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To my world of women, Emma, Britt, Laura and Ann
— Geert

To my wife, Laurie, and my children, Reid and Courtney,
with love — Bob

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PREFACE

When we were graduate students, we chose to study international finance because we wanted to understand issues such as how exchange rates are determined and how people manage the risks that fluctuations in exchange rates create. We also recognized that the economic forces that people now call *globalization* were trends that would only increase in importance over time. We like to think that we made a good call on our careers because, without a doubt, globalization of business is now a fact. Our goal with this book is to equip future global business leaders with the tools they need to understand the issues, to make sound international financial decisions, and to manage the myriad risks that their businesses face in a competitive global environment.

Over the years, the markets for goods and services as well as capital and labor have become increasingly open to the forces of international competition. All business schools have consequently "internationalized" their curriculums. Nevertheless, our combined 54 years of teaching experience indicates that most students will not be ready for the real world, with its global complications, unless they know the material in this book. They will not really understand how fluctuations in exchange rates create risks and rewards for multinational corporations and investment banks, and they will not understand how those risks can be managed. They will not really understand how to determine the value of an overseas project or the nature of country risk. The purpose of this book is to prepare students to deal with these and other real-world issues.

THIS BOOK'S APPROACH: MAKING BETTER DECISIONS BY BLENDING THEORY AND PRACTICE WITH REAL-WORLD DATA ANALYSIS

International Financial Management, 2nd Edition, continues to blend theory, the analysis of data, examples, and practical case situations to allow students to truly understand not only what to do when confronted with an international financial decision but why that decision is the correct one. When we explore international financial markets, we do so with an eye on risk management. We thereby incorporate practical considerations into what other textbooks take as background theory or institutional detail.

Multinational companies face a daunting array of risks, but they also have a wide variety of financial instruments available to manage them. In this book, we detail the sources of risks that arise in international financial markets and how these risks can be managed. For example, a basic risk of international trade involves the fact that goods are being shipped out of the country. How does an exporter make sure that he is paid? We do not stop at identifying the risks and showing how to manage them; we also reflect on why a firm should manage them and how that management affects the firm's value. We do this by developing the valuation methodologies needed to determine the value of any foreign project—from the establishment of a foreign subsidiary to the takeover of a foreign company. Because we have a well-defined valuation methodology, we present international financial management using

a modern, theoretically correct approach, building on the newest insights from international corporate finance. How international risk management affects the value of a firm falls out naturally from our framework. We also provide considerable detail about the institutional aspects of international financial markets for debt and equity. For example, we show how firms can obtain international equity financing, but we also discuss theories and empirical work on the costs and benefits of these decisions.

What's New in the Second Edition

In the new edition, all data have been updated to reflect the most recent information. The newest research ideas in international finance are reflected in the text. Some examples include an in-depth discussion of novel research on why the carry trade makes money and the risks involved in Chapter 7; a discussion of new research on exchange rate determination that explains why exchange rates are so hard to predict in Chapter 10; and new terminal value calculations in Chapter 16.

Between the writing of the first edition and this one, a global financial crisis has roiled markets and economies, and its ramifications are explored in many different chapters. Chapter 1 contains a general discussion of the crisis, and Chapter 2 explores the effects of the crisis on transactions costs in the foreign exchange market. Chapter 6 covers the breakdown of covered interest rate parity during the crisis, and Chapter 18 examines its effects on trade finance. Chapter 20 reflects on how emerging-market companies dabbling in exotic options got burned when the dollar became a safe haven during the crisis. Lessons from the crisis are drawn throughout the book. Chapter 20 now also includes an appendix that discusses the valuation of foreign currency options, and a spreadsheet is available to do the calculations.

While the first edition explored the developments leading up to monetary union in Europe, we now put this material to good use to more fully understand the recent European sovereign debt crisis in Chapter 5. Our swaps chapter (Chapter 21) now also includes a section on credit default swaps, which are important in understanding global sovereign debt markets and also played a role in the 2007 to 2010 global financial crisis.

This new edition also more prominently recognizes the increased importance of emerging markets. The so-called BRICs (Brazil, Russia, India, and China) account for an increasingly larger portion of the global economy, global trade, and global financial markets, with China dominating many debates about international business. Several of our new illustration boxes and examples provide insights about the Chinese economy and its place in global business. Chapter 1 discusses the attempted takeover of a U.S. oil company by a Chinese company; the *Point–Counterpoint* in Chapter 4 discuses the balance of payments imbalances between the United States and China and their consequences; Chapter 5 discusses China's capital controls; Chapter 12 its equity markets; and so on. We also analyze how Brazil's capital controls affect covered interest rate parity in Chapter 6.

Pedagogy for Students

This book necessarily combines theory and business practice. We provide plenty of real-world examples and case studies, and at the same time, we stress fundamental concepts, principles, and analytical theories that are bound to be more resilient to the constantly changing challenges of operating in a competitive global marketplace.

To help students develop an in-depth and enduring knowledge of international financial management, *International Financial Management,* 2nd Edition, incorporates the following features:

- **Real data analysis:** We incorporate the analysis of data in each relevant chapter to allow students to learn how well or poorly the current theories are supported by the data. All Exhibits in the 2nd Edition use the most recent data possible.
- **Extended cases:** Where relevant, we introduce and solve intricate cases that illustrate the application of theory. These case solutions can serve as templates for future analyses.
- ***Point–Counterpoint* features:** We reinforce the subtleties of many international financial management issues by presenting a *Point–Counterpoint* feature for each chapter. Many textbooks provide short, easy answers to difficult questions. That approach is fine when there is general agreement about an issue, but many situations are more subtle and intricate than standard books may lead the reader to believe. The *Point–Counterpoint* features are designed to raise issues that are contentious and that are often not fully resolved or well understood by the academic and practitioner communities. Each *Point–Counterpoint* feature ends by summarizing the state-of-the-art thinking on the issue.
- **Boxes:** We provide boxes to serve two purposes. First, they may contain concrete historical or current illustrations of important concepts introduced during the chapter. Second, they explore and illustrate basic finance concepts that are used in the chapter.
- **Appendixes:** We have included some mathematical and statistical material in appendixes to various chapters in an effort to make the book self-contained. We intend the book to be accessible to students with limited financial backgrounds.
- **End-of-chapter questions and problems:** At the end of each chapter, we have provided a set of interesting questions and problems that are designed to help students ensure that they have mastered the chapter material.
- **Bibliographies:** Each chapter contains a bibliography of further reading that contains not only citations to the books and articles mentioned in the text but also some additional readings that interested students can explore.

Materials for Instructors

At the Instructor Resource Center, located at www.pearsonhighered.com/irc, instructors can download a variety of print, digital, and presentation resources available for this textbook, including the following:

Solutions Manual
Test Item File
TestGen EQ
PowerPoint slides

Solutions Manual—Prepared by the authors, Geert Bekaert and Robert Hodrick. The Solutions Manual contains fully worked out solutions for all the end-of-chapter questions and problems.

Test Item File—Prepared by Dr. April Knill. The Test Item File for each chapter will contain approximately 25 multiple choice questions with fully worked out solutions, 5 short answer questions with answers, and 2 essays with answers. The question difficulty levels of each chapter will be approximately 60% easy, 30% moderate, and 10% difficult.

TestGen—The computerized TestGen package allows instructors to customize, save, and generate classroom tests. The test program permits instructors to edit, add, or delete

questions from the test banks; edit existing graphics and create new graphics; analyze test results; and organize a database of test and student results. This software allows for extensive flexibility and ease of use. It provides many options for organizing and displaying tests, along with search and sort features. The software and the test banks can be downloaded from the Instructor's Resource Center (www.pearsonhighered.com/irc).

PowerPoint slides—Prepared by Dr. April Knill. These entirely new PowerPoint slides provide the instructor with individual lecture outlines to accompany the text. The slides include many of the figures and tables from the text. These lecture notes can be used as is, or professors can easily modify them to reflect specific presentation needs.

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Your Feedback

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Chapter 1

Globalization and the Multinational Corporation

1.1 Introduction

The world economy is becoming increasingly globalized. Campuses have students from many different countries. The chips in your laptop computer may have come from Korea, and its software could have been developed by Indian engineers. We hope that during your study break, you savor some Italian espresso, although the "Italian" coffee beans that were roasted in Italy were likely grown in Indonesia or Brazil. The concept of **globalization** refers to the increasing connectivity and integration of countries and corporations and the people within them in terms of their economic, political, and social activities.

Because of globalization, multinational corporations dominate the corporate landscape. A **multinational corporation (MNC)** produces and sells goods or services in more than one nation. A prototypical example is the Coca-Cola Company, which operates in more than 200 countries. An MNC probably produces your favorite brew. For example, Anheuser-Busch In-Bev is a publicly traded company headquartered in Belgium with origins dating back to 1366. Over time, the local Belgian firm grew into an MNC called Interbrew, with famous brands such as Stella Artois and Leffe. In 2004, Interbrew and Companhia de Bebidas das Américas (AmBev), from Brazil, merged to create InBev; and in 2008, InBev acquired Anheuser-Busch, the brewer of Budweiser beer, to become Anheuser-Busch InBev. The company is now the largest brewer in the world by volume, producing 91 million hectoliters (hl) of beer in the first quarter of 2010.

The link between a large European company and a large company from an emerging economy is no coincidence. Recent years have seen strong growth in Brazil, Russia, India, and China (sometimes called the BRICs). Today, the BRICs account for 15% of the world's **gross domestic product (GDP)** and more than 50% of the GDP of all emerging countries. The integration of these emerging economies into the global economy was forcefully illustrated in 2006, with the creation of the world's largest steel company, ArcelorMittal. Mittal Steel, an Indian company, took over Arcelor, a European steel producer, which was created by an earlier merger of steel companies in France, Belgium, Luxembourg, and Spain. The fact that Arcelor's management at first opposed the takeover shows that globalization does not necessarily proceed smoothly.

The international scope of business creates new opportunities for firms, but it also poses many challenges as became abundantly clear in 2008 when a housing and mortgage crisis in

the United States morphed into a global financial crisis. This book provides a guide to financial management in an increasingly globalized world and, in particular, to the financial management problems that multinational firms face. In this introductory chapter, we first reflect generally on the globalization phenomenon. We then discuss multinational firms in more detail, including their effects on the economy and society at large. We also survey the different important players in this globalizing world, ranging from international banks to international institutions and institutional investors. We end with a quick preview of the book.

1.2 Globalization and the Growth of International Trade and Capital Flows

Globalization affects all aspects of society, but economically, two main trends define it. First, countries continue to expand their trade in goods and services. Second, countries continue to reduce their barriers to capital flows. We discuss each in turn.

The Growth of International Trade

Trade Liberalization

Beginning with the writings of David Ricardo in the 19th century, economists have known that countries gain from trade if each nation specializes in the production of those goods in which it has a **comparative advantage**. Even if one country is more productive at producing a given item than other countries, it should still focus its production on those goods in which it is relatively most efficient, and doing so will make all trading partners better off.[1] There also appears to be a link in the data between trade and growth: More open countries tend to grow faster.[2]

Unfortunately, protectionist tendencies have long kept the world relatively closed, with many countries restricting international trade through tariffs on imports, non-tariff barriers such as subsidies to local producers, quotas on imported products, onerous regulations applying to imported products, and so forth. Wacziarg and Welch (2008) pinpointed when various countries liberalized their trade regimes—in other words, when the countries became open to trade. They looked at a variety of criteria, including the extent of the countries' tariffs and non-tariff barriers, and state control on major export sectors. In 1960, only about 20% of countries were open to trade. These countries included the United Kingdom and the United States, who had a long tradition of openness to international trade, and many European countries that liberalized in 1959 or 1960, after the creation of the **European Economic Community (EEC)**. The EEC set out to establish free trade among a number of European countries, later turning into the European Union, which we describe further in Section 1.4.

The idea that economies should be open to trade got a further boost in the early 1980s, when Western governments started to deregulate their economies and privatize government firms. The fall of the Iron Curtain in 1990 and subsequent trade liberalizations occurring in many developing countries increased trade openness dramatically, with more than 70% of countries open to trade by 2000.

International Efforts to Promote Free Trade

The **General Agreement on Tariffs and Trade (GATT)**, signed in 1947, was designed to encourage free trade between member states by regulating and reducing tariffs on traded

[1]This law of comparative advantage will show up again when we discuss the foreign currency swap market in Chapter 21.

