

# **Global Capital and National Institutions: Crisis and Choice in the International Financial Architecture**

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## **I. Introduction**

All managers face a business environment in which international and macroeconomic phenomena matter. Understanding these phenomena—the determinants of capital flows, the effects of foreign capital on host countries, the impact of exchange-rate movements, and the genesis of financial and currency crises—is a crucial aspect to making informed managerial decisions. International capital flows can significantly affect countries' development efforts and provide clear investment opportunities for businesses. Adverse macroeconomic phenomena can exert a catastrophic impact on a firm's performance, as evidenced by the many strong companies destroyed by the successive crises in Latin America and the Asian financial crisis and the recent U.S. subprime mortgage crisis and the global financial meltdown of 2008 and 2009. But such episodes can also create business opportunities, and not just for the speculators that profit from them. Managers who have and use a coherent framework for analyzing these phenomena can secure a competitive advantage.

This book presents a series of case studies taught in the Harvard Business School course *Institutions, Macroeconomics, and the Global Economy* (IMaGE). The course addresses the opportunities created by the emergence of a global economy and proposes strategies for managing the risks associated with globalization. The course emphasizes both the economic consequences of policies and the political and institutional context in which they are established and implemented. The material thus bridges a gap between firm- and household-level behavior, which is typically well understood by a managerial audience, and aggregate phenomena, which are often less understood by this audience.

The cases in this book have been designed to give students an appreciation of the critical role of institutions and policies in affecting patterns of international capital flows and the abilities of government to manage them effectively. The case studies in the module are tied together by two broad themes: (1) the determinants and effects of international capital, and (2) policy-makers' management of these flows. The cases approach these themes by exploring institutional detail in deep local context. The cases expose students to key recent events that have shaped the way economists think about these subjects. The events covered have a clear global perspective as the cases are set in Africa, Asia, Europe and Latin America, as well as the United States. The cases also cover events that occurred during the last three decades as not only do they affect the business environment that managers face today but also they hold important lessons. An important feature the cases reveal is the cyclical nature of international capital flows.

The cases were written to encourage students to consider several fundamental characteristics of the international financial system: why cycles in international capital flows recur; and how does sovereign debt and domestic debt differ from each other in their contracts, explicit and implicit, and their enforcement. The module also teaches students three key insights from the field of international economics. First, trade in goods is different from trade in financial assets: a financial transaction inherently involves a commitment to pay at a later date. Financial transactions are therefore fundamentally affected by problems of asymmetric information and the risk that the contract will not be enforced, and both problems are exacerbated at the international level. Second, international financial flows are affected by two additional macroeconomic risks that are absent within countries: sovereign risk and the use of different currencies. Third, international capital flows imply additional policy challenges for countries as policy-makers face a difficult trade-off among three objectives: monetary policy autonomy, a stable fixed exchange rate, and free capital mobility. Research has demonstrated that local conditions—political objectives, financial markets, firms, and institutions—decisively influence the operation of these basic macroeconomic logics in actual practice. As a whole, the module emphasizes the

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importance of domestic institutions for effective macroeconomic policy-making, capacious regulations, credible policy commitment, and attracting and using foreign direct investment efficiently.

During the 1990s and early 2000s, the world witnessed an explosion in capital flows at the global level. Gross foreign assets and liabilities stood at two or three times GDP for many countries, as compared to just two decades ago. This explosive growth, especially in emerging markets, has been fueled both by changes in world politics (e.g., the end of the Cold War, collapse of the Soviet Union, shifting political climate in China, and political changes in Latin America and Asia) and advances in technology. Private capital flows—debt finance, equity capital, and foreign direct investment (FDI)—became larger than current and past official capital flows. FDI has become the dominant source of foreign private capital for emerging markets, promising additional productivity gains for recipient countries. Beyond merely adding to the stock of capital, FDI may translate into the promise of better technology, modern management, and greater access to global markets. Portfolio equity liberalization might help in a different way by exposing local companies to the scrutiny of the international capital market (and potentially requiring greater accounting transparency and more effective corporate governance). This new era of foreign capital mobility has also been characterized by low interest rates in industrial countries, growing external imbalances in the U.S. economy, and the rise of China, all of which posed new challenges to policy management.

In 2009, the global economy remained mired in a deep crisis following the subprime meltdown in the U.S. The World Bank, in one of its bleakest assessments yet of the ongoing crisis, estimated that the global economy would contract in 2009 for the first time since World War II. The World Bank's sister organization, the International Monetary Fund (IMF) released a similar outlook. More than \$50 trillion in wealth had been wiped out across borders over the last 18 months. Policymakers across the world found themselves trying to tackle a dizzying array of problems, from rising unemployment to frightened investors to plunging exports. According to one view, shared by many academics and policy makers, the financial sector debacle had its origins in the “global imbalance” — the phenomenon of large current account surpluses in China and a few other countries co-existing with large U.S. deficits. The situation was also a true testimony of how intertwined individual economies had become over the years. With the explosion of international capital flows, financial institutions in various corners of the world had inadvertently participated in the United States' debt-financing boom. The effect of policies to deal with the ongoing global crisis and new policy choices remained to be seen.

The rest of this chapter is organized as follows. Section I presents the sequence of the book and its purpose. *Global Capital and National Institutions: Crisis and Choice in the International Financial Architecture* is composed of three intellectual segments: a. *Determinants and Effects of International Capital Flows*; b. *Policies and Strategies for Harnessing the Benefits of Financial Globalization*; c. *Challenges and Policies of Large Economies*. Section II presents a detailed overview of the cases and readings in the module. Section III relates the cases in the module to the main patterns of international capital flows in the last thirty years. The last section also presents the key insights from the field of international economics covered in the cases as well as the current state of debate among policy-makers.

## I. Sequence and Purpose of the Module

### A. Sequence

#### I. Determinants and Effects of International Capital Flows

- Introduction: Institutions, Policies, and Capital Flows  
Botswana: A Diamond in the Rough (HBS No. 703-027)
- Policies and Effects of Foreign Direct Investment  
Foreign Direct Investment and Ireland's Tiger Economy (HBS No. 706-007)

- Foreign Direct Investment (HBS No. 703-018)
  - Capital Flows: Benefactor or Menace?
    - Transforming Korea Inc.: Financial Crisis and Institutional Reform (HBS No. 708-007)
    - Chronology of the Asian Financial Crisis (HBS No. 708-001)
- II. Policies and Strategies for Harnessing the Benefits of Financial Globalization
- Managing Capital Inflows
    - Capital Controls in Chile in the 1990s (A) (HBS No. 705-031)
    - Capital Controls In Chile in the 1990s (B) (HBS No. 705-032)
    - Capital Controls (HBS No. 702-082)
  - Managing Capital Outflows
    - Malaysia: Capital and Control (HBS No. 702-040)
    - Capital Controls (HBS No. 702-082)
  - Capital Flows and Monetary Policy in Emerging Markets
    - Brazil 2003: Inflation Targeting and Debt Dynamics (HBS No. 704-028)
  - Capital Flows and Tax Policy
    - Rovná Daň: The Flat Tax in Slovakia*” (HBS No. 707-043)
    - Foreign Direct Investment (HBS No.703-018)
  - Incentives to Investments and Institutions
    - Special Economic Zones in India (A): Public Purpose and Private Property (HBS No. 709-027)
    - Tata Motors in Singur: Public Purpose and Private Property (B) (HBS No.709-029)
    - Foreign Direct Investment (HBS No. 703-018)
  - Capital Mobility and the International Financial Architecture
    - Creditor Activism in Sovereign Debt: “Vulture” Tactics or Market Backbone (HBS No. 706-057)
    - International Capital Markets and Sovereign Debt: Crisis Avoidance and Resolution (HBS No. 707-018)
  - Capital Flows Between Rich and Poor Countries
    - Aid, Debt Relief, and Trade: An Agenda for Fighting World Poverty (A) (HBS No. 707-029)
    - Aid, Debt Relief, and Trade: An Agenda for Fighting World Poverty (B) (HBS No.707-040)
- III. Challenges and Policies of Large Economies
- Monetary Policy in Japan
    - Kinyuseisaku: Monetary Policy in Japan* (A) (HBS No. 708-017)
    - Kinyuseisaku: Monetary Policy in Japan* (B) (HBS No. 709-056)
  - Exchange Rate Policy in China
    - China: To Float or Not to Float? (A) (HBS No. 706-021)
    - China: To Float or Not to Float? (B): Timeline of Changes Relevant to the Chinese Renminbi (HBS No. 706-022)
    - China: To Float or Not to Float? (C): Esquel Group and the Chinese Renminbi (HBS No. 706-023)
    - China: To Float or Not to Float? (D): Bank of America’s Strategic Investment in China Construction Bank (HBS No. 706-031)
    - China: To Float or Not to Float? (E): ABB Investment in China (HBS No. 706-035)
    - China: To Float or Not to Float? (F): Alcatel and Strong Chinese Competition

(HBS No. 706-036)

- The U.S. Current Account Deficit and Global Imbalances  
The U.S. Current Account Deficit (HBS No. 706-002)  
The U.S. Current Account Deficit, Spreadsheet (HBS No. 706-701)
- The U.S. Subprime Mortgage Crisis and Global Imbalances  
The U.S. Subprime Mortgage Crisis: Policy Reactions (A) (HBS No. 708-036)  
The U.S. Subprime Mortgage Crisis: Policy Reactions (B) (HBS No. 709-045)  
Sovereign Wealth Funds: For Profits or Politics? (HBS No. 708-053)
- Global Financial Crisis  
The First Global Financial Crisis of the 21<sup>st</sup> century (HBS No. 709-057)

### *B. Purpose and Basic Insights of the Module*

*Global Capital and National Institutions: Crisis and Choice in the International Financial Architecture*, focuses on the costs and benefits of international capital and the policies utilized to make it work. The book is composed of three intellectual segments.

- The cases in *Determinants and Effects of International Capital Flows* study both potential positive and negative effects in host economies of opening up to international capital flows. In particular the cases analyze the effects of capital flows in the development efforts of countries, with an emphasis on FDI (which has become the main source of private flows to emerging markets) and the policies to attract and maximize FDI's benefits. In addition, the cases in this first segment analyze the effects of international capital flows in the context of financial crises.
- The second segment of the book, *Policies and Strategies for Harnessing the Benefits of Financial Globalization*, focuses on the strategies to harness the benefits of financial globalization and minimize potential risks. The cases cover policies regarding the management of capital inflows using capital controls, the choice of exchange rate regime, and policies associated with the management of sovereign defaults. The module ends with a discussion of the effects of transfers of capital and debt relief between rich and poor countries.
- The last segment of the book, *Challenges and Policies of Large Economies*, studies the cases of the three largest economies in the world (Japan, China and the U.S.).<sup>1</sup> Because of their economic importance and political power, the policy options available to these countries, and their effects, are in many ways different from the standard "small open economy" cases analyzed previously in the module. The module ends with a discussion of the "global imbalances", the U.S. subprime crisis and the global financial crisis of 2008-2009.

Technical notes on capital controls, foreign direct investment, and sovereign debt and the international financial architecture accompany the cases.

## **I. Determinants and Effects of International Capital Flows**

**Institutions, Policies, and Capital Flows.** "Botswana: A Diamond in the Rough," which introduces many of the themes in the book, examines the use of foreign capital and in particular FDI as a

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<sup>1</sup> The case book "Institutions Macroeconomics and the Global Economy," by Rafael Di Tella, Huw Pill and Ingrid Vogel (World Scientific, 2005) analyzes in detail the European Union experience.

development strategy with an emphasis on the role of domestic institutions in reaping its potential benefits. The motivation for the case is the important but little-known fact that since achieving independence in 1966, Botswana has recorded the highest sustained real GDP growth rate of any country in the world. The mutually profitable partnership between De Beers and the government of Botswana has helped the country to avoid the so-called “resource curse” that has afflicted other African countries with abundant natural resources such as Angola, Congo (former Zaire) and Nigeria. The case highlights the critical behavioral foundations of the resource curse: whether it is manifested depends ultimately on development strategy and effective leadership. Although Botswana might be the exception that proves the rule, that very exceptionality reveals what can be accomplished with effective institutions and policy-makers. The case introduces one of the main themes of the course, the role of good policy-making and solid institutions in harnessing the benefits of foreign capital. The case also identifies and develops the issues of communication, confidence, coordination, and institutional development and the role of policies that are central to the remainder of the course.

