other countries, policymakers must take these into account. This is why major countries frequently meet to discuss the impacts of their policies on the world economy. Consider the effects of the Federal Reserve's policies on other economies, as discussed below.

For decades, the Federal Reserve (Fed) has attempted to fulfill its mandate to promote full employment, price stability, and economic growth for the U.S. economy. Pursuing these objectives can impose adverse spillover effects on economies of other nations, as seen in the following example.

In response to the Great Recession of 2007–2009, the Fed attempted to grow the U.S. economy by purchasing large amounts of long-term securities; this policy was called quantitative easing. The idea was to pump additional money into the economy that would cause long-term interest rates to fall. This would encourage Americans to spend more on investment and big ticket consumption items, thus stimulating the economy. However, critics doubted that the program would work and maintained that it might cause an increase in inflationary expectations that could destabilize the economy.

Also, the Fed's program was criticized by U.S. trading partners such as Germany and Brazil, as an attempt to improve American competitiveness at their expense. They noted that printing more dollars or cutting U.S. interest tends to cause depreciation in the dollar's exchange value, which will be explained in Chapter 11 of this text. If the value of the dollar decreases, other countries' exports become more expensive for American consumers, thus reducing the amount of goods the United States imports from the rest of the world. The accompanying rise in the exchange value of other countries' currencies makes American goods cheaper for foreign consumers to purchase, which should increase the amount of exports leaving the United States. This would benefit U.S. producers, who would likely increase hiring to meet the increased production requirements of the increased global demand for their exports. What's more, the rest of the world's producers would see their exports fall, resulting in job losses for their workers. Producers in the United States would gain at the expense of producers abroad.

However, Federal Reserve officials challenged this argument by stating that the purpose of their program was not to push down the dollar in order to disadvantage America's trading partners. Instead, it was an attempt to grow the economy, which is not just good for the United States, but for the world as a whole. A depreciation of the dollar was only a side effect of a growth-oriented policy, not the purpose of the policy. This argument did not dampen the fears of foreigners regarding the Fed's monetary policy, and their criticism continued.

Globalization of Economic Activity

When listening to the news, we often hear about globalization. What does this term mean? **Globalization** is the process of greater interdependence among countries and their citizens. It consists of the increased interaction of product and resource markets across nations via trade, immigration, and foreign investment—that is, via international flows of goods and services, people, and investments in equipment, factories, stocks, and bonds. It also includes noneconomic elements such as culture and the environment. Simply put, globalization is political, technological, and cultural, as well as economic.

In terms of people's daily lives, globalization means that the residents of one country are more likely now than they were 50 years ago to consume the products of another country, invest in another country, earn income from other countries, talk by telephone to people in other countries, visit other countries, know that they are being affected by economic developments in other countries, and know about developments in other countries.

What forces are driving globalization?[1] The first, and perhaps most profound, influence is technological change. Since the Industrial Revolution of the late 1700s, technical innovations have led to an explosion in productivity and slashed transportation costs. The steam engine preceded the arrival of railways and the mechanization of a growing number of activities hitherto reliant on muscle power. Later discoveries and inventions such as

[1]World Trade Organization, *Annual Report*, 1998, pp. 33–36.