[2]Articles confirming such a link include Frankel and Romer (1999), Sachs and Warner (1995), Alcalá and Ciccone (2004), and Wacziarg and Welch (2008).

goods and by providing a common mechanism for resolving trade disputes. GATT signatories occasionally negotiated new trade agreements to reduce tariffs, called "Rounds," to which countries would agree.

The Tokyo Round in 1979 also reduced non-tariff barriers to trade, and the Uruguay Round, begun in 1986, established the **World Trade Organization (WTO)** in 1995 to replace the GATT Treaty. GATT succeeded in lowering trade barriers in a multilateral, worldwide way, but a number of important regional trade agreements have slashed trade barriers even more in particular regions. The best known of these regional agreements are the **European Union (EU)**, the **North America Free Trade Agreement (NAFTA)**, **Mercosur** in South America, and the **Association of Southeast Asian Nations (ASEAN)**.

In the meantime, advances in information technology increased the share of services and made the world seem smaller, allowing outsourcing to become an important phenomenon. **Outsourcing** is the shifting of non-strategic functions—such as payroll, information technology (IT), maintenance, facilities management, and logistics—to specialist firms to reduce costs. Today, outsourcing IT work to low-cost countries, such as India, has become commonplace. These developments led to a new focus for trade policy: increasing the international tradability of services. During the Doha Round, which began in 2001, trade in services was put on the agenda. In addition, the Doha Round focused on agriculture, industrial goods, and updated custom codes. Unfortunately, the trade talks have been going far from smoothly, and, at the time of writing, WTO officials hoped to conclude the round by the end of 2011.

The Growth in Trade

The evolution of trade openness dramatically increased trade flows between countries. One measure of trade openness is the sum of exports and imports in a given year divided by a measure of output, such as GDP. Exhibit 1.1 presents some data on this relative size of the trade sector.

In Panel A, the data for large, developed countries reveal a significant increase in trade-to-GDP ratios between 1970 and 1985. Between 1985 and 2000, the trade sectors mostly grew, especially in France, Germany, and Australia, but over the past decade, only Germany has witnessed a substantial increase in its trade sector. Of the countries shown, Germany is the most open, with its trade sector comprising 75% of GDP in 2009, while Japan is the least open, with trade comprising just 27% of its GDP.

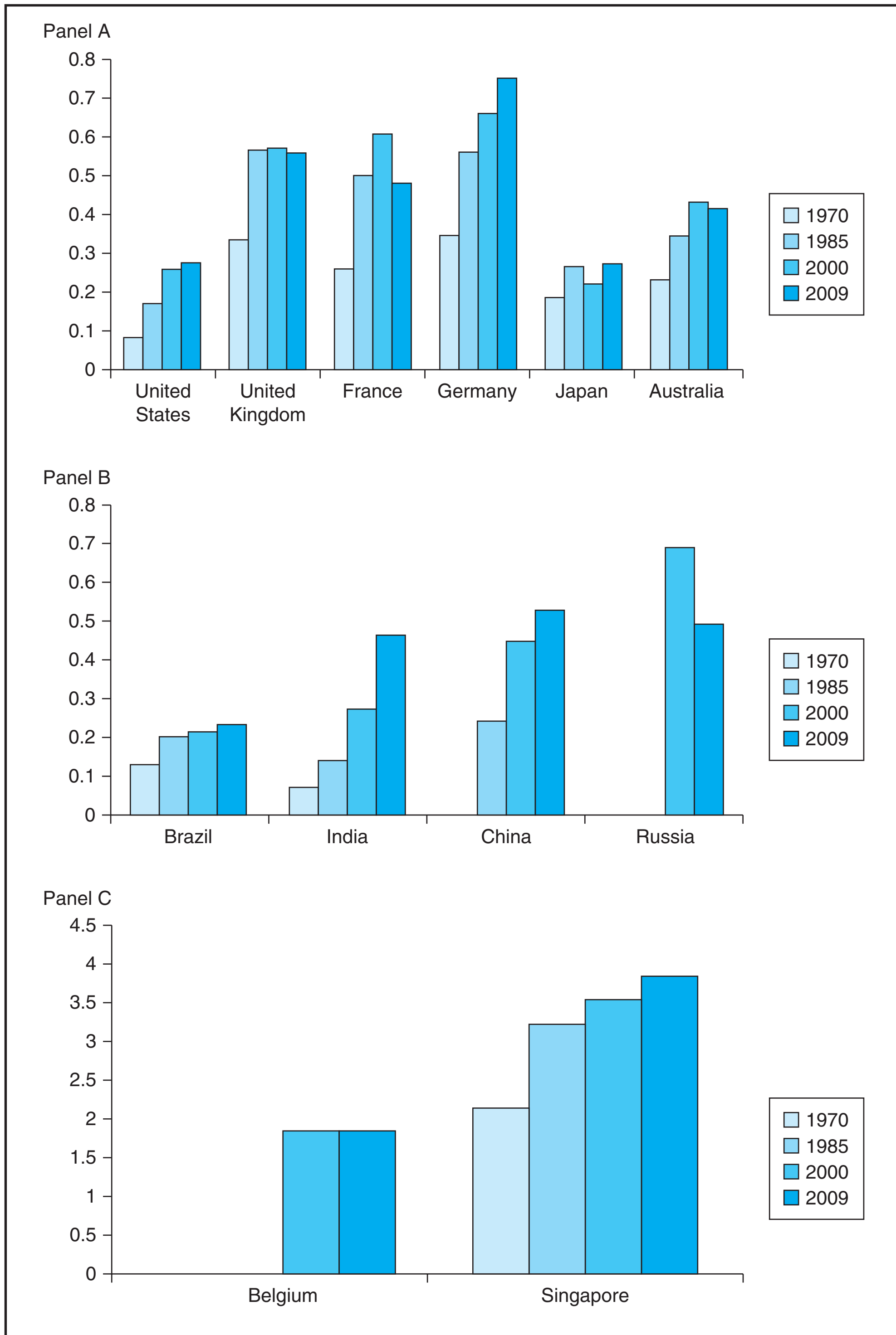
In Panel B, large, developing countries such as Brazil, India, and China witnessed increases in the relative size of their trade sectors. India's trade sector evolved from less than 10% of GDP in 1970 to over 45% in 2009. China's trade sector nearly doubled between 1985 and 2000 and was over 50% of GDP in 2009. This increase reflects the major trade reforms China undertook during the 1980s and 1990s, including China's accession to the WTO in 2001. The accession, in turn, led to a steady decrease in tariffs on imports. Because of its large size and increased openness, China has become a major player in the world economy.

As Exhibit 1.1 demonstrates, although the global trend is toward freer trade, some countries are clearly more open than others. Many factors affect why, how much, and with whom countries trade. For example, countries that border oceans tend to trade more than inland countries. Large countries tend to trade relatively less than smaller countries as evidenced by the U.S. numbers relative to most other countries; and, indeed, China is a relative outlier. Small open countries such as Belgium and Singapore (see Panel C of Exhibit 1.1) have trade-to-GDP ratios well over 150% and 350%, respectively.

How Multinational Corporations Are Affecting Trade

The phenomenal growth of MNCs after World War II also boosted international trade. According to the **United Nations Conference on Trade and Development (UNCTAD)**, there are now 82,053 international companies with about 810,000 subsidiaries, whereas in the

Exhibit 1.1 International Trade as a Percentage of GDP



Note: The data are from UNCTAD and are the sum of exports and imports divided by gross domestic product (GDP), a measure of total output.

early 1990s, there were only 37,000 companies with 175,000 subsidiaries. More than 50% of international trade actually occurs within MNCs (that is, firms trading with themselves). By 2008, more than 25% of MNCs were headquartered in emerging markets.

In MNCs, capital, labor, management skills, and technology are all transferred to other countries to produce abroad rather than export from a domestic factory. Sometimes, the components of different goods are produced in different countries, depending on their relative advantages in terms of costs and technological ability. A classic example is the Barbie doll. The raw materials for dolls come from Taiwan and Japan; their assembly takes place in the Philippines, Indonesia, and China (due to the low labor costs); and the design and the final coat of paint come from the United States, which still has an edge in design and marketing.

The Globalization of Financial Markets

The globalization of financial markets and the profound changes they have undergone since 1980 have also dramatically changed how MNCs manage their business risks, improved their access to foreign capital, and enhanced their ability to reduce financing costs. We provide a short overview of the major developments.

Trends in Financial Openness

A country is financially open if it allows foreigners to invest in its capital markets and allows its citizens to invest abroad. After World War II, most countries had controls or restrictions in place that prevented the free flow of capital across borders. However, in the 1980s, many developed countries began liberalizing their capital markets. For example, Japan started to liberalize in 1984; in Europe, the movement toward the Single Market forced many countries to abolish their capital controls, with France abolishing capital controls in 1986, Italy in 1988, and Belgium in 1990.

In the late 1980s and during the 1990s, many developing countries began a financial liberalization process, relaxing restrictions on foreign ownership of their assets and taking other measures to develop their capital markets, often in tandem with macroeconomic and trade reforms. These developments created a new asset class in which to invest: emerging markets, which we discuss in more detail in Chapter 12.

AMB: Betting on Global Trade

AMB, which owns and develops industrial real estate, is a **real estate investment trust (REIT)** that trades on the New York Stock Exchange. You might think that real estate is not an easily exchangeable asset and consequently that AMB has little to do with international business. But in fact, the fortunes of AMB totally depend on globalization.

You see, AMB develops, acquires, and operates distribution facilities in locations tied to global trade, such as international airports, seaports, and major highway systems. AMB has investments in 11 countries, ranging from Spain to Brazil to China. With increased international trade and the need to minimize inventories, companies have realized that distribution efficiency is a key to their success. Therefore, AMB targets properties that are built for the efficient movement of goods and are strategically located in the world's global distribution markets. Although the value of the property depends to a certain degree on local factors, as is the case for any piece of real estate, AMB's business is primarily a bet on globalization. Investors in AMB are betting on continued growth of international trade and the increasing demand for such strategically located distribution facilities.

The 2007 to 2010 global crisis was particularly dire for AMB. Not only did the crisis cause a worldwide recession that reduced trade flows, but it also prompted protectionist pressures in many countries, undermining the core of AMB's growth strategy. AMB's stock price dropped from about $60 before the crisis to less than $10 in March 2009, a drop of more than 80%! It has since partially recovered.

Deregulation of foreign investment considerably increased the degree of financial openness in the world between 1980 and now. While measuring financial openness is difficult, most relevant studies agree that financial openness has not yet evolved as far as trade openness.[3]

One way to assess how open countries are to capital flows is to examine their foreign assets and liabilities.[4] The ratio of foreign assets plus foreign liabilities to GDP has grown rapidly for industrial countries. In 1970, this financial ratio for industrial countries as a group was slightly less than 50%. By 1985, the ratio was 100%, whereas in 2008, the ratio was over 400%. Financial openness in emerging markets progressed more gradually, with the ratio of foreign assets and liabilities over GDP increasing from 60% to about 150% in 2008.[5]

The New Financial Landscape

The deregulatory zeal of governments worldwide happened against the background of and perhaps as a reaction to a vastly different financial landscape that emerged in the 1980s. Most importantly, the markets for financial derivatives exploded, backed by advances in financial economics and computer technology. A **derivative security** is an investment whose payoff over time is *derived* from the performance of underlying assets (such as commodities, equities, or bonds), interest rates, exchange rates, or indices (such as a stock market index, a consumer price index, or an index of weather conditions). The main types of derivatives are futures, forwards, options, and swaps. These derivatives are traded over the counter (that is, on a bilateral basis among financial institutions or between financial institutions and their clients) and on organized exchanges. Chapters 20 and 21 discuss some of these derivative contracts in more detail.

Another important development was the increased use of **securitization**—the repackaging of "pools" of loans or other receivables to create a new financial instrument that can be sold to investors. For example, financial institutions package mortgages or car loans into complex securities that are sold to investors, thereby spreading the risks involved. Moreover, banks earn fees on these securities and need not hold a capital buffer on their balance sheets to protect against possible losses as required for a regular loan. As Acharya et al. (2010) report, securitized assets worldwide increased from $767 billion at the end of 2001 to $2.7 trillion in December 2006.

The spectacular growth in derivatives and securitization considerably increased the complexity in the financial intermediation business. These developments dramatically improved the ability of banks and corporations to manage risk. For example, corporations with earnings denominated in foreign currencies could now easily hedge their risks using derivatives contracts. Similarly, companies could now easily tap foreign investors for capital with bond issues denominated in different currencies, while using the derivative markets to convert the loans back to their domestic currency if they desired to do so.