**Policies and Effects of Foreign Direct Investment.** “Foreign Direct Investment and Ireland’s Tiger Economy” provides an opportunity to deepen students’ understanding of the topics introduced in the Botswana case, specifically with respect to FDI. The Irish government consciously nurtured an investment-friendly regime and supported institutions like the Irish Development Authority (IDA) that were created to attract and promote investment in Ireland. Foreign firms were lured with generous fiscal and financial incentives. Yet many observers argue that the FDI-centered approach resulted in the marginalization of Ireland’s indigenous industry, which has remained on the economic periphery, and contend that overdependence on FDI has made the country’s economy more vulnerable to external changes. FDI’s potential benefits to a country extend beyond capital inflows and job creation to access foreign technology and markets and increased competition. However, for the benefits of FDI to materialize, host countries must create an overall enabling environment that includes stable macroeconomic conditions, more efficient capital markets, and better human and physical infrastructure. This implies that countries should consider the cost of policies aimed at attracting FDI and those of making investments to improve local conditions. Of course, this is not an either/or choice and the ends are not incompatible; better local conditions not only attract foreign companies, but also enable host economies to maximize the benefits of foreign investment.

The note “Foreign Direct Investment”, which provides an overview of the evolution of international business and analysis of world opinion regarding FDI over time, is a useful complement to the Botswana and Ireland cases.

**Capital Flows: Benefactor or Menace?** “Transforming Korea Inc.: Financial Crisis and Institutional Reform” highlights two of the book’s main themes. The case underscores the benefits of capital mobility versus potential risks and considers how domestic policies can exacerbate or mitigate those risks. Between 1980 and 2000, output per worker in Korea grew at 5.4% per year. During this period, the country experienced only two years of negative growth: in 1980 in the wake of the second oil shock, the international debt crisis, and the assassination of President Park Chung-Hee; and in 1998 in the midst of the Asian financial crisis that forced Korea to seek from the International Monetary Fund (IMF) and World Bank a record \$58 billion emergency rescue package. Prior to the 1997-1998 crisis, the fundamental institutional distortion in Korea was the political power of the *chaebols*, which effectively manipulated the financial system to obtain access to cheap funding. Moral hazard in the form of a government bailout mentality was pervasive. Financial fragility was intensified by the government’s decision, earlier in the 1990s, to open the economy to short-term but not long-term foreign lending.

The case “Chronology of the Asian Financial Crisis” complements the case.

## II. Policies and Strategies for Harnessing the Benefits of Financial Globalization

**Managing Capital Inflows.** “Capital Controls in Chile in the 1990s (A and B)” is a two-case series that explores issues associated with capital mobility, exchange rate management, and policy management (the “irreconcilable trilogy”) in the context of a country widely regarded as a “poster child” of reform. Chile had a disastrous early experience with opening its financial markets that culminated, in 1982, in the worst recession experienced by any Latin American country at the time. The country later restructured its domestic financial system and imposed extensive regulation and supervision. In the early 1990s, capital inflows threatened the central bank’s ability to both maintain a stable exchange rate (to preserve competitiveness) and lower the inflation rate to international levels. Thus, in 1991, Chile adopted a framework of capital controls. The case presents instructors an opportunity to analyze the mechanics and objectives of capital controls by focusing on the control of inflows. A comparison is drawn between Chile’s experiences with capital controls in the 1980s and 1990s. The case also examines the importance of other policies such as bank regulation and fiscal policy as well as the sequencing of policies with the tightening or loosening of capital controls to encourage economic growth and forestall economic crises. An important teaching point is that the system of capital controls instituted in Chile was complicated and its implementation was neither easy nor trivial: capital controls are complex policy instruments that rely on a central bank with strong enforcement capability.

The note “Capital Controls” summarizes the modern history of international financial market regulation, highlights the advantages and disadvantages of these restrictions, and describes the contemporary debate over controlling short-term capital flows.

**Managing Capital Outflows.** The case “Malaysia: Capital and Control” (HBS No. 702-040), explores how the Malaysian government managed the financial crisis that swept Asia in 1997-1998, with a focus on Malaysia’s imposition of controls on capital outflows. This episode sent shock waves through policy and academic circles around the world, and reopened the debate about the pros and cons of unrestricted capital flows and the effectiveness of controls. The case focuses on the content of Malaysia’s internal debate about capital controls, the reasons for the decision to impose them, the reaction of the international financial community, and lessons for other developing countries. Similarly, the case highlights that the implementation of capital controls is neither easy nor trivial. The case is a useful complement to the previous discussion.

**Capital Flows and Monetary Policy in Emerging Markets.** “Brazil 2003: Inflation Targeting and Debt Dynamics” follows up the discussion by illustrating the challenges of formulating monetary policy in emerging markets, in particular, the conflict with exchange rate management in the context of a “fear of floating.” The case also examines the mechanics of inflation targeting, a monetary framework arrangement that countries are increasingly adopting. Inflation targeting implies an explicit institutional commitment to meet a specified and publicly announced numerical inflation rate target or target range within a specified time frame, and emphasizes transparency through communication with the public and the markets about monetary authorities’ plans, objectives, and decisions. In addition, the case fosters an understanding of debt dynamics in emerging markets.

**Capital Mobility and Tax Policy.** “Rovná Daň: The Flat Tax in Slovakia” explores the impact of increased capital mobility on national tax systems. During the 1990s, several east European countries had adopted flat taxes; Slovakia followed suit and, on January 1, 2004, imposed a flat tax of 19% on personal income, corporate income, and value added tax as part of a central piece of economic reform in hopes of luring foreign investors through improved business transparency and simplification of tax laws. Slovakia’s and Ireland’s fiscal policies, in an era of increasing European financial integration, thus raised the stakes for European leaders to coordinate and possibly harmonize their tax systems.

**Incentives to Investments and Institutions.** “Special Economic Zones in India (A): Public Purpose and Private Property,” and “Tata Motors in Singur: Public Purpose and Private Property (B),” discusses a popular policy to increase investments and foster development. In 2005, the government of India enacted the Special Economic Zones (SEZ) Act in order to attract foreign investment, generate export revenues and create manufacturing jobs. However, several planned projects faced difficulties in acquiring land for setting up the SEZ. In December 2007, the government of India introduced the Land Acquisition Amendment Bill in the national parliament as a way to solve the significant land acquisition problems which were slowing down industrial projects in India. The Bill proposed to significantly extend the definition of “public purpose” for which the government could use the power of eminent domain to acquire land from private parties. Both the SEZ policy and the proposed Bill proved quite controversial, leading to intense debate and widespread protests. Some critics felt that while the SEZ policy might increase manufacturing employment and investment, the resulting land acquisition could threaten the livelihood of millions of farmers and further hamper India’s sluggish agricultural sector. Others questioned the necessity of government involvement in land transactions between private landowners and private developers. The case allows for a critical discussion about the appropriate role of the government in fostering economic development.

**Sovereign Debt and the International Financial Architecture.** “Creditor Activism in Sovereign Debt: ‘Vulture’ Tactics or Market Backbone” highlights the problems associated with coordination at the international level. The case allows students to understand the differences between sovereign debt and corporate debt (ability- versus capacity-to-pay problems) through the lens of the fascinating and frequently controversial firm Elliot Associates, which has played an important role in shaping the sovereign debt market. Elliot Associates, a so-called “vulture” fund or “rogue creditor,” invested in sovereign debt at discounted prices and sued for full recovery. Many observers deride firms such as Elliott, which seek to profit from sovereign debt restructurings at the expense of countries suffering economic hardship and of the majority of bondholders whose cooperation accommodates the restructurings. Critics believe that these holdout creditors create “collective action problems” and present a major obstacle to successful sovereign debt restructurings. Others argue that activist investors, in fact, improve the market overall by demonstrating the enforceability of contracts. They assert that creditors who receive favorable judgments in support of claims against countries face too many hurdles in collecting.

The session ends with a discussion of the international financial architecture that provides an opportunity for the class to apply and summarize lessons and implications derived from the cases. Successive economic crises in the 1990s and early 2000s—Mexico in 1994, Asia in 1997, Brazil in 1999, and Argentina in 2001—intensified the focus on reforming the “international financial architecture.” As many of these crises involved defaults on sovereign bonds, an important component of the discussion is the composition of international capital flows and sovereign debt restructuring. The note “International Capital Markets and Sovereign Debt: Crisis Avoidance and Resolution,” which describes some of the proposals advanced to reform the international financial architecture, is a useful complement to the discussion.

**Capital Flows Between Rich and Poor Countries.** “Aid, Debt Relief, and Trade: An Agenda for Fighting World Poverty (A) and (B)” reviews the challenges of growth and development, the state’s role in creating functioning markets, and the potential role of aid and debt relief in promoting economic growth by examining the difficulties and problems that face the world’s poorest countries. Amid the debate over aid versus debt relief, the private sector, often backed by wealthy foundations, has emerged as an active donor, but faces scrutiny as to whether it can improve the distribution and function of aid. The case builds on one of the recurring themes of the course: capital, even putatively “free” capital in the form aid, cannot really improve economic performance in a sustained way without being channeled into

effective domestic institutions. Although aid can achieve other goals—distributing food and education to those in need, perhaps assuaging the guilt of the world’s richest countries and individuals with respect to their sense of obligation to help the poor—unless the much greater challenge of institution-building is taken into account, the current state of affairs is likely to disappoint both donors and recipients.

## Challenges and Policies of Large Economies

The cases of the three largest economies of the world—Japan, China, and the United States—are examined next. Due to these countries’ economic and political importance, the issues and policy options open to them are in many ways different from those studied in the standard “small open economy” cases. The module ends with discussion of current financial crisis.

**Monetary Policy in Japan.** “*Kinyuseisaku: Monetary Policy in Japan (A)*” reviews Japanese monetary policy over the last two decades with an emphasis on the experience of deflation. After what seemed like a miracle performance, the Japanese economy fell stagnant for more than a decade. The “lost decade” has been attributed to many problems: burst of the bubble, bank problems and non-performing loans, failed fiscal policy, and slow structural reforms. But many critics point to failed monetary policy, as deflation is a monetary phenomenon. The case accommodates a critical analysis of the policies that the country implemented and an in-depth discussion of monetary policy, tools, and mechanisms and their effectiveness. “*Kinyuseisaku: Monetary Policy in Japan (B)*” updates to case to the current dilemma faced by authorities as they deal with the Global Financial Crisis of 2008-2009 with a history of high debt levels and low interest rates.

**Exchange Rate Policy in China.** “China: To Float or Not to Float? (A)” links China’s exchange rate policy with its development strategy.<sup>2</sup> On July 21, 2005, China revalued its decade-long, quasi-fixed exchange rate of approximately 8.28 yuan per U.S. dollar by 2.1% to 8.11, and introduced a more market-based exchange rate system. Yet the move fell short of many analysts’ and economists’ expectations. Extensive controls on capital movements into the country that had helped counter some inflationary pressure were increasingly becoming a target of debate as China continued to integrate itself into the world economy. An important objective of the case is to impart an understanding of the mechanics of China’s exchange rate policy, specifically, the role of capital controls and policy sterilization, as well as the challenges, risks, and benefits associated with maintaining a quasi-fixed exchange rate against the U.S. dollar. Comparisons with the Chile case encourage students to recognize that the policy motivations and institutional capacity of the government are essential to informed understanding of both the purpose of the regime and the conclusions that governments and market participants should draw from those countries’ experiences. The case also emphasizes the importance of sequencing exchange rate reform with changes to the banking sector and capital controls. To foster a debate about what China should do with its exchange rate policy and assess the impacts of different choices on businesses located in China and elsewhere, any of the following complementary short cases can be assigned: “China: To Float or Not to Float? (C): Esquel Group and the Chinese Renminbi” (HBS No. 706-023); “China: To Float or Not to Float? (D): Bank of America’s Strategic Investment in China Construction Bank” (HBS No. 706-031); “China: To Float or Not to Float? (E): ABB Investment in China” (HBS No. 706-035); and “China: To Float or Not to Float? (F): Alcatel and Strong Chinese Competition” (HBS No. 706-036).