The new financial landscape also made it increasingly difficult for governments to regulate their domestic capital markets without smart financiers finding loopholes around the rules. For example, a major impetus to the growth of the swap market was regulatory arbitrage, where financial institutions exploited country-specific regulations or taxes to lower the cost of funding for multinational companies. In Chapter 11, we give some concrete examples of such regulatory arbitrage.

With derivative contracts and securitization techniques becoming ever more sophisticated, a degree of complexity and opaqueness crept into the financial system that put stress on the risk management systems of banks and companies. For instance, mortgage loans were

[3]See Quinn and Toyoda (2008) and Chinn and Ito (2008) for indices of financial openness.
[4]See Chapter 4 for a discussion of the relationship between flows of capital that are recorded in a country's balance of payments and the balance sheet position of the country's foreign assets and liabilities.
[5]These numbers are reported and discussed in Lane and Milesi-Ferretti (2007) and Milesi-Ferretti et al. (2010).

carved up into different tranches depending on the perceived riskiness of the loans into so-called collateralized debt obligations (CDOs).

In the 1990s, a backlash against derivatives began as industrial and financial firms took large losses. Metallgesellschaft of Germany and Procter & Gamble in the United States sustained huge losses due to lax oversight of derivatives trading. Barings Bank, the oldest British bank and the personal bank for the queen, collapsed when one rogue trader, Nick Leeson (1996), lost $1.4 billion on the derivatives exchanges of Singapore and Osaka in Japan in 1995. Leeson was outdone in January 2008 by Jérôme Kerviel, a trader at Société Générale, a French bank, who lost a staggering 4.9 billion euros ($6.7 billion) on derivative contracts. But by then, it had become apparent that more systemic problems were brewing in the financial sector.

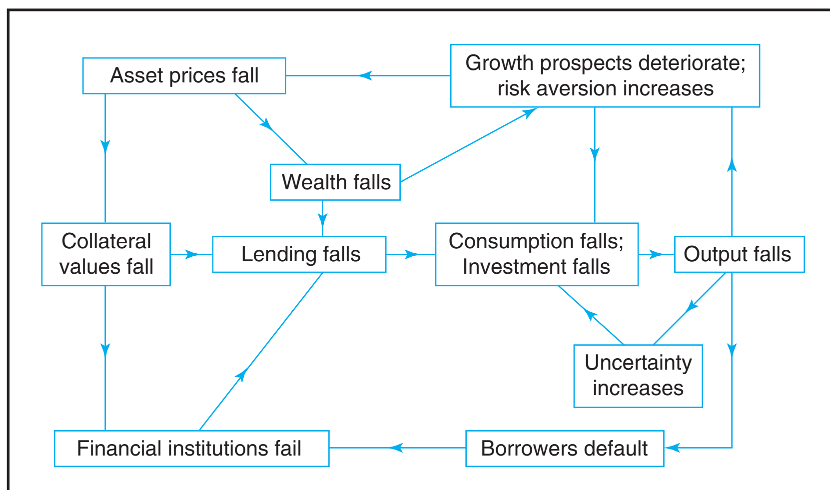
A Global Financial Crisis

From 2007 through 2010, the world witnessed a full-blown financial crisis that started in the United States and led to a global recession, the longest and deepest in the postwar era. We will discuss a number of important economic crises in this book, but the scale and the depth of this recent crisis raise deep issues about the functioning of the global financial system, making it deserve special attention.

Exhibit 1.2 depicts how a financial crisis typically unfolds, consisting of rapidly falling asset prices and financial institutions that become insolvent or are hit by liquidity crises.

Suppose asset prices fall. Consumers are now less wealthy and spend less. Firms may have a harder time financing themselves because the value of their collateral drops, causing them to invest less. As financial institutions take losses, aggregate lending to both consumers and firms is reduced as well, causing them to spend less. Both chains of events reduce aggregate output and lead to layoffs. The bad economic conditions feed back into asset prices and the health of financial institutions through several channels. Unemployed workers and poorer consumers tend to be more cautious and may invest more in safe assets (such as U.S. Treasury bills and bonds), rather than risky securities. This increased risk aversion and the flight to safety it entails in turn reduce asset prices further. As Bloom (2009) shows, increased uncertainty about the economic and financial future may make companies delay investments and further reduce output. Facing defaults on their loans, caused by the bad economic conditions, and perhaps

Exhibit 1.2 The Workings of a Financial Crisis



Note: This exhibit is inspired by Figure 19-1 in Gregory Mankiw and Laurence Ball (2011).

because of their direct exposure to asset prices, certain financial institutions may also curtail lending and perhaps even go bankrupt. Once depositors and investors are sufficiently worried about the health of their financial institutions, a liquidity crisis may erupt. In a liquidity crisis, a financial or other institution does not have enough liquid assets to make the payments it has promised. It may be solvent—that is, its assets may exceed its liabilities—but if counterparties who are worried about its solvency insist on immediate payment, the institution is forced to sell illiquid assets at fire-sale prices. This may push the institution into insolvency and freeze up the markets in which the institution plays a big role.

The classic example of such a crisis is a bank run, where depositors who fear the bank's insolvency cause it to go bankrupt by withdrawing deposits en masse. Government-sponsored deposit insurance protects against this. In a more modern system, institutional investors and corporations fund banks and other financial institutions through secured short-term loans. When repayment is uncertain, large institutional investors require financial institutions to either provide the safest assets (like Treasuries) as collateral or provide other securities, such as securitized loans, at a discount relative to current value, which is called the haircut. Steep haircuts amount to steep deductions in the value of the bank's assets.

We now provide a brief overview of actual events but note the references for further reading in the bibliography [Mankiw and Ball (2011) is a good start]. In the United States, securitization and the government-condoned quest to allow every household to own a home fueled spectacular growth in subprime mortgages between 2000 and 2006. Subprime mortgages are made to borrowers with relatively low credit scores, and such mortgages may have special features to reduce loan payments in the early years of the loan. Because house prices kept increasing, many people bought houses they could not really afford or speculated on rising house prices. Financial institutions securitized these mortgages and initially sold them to investors (pension funds, hedge funds, and banks) across the world, but as time went by, the institutions increasingly held the least risky parts of the tranches on their books. However, in 2006 and 2007, house prices started to fall and defaults on subprime mortgages started to rise. In 2007, two companies specializing in subprime mortgages declared bankruptcy, signaling to financial markets that major financial institutions holding assets backed by subprime mortgages might suffer losses, too. This raised the specter of a liquidity crisis in the U.S. financial system. In the United States, haircuts on securitized loans began to creep up (see Gorton, 2010), but in the United Kingdom, Northern Rock Bank faced a classic bank run in September 2007, after it ran short of liquid assets and asked the Bank of England, the United Kingdom's central bank, for a loan. Northern Rock was the first of a series of venerable financial institutions to face serious trouble.

On March 16, 2008, JPMorgan Chase (helped by a loan from the Federal Reserve, the U.S. central bank) bought Bear Stearns, a respected investment bank, which could no longer fund itself in the money markets. September 2008 proved much worse. First, Fannie Mae and Freddie Mac, the government-sponsored enterprises that securitize a large share of U.S. mortgages, were taken over by the U.S. government. Then, on September 15th, Lehman Brothers, an investment bank founded in 1850, declared bankruptcy. Nobody fully understood how interconnected to other financial institutions around the world Lehman really was, and its default caused money markets to essentially freeze, while a flight to safety ensued. Treasury bond prices soared, the stock market tanked, and uncertainty was at an all-time high. The vicious circle shown in Exhibit 1.2 was now in full swing, and the real economy took a nose dive, too.

Ramifications of the Crisis

Academics, practitioners, and regulators are still busy debating the exact causes and consequences of the crisis. To some, the crisis was U.S. grown, and a straight line could be drawn from greedy mortgage originators in California to excessive risk takers at the banks and in the derivative markets. To others, the U.S. events were simply a trigger to shrink the bloated

financial sector, which had responded to low interest rates and international capital adequacy rules with a securitization business model using excessive leverage and incorrectly priced tail risks. To yet others, the root causes were global imbalances, the large U.S. current account deficit, and large surpluses in emerging countries, in particular China. Although U.S. monetary policy may have kept short-term interest rates too low, adherents of this latter view put the responsibility for excessively low long-term interest rates with excessive capital flows into U.S. Treasuries implied by the global imbalances.

The crisis also raises a host of regulatory issues. Central banks and governments across the world reacted vehemently to contain the crisis, pumping money into banks and companies and running very expansionary monetary and fiscal policies. More important are the policy lessons to be drawn for the future. For example, ex post, it seems hard to understand why the Federal Reserve saved Bear Sterns, and later AIG, a large insurance company, but not Lehman Brothers, given the importance of Lehman for U.S. money markets. Nevertheless, the Federal Reserve surely was correct in worrying about the moral hazard involved in saving big financial institutions. Insurance may make people behave riskier, just as an anti-lock braking system may not necessarily increase road safety because drivers with such systems drive faster. When large institutions feel they are "too big to fail," they may behave recklessly. Such issues will undoubtedly be debated and studied at length in years to come. We cannot fully join this debate, but we will come back to the far-reaching ramifications of this crisis throughout the book.

1.3 Multinational Corporations

A **multinational corporation (MNC)** consists of a parent company in the firm's originating country and the operating subsidiaries, branches, and affiliates it controls both at home and abroad. The United Nations refers to such firms as *transnational corporations* to emphasize that the operation and ownership of these enterprises is spread throughout the world.

Exhibit 1.3 lists the largest multinational corporations in 2008, ranked by the dollar value of their foreign assets in each of 19 countries. General Electric (GE) was the largest MNC by this measure, with $401 billion in foreign assets. Exhibit 1.3 also indicates that GE employed 171,000 people in its foreign affiliates. Industries with at least three companies in the top 20 include petroleum, motor vehicles, and utilities. The United Nations also computes a transnationality index, which averages the ratios of foreign assets, sales, and employment to their total counterparts. Vodafone of the United Kingdom, Anheuser-Busch InBev of Belgium, and ArcelorMittal of Luxembourg are the most international companies in the top 20, each with a transnationality index larger than 85%. The largest Chinese company was state-owned CITIC Group (formerly China International Trust and Investment Corporation), which oversees the government's foreign investments and some domestic ones as well. CITIC Group's assets include financial institutions, industrial concerns (satellite telecommunications, energy, and manufacturing), and service companies (construction and advertising). Yet, its transnationality index is only 21%.

How Multinational Corporations Enter Foreign Markets

Many MNCs initially start out simply as exporting or importing firms. Later, an MNC may use **licensing** in which the MNC gives local firms abroad the right to manufacture the company's products or provide its services in return for fees, typically called **royalties**. While expanding internationally through licensing doesn't require much investment, it can be difficult for licensing firms to maintain their product quality standards. **Franchising** involves somewhat more involvement. Here, the firm provides a specialized sales or service strategy,

Exhibit 1.3 World's Top Non-Financial Transnational Corporations, Ranked by Foreign Assets (in billions of dollars and thousands of employees)

Rank	Firm	Home Economy	Industry	Assets		Sales		Employees	
				Foreign	Total	Foreign	Total	Foreign	Total
1	General Electric	USA	Electrical and electronic equipment	401	798	97	183	171	323
2	Royal Dutch/Shell Group	UK	Petroleum	222	282	261	458	85	102
3	Vodafone Group	UK	Telecommunications	202	219	60	69	69	79
4	BP	UK	Petroleum	189	228	284	366	76	92
5	Toyota Motor Corp	Japan	Motor vehicles	170	296	130	204	122	321
6	ExxonMobil Corp	USA	Petroleum	161	228	322	460	50	80
7	Total	France	Petroleum	141	165	178	235	60	97
8	E.On	Germany	Utilities	141	219	53	127	57	94
9	Electricité De France	France	Utilities	134	278	44	94	51	161
10	ArcelorMittal	Luxembourg	Metal and metal products	127	133	113	125	239	316
11	Volkswagen Group	Germany	Motor vehicles	124	234	126	167	196	370
12	GDF Suez	France	Utilities	119	233	69	99	95	197
13	Anheuser-Busch InBev	Belgium	Food, beverages, and tobacco	106	113	19	24	108	120
14	Chevron Corporation	USA	Petroleum	106	161	154	273	35	67
15	Siemens	Germany	Electrical and electronic equipment	104	135	84	116	295	427
16	Ford Motor Company	USA	Motor vehicles	103	223	86	146	124	213
17	Eni Group	Italy	Petroleum	96	162	95	158	39	79
18	Telefonica	Spain	Telecommunications	95	139	54	84	197	252
19	Deutsche Telekom	Germany	Telecommunications	95	171	48	90	96	228
20	Honda Motor Co	Japan	Motor vehicles	89	120	81	99	112	182

Notes: The data are compiled from UNCTADstat (http://unctadstat.unctad.org). We corrected the home country for Anheuser-Busch InBev, which was incorrectly listed as the Netherlands.

offers support at various levels, and may even initially invest in the franchise in exchange for periodic fees. McDonald's is the best-known franchising firm. Another way to penetrate foreign markets is through a **joint venture**, a company that is jointly owned and operated by two or more firms. For example, Walmart, the gigantic U.S. retailer, set up a joint venture with India's Bharti Enterprises in 2007 to start a chain of wholesale cash-and-carry stores in India.

MNCs also enter foreign markets by setting up production and distribution facilities abroad either by acquiring or merging with foreign companies or by simply establishing new operations in the countries (in what are called *greenfield investments*). These latter categories constitute the bulk of **foreign direct investment (FDI)**, which we discuss in more detail later in this chapter.

Today, there is much talk about the globally integrated corporation. As IBM chief executive officer (CEO) Samuel Palmisano put it in a 2006 speech, such a firm shapes its strategy, management, and operations as a single global entity. True to form, Mr. Palmisano's speech took place not at its corporate headquarters in Armonk, New York, but in Bangalore, India, where IBM now has more than 50,000 employees.

The Goals of an MNC

The premise of this book is that the appropriate goal of the management of any corporation, including a multinational corporation, is to maximize shareholder wealth. This is the tradition in what are called the "Anglo-American" countries, including Australia, Canada, the United Kingdom, and especially the United States. The management of a corporation maximizes shareholder wealth by making investments in projects whose returns are sufficiently large to compensate its shareholders, through dividends and capital gains, for the risk involved in the projects.

The Investment Time Horizon

The appropriate time horizon for management to consider is the long term. When deciding if an investment today maximizes shareholder value, the current value of all its future benefits must be compared to the cost of the investment. It is sometimes argued that shareholder maximization leads management to be too short-term focused on meeting the quarterly expectations of stock analysts, and it is certainly possible for management to mislead the markets in the short run, as the U.S. accounting scandals discussed shortly aptly demonstrate. Yet, we believe that markets are pretty efficient at finding and aggregating information. Thus, good management should not be willing to trade off an increase in the stock price today for a major fall in the stock price shortly thereafter. Rather, it is the job of management to inform the markets about the costs and future profitability of the firm's investments.

The Stakeholder Alternative

Shareholder wealth maximization is not traditionally practiced by large European or Asian firms who tend to lump shareholder interests together with those of other "stakeholders," including management, labor, governments (both local and national), banks and other creditors, and suppliers. Because management must juggle these various interests, its objectives are less clear in the stakeholder model than in the shareholder model.

Agency Theory and Corporate Governance

In a modern corporation, stockholders hire managers who make decisions about production and marketing. How can the ultimate owners of the assets motivate the managers to act in the owners' interest? The economic field of **agency theory** (see, for instance, Jensen and Meckling, 1976) explores the problems that arise from the separation of ownership and control and devises ways to resolve them. A manager of a firm, in particular the CEO, is viewed as an agent who contracts with various principals—most importantly the firm's shareholders,

but also the firm's creditors, suppliers, clients, and employees. The principals must design contracts that motivate the agent to perform actions and make decisions that are in the best interests of the principals.

Unfortunately, the world is too complicated for investors to write a contract that specifies all the actions that managers will take in the future. Yet, the managers will surely acquire important information that the shareholders do not have and thus retain a great deal of discretion about which actions to take in response to such "private" information.

The legal and financial structure that controls the relationship between a company's shareholders and its management is called **corporate governance**. Its role is to establish the framework within which the managers operate and to mitigate the principal–agent problem. The importance of poor corporate governance was forcefully illustrated in a series of recent corporate scandals.

Corporate Scandals

One of the most spectacular cases of corporate fraud involved the Enron Corporation of Houston, Texas. By late 2001, the company, which was founded in 1985, had transformed itself from a regional gas pipeline operator into the largest buyer and seller of natural gas and electricity in the United States, as well as a major trader in numerous other commodities. A criminal investigation begun in 2001 revealed that Enron's meteoric rise in value was fed mostly by institutionalized, systematic, creative accounting fraud, which landed its top executives in jail. The Enron bankruptcy was a disaster for many of the company's 21,000 employees who lost their jobs and any retirement savings in Enron stock. The market price of an Enron share fell from a high of $90 in August 2000 to zero in 2006, as creditors eventually liquidated the company. The CEOs of Worldcom, a telecommunications firm, and Tyco, a sprawling conglomerate, also received prison sentences around the same time for corporate misdeeds.

Lest you think that only managers of large U.S. companies are capable of fraud, consider the case of Parmalat, an Italian dairy and food-processing company founded in 1961 by Calisto Tanzi. Parmalat is the global leader in the production of ultra high temperature (UHT) milk, which sterilizes food in 1 to 2 seconds by exposing it to temperatures exceeding 135°C. Such milk can be kept on the shelf, unrefrigerated, for between 6 and 9 months. In 2003, accounting irregularities were uncovered in Parmalat's books implying that €3.95 billion of assets were missing from the accounts of Bonlat, a Parmalat subsidiary in the Cayman Islands. Parmalat declared bankruptcy, and Tanzi was arrested. He eventually admitted to illegally diverting funds from Parmalat into other ventures he controlled and was sentenced to prison.

More recently, asset management scandals dominated the press. The investment firms of Bernard Madoff (in 2008) and of Allen Stanford (in 2009) were shown to have run massive Ponzi schemes for years. A Ponzi scheme is an investment fraud that dupes investors into believing they are earning fabulous returns from good investments, whereas actual payouts use funds contributed by new investors. As long as assets under management grow, the scheme can continue indefinitely. Both cases, and especially the Madoff case, with total losses reportedly amounting to $21 billion, raise serious issues about the regulatory oversight of the investment industry.

Corporate Governance Around the World

It is clear from these corporate scandals that management does not always act in the interest of shareholders. Yet, most corporations function without fraud and corruption. This section examines how shareholders deal with management not only to try to prevent outright illegal activities but to align the interests of management with those of shareholders.

Multinationals must worry about more than "in-house" corporate governance. Whether they acquire an existing foreign firm, set up a joint venture, or simply adopt a licensing agreement may depend on the corporate governance practices in that country. Corporate

Exhibit 1.4 Methods of Overcoming Agency Problems Due to the Separation of Ownership and Control

Method	Pros	Cons
1. Independent board of directors	Protection of minority shareholders' interests. Increased risk sharing.	Often not sufficiently independent of management and therefore ineffective.
2. Partial concentration of ownership and control in the hands of a large shareholder	A large shareholder has the self-interest to monitor management's activities to prevent abuses.	Possible collusion between management and large shareholder against smaller shareholders. Reduced liquidity in the stock.
3. Executive compensation with options or bonuses related to performance.	Provides a direct incentive to maximize stock price.	Rewards management for good luck. Subject to monipulation and possible short-term focus to allow management to get rich.
4. Clearly defined fiduciary duties for CEOs with class-action law suits.	Provides a complementary disciplining device.	Increases legal costs and enriches lawyers at the expense of stockholders.
5. Hostile takeovers and proxy contests.	Directly disciplines bad management.	Provides an incentive for raiders to expropriate wealth from creditors and employees.

governance differences across countries and firms affect a firm's valuation and may lead firms to cross-list shares in stock markets with a legal environment that fosters good corporate governance, or MNCs may improve their own corporate governance standards to attract international investors.

In their review of corporate governance and control, Becht et al. (2007) examine five ways of overcoming agency problems. The pros and cons of the different approaches are discussed in the following sections and are summarized in Exhibit 1.4.

An Independent Board of Directors

In the Anglo-American model, the board of directors has the most important role in corporate governance. It is the board's responsibility to help management develop a strategy and to approve its major investments. The board controls management's activities by appointing and compensating the management with the goal of making the organization accountable to its owners and the authorities.

How well the board of directors functions depends on whether the directors are independent of the management. If the board is dominated by the CEO's friends, the board may not be able to represent the interests of shareholders. If the board is not independent, international expansion of the activities of the firm could be a manifestation of empire building; why else would you need a corporate jet?

While the Anglo-American model of corporate governance embraces the independent board of directors, things are different in Europe. In Germany, for example, the *Aufsichtsrat*, or supervisory board, of a large corporation has 20 members. Shareholders elect 10 members, and the other 10 members are employee representatives. The supervisory board oversees and appoints the members of the *Vorstand*, or management board, which must approve major business decisions.

Concentrated Ownership

The most common method of overcoming agency problems in developed countries outside of the United Kingdom and the United States is through concentrated ownership. A block of stock is held by either a wealthy investor or a financial intermediary, which might be a bank, a holding company, a hedge fund, or a pension fund. A large shareholder clearly has a vested

interest in monitoring management and has the power to implement changes in management. Negative aspects of this approach include possible collusion between the large shareholder and the management to expropriate wealth from the smaller shareholders and the fact that the stock may be more difficult to trade on the stock market if a substantial block of shares is withdrawn from the market but still available to be sold should the large shareholder want to sell.

Executive Compensation

An important aspect in aligning the interests of an agent and a principal is how the agent is compensated. The compensation committee of the board of directors has the responsibility to design appropriate executive compensation that overcomes shareholder/management conflicts. Here, ownership of stock by the management and grants of stock options should encourage the management to think like the shareholders.

Positive aspects of this method include the fact that people respond to incentives, and the economics of the problem indicate the need to pay for performance. Unfortunately, it is often difficult to ascertain why stock prices increase. Was it management's actions or simply luck? An increase in the price of oil raises the value of the large firms that extract oil and sit on large reserves, and consequently, oil price increases can lead to big paydays for managers whose decisions had nothing to do with the increase in the oil price.

The recent global crisis certainly raised a variety of knotty corporate governance issues. Within banks, the compensation of traders and executives was based too much on short-term gains and failed to account for the riskiness of their actions, whereas risk managers were insufficiently compensated for halting excessive risk taking. Rating agencies failed to correctly assess the risks of the complex securities issued by the banks. In the wake of the global financial crisis, the large compensation packages offered to executives and successful employees by several financial institutions, especially those that received taxpayers' money during the crisis, were heavily criticized.

Shareholder Activism and Litigation

Poor corporate performance eventually leads to unhappy shareholders. If the performance isn't too bad, the shareholders may just bide their time and allow management to improve performance. Alternatively, the unhappy shareholders may sell their shares to someone who is more optimistic about the firm's prospects. Disgruntled shareholders also may try to use the legal system to sue the board of directors for failure to perform their fiduciary duty. Clearly defining the fiduciary responsibilities of the CEO raises the threat of litigation and keeps managers from expropriating shareholder value, thus providing a complementary method of aligning management's actions with shareholders' interests.

If shareholders disagree with the management's strategy or its implementation, they may actively try to change the management or vote for different directors. For example, in November 2010, Carl Icahn, a billionaire investor, and Seneca Capital, a hedge fund, blocked the takeover of Dynegy, an energy company, by The Blackstone Group, a private equity group. They also sought to replace several board members who were deemed not to be acting in the interest of the firm. The saga continues at the time of writing as Seneca Capital now tries to halt a counter-bid by Icahn to take over Dynegy.

Hostile Takeovers

Ultimately, management is disciplined by the market for hostile takeovers. In a hostile takeover, the candidate acquiring company, the "raider," bids for a majority of the voting rights of the "target" company and, if successful, uses the acquired voting power to replace the CEO and redirect the strategy of the target.

Such takeovers are common in the United States, the United Kingdom, and France, but they are rare in Germany. Nevertheless, in 2000, Vodafone of the United Kingdom completed

a $199 billion cross-border hostile takeover of the German company Mannesmann, in the largest-ever European takeover. Hostile takeovers are also rare in Japan because of the presence of keiretsu, an arrangement in which a group of firms is linked, usually with a prominent bank, through cross-shareholding agreements.