**The U.S. Current Account Deficit and Global Imbalances.** The U.S. current account deficit of close to \$800 billion in the mid 2000s had been referred to as a paradox, a conundrum, and a threat. Considered at the core of so-called “global imbalances,” the deficit caused consternation among

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<sup>2</sup> “China: To Float or Not to Float (B): Timeline of Changes Relevant to the Chinese Renminbi” (HBS No. 706-022) provides updated information on further changes to China’s exchange rate system and international calls for greater flexibility.

policymakers around the world. Current account surpluses in poor and emerging economies took the bulk of the “other side”—China, East Asia, oil (non-OECD) exporting countries, and other emerging economies account for close to 75% of the foreign lending to the United States. The goal of the case is not only to analyze the implications of the U.S. deficit on the world economy and business environment, but also to make sense of the deficit in the context of traditional macro and international economic tools. As world savings finances world investments (that is, the sum of the world’s current account deficit has to add to zero), changes in the U.S. current account deficit have implications for other countries’ current accounts. As such, the evolution of the global imbalances has a first-order impact on world exchange rates, world patterns of exports and imports, international capital flows, and global growth. Building on the discussion in the *China* case, in addition to historical comparisons to U.S. current accounts deficits in the 1970s and 1980s, the case emphasizes that “politics”—the political pressures for potentially chaotic adjustments—are the main threat to what seems to be an “equilibrium” with economic incentives of the main parties aligned to sustain “global imbalances.” A model of exchange determination as outlined in “The U.S. Current Account Deficit Spreadsheet” (HBS No. 706-701) complements the discussion. The model, which incorporates three areas—the United States, Europe, and Asia—can be used to calibrate bilateral real exchange rate changes in response to various scenarios under which global current account imbalances might adjust.

**The U.S. Subprime Crisis and Global Imbalances.** The cases “U.S. Subprime Mortgage Crisis: Policy Reactions (A) and (B)” focus on the difficulties faced by the U.S. economy in 2008 and 2009 and the policy responses of the U.S. fiscal and monetary authorities highlighting events such as the Fed’s role in orchestrating JPMorgan Chase’s purchase of Bear Stearns, quantitative easing, the fiscal stimulus and the various plans to address the problems in the financial system. The cases also advance different policies that have been proposed to deal with consequences but also the causes behind the crisis. The case “Sovereign Wealth Funds: For Profits or Politics?” complements the discussion. Sovereign Wealth Funds, (SWF), broadly defined as an investment fund owned by a national or a government, were gaining prominence across the globe, especially with their recent investments in troubled U.S. financial firms that had suffered significant losses from the subprime mortgage crisis.

**Global Financial Crisis.** The case “The First Global Crisis of the 21<sup>st</sup> Century” discusses the world implications of the U.S. meltdown. Many analysts believed the large U.S. deficits raised the risk of a sharp and disorderly macroeconomic adjustment that could be painful, for the United States as well as for the rest of the world. By 2009, governments had taken various policy measures over the last few months to tackle the subprime mortgage crisis that threatened to drag the economy into a recession. Yet as the global economy faced slower growth stemming from the U.S. mortgage crisis, policy makers were caught in an intense debate over what the ‘right’ solution would be and the implication of these policies on global imbalances.

## II. Overview of Cases and Readings

### “Botswana: A Diamond in the Rough” (HBS No. 703-027)

#### Case Synopsis

Since achieving independence in 1966, Botswana has recorded the highest sustained real GDP growth rate in the world. Moreover, Botswana, arguably the most politically stable country in Africa, has enjoyed a democratic regime since independence. The achievements of this small, landlocked country situated in sub-Saharan Africa appear even more impressive because they have occurred in a region generally associated with economic stagnation and political unrest. The case highlights Botswana’s mutually profitable partnership with De Beers as evidence of using FDI as a successful development

strategy. Independence leaders such as Sereste Khama and Quett Masire gained a broad political base and made far-sighted policy decisions about the country's most important asset, diamonds. That Botswana was able to avoid the natural resource curse that has haunted virtually all natural resource-abundant countries, including Angola, Zaire (Congo), and Nigeria, is largely attributable to the role played by institutions. But a weaker diamond market and no strong alternative sector for foreign investment pose major challenges for the nation going forward.

The note "Foreign Direct Investment" (HBS No. 703-018), which provides an overview of the evolution of international business and analysis of cycles of world opinion regarding FDI, is a useful complement to the case.

### Teaching Objectives

- Define and differentiate FDI flows from other forms of foreign capital flows.
- Discuss the determinants of and motivations for FDI flows.
- Analyze the benefits of FDI and FDI-led strategies to host countries.
- Analyze the origins of Botswana's institutions and the role of leadership in the country's development.

### Proposed Assignment Questions

1. Is Botswana a success story?
2. What accounts for the country's performance?
3. Is this performance sustainable?

### Supplementary Reading List

- Laura Alfaro, Sebnem Kalemli-Ozcan, and Vadym Volosovych, "Why Doesn't Capital Flow from Rich to Poor Countries? An Empirical Investigation," *Review of Economics and Statistics* 90 (May 2008): 347-368.
- Daron Acemoglu, Simon Johnson, and James Robinson, "An African Success Story: Botswana." In *In Search of Prosperity: Analytic Narratives on Economic Growth*, edited by Dani Rodrik. Princeton: Princeton University Press, 2003.

### "Foreign Direct Investment and Ireland's Tiger Economy" (HBS No. 706-007)

#### Case Synopsis

Ireland's transformation from one of Europe's poorest countries into one of its richest in a short span earned it the nickname "Celtic Tiger." Its spectacular growth is attributed in large part to FDI, particularly from the United States. Ireland has, through government institutions such as the Irish Development Authority (IDA), focused its energies on attracting foreign investors with a combination of marketing strategies and fiscal and financial incentives. But the remarkable economic record of the 1990s, notwithstanding the efficacy and long-run viability of an FDI-focused growth policy, has come under scrutiny. Can Ireland continue to attract and sustain significant levels of FDI in the face of rising costs

and labor shortages at home and increasing competition from eastern European countries, aggressively trying to attract foreign investment and reducing corporate taxes?

The note “Foreign Direct Investment” (HBS No. 703-018), which provides an overview of the evolution of international business and analysis of cycles of world opinion of FDI, is a useful complement to the case.

### Teaching Objectives

- Critically assess Ireland’s development strategy.
- Discuss and debate the role of FDI, pros and cons as well as benefits and costs, in the context of Ireland’s growth.
- Critically assess the merits of government policies for attracting FDI to a host country.
- Discuss the effects of policies for attracting FDI within the context of the European Union.

### Proposed Assignment Questions

1. What accounts for Ireland’s economic success? What role did FDI play?
2. Should countries subsidize FDI? What are the pros and cons of FDI?
3. Are there lessons for other countries? Can the Irish model be replicated?

### Supplemental Reading List

- Laura Alfaro et al. “FDI and Economic Growth: The Role of Local Financial Markets,” *Journal of International Economics* 64 (October 2004): 113-134.
- Giorgio Barba Navaretti and Anthony Venables, *Multinational Firms in the World Economy* (Princeton: Princeton University Press, 2004), Introduction and Chapter 8.

### “Transforming Korea Inc.: Financial Crisis and Institutional Reform” (HBS No. 708-007)

#### Case Synopsis

In December 1997, Korea, which had prided itself on its remarkable growth over the previous few decades, suffered the humiliation of asking the International Monetary Fund (IMF) for a record \$58 billion bailout. Korea had emerged from the aftermath of the Korean War (1950-1953) and embarked on an export-led growth strategy that, by the 1980s, had transformed the nation from one of the lowest-income countries in Asia into a major exporter. The country’s economy continued to grow at a rapid pace through aggressive state intervention and capital controls, coupled with high savings and relatively low unemployment. By 1996, Korea had become the world’s 11th largest economy and joined the Organization for Economic Cooperation and Development (OECD). But just one year later, it was swept up in the Asian financial crisis, which exposed fundamental weaknesses in its economy, ranging from huge bad loans in the banking sector to overcapacity in the manufacturing sector to reckless growth policies pursued by large conglomerates—the engines that had been driving the nation’s economic growth. Under the IMF’s guidance, Korea launched a sweeping reform plan that overhauled its financial sector, revised its domestic labor laws, and opened up its market to greater foreign investment.

As Korea approached the ten-year anniversary of the financial crisis, reactions were mixed. Some observers praised the country for having made significant improvements in its banking system and overall regulatory environment. But others believed that Korea needed, in addition to regulatory and institutional reforms, to find a new growth model capable of generating sustainable economic growth, especially as neighboring China and Japan seemed to be increasingly threatening its competitiveness in the global export market.

The case “Chronology of the Asian Financial Crisis,” (HBS No. 708-001), which provides a detailed overview of the events surrounding the crisis, complements the discussion.

### Teaching Objectives

- Explain the role of economic development strategy in the context of a country’s political background, recognizing that political constraints, especially if international or domestic political conditions change, might facilitate or hinder growth strategy.
- Understand the benefits of capital mobility versus the potential risks of financial liberalization in the case of Korea, in particular, in relation to the large family conglomerates that dominated the country’s economic landscape for decades.
- Grasp the origins of Korea’s financial crisis such as vulnerabilities to external shocks and institutional inadequacies, both domestic and global.
- Explore and examine the appropriateness of the policies that the IMF prescribed to a country suffering from financial crisis.

### Proposed Assignment Questions

1. How did Korea achieve its economic “miracle”?
2. If Park’s strategy up to 1979 was so successful, why did his successors want to change it?
3. Was the financial crisis of 1997 inevitable? What were the main causes of the crisis?
4. Were the IMF’s policies appropriate for Korea at that time? Why or why not?
5. How did Korea change through the crisis?

### Supplementary Reading List

- Joseph Stiglitz. *Globalization and Its Discontents*. New York: W.W. Norton & Company, 2002.
- Kenneth Rogoff. “An Open Letter to Joseph Stiglitz.” Washington DC, July 2, 2002, <http://www.imf.org/external/np/vc/2002/070202.htm>, accessed October 2007.
- Hahm Joon-Ho and Frederic Mishkin. “Causes of the Korean Financial Crisis: Lessons for Policy,” NBER Working Paper No. W7483, 2000, <http://ssrn.com/abstract=211229>.
- “Gold from the Storm,” *The Economist*, June 28, 2007.
- Rudiger Dornbusch, Yung Chul Park, and Stijn Claessens. “Contagion: How It Spreads and How It Can Be Stopped.” World Bank Research Observer, May 19, 2000.

<http://siteresources.worldbank.org/INTMACRO/Resources/ClasessensDornbuschPark.pdf>, accessed October 2007.

### **“Capital Controls in Chile in the 1990s (A)” (HBS No. 705-031)**

#### **Case Synopsis**

In 1991, Chile adopted a framework of capital controls focused on reducing the massive flows of foreign investment coming into the country. Because international interest rates remained low, capital inflows threatened the central bank’s ability to manage the exchange rate within a crawling band that aimed to eventually lower the rate of inflation to international levels. Until the Asian financial crisis of 1997 and the Russian debt crisis of August 1998, Chile’s economy had performed spectacularly under, or perhaps despite, these controls. But in the aftermath of those crises, the country’s economy began to suffer through both trade and financial channels. Its current account deteriorated not only because Chile relied on Asia as a market for one-third of its exports, but also because the price of copper, its largest export product, plummeted as demand from Asia dwindled. Financial flows to Chile, as to emerging markets in general, fell dramatically as investors panicked. By the end of 1999, Chile had experienced Latin America’s most severe “sudden stop” of external capital flows. Many private sector observers blamed the controls for unnecessarily adding to the strain and demanded that they be dismantled. But Chile’s central bank continued to defend the controls, arguing that they had helped to insulate the country from worse contagion. Chile was thus forced to decide what to do about its system of capital controls in this new economic environment.

A follow-up case, “Capital Controls in Chile in the 1990s (B)” (HBS No. 705-032), discusses the “sudden stop” in external capital flows to Chile in the years after the Asian and Russian crises, and details the changes in Chile’s capital controls framework and exchange rate system between mid-September 1998 and June 2003. The case also discusses the impact of the U.S. Free Trade Agreement that went into effect in 2004 on the scope of future capital controls in Chile.

The note “Capital Controls” (HBS No. 702-082), which traces the modern history of capital controls and presents the debate regarding the advantages and disadvantages of international financial market regulation, is a useful complement to the Chile cases.

#### **Teaching Objectives**

- Explore the relationships among capital mobility, exchange management, and monetary policy (the “irreconcilable trinity”).
- Introduce the mechanics and objectives of capital controls.
- Highlight the academic discussion of, and encourage students to debate, the advantages and disadvantages of capital controls, particularly on inflows.
- Compare Chile’s experiences with capital controls in the 1980s and 1990s, and discuss the importance of other policies (such as bank regulation and fiscal policy) to encouraging economic growth and deterring economic crises.