The Sarbanes-Oxley Act

In response to the corporate scandals, the U.S. Congress passed legislation to attempt to improve corporate governance. The Sarbanes-Oxley Act of 2002 covers issues such as auditor independence, corporate governance, and enhanced financial disclosure. It established the Public Company Accounting Oversight Board, charged with overseeing, regulating, inspecting, and disciplining accounting firms in their roles as auditors of public companies. It requires that public companies and their internal auditors evaluate and disclose the effectiveness of their internal controls as they relate to financial reporting, because CEOs and chief financial officers (CFOs) of publicly traded companies must certify their financial reports. Companies can no longer make loans to corporate directors. Finally, the audit committee of the board of directors, which oversees the relationship between the corporation and its auditor, must be composed of independent directors.

Note that the Sarbanes-Oxley Act's insistence that only independent directors serve on the audit committee conflicts with European and Asian traditions. For example, the German supervisory board has employee representatives, who are clearly not independent.

The issue is really one of getting the right form for corporate governance. While the Sarbanes-Oxley Act may further improve corporate governance in the United States, the United States was already considered the country with the best corporate governance. Moreover, implementing the new requirements is expensive, and it is likely one of the factors behind the decision of many international companies not to list their stock on the U.S. stock market but in European countries with less onerous regulations.

What the Data Show

Differences across countries in corporate governance are examined in a series of influential and controversial articles by La Porta et al. (1997, 1998, 2000a, 2000b), known as LLSV. The LLSV articles show that measures of investor protection across countries correlate strongly with a classification of legal systems based on the idea of "legal origin"—the primary distinction being between English common law countries, such as Canada, the United Kingdom, and the United States; French civil law countries, such as Belgium, France, and Italy; German civil law countries, such as Austria, Germany, and Switzerland; and Scandinavian civil law countries, such as Denmark, Finland, and Sweden. The English common law countries provide more investor protections than the civil law countries.

LLSV show that legal origin correlates well with concentration of ownership, the size of the stock market, and the level of dividend payments. For example, in civil law countries with low ownership protection, corporate ownership is much more concentrated than in the English common law countries. LLSV also show that countries with greater legal protection of investor rights have more firms listed on public stock markets, larger corporate valuations, and greater economic growth.

China provides an important counterexample to the findings on the importance of legal systems in promoting the growth of financial systems and the overall economy. Allen et al. (2005) note that neither China's legal system nor its financial system is particularly well developed, yet China has experienced extraordinary real growth. While China retains a large state-controlled sector, it is the private sector that has been the engine of growth. This suggests that alternative financing channels and corporate governance mechanisms, possibly based on reputation considerations, promote the growth of the private sector.

Multinational Corporations and Foreign Direct Investment

Foreign direct investment (FDI) occurs when a company from one country makes a significant investment that leads to at least a 10% ownership interest in a firm in another country. The outstanding stock of FDI was estimated to be worth around $18 trillion in 2009 and has grown 30-fold between 1980 and 2009.

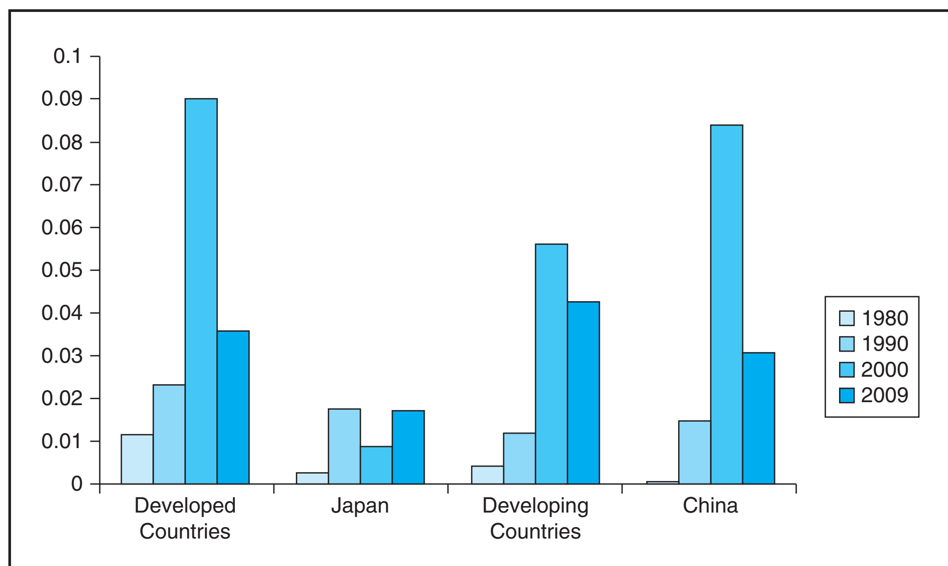
Exhibit 1.5 shows the sum of FDI inflows and outflows relative to GDP between 1980 and 2009 for developed countries, for developing countries, and for two countries in Asia (Japan and China). Between 1980 and 2000, the FDI/GDP ratio essentially grew by a factor of 10 in both developed countries (from 1% to 9%) and in developing countries (from 0.4% to 4.3%). Over the last decade, FDI flows stalled, and they decreased during the global crisis. Although much was made of Japan's international investments in the 1980s, it now has a lower FDI/GDP ratio than China, whose FDI flows have grown quickly. There is another notable difference between the two countries. Japan's FDI outflows are about six times as large as FDI inflows to Japan. In contrast, China's inflows in 2009 were twice as large as its outflows. Overall, the United States remains the country with the largest dollar amount of FDI inflows and outflows.

International Mergers and Acquisitions

An important part of FDI involves international mergers and acquisitions (M&A), in which a corporation in one country merges with or acquires a corporation in another country. Exhibit 1.6 presents UNCTAD data on cross-border mergers and acquisitions broken down by country of purchaser on the left side and by country of seller on the right side. We only report countries with a minimum amount of deals.

Exhibit 1.6 shows that $250 billion of cross-border M&A occurred in 2009. This was substantially above the roughly $100 billion in 1990 but substantially below the $900 billion of 2000. Exhibit 1.6 clearly indicates that most M&A activity remains primarily a developed country phenomenon. Of the $250 billion of M&A activity in 2009, purchasers in developed

Exhibit 1.5 Foreign Direct Investment as a Percentage of GDP



Notes: The data are compiled from UNCTADstat (http://unctadstat.unctad.org). Foreign inflows, foreign outflows, and GDP are reported in nominal U.S. dollars.

Exhibit 1.6 Cross-Border Mergers and Acquisitions, 1990–2009 (in millions of dollars)

	By Purchaser			By Seller		
Region/Economy	**1990**	**2000**	**2009**	**1990**	**2000**	**2009**
World	98,903	905,214	249,732	98,903	905,214	249,732
Developed Economies	87,188	828,662	160,785	89,310	852,265	203,530
Europe	60,676	671,695	102,709	42,945	515,547	133,871
Belgium	660	18,856	(9,638)	2,770	1,991	12,089
France	18,704	114,581	41,565	7,036	33,544	724
Germany	3,898	9,996	24,313	4,391	232,554	12,790
Italy	1,678	18,722	17,505	1,067	11,151	1,109
Netherlands	3,127	42,816	(3,273)	1,321	27,004	17,988
Spain	4,312	31,984	(1,278)	2,198	19,823	32,173
Switzerland	3,502	59,164	7,385	3,349	6,046	15,275
United Kingdom	5,593	321,784	(3,546)	17,958	112,630	25,164
North America	13,158	127,223	40,477	40,651	303,142	51,475
Canada	1,966	33,119	16,718	4,175	31,421	11,389
United States	11,192	94,105	23,760	36,475	271,721	40,085
Other Developed Countries	13,354	29,744	17,598	5,714	33,576	18,185
Japan	13,532	13,901	17,440	1,223	12,695	22,206
Australia	(75)	3,423	(2,981)	1,223	12,695	22,206
Developing Economies	7,551	57,599	73,975	9,593	52,320	39,077
Africa	499	3,069	2,702	411	2,355	5,140
South Africa	290	2,852	1,491	(15)	308	4,215
Latin America and the Caribbean	1,159	3,584	3,740	8,748	35,798	(4,358)
Brazil	—	189	2,501	(32)	17,274	(1,369)
Mexico	302	4,082	3,247	2,005	4,477	104
Asia and Oceania	5,893	50,946	67,534	434	14,167	38,295
Qatar	—	2	10,266	—	—	298
United Arab Emirates	48	3	14,831	—	(10)	300
China	1,340	(307)	21,490	—	37,316	10,898
Hong Kong, China	501	37,704	7,461	286	(35,699)	3,028
Korea, Republic of	46	1,286	6,951	—	6,345	1,956
Malaysia	58	236	3,277	(186)	976	354
Singapore	88	8,013	2,762	461	1,309	9,693
Turkey	13	49	—	113	112	2,849
Russian Federation	—	157	7,599	—	421	5,079

Notes: Compiled from UNCTAD's cross-border M&A database (www.unctad.org/fdistatistics). The data cover deals involving the acquisition of an equity stake of more than 10 percent. The data are "net"; that is, purchases by home-based MNCs minus the sales of foreign affiliates of home-based MNCs, or sales in the host economy to foreign MNCs minus sales of foreign affiliates in the host economy. For the developed countries, we select countries that either purchased or sold more than $10 billion worth of companies internationally in 2009; for emerging markets, the cutoff is $2 billion. Negative numbers are indicated with parentheses.

countries accounted for $160 billion, while sellers in developed countries accounted for more than $200 billion. France, Germany, and the United States were among the largest acquirers, whereas Spain, the United Kingdom, and the United States were the largest sellers.

Valuing a cross-border acquisition is clearly an important financial skill, and Chapter 15 explains how this can be done. Financial mergers are increasingly coming from emerging markets, as the trend of emerging market companies competing for targets in the West continues. Not all mega deals are value enhancing. Karnani (2010) argues that many of the high-profile deals where Indian MNCs bought well-known Western companies failed to increase shareholder value, and the desire for empire building and nationalistic pride often played a role. One example he analyzes is Tata Motor's 2008 acquisition of Jaguar and Land Rover, two classic British car brands, from the Ford Motor Company.

In a study of over 6,000 acquisitions covering data from 61 countries from 1990 to 2007, Ellis et al. (2011) assess the effect of measures of corporate governance on the benefits of an international acquisition for the acquiring shareholders. They find that acquirers from countries with better governance show the highest stock price reaction to such acquisitions and that the stock price reaction is largest when targets are from countries with worse governance.

1.4 Other Important International Players

In the course of its international business activities, an MNC may need financing from an internationally active bank, use economic information provided by an international organization, operate within a regulatory framework set by local governments or international institutions, and deal with investor relations in several countries. We briefly survey these other important players in international finance.

International Banks

Major banks operate internationally to service their MNC clients. The globalization of business is well expressed in the banking sector. For example, Citibank, part of the Citigroup financial services company, operates in virtually every country in the world, and it has a long tradition of foreign activity, having established offices in Europe and Asia in 1902.

Cross-border mergers have also created a few top global asset management firms. In 2009, U.S.-based Blackrock became the world's largest asset manager with over $3 trillion under management by buying Barclays Global Investors (BGI) from Barclays, a major British bank. BGI was created in 1995 when Barclays bought Wells Fargo Nikko Advisors, which combined the asset management activities of Wells Fargo, a California bank, and Nikko Securities, a leading Japanese broker.

The emergence of more consolidated financial institutions at the global level is a recent phenomenon. One reason is that banks were often protected from foreign takeovers, either through explicit regulation or through political maneuvering, because they are considered to be important and strategic components of the economy. It was the Uruguay Round that paved the way for the deregulation of the financial services sector. Chapter 11 presents a fuller discussion of these issues.

International Institutions

The International Monetary Fund (IMF)

The IMF is an international organization of 187 member countries, based in Washington, DC, which was conceived at a United Nations conference convened in Bretton Woods, New Hampshire, in 1944. The 45 governments represented at that conference sought to build a framework for economic cooperation that would avoid a repetition of the disastrous economic policies that had contributed to the Great Depression of the 1930s.

The main goals of the IMF are to ensure the stability of the international monetary and financial system (the system of international payments and exchange rates among national currencies that enables trade to take place between countries), to help resolve crises when they occur, and to promote growth and alleviate poverty. To meet these objectives, the IMF offers *surveillance* and *technical assistance*. Surveillance is the regular dialogue about a country's economic condition and policy advice that the IMF offers to each of its members.

Technical assistance and training are offered to help member countries strengthen their capacity to design and implement effective policies, including fiscal policy, monetary and exchange rate policies, banking and financial system supervision and regulation, and statistics.