### Proposed Assignment Questions

1. Why did Chile institute capital controls in 1991? Did the controls achieve their objectives? What roles did other policies play in Chile's economic success in the 1990s?
2. What were the arguments for and against dismantling the controls in the wake of the Asian and Russian financial crises? What were the alternative policy options? Was Chile in danger of suffering a crisis such as that of 1982?
3. How should the relaxing of controls be sequenced with other policies? What can other countries learn from Chile's experiences?

### Supplementary Reading List

- Laura Alfaro and Rawi Abdelal. "Capital and Control: Lessons from Malaysia." *Challenge* 46 (July/August 2003): 36-53.
- Sebastian Edwards. "How Effective Are Capital Controls?" *Journal of Economic Perspectives* 13 (Fall 1999): 65-84.
- Bernard Laurens. "Appendix I: Chile's Experience with Controls on Capital Inflows in the 1990s." In A. Ariyoshi et al., "Capital Controls: Country Experiences with Their Use and Liberalization," IMF Occasional Paper 190, 2000.
- Kevin Cowan and Jose De Gregorio. "International Borrowing, Capital Controls and the Exchange Rate: Lessons from Chile." In *Capital Controls and Capital Flows in Emerging Economies: Policies, Practices and Consequences*, edited by Sebastian Edwards, Chicago: University of Chicago Press, 2007.

### "Malaysia: Capital and Control" (HBS No. 702-040)

#### Case Synopsis

On September 1, 1998 Malaysia imposed strict currency and capital controls, banning offshore trading of the Malaysian ringgit and restricting outflows of capital. The Malaysian capital controls sparked an enormous controversy in the world of international finance, and they remain at the center of debates among economists and policy makers. These debates include the following questions: Did the Malaysian capital controls successfully insulate the country's economy from the crisis? Did the capital controls promote an economic recovery that outpaced Malaysia's more orthodox neighbors, such as Korea? Does the Malaysian experience hold lessons for other developing countries facing financial crises? The case is designed to encourage students to engage each of these debates. *Malaysia: Capital and Control* was written for use in Business, Government, and the International Economy (BGIE), a required first-year course at Harvard Business School.

The note "Capital Controls" (HBS No. 702-082) is a useful complement to the case.

#### Teaching Objectives

- Explore the relationships among capital mobility, exchange management, and monetary policy (the "irreconcilable trinity").

- Deepen understanding of the mechanics and objectives of capital controls as well as the academic discussion of, and encourage students to debate, the advantages and disadvantages of capital controls, particularly on outflows.
- Debates the origins of the Malaysian capital controls.

### Assignment Questions

1. What caused the financial crisis in Malaysia?
2. Why did the Malaysian government impose currency and capital controls? Were the controls necessary? Were they effective? What were the benefits and costs? What are the lessons of Malaysia's experiment with currency and capital controls?
3. Why did the international financial community react so negatively to the Malaysian currency and capital controls?
4. What have been the effects of the Malaysian government's attempts to achieve "national unity" between 1971 and 2001?

### Supplementary Reading List

- Laura Alfaro and Rawi Abdelal. "Capital and Control: Lessons from Malaysia." *Challenge* 46 (July/August 2003): 36-53.
- K. S. Jomo. "Capital Controls." In *Malaysian Eclipse: Economic Crisis and Recovery*, edited by K. S. Jomo. London: Zed, 2001.
- Ethan Kaplan and Dani Rodrik. "Did the Malaysian Capital Controls Work?" NBER Working Paper No. 8142, February 2001. Also see Paul Krugman. "Saving Asia: It's Time to Get Radical." *Fortune*, September 7, 1998: 74-80;
- Paul Krugman. "An Open Letter to Prime Minister Mahathir." September 1, 1998, reprinted in *Fortune*, September 28, 1998: 35-36; Paul Krugman. "Capital Control Freaks: How Malaysia Got Away with Economic Heresy." *Slate*, September 27, 1999.

### "Brazil 2003: Inflation Targeting and Debt Dynamics" (HBS No. 704-028)

#### Case Synopsis

In October 2002, Brazilians elected for the first time in the country's history a left-wing president, Luís Inácio "Lula" da Silva. As markets faltered in response, da Silva reaffirmed his commitment to fiscal discipline, a floating exchange rate, and inflation targeting. By August 2003, however, his attempt to change market sentiment was coming under threat, as the country faced a looming recession. Skeptics began to worry that the new PT (Worker's Party) government would be forced to resort to printing money to meet its campaign promises. Moreover, with observers questioning the sustainability of Brazil's large public debt situation in the wake of Argentina's massive default on its public debt at the end of 2001, da Silva was under intense pressure to implement measures that would help spur the economy and deliver immediate results.

## Teaching Objectives

- Examine the mechanics of inflation targeting.
- Illustrate the challenges of inflation targeting in emerging market economies, in particular, the conflict with exchange rate management in the context of “fear of floating.”
- Develop an understanding of debt dynamics in emerging market economies and the linkages between inflation targeting and other monetary policy approaches,

## Proposed Assignment Questions

1. What is inflation targeting? What are the alternatives?
2. Would you buy a Brazilian bond in July 2002? What would be the basis for your decision? What other information would you like to have?
3. How about August 2003? Would you buy a Brazilian bond? What has changed?
4. Is inflation targeting a good strategy for emerging markets such as Brazil?

## Supplementary Reading List

- Laura Alfaro and Fabio Kanczuk. “Debt Maturity: Is Long-Term Debt Optimal?” Harvard Business School Working Paper No. 06-005, 2005.
- Guillermo A. Calvo and Frederic S. Mishkin. “The Mirage of Exchange Rate Regimes for Emerging Market Countries.” *Journal of Economic Perspectives* 17 (Fall 2003): 99-118.
- Banco Central do Brasil. “Open Letter to the Ministry of Finance.” January 16, 2003, <http://www.bcb.gov.br>, accessed February 2004.
- Rafael Di Tella and Ingrid Vogel. “The Choice of Exchange Rate Regime,” HBS No. 704-038, (Boston: Harvard Business School, 2004).
- Arminio Fraga, Ilan Goldfajn, and André Minella, “Inflation Targeting in Emerging Market Economies,” NBER Macroeconomics Annual 2003 Vol. 18, June 2003.
- Frederic S. Mishkin, “Inflation Targeting in Emerging-Market Countries,” *American Economic Review* 90 2 (May 2000): 105-109.

## “Rovná Daň: The Flat Tax in Slovakia” (HBS No. 707-043)

### Case Synopsis

Robert Fico, the newly elected Prime Minister of the Slovak Republic (Slovakia) in 2006, faced a crucial policy decision—whether to keep the controversial *Rovná Daň*, or ‘flat tax’ that his predecessor, Mikuláš Dzurinda, had adopted as part of a central piece of economic reform to bring stability and growth to the country. A flat tax was defined as an income tax that applied the same rate to everyone, regardless of one’s income level, often excluding deductions or exceptions. During the 1990s, several Eastern European countries such as Estonia had successfully adopted flat taxes; Slovakia followed suit and on

January 1, 2004, imposed a flat tax rate of 19% on personal income, corporate income, and Value Added Tax (VAT). According to Slovakia's Ministry of Finance, Ivan Mikloš, the broad objectives of the tax reform were the "creation of a business and investment friendly environment for both individuals and companies; elimination of existing weaknesses and distortionary effects of the tax law; and achievement of a high degree of tax fairness by taxing all types and amounts of income equally." Other goals included luring foreign investors through improved business transparency and simplification of tax laws. Yet despite positive growth, Dzurinda's reform plan had also led to cuts in public spending and high unemployment. Amid growing public discontent over the flat tax, Fico won the election as a critic of the existing tax system and as a proponent of reinforcing the welfare state. His decision whether to keep or overhaul the tax system in a nation suffering from reform fatigue would not only have an impact on the long-term sustainability of reforms, but also on Slovakia's compatibility with the European Union integration.

The note "Foreign Direct Investment," (HBS Note 703-018) serves as a useful complement to the case discussion.

### Teaching Objectives

- Understand the general principles of public finance and examine the objectives and purposes of a tax system.
- Understand the role of tax policy within the context of a nation's overall development strategy and its effect on the business environment
- Explore the principles behind what makes a tax system fair, equitable, and optimal, especially in relation to political economy considerations.
- Review the goals and complexities of adopting a flat tax system and whether it can serve as a fundamental platform for sustainable economic growth and foreign investment.
- Examine the flat tax's compatibility with the European integration initiative, as taxes and welfare systems are at the core of the different capitalist models in Europe.

### Proposed Assignment Questions

1. What is a flat tax? Should countries have a flat tax system? What are the best arguments for and against adopting it?
2. Why did Slovakia adopt a flat tax? How does it fit into Slovakia's development strategy?
3. Is the growing interest in flat tax compatible with the European Union's integration initiative in the long run?

### Supplementary Reading List

- Harvey S. Rosen, *Public Finance*, (Boston: McGraw Hill), 7<sup>th</sup> Edition, Chapter 14.
- Robert E. Hall and Alvin Rabushka, *The Flat Tax*, (Stanford: Hoover Institution Press, 1995).
- Paul Krugman, "The Tax Reform Obsession," *The New York Times*, April 4, 1996.

- “The Case for Flat Taxes,” *The Economist*, April 14, 2005.
- “Flat Taxes” *The Economist Intelligence Unit Views Wire*, January 18, 2007.
- “Slovak Republic,” OECD Economic Surveys, Volume 2005/16, September, 2005.
- “The Fundamental Tax Reform, December 2004,” Ministry of Finance of the Slovak Republic, <http://http://www.finance.gov.sk/en/Default.aspx?CatID=118>, accessed September 23, 2007.

### **Special Economic Zones in India (A): Public Purpose and Private Property,” (HBS No. 709-027)**

#### **Case Synopsis**

In December 2007, the government of India introduced the Land Acquisition Amendment Bill in the national parliament. The Bill proposed to significantly extend the definition of “public purpose” for which the government could use the power of eminent domain to acquire land from private parties. Under the terms of the proposed bill, if a “public serving” company had acquired 70% of the land for a project, the government could use the power of eminent domain to acquire the remaining 30% on behalf of the company. The bill was introduced as a way to solve the significant problems of land acquisition which were slowing down industrial projects in India. In 2007, farmer protests led to the cancellation of the project to build a Special Economic Zone in West Bengal state. India had enacted the Special Economic Zones (SEZ) Act in 2005, to create duty-free areas that were given various regulatory, infrastructural, and taxation benefits, similar to export processing zones in other countries. These zones were designed to attract investment from foreign and domestic sources, and fuel employment in the services and manufacturing sectors. Industrial projects outside Special Economic Zones were also facing difficulties in land acquisition. Both the SEZ policy and the proposed bill proved quite controversial, leading to intense debate and widespread protests.

A complementary case, “Tata Motors in Singur: Public Purpose and Private Property (B)” (HBS No. 709-029), details the Tata Motors factory project in Singur, the sequence of events in the subsequent land acquisition dispute, and the final outcome of Tata withdrawing its factory from West Bengal in October 2008 and relocating in Gujarat. This (B) case can also be taught on its own, as a way to analyze business strategy in the face of political risk in emerging markets.

The note “Foreign Direct Investment,” (HBS Note 703-018) can complement the case discussion.

#### **Teaching objectives**

- Understand that the underpinnings of a private property system include protection against expropriation by the state as well as other individuals, and that violating such protections, even for a “public purpose,” can lead to an erosion of perceived security of property.
- Discuss the limits to private property rights, and the circumstances under which governments should be allowed to acquire private property. This is part of the larger question of the appropriate role of the government in facilitating economic development.
- Explore the logic behind setting up Special Economic Zones as a development strategy, and the pre-conditions needed for this strategy to succeed. In particular, the students should consider whether the benefits generated by SEZs can justify government intervention in establishing them.

- Analyze the factors driving political risk with regard to land acquisition in emerging markets, and the necessity of involving all stakeholders, not just the current government.

### Assignment questions

1. Should the Indian government change the law on eminent domain, so that they can acquire land for Special Economic Zones?
2. Is setting up Special Economic Zones the right development strategy for India?
3. What could Tata Motors have done in their Singur project to mitigate the protests from farmers?
4. Under what circumstances and to what extent should the government intervene in market transactions?

### Supplementary Reading List

- Daron Acemoglu, Simon Johnson and James A. Robinson, “The colonial origins of economic development: an empirical investigation,” *American Economic Review* 91, no.5, pp. 1369-1401.
- Abhijit Banerjee and Lakshmi Iyer, “History, Institutions and Economic Performance: The Legacy of Colonial Land Tenure Systems in India,” *American Economic Review* 95, no.4, 1190-1213.