Economic crises often occur when countries borrow excessively from foreign lenders and subsequently experience difficulties financing their balance of payments. We discuss the balance of payments in detail in Chapter 4. The IMF is set up to offer temporary financial assistance to give member countries the breathing room they need to correct balance-of-payment problems. A policy program supported by IMF financing is designed by the national authorities in close cooperation with the IMF, and continued financial support is conditional on effective implementation of this program. This is known as IMF conditionality. The IMF charges market interest rates for these loans. In addition, the IMF also actively works to reduce poverty in countries around the globe, independently and in collaboration with the World Bank and other organizations. Here, loans are provided at below-market rates. The IMF's main resources are provided by its member countries, primarily through the payment of quotas, which broadly reflect each country's economic size.

The World Bank

This institution was also created in 1944, as the **International Bank for Reconstruction and Development (IBRD)**, to facilitate postwar reconstruction and development. Over time, the IBRD's focus shifted toward poverty reduction, and in 1960, the **International Development Association (IDA)** was established as an integral part of the World Bank. Whereas the IBRD focuses on middle-income countries, the IDA focuses on the poorest countries in the world. Together they provide low-interest loans, interest-free credits, and grants to developing countries for investments in education, health, infrastructure, communications, and other activities.

The World Bank also provides advisory services to developing countries and is actively involved with efforts to reduce and cancel the international debt of the poorest countries. Rogoff (2004) describes the World Bank as a complex hybrid of a long-term development bank, an aid agency, and a technical assistance outsourcing center.

Because the contributions from its 187 member countries are relatively modest, the World Bank is an important borrower in international capital markets. It then lends these funds to developing countries at a small markup.

A number of other closely associated development organizations are part of the World Bank Group. The best known is the **International Finance Corporation (IFC)**. The IFC is a global investor and advisor committed to promoting private-sector development in developing countries. One priority is the development of domestic financial markets through institution building and the use of innovative financial products.

Multilateral Development Banks (MDBs)

These institutions provide financial support and professional advice for economic and social development activities in developing countries. The term typically refers to the World Bank Group and four regional development banks: the African Development Bank, the Asian Development Bank, the European Bank for Reconstruction and Development, and the Inter-American Development Bank. These banks have a broad membership that includes both developing countries (borrowers) and developed countries (donors), and their membership is not limited to countries from the region of the regional development bank. While each bank has its own independent legal and operational status, their similar mandates and a considerable number of joint owners lead to a high level of cooperation among MDBs.

The MDBs provide financing for development in three ways. First, they provide long-term loans at market interest rates. To fund these loans, the MDBs borrow on the international capital markets and re-lend to borrowing governments in developing countries. Second, the MDBs offer long-term loans (often termed *credits*) with interest rates set well below market rates. These credits are funded through direct contributions of governments in donor countries. Finally, grants are sometimes offered mostly for technical assistance, advisory services, or project preparation.

The World Trade Organization (WTO)

In 1995, the GATT members created the WTO, headquartered in Geneva, Switzerland, which had 153 member countries in 2010. Whereas GATT was a set of rules, the WTO is an institutional body. The WTO expanded its scope from traded goods to trade within the service sector and intellectual property rights. Various WTO agreements set the legal ground rules for international commerce to hopefully ensure that the multilateral trading system operates smoothly. The agreements are negotiated and signed by a large majority of the world's trading nations and are ratified in the parliaments of the member countries.

If there is a trade dispute between countries, the WTO's dispute settlement process helps interpret the agreements and commitments, and it ensures that countries' trade policies conform to them. In the past decade, for example, Europe and the United States have bickered over international trade rules regarding steel and bananas and have needed WTO rulings to end the conflicts.

The Organization for Economic Cooperation and Development (OECD)

The OECD operates from Paris, France, and is a group of 34 relatively rich member countries. It provides a setting to examine, devise, and coordinate policies that foster sustainable economic growth and employment, rising standards of living, and financial stability in member countries and beyond. Analysis by the OECD staff and representatives of the member countries in specialized committees may culminate in formal agreements or treaties between member countries. Negotiations at the OECD on taxation and transfer pricing, for example, have paved the way for bilateral tax treaties around the world.

The OECD is renowned for its high-quality economic and social databases. Its country reviews and surveys are a must-read for policymakers and provide useful information for businesses. The OECD is funded by national contributions from its members.

The Bank for International Settlements (BIS)

The BIS, established in 1930, is headquartered in Basel, Switzerland. It fosters international monetary and financial cooperation to promote stability and serves as a bank for central banks. Bimonthly meetings of the governors and other senior officials of the BIS member central banks to discuss monetary and financial matters are instrumental in pursuing this goal. BIS standing committees support central banks and authorities in charge of financial stability more generally, by providing background analysis and policy recommendations. The best known is the Basel Committee on Banking Supervision, which developed into a standard-setting body on all aspects of banking supervision, including the framework that regulates the amount of capital international banks must hold. We discuss this in detail in Chapter 11.

The European Union (EU)

The member states of the EU seek to create a common market in which goods, services, people, and capital can move around freely and to achieve economic and political

International Organizations and the 2007 to 2010 Global Crisis

Whereas the OECD is busy writing policy briefs on the corporate governance lessons of the crisis and the BIS knows that the Basel III standards will be scrutinized more than ever, the crisis means a reversal of fortunes of sorts for the IMF. First, it reacted quickly to mitigate the effects of the crisis on low-income countries by increasing lending and making the conditions attached less onerous. Second, although many developing countries had became reluctant to tap IMF support after financial crises in the 1990s, the IMF was called in several times during the 2007 to 2010 crisis to provide emergency support to both developing (Colombia, El Salvador, Jamaica, Mexico, Poland, and Ukraine) and developed countries (Greece and Ireland). Third, a 2009 summit of the G20, the largest developed and developing economies, increased the IMF's capital by $500 billion and put the organization at the center of the fight against future financial crises by asking it to develop new early warning systems. Finally, in early 2011, the IMF announced that it would also start surveillance of capital flows and capital controls, rather than being restricted to overseeing current account imbalances. It also announced, in another reversal of previous policy, that it may support some forms of capital controls. The IMF has claimed a central role in the new post-crisis international financial architecture.

integration. The EU grew out of the post–World War II desire to prevent such wars from ever happening again. In the early years, the cooperation was between six countries (Belgium, West Germany, Luxembourg, France, Italy, and the Netherlands) and was mainly about trade and the economy, but the EU has grown to 27 members with successive waves of country accessions. The most recent additions were Bulgaria and Romania in 2007. The EU developed common policies in a wide range of fields—agriculture, culture, consumer affairs, competition, the environment, energy, transport, and trade. The 1992 Treaty of Maastricht introduced new forms of cooperation between the member state governments—for example, on defense and in the area of justice and home affairs—and created the EU.

While all original goals of the EU have not yet been completed, its importance for everyday life in Europe is undeniable. Although the Single Market was formally completed at the end of 1992, work must still be done in some areas (for example, creating a genuinely single market in financial services). During the 1990s, it became increasingly easy for people to move around Europe, as passport and customs checks were abolished at most of the EU's internal borders.

In 1992, the EU decided to go for **economic and monetary union (EMU)**, involving the introduction of a single European currency managed by a European central bank. The single currency, the euro, became a reality on January 1, 1999. While the euro was initially a success, the global financial crisis laid bare deep economic problems in Greece, Ireland, Italy, Portugal, and Spain that could no longer be resolved by independent monetary policies. In 2010, the situation deteriorated into a sovereign debt crisis, initially focused on Greece and Ireland, and some have come to doubt the survival of the EMU. We discuss exchange rate policies in the EU and the current crisis in more detail in Chapter 5. The EU also negotiates major trade and aid agreements with other countries and is developing a common foreign and security policy. Decision power within the EU rests with the European Commission, a collection of bureaucrats, the Council of Ministers (for example, ministers of finance of the member states who get together regarding financial decisions), and the European Parliament (which is chosen through direct elections).

Governments

Governments are important players in international financial management because they set the regulatory environment in which multinationals operate. Chapter 14 describes how corporations ought to assess political risk—the risk that government decisions may adversely affect

the MNC's cash flows. Governments (central banks in particular) also affect important asset prices, such as interest rates, which constitute the main component of a firm's cost of debt. Chapter 5 examines how central banks influence the value of exchange rates, another critical asset price.

Individual and Institutional Investors

Individual Investors

You may wonder what role individual investors play in a book about international financial management. First, they are the company's shareholders, the ultimate owners of the company, and we argued earlier that the management should act in the interest of shareholders. More importantly, though, individual and institutional investors determine bond and stock prices.

Institutional Investors

These organizations invest pools of money on behalf of individual investors or other organizations. Examples include banks, insurance companies, pension funds, mutual funds, and university endowments. The 1980s and 1990s displayed a slow trend of institutionalization, with more savings channeled through institutional investors, which were more sophisticated and more interested in the international diversification of their portfolios.

Institutional investors, together with individual investors, determine the prices of bonds and stocks, implicitly determining the expected rates of return on these assets and thereby setting the MNC's cost of capital (see Chapter 13). The cost of capital, in turn, affects project valuations, which determines a company's investments (see Chapters 15 and 16).

Institutional investors often own relatively large portions of the shares of particular companies and are consequently well positioned to try to exert control on management. The California Public Employees' Retirement System (CalPERS) has become the poster child for shareholder activism. In 2010, CalPERS urged changes in the board of BP, the oil company, following the disastrous oil spill in the Gulf of Mexico.

Sovereign Wealth Funds

Over the past decade, a new set of institutional investors has received much attention. **Sovereign wealth funds** are state-owned investment funds, managing a global portfolio much like a pension fund would do. Many of these funds are located in countries with substantial oil revenues, such as Norway's oil fund or the Kuwait Investment Authority, which dates back to the 1950s. Sovereign wealth funds became particularly prominent during the 2007 to 2010 crisis when several funds took large stakes in struggling U.S. banks, such as the Abu Dhabi Investment Authority acquiring a $7.5 billion stake in Citigroup.

It is not always oil that provides the base revenue stream of sovereign wealth funds. One of the first funds, created in 1956, is the Revenue Equalization Reserve Fund of Kiribati, a tiny island in the Pacific Ocean. Kiribati's luck was that migrating birds produce tons of guano on its soil, which proved to be a much sought after fertilizer!

Hedge Funds and Private Equity Firms

In recent years, much of investors' money has flowed to **hedge funds**. Like mutual funds, hedge funds pool investors' money and invest in financial instruments to make a positive return. Many hedge funds seek to profit in all kinds of markets by pursuing speculative investment practices that may increase the risk of loss. The number of such funds has grown exponentially, particularly in the United States and Europe. Whereas mutual funds are strictly regulated—in the United States, they fall under the Investment Company Act of 1940—hedge funds operate under exemptions to the law. Theoretically, this limits their investors to people who are sophisticated and affluent. For example, hedge fund investors must have a minimum marketable wealth to qualify. Because of their light regulation, hedge funds can invest in just

about anything and may make extensive use of derivatives. They also charge fees as a function of performance, whereas mutual funds charge fees as a percentage of assets under management. As the hedge fund industry continues to grow, hedge funds may become more and more important in determining asset prices.

Operating under a structure similar to that of hedge funds are private equity firms, which raise money from rich individual investors and institutions and invest in a number of individual companies. These companies can be private (that is, not traded on a stock market), but larger private equity firms, such as Kohlberg Kravis Roberts & Co. and The Blackstone Group, also invest in companies listed on public exchanges and take them private (that is, de-list from the exchange). Private equity firms typically control the management of their companies, often bringing in new teams that focus on making the overall company more valuable. Private equity firms are increasingly involved in international acquisitions and may own genuine MNCs. Hedge funds and private equity firms are often actively looking for firms with poor corporate governance as potential targets for their value-enhancing activities.

1.5 Globalization and the Multinational Firm: Benefactor or Menace?

The past few decades witnessed enormous momentum toward trade and capital liberalization, deregulation, and the privatization of state-owned companies. The multinationalization of business is proceeding at a rapid pace. Yet, in the late 1990s and the beginning of the current century, several events and developments threatened the trend toward increasing globalization. These events include the recent problems experienced by multilateral trade liberalization, the currency and banking crises many countries experienced at the end of the 1990s, derivatives and corporate scandals that put capitalism more generally in a negative light, and the rise of the so-called anti-globalist movement. The watershed event may be the 2007 to 2010 global crisis.

In this section, we reflect on the possibility that these events may lead to a slowing or halting of the globalization process. This is a critical question that every international financial manager should ponder regularly. Managing financial risks in an integrated world economy is very different from managing risk in a world where governments fully assert their sovereignty, hamper international trade, and limit international capital flows. While nobody can foresee the future, it is our opinion that if societal trends are generally welfare enhancing, they will likely continue. Much ink has flowed on this topic, and the effects of trade liberalization (economic integration) and capital market liberalization (financial integration) on economic welfare are controversial. We turn to the rapidly growing academic literature on the real effects of globalization and foreign direct investment to find some objective clues as to whether recent events really have the potential to undermine globalization.

A Rocky Road to Free Trade

Several recent developments have slowed the trend toward more trade openness. First, unilateral trade liberalization in the developing world has slowed down considerably. There seems to be more emphasis on preferential trade agreements in particular regions, but these may challenge the viability of multilateral trade rules. Second, recent efforts to open the European services markets to increased competition in the context of the European Union fell short of initial ambitions. Third, multinational trade talks in the Doha Round, after 10 years, have yet to yield concrete results. Moreover, violent demonstrations by opponents of free trade interrupted several meetings. Finally, the global crisis led to what Baldwin and Everett (2009) call

"murky" protectionism.This includes measures that are allowed under WTO obligations but still discriminate against foreign companies, goods, workers, and investors.

Many developing countries raised tariffs while adhering to the ceilings imposed by the WTO (such as Russia on used cars), or they used trade litigation or technical barriers to shield domestic industries from foreign competition. Legislatures imposed rules in bailout packages following the crisis implicitly favoring domestic companies or labor, such as UK banks being encouraged to lend to the home market or the U.S. requirement that banks receiving bailout money replace laid-off workers with American workers. The United States did not set a good example for free trade: The U.S. government bailout of the car company GM is a blatant example of protectionism, and its September 2009 decision to slap a 35% tariff on imported Chinese tires threatened to ignite a trade war.

The sudden increase in economic protectionism is dangerous, as trade openness seems to unambiguously create economic growth. Increased protectionism likely only worsened the recessionary impact of the financial crisis. Here, we review two critiques of the trade liberalization process that have some merit. They do not call for less trade openness but for a different emphasis and process toward trade openness.

Trade Openness and Economic Risk

Countries should care not only about their long-term rate of economic growth but also about its variability. If a global economy exposes countries to additional risks and causes deeper recessions than a closed economy would face, many policymakers and their citizens may prefer the calmer waters of slower, steady growth in a relatively closed economy. Rodrik (1998) argued that trade openness increases external risk because open economies are more buffeted by international shocks (changes in commodity prices, exchange rates, foreign business cycles, and so forth). These shocks may create volatile swings in the fortunes of internationally oriented businesses, with adverse implications for the job security of the people employed in these companies.

Such increases in real variability call for government transfers to mitigate external risk: social security, unemployment benefits, job training, and so on. Indeed, small European countries, such as those in Scandinavia, have simultaneously opened their economies and developed extensive welfare states to protect their citizens against the economic insecurities generated by globalization. However, the social safety nets in most developing countries are anemic, which suggests that unbridled trade openness without the existence of government welfare programs may be ill advised.

Fairer Trade Openness?

Within the EU, the Common Agricultural Policy protects farmers through subsidies and other measures. In the 1980s, enormous dairy subsidies led to such overproduction of butter and milk that increasingly drastic measures had to be taken to get rid of the "butter mountain" and "milk lake." This unfortunately also included disposing of vast quantities of butter on the world market at low prices. While the introduction of production quotas has reduced this problem, it has not gone away completely. In the United States, growers of corn, wheat, cotton, soybeans, and rice receive more than 90% of all farm subsidies; Japan is notorious for the protection of its rice farmers.

Clearly, developed countries have maintained protectionist measures and subsidies in the agricultural sector. Yet, it is in that sector that the comparative advantage of developing countries is likely largest. Nobel Laureate Joseph Stiglitz, in his 2002 book *Globalization and Its Discontents*, has railed against such inequalities. Other examples include the Uruguay Round opening up markets for financial services (benefiting developed countries with large international banks) but not for maritime and construction services (benefiting developing countries). As often happens, what is desirable at an economic level is not always achievable politically. For example, while the agricultural sector has shrunk considerably in most developed countries, its political power remains disproportionately large.

Do International Capital Flows Cause Havoc?

In the 1990s, a number of emerging markets that had previously opened up their capital markets to foreign investment experienced significant currency and banking crises. First, Mexico was hit in 1994, then Southeast Asia in 1997, and Russia in 1998. These crises caused real economic pain as output fell and unemployment rose dramatically. The crises also resulted in a reversal of capital flows, and many developing countries are now exporting capital to rather than importing capital from developed countries. We discuss these issues further in Chapter 4. Many blamed the crises on foreigners—either foreign investors or international organizations such as the IMF. The crises also intensified the political and economic debate about the benefits and costs of financial globalization. Are these criticisms well-founded? Let's examine the theoretical benefits and costs of financial globalization and what the record shows.

Benefits of Financial Openness

Economic theory suggests undeniable benefits of financial globalization. A free international capital market can channel savings to its most productive uses, wherever they may be. Residents of different countries can pool risks internationally, achieving more effective insurance than purely domestic arrangements allow. A country suffering a temporary recession, a natural disaster, or simply a lack of capital can borrow abroad. Because risks are shared, the cost of capital decreases, leading firms to invest more, which increases growth.

Costs of Financial Globalization

Of course, foreign capital need not be efficiently invested. One view of the global financial crisis sees foreign capital as a problem. Low interest rates led to a consumption binge and unrealistically high asset prices with worldwide booms in construction and real estate. These phenomena were greatly helped by weak banking sectors in the capital-receiving countries that failed to stop excessive borrowing using inflated assets as collateral. A boom–bust cycle resulted. Fickle foreign capital can leave at the first hint of trouble, and financial volatility easily turns into real volatility when businesses go broke and banks collapse. This view suggests that liberalization dramatically increased financial-sector vulnerability in many countries and increased real volatility.

Financial globalization may also mean a loss of fiscal autonomy as it is difficult to tax internationally footloose capital relative to less mobile factors of production, notably labor. MNCs can also shift "profits" across countries, reducing tax revenue in high-tax countries.

Nevertheless, in a globalizing world where multinational corporations account for much economic activity, the effectiveness of capital controls likely decreases. Desai et al. (2009) show that multinational corporations employ "internal capital markets" (between the affiliates of the MNC) to circumvent capital controls. They also demonstrate that MNCs in countries with capital controls shift profits to other countries and invest less than in other, similar countries. Consequently, imposing capital controls can have potentially severe economic costs and lead to reduced tax revenues.

What the Data Show

Because a large number of emerging economies have liberalized at different times, the data allow us to see what has happened in countries that liberalized relative to countries that did not. While such exercises are never definitive, they give us a better overall picture of the evidence than some well-chosen case studies. Recent work by Bekaert et al. (2005) demonstrates that countries with open equity markets grow 1% faster per year than countries with closed markets and that countries with open capital accounts also grow faster than countries with severe capital controls. Although not everyone agrees with these findings, they appear to be robust. It is generally accepted that countries with better financial development (a stronger banking sector, for instance) and better institutions (higher-quality governments) are more

likely to experience growth benefits after opening up their capital markets than countries with weak development and poor institutions.

The evidence on real volatility is more mixed (see Bekaert et al., 2006; and Kose et al., 2009). Liberalizing countries, on average, appear to experience a small decrease in real volatility, but the institutional background of the countries is important. Countries with highly (less) developed banking sectors or high- (low-) quality government institutions experience decreases (increases) in real volatility. The assertion that globalization has gone too far for emerging economies is consequentially not supported by empirical analysis. Nevertheless, the recent crises suggest that financial integration is best accompanied with vigorous reforms of the domestic financial sector and local institutions.

Interestingly, MNCs can provide a buffer during an economic crisis. When emerging markets suffer a currency crisis, severe economic recessions usually follow. While the currency depreciation should improve the international competitiveness of local firms, imperfect capital markets often make it difficult for local companies to avail themselves of these opportunities. Desai et al. (2008) show that multinational affiliates are both better able to capitalize on these competitiveness effects and better able to circumvent the financing difficulties that local firms face. In doing so, multinational affiliates expand activity precisely when local firms are handicapped. They can do so because they can sell products within the multinational network and obtain intra-firm borrowing and equity infusions. In short, an MNC's enhanced access to global product and capital markets allows them to buffer crisis economies from the severity of economic shocks.

The Anti-Globalist Movement and MNCs

Recent trade rounds have not only had to cope with political squabbling between countries but also with a powerful anti-globalist movement that has organized often violent demonstrations around trade talk centers. The anti-globalist movement is particularly important because it has identified multinational corporations as one of the main "villains" of globalization.

What Are Anti-Globalists?

Anti-globalization is an umbrella term encompassing separate social movements, united in their opposition to the globalization of corporate economic activity and the free trade with developing nations that results from such activity. Anti-globalists generally believe that global laissez-faire capitalism is detrimental to poor countries and to disadvantaged people in rich countries.[6]

Anti-globalists also criticize global financial institutions such as the World Bank, the IMF, and the WTO. Especially under attack is the so-called Washington consensus model of development, which, as promoted by international financial institutions (especially the IMF), is interpreted as requiring macroeconomic austerity, privatization, and a relatively laissez-faire approach to economic management. It is believed that these policies exacerbate unemployment and poverty. While there are serious criticisms of IMF-supported policies, the point should be made that seeing a doctor near a patient does not mean the doctor made the patient sick. Too often, unsustainable policies in the developing countries are the root of the problem, and the IMF arrives later.

Many anti-globalists are part of nongovernmental organizations (NGOs), which advocate global human rights, protection of the environment, poverty alleviation, fair trade, and so on. The movement's largest and most visible mode of organizing remains mass demonstrations against international meetings, which unfortunately often turn violent. At the Rostock, Germany, Group of Eight (G8) Summit in 2007, hundreds of people were injured.

[6]*No Logo*, the book by the Canadian journalist Naomi Klein (2000), which criticized the production practices of multinational corporations and the omnipresence of brand-driven marketing in popular culture, has become a manifesto of the movement.

Why Do Anti-Globalists Dislike Multinationals So Much?

One worry is that multinational activities harm the environment because governments keen on FDI degrade environmental standards (the race-to-the-bottom effect) or because heavily polluting industries relocate to countries with lower standards, in particular to developing countries (the pollution-haven effect). The evidence to date is inconclusive. A second critique is the "sweatshop" argument: People in developing nations slave away for MNCs at low wages and for excruciating long hours under horrific conditions.

Finally, globalization is seen as a threat to employment in home countries. The internationalization of the labor market is arguably the most contentious issue in the societal debate about the effects of globalization. Originally, worries focused on international trade sucking blue-collar manufacturing jobs to lower-cost countries, but more recently, the outsourcing phenomenon is seen as also threatening white-collar jobs. Because telecom charges have tumbled worldwide, workers in far-flung locations are easily and inexpensively connected to customers in the developed world. Moreover, not only are basic data processing and call centers being outsourced to lower-wage countries but also software programming, medical diagnostics, engineering design, law, accounting, finance, and even business consulting. These services can now be delivered electronically from anywhere in the world, exposing skilled white-collar workers to increased competition.

The Economic Effects of FDI and Multinational Activity

Setting aside nationalistic pride and anti-globalist slogans, scholars have studied the economic effects of FDI quite thoroughly, and some firm conclusions can be drawn.[7] The bleak view that FDI simply leads to unemployment in the company's home country and depressed wages and exploited workers in the host country does not hold up to close scrutiny.

In the home country, there is no denying that job losses occur when production facilities are shifted abroad or certain tasks are outsourced. However, FDI is a two-way street. Foreign companies investing in the home country create jobs. For example, studies indicate that over the past 30 years, the jobs and output created by foreign-owned affiliates offset the losses suffered by the U.S. manufacturing sector. Moreover, Desai et al. (2006) show that U.S. firms investing abroad also increase their U.S. investment and employment. Hence, a company's investment abroad could end up protecting jobs at home by strengthening the parent company, for example, by shielding it from the damaging effects of currency fluctuations and trade-inhibiting tax policies in the home country. Analysis by Amiti and Wei (2005) also suggests that outsourcing so far has not led to net job losses because globalizing firms also create jobs as they become more profitable.

Let's turn to the effects of FDI on host countries. While some working conditions may be less than ideal (definitely compared to what workers are used to in developed countries), the preponderance of the evidence suggests that MNCs pay higher wages than local firms. Unfortunately, there is only sparse evidence of those higher wages having a "spillover" effect on the wages local companies pay.