### “Creditor Activism in Sovereign Debt: ‘Vulture’ Tactics or Market Backbone” (HBS No. 706-057)

#### Case Synopsis

The role of distressed debt funds, also known as “vulture funds,” in sovereign debt restructuring was a hotly debated topic, especially after Elliott Associates successfully converted an \$11 million investment in Peruvian bonds into a \$58 million cash payout from the country, representing the full face value of \$21 million plus past-due interest. Many observers derided “vulture” and “rogue creditor” firms such as Elliott that sought to profit from sovereign debt restructurings and maintained that these holdout creditors presented a major obstacle to successful sovereign debt restructurings. But other observers argued that activist investors, in fact, improved the market overall by demonstrating the enforceability of contracts. Elliott and similar firms have changed the “business” of sovereign debt by taking a determined approach to ensuring that their contracts are enforced. Contrary to conventional wisdom, holdouts have not tended to derail restructurings. In most incidents, an 80-90% participation level is achieved in restructuring. Argentina’s case in 2005, with 76% participation, was an exception. Holding out is risky. Specialized firms like Elliot have been successful, but not every investor can be. A coordinated international approach might be warranted, however, as it is debatable whether courts in “rich” countries should be making decisions about which defaults are allowable or not due to capacity- versus willingness-to-pay problems. It is difficult to keep politics out of the decision, which accounts for the tendency of Europe and the United States to take an ambiguous and ambivalent approach to the problem of attachment.

A supplementary note on sovereign debt, “International Capital Markets and Sovereign Debt: Crisis Avoidance and Resolution,” (HBS No. 707-018), describes how successive economic crises in the 1990s and early 2000s intensified the focus on reforming the “international financial architecture.” Because many of these crises involved defaults on sovereign bonds, an important component of the

discussion revolved around the composition of international capital flows and sovereign debt restructuring. With the official sector, private creditors, and sovereign debtors concerned about different issues, proposals surrounding the topic varied widely. The note describes some of the proposals and summarizes their advantages and disadvantages.

### Teaching Objectives

- Explore the differences between sovereign debt and corporate debt (ability- versus capacity-to-pay problems).
- Highlight the problems of collecting after receiving favorable judgments against countries.
- Debate the benefits and drawbacks of “vulture funds” in sovereign debt restructuring, and analyze their effects on the sovereign debt market more generally.
- Consider whether institutional intervention is required in sovereign debt restructuring.

### Proposed Assignment Questions

1. How does one make money in this business? What are the implications of doing business with and buying sovereign debt in the secondary market? How does it differ from corporate debt?
2. Would you like to work for Elliott in this business? What are the implications of “vulture” activities for the sovereign debt market? What are the pros and cons? Do holdouts and “races to the courthouse” threaten to obstruct sovereign debt restructuring?
3. You are an average person in, say, Peru, Panama, or Argentina. Do you want Elliott to win or lose its case?
4. Is this the best type of solution to debt problems or is an institutional solution required? Thinking back to the Paris and London Club processes mentioned in the case, what other approaches might possibly address sovereign debt restructuring? What are the complications?
5. Some countries (e.g., Argentina) are thinking about responding by issuing bonds within their jurisdictions. Do you think this makes sense? What are the pros and cons?

### Supplementary Reading List

- Laura Alfaro and Fabio Kanczuk, “Sovereign Debt as a Contingent Claim: A Quantitative Approach,” *Journal of International Economics* 65, no.2 (March 2005): 297-314.
- Kenneth S. Rogoff, “International Institutions for Reducing Global Financial Instability,” *Journal of Economic Perspectives* 13 (Fall 1999): 21-42.
- Federico Sturzenegger and Jeromin Zettelmeyer, *Debt Defaults and Lessons from a Decade of Crises* (MIT Press), December 2006. Earlier draft available as *Defaults in the 90s: Learning to Deal with Crisis*, [http://www.utdt.edu/~fsturzen/Defaults%20in%20the%2090s Final.pdf](http://www.utdt.edu/~fsturzen/Defaults%20in%20the%2090s%20Final.pdf), accessed July 6, 2006.

## **“Aid, Debt Relief, and Trade: An Agenda for Fighting World Poverty (A)” (HBS No. 707-029)**

### **Case Synopsis**

At the 2005 Group of Eight (G8) Summit at Gleneagles, Scotland, world leaders called for full debt relief for the world’s poorest countries and agreed to double aid to Africa by 2010. The decision, in the spirit of helping to end world poverty and hunger, was called “real and achievable progress” by British Prime Minister Tony Blair. But critics questioned whether the proposal was a reliable way to fight world poverty and, in particular, whether debt relief or aid could promote investment and economic growth in the world’s highly indebted poor countries (HIPC’s). The role that bilateral and multilateral institutions such as the World Bank and their conditional aid packages have played in enabling growth and development of the world’s poorest countries seemed to be called into question by the G8’s announcement. Although observers might be quick to criticize donor policies, there is little consensus regarding the best policy for distributing aid and ensuring that the money is spent efficiently and effectively.

The “Aid, Debt Relief, and Trade: An Agenda for Fighting World Poverty (B)” case (HBS No. 707-040) provides a brief update on the progress made towards debt relief, official development assistance, and trade talks following the 2005 Gleneagles summit.

### **Teaching Objectives**

- Review the challenges to growth and development, the state’s role in creating functioning markets, and the interaction between markets and institutions by examining the difficulties and problems facing the world’s poorest countries.
- Understand the potential of aid flows and debt relief to promote economic growth by improving efficiency and incentives for investment.
- Differentiate among different kinds of capital flows across sovereign countries—private debt, sovereign-to-sovereign lending, international financial institutions’ loans to individual countries, and corporate private debt—and their respective implications.
- Understand the complications involved in aid distribution such as a country’s ability (or inability) to accumulate and efficiently spend aid, and the politics of sovereign-to-sovereign lending with respect to whether countries’ own political motivations align with the overarching humanitarian issue of trying to resolve world poverty.
- Examine the private sector’s role in tackling poverty and health issues around the world, and assess whether and how private funding could be effective by reviewing the non-profit organizations, foundations, and microfinance projects that are emerging in greater numbers.

### **Proposed Assignment Questions**

1. What obligations do rich countries have to assist poor countries?
2. Can debt relief open the doors to growth and investment?
3. Can aid flows help poor nations break out of poverty?
4. What is the role of the private sector in the redistribution of income at the global level?

### Supplementary Reading List

- Laura Alfaro, Sebnem Kalemli-Ozcan, and Vadym Volosovych. “Why Doesn’t Capital Flow from Rich to Poor Countries? An Empirical Investigation.” *The Review of Economics and Statistics* 90 . (May 2008): 347-368.
- World Bank. *Assessing Aid: What Works, What Doesn't and Why*. New York: Oxford University Press, 1998.
- William Easterly. “Can Foreign Aid Buy Growth?” *The Journal of Economic Perspectives* 17 (2003): 23-48.
- Serkan Arslanalp and Peter Blair Henry. “Debt Relief.” *Journal of Economic Perspectives* 20 (Winter 2006): 207-220.
- Craig Burnside and David Dollar. “Aid, Policies, and Growth.” *American Economic Review* 90 (2000): 867-868.
- William Easterly, Ross Levine, and David Roodman. “Aid, Policies, and Growth: Comment.” *American Economic Review* 94 (2004): 774-780.
- Jeremy Bulow and Kenneth Rogoff. “Grants versus Loans for Development Banks.” *American Economic Review* 95 (2005): 393-397.

### “*Kinyuseisaku*: Monetary Policy in Japan” (HBS No. 708-017)

#### Case Synopsis

Toshihiko Fukui, the governor of the Bank of Japan (BOJ), faced a complex situation in the fall of 2007. Japan was experiencing the longest business recovery in its postwar history. The BOJ had abandoned its zero interest rate policy (ZIRP) in 2006 after five years, and increased rates twice to 0.5%, but was eager to raise them again to more “normal” levels to exert effective monetary policy. However, the timing and approach remained controversial issues. Economic data were mixed and a large public debt burden, approximately 170% of the country’s gross domestic product accumulated from past efforts to lift the economy out of its slump through fiscal expansion, could not be ignored. Japan also faced a demographic crisis in the form of an aging population that would increase pension and health-care costs, and thereby place greater pressure on public spending. Moreover, there was growing uncertainty in the global financial markets stemming from the United States’ sub-prime mortgage crisis. Although the BOJ had the autonomy to make an independent decision regarding monetary policy, Fukui was placed in a delicate position; numerous factors and different interest groups’ concerns would need to be considered in making what would be a critical decision for the future of the Japanese economy.

The case “*Kinyuseisaku*: Monetary Policy in Japan” (B) (HBS No. 709-056) presents the situation faced by authorities as of 2009 and the policy choices open to them amidst the Global Financial Crisis of 2008-2009.

#### Teaching Objectives

- Analyze the impact of monetary policy on Japan’s economic performance over the past few decades.

- Examine the effects and consequences of conducting monetary policy in a deflationary environment.
- Understand the importance of managing expectations to conduct monetary policy effectively and efficiently.
- Evaluate how other policies and factors such as fiscal policy, the banking sector's non-performing loans, and the international financial markets affected Japan's economic recovery and, more specifically, the effectiveness of its monetary policy.
- Explore potential future policy options for improving the nation's current situation.

### Proposed Assignment Questions

1. Evaluate Japan's performance over the past two decades. What is wrong with the economy? Is it a lack of supply (structural) or lack of demand problem?
2. Assess the BOJ's actions during the "lost decade" and moving into the early 2000s.
3. How should policy-makers address Japan's economic woes? How feasible are the potential solutions? Should the BOJ increase the interest rate? If so, what would be the appropriate timing?

### Supplementary Reading List

- Takatoshi Ito and Frederic S. Mishkin. "Two Decades of Japanese Monetary Policy and the Deflation Problem." In *Monetary Policy with Very Low Inflation in the Pacific Rim*, edited by Takatoshi Ito and Andrew K. Rose. Chicago: University of Chicago Press, 2006, pp. 131-193.
- Ben Bernanke and Mark Gertler. "Should Central Banks Respond to Movements in Asset Prices?" <http://www.princeton.edu/~bernanke/asset.doc>, accessed August 13, 2007.
- Stephen G. Cecchetti, Hans Genberg, John Lipsky, and Sushil Wadhvani. "Asset Prices and Central Bank Policy." *Geneva Reports on the World Economy 2*. London: Centre for Economic Policy Research, 2000..
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- Alan J. Auerbach and Maurice Obstfeld. "The Case for Open Market Purchases in a Liquidity Trap." NBER Working Paper No. 9814. (Cambridge: National Bureau of Economic Research, 2003).
- Mervyn King. "The Institutions of Monetary Policy." *American Economic Review* 94 (May 2004): 1-13.
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## “China: To Float or Not To Float? (A)” (HBS No. 706-021)

### Case Synopsis

On July 21, 2005, China revalued its decade-long, quasi-fixed exchange rate of approximately 8.28 yuan per U.S. dollar by 2.1% to 8.11. At the same time, a more market-based exchange rate system was introduced. But many analysts and economists who had been calling for more drastic changes in the dollar-to-yuan exchange rate were disappointed. Modification of China’s exchange rate regime had been eagerly anticipated and hotly debated in the preceding months, as China’s trade surplus against the United States reached record highs and frictions increased with Europe and Japan. Not only were outside pressures intensifying, but analysts argued that the tightly managed exchange rate was straining China’s own economy. They noted that the exchange rate was expensive to sustain and contributed, as well as limited China’s flexibility to respond to a potentially overheating economy. It remained to be seen what China would ultimately choose to do with its exchange rate regime.