Proponents of FDI argue that its main advantages are an improvement in allocative efficiency (employing capital where it is most productive) and technology transfer and productivity spillovers. Foreign direct investors presumably have access to productive knowledge that is otherwise not available to producers in the host country: technological know-how, marketing and managing skills, export contacts, coordinated relationships with suppliers and customers, and reputation. FDI

[7]Most of what is written here builds on the review article by Lipsey (2004). Other articles include one by Goldberg (2007), which focuses on the financial services sector, and an article by Aitken and Harrison (1999), which is a nice example of a careful empirical study with detailed data for one country (Venezuela).

may consequently help close the "idea gap" between developing and developed countries. Yet the empirical evidence on FDI-induced improvements in productivity is somewhat inconclusive to date.[8] Nevertheless, there is general agreement that FDI boosts economic growth in host countries, with one authoritative study suggesting that the growth effects are only significant when the host countries boast a sufficiently educated population (see Borensztein et al., 1998).

Pondering the economic effects of FDI for host countries is important because many countries offer incentives (outright subsidies or reduced taxes) to attract FDI, and host countries must make sure the benefits from FDI justify the costs.

Some Final Thoughts on Globalization

Can globalization withstand all the challenges already discussed? The 2007 to 2010 crisis gave additional ammunition to anti-globalization voices. On the surface, it looked as if greedy American bankers enriched themselves by dumping worthless assets on the rest of the world, causing a worldwide recession. The chance that the globalization process may be halted is now real.

We believe globalization is desirable, yet the arguments of the critics should not be ignored. There does seem to be some evidence that, on average, workers in developed countries have not benefited from globalization and that the benefits of globalization in developing countries have not, as of yet, brought widespread welfare enhancements. It is possible that this is because of the incompleteness of the process; it is equally possible that governments must intervene to help better spread the newly created wealth. For example, whereas it was generally believed that the IT revolution increased the relative value of skilled workers relative to nonskilled ones, it is now becoming clear that globalization also contributes to this trend. With the vast labor forces of India and China gradually becoming integrated into the world's labor force, this massive increase in labor relative to capital is likely to have affected their relative returns. High returns to capital typically mean that the rich get richer. At the same time, the skill level in emerging markets is rising so that even some skilled labor in the Western world will feel the brunt. Because globalization destroys some jobs and creates others, it is natural that it creates uncertainty and that trade-displaced workers feel left behind by the benefits. This should put pressure on governments to help as much as possible those displaced by globalization, for example, by effective retraining and employment policies. If the average worker does not feel better off due to the globalization process, resentment will rise.

Similarly, developing countries must ensure that the benefits of openness are shared widely. The dialogue between developing countries and developed countries should change. A fair globalization involves developed countries opening their markets more to products in which developing countries can be highly competitive (such as agricultural products). 1987 Nobel Peace Prize Laureate and former president of Costa Rica, Oskar Arias Sánchez, said it best: "We [the developing countries] don't want your [the developed countries'] handouts; we want the right to sell our products in the world markets."

1.6 Overview of the Book

The field of international financial management addresses decisions facing corporate managers regarding trade and investment across national borders. While practical examples and case studies are useful study guides, we stress fundamental concepts, principles, and analytical

[8]Branstetter (2006) uses citations of patents to demonstrate that Japanese FDI in the United States increases the flow of knowledge spillovers both from the Japanese investing firms to American companies and vice versa. However, Aitken and Harrison (1999) find that the net gains from foreign investment are small as FDI improves the productivity of the foreign-owned plant but negatively affects the productivity of domestically owned plants.

theories that are bound to be more resilient to the constantly changing challenges of operating in a competitive global marketplace.

The fundamental idea of this book is to present international financial management in a modern, theoretically correct approach that incorporates analysis of data and thus allows the student to learn how well or poorly the current theories are supported by the data. Throughout the book, we emphasize the sources of risks that arise in international financial markets and how these risks can be managed.

This book is divided into five parts: I: Introduction to Foreign Exchange Markets and Risks; II: International Parity Conditions and Exchange Rate Determination; III: International Capital Markets; IV: International Corporate Finance; and V: Foreign Currency Derivatives.

Part I: Introduction to Foreign Exchange Markets and Risks

Part I examines the spot foreign exchange market in Chapter 2, the forward foreign exchange market in Chapter 3, the balance of payments in Chapter 4, and alternative exchange rate systems in Chapter 5. These chapters allow you to understand the nature of transactions foreign exchange risk and how it can be managed and to understand the links between the balance of payments and the demands and supplies of currencies that flow through the foreign exchange market. The fact that different countries choose different exchange rate systems implies that risks of loss due to fluctuations in exchange rates and the ability to manage these risks differ across countries.

Part II: International Parity Conditions and Exchange Rate Determination

Part II examines the relationships between interest rates and exchange rates and between prices and exchange rates. Chapter 6 explains the foremost building block of international finance: the theory of interest rate parity. This crucial concept explains why differences in interest rates across countries are neither a profit opportunity for investors nor an opportunity for corporations to lower their borrowing costs. Chapter 7 discusses speculation and risk in the foreign exchange market. We examine the issue of whether the uncertainty of future exchange rates affects the expected profitability from investing abroad. Chapter 8 examines the concept of purchasing power parity, which describes the relationship between the prices of goods in different countries and the exchange rate. It also discusses the links between inflation rates and rates of change of exchange rates. We will show that purchasing power parity works quite poorly in contrast to interest rate parity. Chapter 9 discusses management issues that arise in such an environment. The competitive pricing of products in different countries and the evaluation of foreign subsidiaries are examined. With all the building blocks out of the way, Chapter 10 explains how economists think about exchange rate determination and explores alternative methods that are used to forecast future exchange rates.

Part III: International Capital Markets

Part III surveys the international capital markets. The international bond market is examined in Chapter 11. When an MNC issues debt, it must consider the currency of the debt, the maturity of the debt, the type of interest rate payments that are promised and when the principal will be repaid, and who to use as a marketing agent for the debt. The international equity markets are explored in Chapter 12. As discussed earlier, a key consideration for firms is the cost of capital. Chapter 13 explains how international investors determine the expected return on equity and thus set the costs of capital for corporations. Chapter 14 explores the ideas of political risk and country risk. The history of direct foreign investment by multinational corporations is replete with instances in which MNCs have lost either part or all of the value of an investment because of a political decision in the host country.

Part IV: International Corporate Finance

Part IV contains a blueprint for valuing international projects. Chapter 15 lays the foundations of international capital budgeting using the adjusted net present value (ANPV) framework. Chapter 16 continues with some more advanced issues in international capital budgeting. Foreign projects can be valued, as in Chapter 15, by discounting expected foreign currency cash flows. They can also be valued by discounting expected domestic currency cash flows. Chapter 16 explains how these two approaches are related. Although risk management issues arise throughout the book, Chapter 17 uses the ANPV framework to show how risk management can add value to a multinational corporation.

Part IV also considers two basic topics that are part of the tool kit of any international financial manager. Chapter 18 examines how firms finance international trade. Managing working capital is the topic of Chapter 19, including allocating assets and liabilities efficiently and transfer pricing.

Part V: Foreign Currency Derivatives

Part V introduces foreign currency options in Chapter 20 and interest rate and foreign currency swaps in Chapter 21. These derivative instruments are incredibly useful in managing foreign exchange risks. Option strategies can be described as purchasing insurance in the sense that you pay up front to protect yourself against bad events, but you participate in the profitability if the bad event doesn't occur. Interest rate swaps allow a financial manager to change a firm's debt from fixed interest rate payments to floating interest rate payments, while currency swaps allow the financial manager to change the currency of denomination of the debt.

A Final Introduction

We still have one introduction to make. Throughout the book, two brothers, Ante and Freedy Handel, discuss various international financial management problems and controversial issues in international finance in *Point–Counterpoint* features. These brothers, who are enrolled in an international finance class, don't share a common viewpoint. Ante typically rails against free trade and free markets as he believes financial markets are inefficient and that prices do not necessarily correctly reflect information about a firm's prospects. Freedy believes more in the power of the capitalist system to allocate resources efficiently, and he consequently believes that financial markets by and large get things right.[9]

The *Point–Counterpoint* feature is designed to explore areas of controversy and is consistent with the philosophy of this book. Many textbooks often provide short, easy answers to difficult questions. That approach is fine when there is general agreement about an issue, but often the situation is more subtle and intricate than standard books may make you believe. The *Point–Counterpoint* feature is designed to raise issues that are contentious and that are often not fully resolved or well understood by the academic and practitioner communities. Luckily, the two brothers have a sober thinking cousin, Suttle Trooth, who moderates their discussions and reflects state-of-the-art thinking on the issues. Here, we start the brothers off discussing a takeover attempt of a U.S. oil company by a Chinese company.

[9]For the language buffs, *handel* is Dutch for "trade" or "commerce." In German, it means "trade" or "transaction," but *händel suchen* also means "making trouble" or "quarreling," and the brothers do a lot of that.

POINT–COUNTERPOINT

China Goes Global and Gets Rebuffed

It's August, and Ante and Freedy Handel enjoy their vacation, relaxing at home. Ante, comfortably lounging in a splendid sofa designed and produced in Milan, Italy, looks up from his newspaper and barks to Freedy: "Hey, that Chinese company withdrew its bid on Unocal. Our Congressional Representatives finally got something right because we don't want the Chinese government owning our strategic assets." Freedy, savoring a refreshing Leffe, sounds baffled. "I have not heard of this case; can I see the paper? I thought FDI is good for the world economy as it places the control of assets into the hands of the people that value them the most."

Ante gives the article to Freedy, who grows increasingly agitated as he reads. Here are the facts. On April 4, 2005, directors of Unocal, the 12th-largest U.S. oil company, accepted a $16.5 billion offer to be bought by Chevron, the second-largest U.S. oil company. However, on June 22, 2005, the Chinese National Offshore Oil Corporation (CNOOC), the third-largest Chinese oil company and a company smaller than Unocal, made an $18.5 billion counteroffer to purchase Unocal. In mid-July 2005, Chevron increased its bid to $17.3 billion, still below CNOOC's bid. However, CNOOC's offer was facing unprecedented political opposition in Washington. For example, in a letter to the Treasury Department, 41 politicians, both Republicans and Democrats, raised concerns that a Chinese takeover of Unocal could compromise national security. Many other high-ranking U.S. government officials also expressed doubts about the desirability of CNOOC's purchase of Unocal. The situation was resolved August 2, 2005, when CNOOC withdrew its bid, thus allowing Chevron to complete the takeover.

"See!" blurts Ante. "Clearly, the Chinese want to grab strategic U.S. oil assets, and that simply is a threat to U.S. national security." Freedy gasps, "Mercantilism is dead, Ante. You have got to be joking. Unocal is a small player. It only produces 0.8% of total U.S. crude oil production. Most of what you buy is international anyway. Where do you think your sofa is from?"

"Wait a minute, wise guy," Ante retorts. "Read the article! Unocal is a significant provider of natural gas to Southeast Asia (the Philippines, Bangladesh, and Thailand), where 70% of its oil and gas reserves are located. It is also a primary investor in the Baku-Tbilisi-Ceyhan (BTC) Pipeline, which carries oil from the Caspian to the Mediterranean. If China acquired a share through CNOOC, it would gain a foothold in a region of utmost strategic importance to the United States."

At that point, Suttle Trooth strolls in, sporting a cool red iPod Nano. "Hey guys, have you heard that new killer CD by Radiohead?" Noting Ante and Freedy's agitated faces, he quickly gets the picture. "Boy, you really are quarreling again."

Ante and Freedy show the article to Suttle, both smirking confidently and thinking that Suttle will prove them right. "Aha." Suttle sighs, "What else is new? The American public and its politicians were up in arms in the 1970s when the Saudis recycled their petrodollars buying into U.S. industries, and again in the 1980s when Japan embarked on a buying spree of American assets including a real estate icon like Rockefeller Center in New York. Americans just do not like foreigners getting their hands on important, 'symbolic,' American assets. Nevertheless, it remains bad economics. The results on the economic effects of FDI for host countries are rather unanimously positive. Freedy is hence correct that much of the economic protectionism that goes on is simply bad politics catering to some latent xenophobic feelings that exist everywhere. I also do not believe the strategic value of Unocal is large or that a Chinese takeover of a relatively small American oil and gas firm is a risk to U.S. national security. However, there is one thing about the takeover that is a bit unfair. Look at what the article says about the financing of the deal."