Additional short cases that can be used to supplement the main case include:

- “China: To Float or Not to Float? (B): Timeline of Changes Relevant to the Chinese Renminbi” (HBS No. 706-022). This case provides updated information on changes to China’s exchange rate system and international calls for further flexibility. It starts with the People’s Bank of China’s July 21, 2005 announcement of the yuan revaluation.
- “China: To Float or Not to Float? (C): Esquel Group and the Chinese Renminbi” (HBS No. 706-023). This case presents a brief overview of China’s textile industry and the Esquel Group, and of the reaction of the Hong Kong-based manufacturer of cotton shirts with factories in China to the yuan revaluation.
- “China: To Float or Not to Float? (D): Bank of America’s Strategic Investment in China Construction Bank,” (HBS No. 706-031). Bank of America, the second largest U.S. bank in terms of assets and market capitalization and one of several foreign banks directly participating in China’s banking sector reform, had \$3 billion invested in the China Construction Bank, the Chinese state bank. Many analysts considered banking sector reform an important complement to capital account liberalization and further changes to China’s exchange rate regime. The case allows discussion about the optimal sequencing of liberalization policies.
- “China: To Float or Not to Float? (E): ABB Investment in China” (HBS No. 706-035). Given its significant presence in China, ABB was among the companies confronted with the challenge of addressing the revaluation of the yuan and the possibility of future appreciation. In 2004, approximately 6% of the company’s total worldwide revenues were generated in the local currency. It remained unclear how possible future appreciation might affect ABB’s strategy to intensify its use of China as a base for global sourcing. The company was among those exploring opportunities to shift inland, where costs were much lower than in the more popular coastal and capital-city areas.
- “China: To Float or Not to Float? (F): Alcatel and Strong Chinese Competition” (HBS No. 706-036). The Chinese operations of Alcatel, a global communications solution provider based in France, faced strong local competition and a difficult market. Alcatel confronted the question of whether and how it would be able to recover growth in the Chinese market even as initiatives were underway to increase the focus on services over equipment, expand its Chinese research and development presence, and merge with a U.S. competitor, Lucent.

## Teaching Objectives

- Link China's exchange rate policy with its development strategy and explore the historical context of, and sustainability of flaws in, China's development strategy.
- Understand the mechanics of China's exchange rate policy, specifically with respect to the role of capital controls and sterilization, and the challenges, risks, and benefits of maintaining a quasi-fixed exchange rate against the U.S. dollar; highlight the importance of sequencing exchange rate reform with banking sector and capital controls reforms.
- Debate what China should do with its exchange rate policy and how different actions will affect businesses located in China and elsewhere.

## Proposed Assignment Questions

1. What are the implications of China's exchange rate policy for doing business with and "against" China?
2. How is China's exchange rate policy linked to its development strategy? How would changes in exchange rate policy affect growth in China as well as in the rest of the world?
3. How should changes to China's exchange rate policy be sequenced with banking sector reform and liberalization of capital controls?

## Supplementary Reading List

- Eswar Prasad and Shang-Jin Wei. "The Chinese Approach to Capital Inflows: Carrots and Sticks, or Deeper Forces at Work?" In *Capital Controls and Capital Flows in Emerging Economies: Policies, Practices and Consequences*, edited by Sebastian Edwards. Chicago: University of Chicago Press, 2007.
- Wayne Morrison and Marc Labonte. "China's Exchange Rate Peg: Economic Issues and Options for U.S. Trade Policy." CRS Report for Congress, RL32165, May 10, 2005.
- Michael Dooley, David Folkerts-Landau, and Peter Garber. "The U.S. Current Account Deficit: Collateral for a Total Return Swap." Deutsche Bank Global Markets Research, August 2004.

## "The U.S. Current Account Deficit" (HBS No. 706-002)

### Case Synopsis

Investors and policymakers worldwide were confronted with the risk of painful economic consequences arising from the large and growing U.S. current account deficit. The implications of the widening deficit were intensely debated. Among those arguing that the large deficit would eventually resolve itself smoothly, even if it persisted for many years, was Federal Reserve Chairman Alan Greenspan, who anticipated a "benign resolution to the U.S. current account imbalance."<sup>3</sup> Others, such as economists at the World Bank, believed the large deficit risked a sharp and disorderly fall of the dollar,

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<sup>3</sup> Remarks by Chairman Alan Greenspan at the 21st Annual Monetary Conference, co-sponsored by the Cato Institute and *The Economist*, Washington, D.C., November 20, 2003.

and that necessary macroeconomic adjustment could be painful, for the United States as well as for the rest of the world.<sup>4</sup> Despite the ongoing deficit, the gap between foreign holdings of U.S. assets and U.S. holdings of foreign assets was slightly improving. After widening to unprecedented levels, from 4.6% of GDP in 1996 to 23.2% of GDP in 2001, net liabilities fell to 16.3% of GDP in 2006. The improvement was driven by the devaluation of the dollar and the more rapid appreciation of U.S.-owned foreign assets (in local currency) than that of U.S. dollar liabilities (in dollars). The *Financial Times* asked: “How long will foreigners be prepared to make such generous ‘gifts’ to the US?”<sup>5</sup> In this environment, Berkshire Hathaway, run by legendary investor Warren Buffett who postulated that current account imbalances would lead to “some chaotic markets in which currency adjustments play a part,” announced to shareholders a plan to increase investment in overseas companies to protect against this risk.<sup>6</sup> It remained to be seen what results this currency bet would ultimately yield.

A simulation model (HBS No. 706-701) of the U.S. current account deficit based on Maurice Obstfeld and Kenneth Rogoff’s, “Global Current Account Imbalances and Exchange Rate Adjustments,” can be used in conjunction with this case.<sup>7</sup>

### Teaching Objectives

- Study the drivers of the widening U.S. current account deficit and explore the effects of an adjustment on the world economy and business environment.
- Review the dynamics of the current account including the impact of: domestic savings and investment relative to world savings and investment; trade and international capital flows; international growth and productivity in traded and non-traded goods; prices, interest rates, and exchange rates; and fiscal and monetary policy.
- Emphasize that the current account deficit is the general equilibrium outcome of domestic and international forces.
- Explore the interaction between the current account balance and net liability position including the effect of valuation (e.g., the fact that the net liability position can be brought closer to balance through changes in asset values such as a dollar depreciation that raises the value of foreign assets held by U.S. residents).
- Explore parallels with previous historic periods of U.S. external imbalance.

### Proposed Assignment Questions

1. Is Warren Buffett’s decision to bet against the dollar a good one? Why or why not?
2. Why has the United States developed such large current account deficits?
3. Is the U.S. current account deficit in 2005 sustainable? Is its continual widening a problem? Is the United States headed towards crisis? Why or why not?

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<sup>4</sup> World Bank Global Development Finance Report, 2005.

<sup>5</sup> Martin Wolf, “Global Imbalances,” Martin Wolf’s Economist Forum, *Financial Times*, <http://www.ft.com/comment/columnists/martinwolf>, accessed January 30, 2006.

<sup>6</sup> “Buffett skeptical about soft landing for dollar,” *Financial Times*, May 6, 2006.

<sup>7</sup> Maurice Obstfeld and Kenneth Rogoff, “Global Current Account Imbalances and Exchange Rate Adjustments,” in *Brookings Papers on Economic Activity 1*, edited by George L. Perry and William C. Brainard (Washington, D.C: Brookings Institution Press, 2005).

4. What, if anything, should the United States do to reduce its current account deficit?
5. Is global adjustment to external imbalances likely to occur and, if so, how? What could be done to facilitate a smooth adjustment?

### **Supplementary Reading List**

- Michael P. Dooley, David Folkerts-Landau, and Peter Garber. “The Revived Bretton Woods System: The Effects of Periphery Intervention and Reserve Management on Interest Rates and Exchange Rates in Center Countries.” Bureau of Economic Research Working Paper 10332, March 2004.
- Nouriel Roubini and Brad Setser. “Will the Bretton Woods 2 Regime Unravel Soon? The Risk of a Hard Landing in 2005-2006.” Written for the Symposium on the “Revived Bretton Woods System: A New Paradigm for Asian Development?” organized by the Federal Reserve Bank of San Francisco and UC Berkeley, San Francisco, February 4, 2005.
- Catherine L. Mann. “Perspectives on the U.S. Current Account Deficit and Sustainability.” *Journal of Economic Perspectives* 16 (Summer 2002): 131-152.
- Sebastian Edwards. “Is the U.S. Current Account Deficit Sustainable? And if Not, How Costly Is Adjustment Likely to Be?” Prepared for presentation at the Spring 2005 meeting of the Brookings Panel on Economic Activity, March 16, 2005.
- Ricardo Hausmann and Federico Sturzenegger. “Global Imbalances or Bad Accounting? The Missing Dark Matter in the Wealth of Nations.” Center for International Development, Harvard University, Working Paper No. 124, January 2006 (Revised September 2006), <http://www.cid.harvard.edu/cidwp/124.htm>, accessed December 9, 2006.

### **U.S. Subprime Mortgage Crisis: Policy Reactions (A) (HBS No. 708-036)**

#### **Case Synopsis**

By early 2008, the U.S. Government and the U.S. Federal Reserve Board had taken various policy measures over the last months to tackle the subprime mortgage crisis that threatened to drag the economy into a recession. The Bush administration approved a fiscal stimulus package exceeding \$150 billion. Interest rates had been repeatedly cut at the fastest pace in decades to 2.25% as of March 2008. In March 2008, the U.S. Federal Reserve Board, in an unprecedented move, played a critical role in orchestrating JPMorgan Chase’s purchase of Bear Stearns, the fifth largest U.S. investment bank. This was no ordinary deal between two investment banks on Wall Street. The Fed had consented to cover up to \$29 billion in potential losses from Bear Stearns’ risky assets, whose financial woes were linked to the U.S. subprime mortgage crisis. In a separate move, to ease the economy’s credit crunch, the central bank also opened a direct credit line for investment banks for the first time in history. The policy broke away from the traditional practice of directly lending to commercial banks only. These moves were all aimed at restoring investors’ confidence amid concerns of the widespread impact of the mortgage crisis.

Policy makers, academics, and business leaders were caught in an intense debate over what the best policy response would be moving forward. Some argued for an aggressive monetary and fiscal expansion to prevent a recession in the United States. Additional proposals ranged from the Fed and the Treasury to take on a more direct responsibility for financial regulation of investment banks to the provision of aid for

the millions of homeowners who now faced foreclosures, unable to meet their housing payments. Many critics, however, viewed the Fed's involvement in the Bear Stearns and some of the proposals advanced to date as a bailout for financial institutions' imprudent lending practices conducted especially in the subprime mortgage sector and homeowners' reckless borrowing.

The Case "U.S. Subprime Mortgage Crisis: Policy Reactions (B)" (HBS No. 709-045) complements the discussion and updates events. By March 2009, one year had passed since investment bank Bear Stearns had been bailed out in an effort to stem the subprime mortgage crisis from spiraling out of control. However, the situation had turned from bad to worse. Several big companies that represented the heart of America's financial system, including Lehman Brothers and insurance giant AIG, had faltered. In fact, the United States had plunged into the worst financial crisis and recession not seen since the Great Depression. About 2.6 million jobs in 2008 had been axed, coupled with a loss of wealth and depressed consumer confidence. The Bush administration attempted to breathe life back into the economy pushing for a stimulus package, and creating various lending programs for debt-ridden banks. The Fed had dropped interest rates to near zero and pursued quantitative easing policies. Yet as the economy showed few signs of turning around anytime soon, now, the responsibility fell on newly elected President Barack Obama. The new administration pursued a new fiscal stimulus and the new policies to tackle the problems in the financial system. The effectiveness of policies remained to be seen.

The case "Sovereign Wealth Funds: For Profits or Politics?" (HBS No. 708-053) allows for a critical evaluation of the role of sovereign wealth funds.

### Teaching Objectives

- Analyze the causes and consequences of the U.S. subprime crisis and in particular their relation to the global imbalances.
- Explore the short-term versus long-term consequences of the policies advanced.

### Assignment Questions

1. What explains the U.S. subprime mortgage crisis? Who's to blame?
2. How does the U.S. current account deficit relate to the current subprime mortgage mess? Why is the U.S. current account in such a massive deficit? Is the U.S. current account deficit sustainable? Is its continual widening a problem?
3. What, if anything, should the United States do to solve the subprime crisis? What, if anything, should the United States do to reduce its current account deficit? Are the solutions compatible?
4. Of all the concerns raised against SWF, which do you find the most persuasive? Should Washington have allowed these government funds to take such large stakes in Wall Street?

### Supplementary Reading List

- Stephen G. Cecchetti et al. "Asset Prices and Central Bank Policy." Geneva Reports on the World Economy 2. London: Centre for Economic Policy Research, 2000.

- Ben S. Bernanke. “Deflation: Making Sure “It” Doesn’t Happen Here.” Remarks before the National Economists Club, Washington DC, November 21, 2002, <http://www.federalreserve.gov/boardDocs/speeches/2002/20021121/default.htm>.
- Ben S. Bernanke and Mark Gertler. “Should Central Banks Respond to Movements in Asset Prices?” <http://www.princeton.edu/~bernanke/asset.doc>, accessed August 13, 2007, p. 1.
- Ben S. Bernanke. “The Crisis and the Policy Response.” Speech at the Stamp Lecture, London School of Economics, January 13, 2009.
- Alan Greenspan. “The roots of the mortgage crisis.” *The Wall Street Journal*, December 12, 2007.
- John B. Taylor. “Housing and monetary policy.” National Bureau of Economic Research Working Paper 13682.
- Carmen Reinhart and Kenneth Rogoff. “Is the 2007 U.S. subprime financial crisis so different? An international historical comparison.” NBER Working paper w13761, January 2008.
- Carmen Reinhart and Kenneth Rogoff. “The Aftermath of Financial Crises.” NBER Working Paper w14656, January 2009.

### **“The First Global Financial Crisis of the 21<sup>st</sup> century (HBS No. N9-709-057)”**

#### **Case Synopsis**

In 2009, the World Bank and the International Monetary Fund (IMF) forecasted that the world economy would contract for the first time in the post war period. By then governments around the world had taken various policy measures over the last few months to tackle the subprime mortgage crisis that threatened to drag the economy into a recession. Individual nations tried to stabilize and steer their economies towards recovery through monetary, fiscal, and financial policies. Yet as the global economy faced slower growth stemming from the U.S. mortgage crisis, policy makers were caught in an intense debate over what the “right” solution would be, and the implication of these policies.

#### **Teaching Objectives**

- Analyze the global causes and consequences of the U.S. subprime crisis and the relation to the global imbalances.
- Explore the policies available for countries, in particular developing ones, to deal with the consequences of the crisis.
- Analyze the role of coordinated efforts and the role of international institutions in the crisis.

#### **Assignment Questions**

1. What explains the global meltdown?

2. Is global adjustment to the crisis and current imbalances likely to occur, and if so, how? What could be done to encourage a smooth adjustment?
3. Are there differences between large and small countries, or developed and developing in terms of the tools available?
4. What should be, if any, the role of the IMF?
5. What can be done to prevent future global crises?

### Supplementary Reading List

- World Economic Outlook Update, Global Economic Slump Challenges Policies,” International Monetary Fund, January 28, 2009, <http://www.imf.org/external/pubs/ft/weo/2009/update/01/index.htm>

### III. International Capital Flows

#### *A. Patterns of International Capital: 1970s-2000s*

Cycles in capital flows, especially in emerging markets, have been observed for nearly two hundred years.<sup>8</sup> The module focuses on events that occurred during the last three decades as they hold important lessons for current policy-makers and the business environment that managers face today.

In the late 1970s, banks in the United States (and other industrial countries) recycled OPEC surplus to emerging markets, in particular, Latin America. This took place against a background of soaring commodity prices and high inflation in the advanced economies, coupled with low real interest rates and weak loan demand in the United States. Capital flows through bank lending surged during this period. But in the early 1980s, the situation changed dramatically. Interest rates rose sharply as the U.S. Federal Reserve acted to reduce spiraling double-digit inflation, thus dampening economy activity and lowering commodity prices and demand. As most of the loans had either short maturities or variable interest rates, the prospects for repayment quickly deteriorated. In the summer of 1982, debtor countries, led by Mexico, could not secure the added credit they needed to pay the high interest and offset the shortfall of export earnings. Mexico's debt moratorium in August 1982 sent shock waves around the world, and the highly exposed and leveraged banks retrenched from emerging markets and Latin America in particular.<sup>9</sup> One after another, developing countries experienced currency crises, banking crises, or

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<sup>8</sup> See Carmen Reinhart and Kenneth Rogoff, “Serial Default and the ‘Paradox’ of Rich to Poor Capital Flows,” *American Economic Review* 94 (May 2004): 53-58; Carmen Reinhart and Kenneth Rogoff, “This Time is Different: A Panoramic View of Eight Centuries of Financial Crises,” NBER Working Paper w13882 (February 2008); Laura Alfaro, Sebnem Kalemli-Ozcan, and Vadym Volosovych, “Capital Flows in a Globalized World: The Role of Policies and Institutions,” in *Capital Controls and Capital Flows in Emerging Economics: Policies, Practices, and Consequences*, edited by Sebastian Edwards (Chicago: University of Chicago Press, 2007); and Laura Alfaro and Fabio Kanczuk, “Capital Controls, Risk and Liberalization Cycles,” *Review of International Economics* 12 (August 2004). On longer-term trends, see also Maurice Obstfeld and Alan Taylor, *Global Capital Markets: Integration, Crisis, and Growth* (Cambridge: Cambridge University Press, 2004).

<sup>9</sup> See Laura Alfaro and Ingrid Vogel, “Creditor Activism in Sovereign Debt: Vulture Tactics or Market Backbone,” HBS No. 706-057.

both. Numerous crises, including some of the worst hyperinflations uncorrelated to wars, occurred in Latin America during the “lost decade” that followed.<sup>10</sup>

The drought in capital flows lasted until 1990. Debt restructuring and negotiation paved the way for a rediscovery of emerging markets.<sup>11</sup> Renewed access to international capital markets in the wake of the resolution of the debt crisis led to a surge in available external capital. Mexico, for example, having implemented a successful inflation stabilization plan and having signed NAFTA, became the darling of foreign investors.<sup>12</sup>

Notwithstanding the 1994-1995 Mexico crisis, capital flows to East Asian miracle economies such as those to Korea and Malaysia increased no less dramatically, especially after 1995, when short-term interest rates in Japan headed towards unprecedented lows.<sup>13</sup> Other emerging countries such as Chile also experienced a surge of capital inflows.<sup>14</sup> What followed was a period of extreme financial turbulence, starting in Asia and spreading to Latin America and other regions.

After a sharp reduction in capital flows to emerging markets during 1998-2002, spreads narrowed to levels not seen since the early 1990s. This new wave of easy access to cheap international credit found the U.S. current account deficit (the difference between the country’s savings and investment) at the core of so-called “global imbalances,” with current account surpluses in oil-producing countries, Japan, China, and other Asian countries taking the bulk of the “other side.”<sup>15</sup> The nature of the U.S. deficit, however, changed over time. In the late 1990s, the U.S. government increased its savings as firms did the same with their investments, thus accounting for most of the imbalance. But after 2000-2001, although U.S. firms continued to increase their savings, the government and households reduced theirs.

As world savings must equal world investments, changes in the U.S. current account deficit have implications for other countries’ current accounts. To sustain the same level of world growth, reductions in the U.S. deficit should be balanced with other countries’ deficits or the surplus countries should reduce their surpluses. Authorities in Japan have been struggling with zero (or close to zero) inflation and low growth.<sup>16</sup> In 2005, China adopted a *de jure* floating regime, but *de facto* changes have been limited.<sup>17</sup>

As the world coped with the aftermath of the U.S. subprime crisis, the evolution of global imbalances has had a first-order impact on global growth. In March 2009, the World Bank presented its most dismal outlook for the global economy to date, forecasting negative growth for the full year, a phenomenon not seen since World War II. Individual nations tried to stabilize and steer their economies towards recovery through monetary, fiscal, and financial policies. At the same time, they recognized that

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<sup>10</sup> See Rafael Di Tella, Huw R. Pill, Miguel Lopez de Silanes Gomez, Cinthia Fernholz Violand, and Ingrid Vogel, “Bolivia: Globalization, Sovereignty, or Democracy?” HBS No. 702-086; and Rafael Di Tella, Laura Alfaro, and Ezequiel Reficco, “Bolivia and Evo Morales,” HBS No. 707-041.

<sup>11</sup> See Laura Alfaro, Eric Werker and Renee Kim, “Aid, Debt Relief, and Trade: An Agenda for Fighting World Poverty (A),” HBS No. 707-029.

<sup>12</sup> See Huw Pill, “Mexico: The Tequila Crisis 1994-1995,” HBS No. 702-093.

<sup>13</sup> See Laura Alfaro and Renee Kim, “Transforming Korea Inc.: Financial Crisis and Institutional Reform,” HBS No. 708-007; and Laura Alfaro, Rafael Di Tella, and Renee Kim, “Chronology of the Asian Financial Crisis,” HBS No. 708-001. Also see Rawi Abdalal and Laura Alfaro, “Malaysia: Capital and Control,” HBS No. 702-040 and Laura Alfaro and Akiko Kanno, “*Kinyuseisaku*: Monetary Policy in Japan (A),” HBS No. 708-017.

<sup>14</sup> See Laura Alfaro, Rafael Di Tella, and Ingrid Vogel, “Capital Controls in Chile in the 1990s (A),” HBS No. 705-031.

<sup>15</sup> See Laura Alfaro, Rafael Di Tella, and Ingrid Vogel, “The U.S. Current Account Deficit,” HBS No. 706-002; Alfaro and Kanno, “*Kinyuseisaku*: Monetary Policy in Japan (A),” HBS No. 708-017; and Laura Alfaro, Rafael Di Tella, and Ingrid Vogel, “China: To Float or Not to Float? (A)” HBS No. 706-021.

<sup>16</sup> See Alfaro and Kanno, “*Kinyuseisaku*: Monetary Policy in Japan (A),” HBS No. 708-017

<sup>17</sup> See Alfaro, Di Tella, and Vogel, “China: To Float or Not to Float? (A),” HBS No. 706-021.

the scope and scale of the financial crisis required a greater coordinated effort. Yet at the Group of 20's (G20) summit of top level financial ministers held in the first week of April 2009, there was discord among the nations that accounted for 80% of the world economy on what kind of joint action had to be taken. The United States urged other nations to push forward with a greater fiscal stimulus while several European nations, led by France and Germany, stressed the need for greater financial regulation at the global level instead. Although there were underlying differences in domestic constraints that caused the discord among nations on what had to be done, there were also contrasting views on what kind of short and long-term policies would really work.

### *B. International Capital Flows, Sovereign Risk, and Exchange Rates*<sup>18</sup>

The book covers issues that define international economics as a distinct field—the implications of sovereign governments and national currencies, and the determinants and effects of cross-border capital flows. Three basic insights are essential.

First, trade in goods is different from trade in financial assets. Because a financial transaction inherently involves a commitment to pay at a later date, payments are always contingent and hence, fundamentally affected by the problems of asymmetric information (such as moral hazard and adverse selection) and the risk of non-enforcement. Both problems are exacerbated in international financial transactions. Information is generally better shared inside countries than across international boundaries, and it is far easier to use national legal systems to manage contractual disputes than it is to rely on still-weak international legal norms. International capital flows can bring substantial gains by augmenting local savings and improving technology. But under pre-existent distortions, weak institutional settings, and—particularly—under unregulated financial markets, international capital mobility can exacerbate the misallocation of resources, increase the likelihood of financial crises, and impair growth.

Second, international financial flows are affected by two additional macroeconomic risks that are absent within countries. That is, the international financial system is burdened not just by asymmetric information and contract uncertainty. One further consideration is sovereign risk: governments can choose to default on their international obligations. The second complication is that countries generally have their own currencies and the rise and fall of currencies relative to one another often can be decisive for investors' returns.<sup>19</sup> Potential net gains from international financial trade are contingent on containing these risks.

The main channel through which international capital mobility exacerbates problems associated with trade in assets is related to sovereignty: the involvement of governments as implicit parties to international contracts.<sup>20</sup> The importance of the recurring phenomenon of countries defaulting on their obligations underscores this problem and has prompted an enormous volume of theoretical and empirical

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<sup>18</sup> See Maurice Obstfeld, "International Finance and Growth in Developing Countries: What Have We Learned?" March 2007, <http://www.growthcommission.org/storage/cgdev/documents/ThemesPapers/Paper%20Obstfeld.pdf>, accessed January 10, 2008; and Benjamin E. Hermalin and Andrew K. Rose, "Risks to Lenders and Borrowers in International Capital Markets," in *International Capital Flows*, ed. Martin Feldstein (Chicago: University of Chicago Press, 1999), pp. 363-386.

<sup>19</sup> Even for countries that adopt a foreign currency, sovereignty implies the choice to renege or change. For example, Botswana adopted the pula in 1976 (before the South African Rand was official currency). See Laura Alfaro et al., "Botswana: A Diamond in the Rough," HBS No. 703-027.

<sup>20</sup> See Maurice Obstfeld and Kenneth Rogoff, *Foundations of International Macroeconomics* (Cambridge: MIT Press, 1996); Jean Tirole, *Financial Crisis, Liquidity, and the International Monetary System* (Princeton: Princeton University Press, 2002); Laura Alfaro and Fabio Kanczuk, "Sovereign Debt as a Contingent Claim: A Quantitative Approach," *Journal of International Economics* 65, 2 (March 2005): 297-314; Laura Alfaro and Ingrid Vogel, "International Capital Markets and Sovereign Debt: Crisis Avoidance and Resolution," HBS No. 707-018; and Alfaro and Vogel, "Creditor Activism in Sovereign Debt: Vulture Tactics or Market Backbone," HBS No. 706-057.

literature.<sup>21</sup> Research has focused on why countries ever choose to pay their debts and why private creditors ever expect repayment, given that repayment incentives for governments are minimal in the relative absence of collateral and that courts have limited ability to extract compliance from sovereign entities in the absence of a supranational legal authority empowered to enforce contracts across borders.

The use of different currencies can generate additional macroeconomic risks.<sup>22</sup> Currency mismatches such as dollar liabilities versus domestic-currency assets, for example, can fuel exchange rate volatility and occasion systemic risk. Developing countries are often characterized by their inability to borrow externally in their own currencies as well as by their extensive domestic liability of dollarization/indexation.<sup>23</sup> This exacerbates problems related to large exchange rate movements. For example, a large depreciation of the domestic currency can lead to an increase in the value of debts relative to assets (in contrast, for example, to the United States, which can issue debt in local currency). This accounts for the tendency of emerging market floaters to be guided more heavily than industrial countries by exchange-market developments, a reduced monetary autonomy phenomenon that Calvo and Reinhart (2002) have labeled “fear of floating.”<sup>24</sup>

Third, international capital flows have important macroeconomic consequences, and policy-makers face a difficult trade-off among three objectives: monetary policy autonomy, a stable fixed exchange rate, and free capital mobility. Also known as the “irreconcilable trilogy,” the open-economy “trilemma” is that only two of the three goals can be reached simultaneously. When capital outflows surge, as they sometimes do, a central bank that does not want their currency to depreciate must either increase interest rates to attract capital or purchase its own currency using foreign exchange reserves. If the flows of capital are large, a central bank might quickly exhaust its foreign exchange reserves with little influence over the market outcome. Increasing interest rates, on the other hand, can have negative consequences for economic activity and employment. In a country where the financial sector is weak, the consequences can be devastating. Similarly, countries experiencing net capital inflows face appreciating exchange rates and increasing money supply which can lead to undesirable inflation, or fuel bubbles in asset prices. Popping asset bubbles can bankrupt the financial systems of countries with heavily exposed domestic banks, as seen in Japan and many Asian countries in the 1990s. Although central banks can “sterilize” increases in international reserves by selling government bonds and thereby reducing domestic credit, this tends to keep interest rates high. Because the government pays a higher interest rate on its bonds than it receives on its foreign reserve holdings, sterilization represents a non-trivial cost to the government of encouraging continued capital inflows.<sup>25</sup> Sterilization is at best only a temporary policy; the evidence to date suggests some scope for sterilization in the short run, but gives little indication of its viability as a long-term policy.<sup>26</sup> If capital movements are restricted, however, countries can pursue autonomous monetary policies while maintaining fixed exchange rates.

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<sup>21</sup> For surveys of the literature, see M. Kenneth Kletzer, “Sovereign Immunity and International Lending,” in *The Handbook of International Macroeconomics*, edited by Frederick van der Ploeg (United Kingdom, London: Blackwell Publishers, 1994); Jonathan Eaton and Raquel Fernandez, “Sovereign Debt,” in *Handbook of International Economics* Vol. 3, edited by Gene Grossman and Kenneth Rogoff, (Amsterdam: Elsevier, North-Holland, 1995), pp. 2031-2077; and Kenneth Rogoff and Jeromin Zettelmeyer, “Bankruptcy Procedures for Sovereigns: A History of Ideas, 1976-2001,” IMF Working Paper, WP/02/133, August 2002.

<sup>22</sup> See Laura Alfaro, “Inflation, Openness, and Exchange Rate Regimes,” *Journal of Development Economics* 77 (June 2005): 229-249.

<sup>23</sup> See Barry Eichengreen, Ricardo Hausmann, and Ugo Panizza, “Currency Mismatches, Debt Intolerance, and Original Sin: Why They Are Not the Same and Why It Matters,” NBER Working Paper w10036, October 2003; and Laura Alfaro, Rafael Di Tella, and Ingrid Vogel, “Brazil 2003: Inflation Targeting and Debt Dynamics,” HBS No. 704-028.

<sup>24</sup> Guillermo A. Calvo and Carmen M. Reinhart, “Fear of Floating,” *The Quarterly Journal of Economics* 117 (2002): 379-408.

<sup>25</sup> See Laura Alfaro, Rafael Di Tella, and Ingrid Vogel, “Capital Controls in Chile in the 1990s (A),” HBS No. 705-031.

<sup>26</sup> Takatoshi Ito and David Folkerts-Laudau, *International Capital Markets* (Washington: International Monetary Fund, 1996); Kathryn M. Dominguez, “The Role of the Yen,” in *International Capital Flows*, edited by Martin Feldstein (Chicago: University of Chicago

More generally, international borrowing has to be repaid in the future (ignoring the sovereign risk considerations discussed above), for which some investment in profitable projects is important. As such, adequate domestic incentives to invest foreign capital productively are crucial. However, many times, capital flows abruptly stop with severe negative effects.

The academic literature has identified numerous mechanisms that can lead to currency and financial crises. In the canonical “first-generation” crisis models, a government with persistent money-financed budget deficits is assumed to use a limited stock of reserves to peg its exchange rate.<sup>27</sup> This policy would ultimately be unsustainable and investors’ attempts to anticipate the inevitable floating of the exchange rate would generate a speculative attack on the currency when reserves fall to a critical level. An unsustainable fiscal deficit will lead to reserve losses, current-account deficit, real appreciation, and an inevitable collapse (Southern Cone experiences of the 1970s, Brazil in 1999). In “second generation” models, a government chooses whether or not to defend a pegged exchange rate by trading off short-run macroeconomic flexibility against longer-term credibility.<sup>28</sup> This is potentially a multiple equilibria story. Defending the peg is more expensive (via higher interest rates) if the market believes the defense will ultimately fail. Multiple equilibria are thus occasioned by speculative attacks on the currency originating from a predicted deterioration of fundamentals or via a self-fulfilling prophecy (EMS Crisis in Europe in the 1990s). “Third generation” models were developed to account for the crises of the late 1990s (characterized as currency and financial crises) emphasizing balance sheet effects and implicit government guarantees (Asian financial crisis and Korea in 1997).<sup>29</sup> For emerging markets, in particular, there is a potentially explosive multidirectional interaction among the currency market, government finances, and banking and corporate sectors.

Although crises can sometimes be driven by expectations, their possibility presupposes some weakness in various “fundamentals” of an economy.<sup>30</sup> These might be institutional (e.g., quality of bank supervision, quality and transparency of corporate governance, state of domestic financial development, strength of the domestic judicial system) or macro (e.g., a competitive real exchange rate, the sustainability of the trajectory of the public debt, the term and currency composition of external debt).

The case of Brazil, for example, shows how fiscal imprudence can generate unstable government debt dynamics in which government borrowing rates rise to reflect higher default probabilities, inducing further borrowing and rate hikes, thus increasing the probability of an eventual crisis.<sup>31</sup> Political economy

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Press, 1999): pp. 133-171; and Kathryn M. Dominguez and Jeffrey Frankel, “Does Foreign-Exchange Intervention Matter? The Portfolio Effect,” *American Economic Review* 83 (December 1993): 1356-1369.

<sup>27</sup> See Paul Krugman, “A Model of Balance of Payments Crises,” *Journal of Money, Credit, and Banking* 11 (1979): 311-25; and Robert Flood and Peter Garber, “Collapsing Exchange Rate Regimes: Some Linear Examples,” *Journal of International Economics* 17 (1984): 1-13.

<sup>28</sup> Maurice Obstfeld, “The Logic of Currency Crises,” *Cahiers Economiques et Monétaires* 43 (1994): 189-213.

<sup>29</sup> See Paul Krugman, “What Happened to Asia?” January 1998, <http://web.mit.edu/krugman/www/DISINTER.html>, accessed January 10, 2008; Hermalin and Rose, p. 364; Graciela Kaminsky and Carmen Reinhart, “The Twin Crises: The Causes of Banking and Balance-of-Payments Problems,” *American Economic Review* 89 (1999): 473-500; Ronald McKinnon and Huw Pill, “Credible Liberalizations and International Capital Flows: The Overborrowing Syndrome,” in *Financial Deregulation and Integration in East Asia*, edited by Takatoshi Ito and Anne O. Krueger (Chicago: University of Chicago Press, 1996); and Roberto Chang and Andres Velasco, “A Model of Financial Crises in Emerging Markets,” *Quarterly Journal of Economics* 116 (May 2001): 489-517.

<sup>30</sup> Of course, inferring causality from empirical associations is always perilous. For example, fiscal rectitude, labor market flexibility, and trade openness typically reflect endogenous government policies, which can be driven by “deeper” political factors that, in themselves, make the economy better able to live productively with an open financial account. It is difficult to believe, however, that a favorable configuration of conventional fundamentals will not make an independent contribution to financial stability. See Maurice Obstfeld, “International Finance and Growth in Developing Countries: What Have We Learned?” March 2007, [http://www.econ.berkeley.edu/~obstfeld/280c\\_sp07/commission.pdf](http://www.econ.berkeley.edu/~obstfeld/280c_sp07/commission.pdf), accessed January 18, 2007.

<sup>31</sup> See Laura Alfaro, Rafael Di Tella, and Ingrid Vogel, “Brazil 2003: Inflation Targeting and Debt Dynamics,” HBS No. 704-039.

considerations also play an important role. In South Korea, prior to its 1997-1998 crisis, the fundamental institutional distortions were the political power of *chaebols*, which effectively manipulated the financial system to obtain access to cheap funding, and a pervasive government bailout mentality (moral hazard).<sup>32</sup> The fragility of the financial system became worse with the government's decision, earlier in the 1990s, to open the economy to short-term but not long-term foreign lending.<sup>33</sup>

Troubles associated with early financial liberalization were also a devastating experience for Chile in 1982. Policy-makers were forced to dramatically depreciate the local currency and nationalize privately contracted financial-sector external debt. Extensive restructuring of the banking system involved the imposition of strict regulations as the government tried to address currency mismatches on balance sheets. On the currency side, from the mid-1980s, the Chilean peso to U.S. dollar exchange rate was kept within a crawling band and the central parity was adjusted daily to reflect the inflation difference between Chile and its main trading partners. The goal was to maintain competitiveness, although there is a danger in any such system that expectations will feed into inflation, resulting in the accommodation of expectations via the exchange rate. Chile's *encaje*, or unremunerated reserve requirement on foreign capital inflows, although initially maintained, was scrapped in the late 1990s as the regime was tested during the Asian crisis. A noteworthy feature here is that by, for example, adopting a tight fiscal policy and prudent banking regulation, countries can create conditions that minimize risk.

Recent literature suggests that certain structural preconditions for financial inflows can maximize their beneficial effects in an emerging market economy.<sup>34</sup> Even in the case of FDI flows, where research identifies benefits linked to know-how and managerial skills as well as lower volatility, success stories like those of Ireland and Botswana suggest a key role for domestic policies. During the 1990s and 2000s, an extraordinary consensus emerged among policy-makers: nearly all lauded the benefits of FDI.<sup>35</sup> Unlike more liquid capital flows, FDI appeared to be stable and proponents further claimed, quite plausibly, a number of other beneficial effects of FDI for recipient countries, including increased productivity and transfers of technology, managerial skills, and know-how. Governments around the world rushed to reduce taxes and provide special incentives for foreign firms to build plants and, following the example of success stories such as that of Ireland, Eastern Europe embraced the FDI development strategy of lowering taxes.<sup>36</sup> The empirical record indicates that the benefits of FDI are most likely to be realized when capital flows are complemented by a range of domestic policies that enhance stability and growth.<sup>37</sup>

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<sup>32</sup> See Alfaro and Kim, "Transforming Korea Inc.: Financial Crisis and Institutional Reform," HBS No. 708-007

<sup>33</sup> Obstfeld, "International Finance and Growth in Developing Countries: What Have We Learned?"

<sup>34</sup> Frederic S. Mishkin provides an analysis of recent emerging-market crises that places at center stage the way faulty institutional underpinnings have distorted the effects of capital inflows from abroad and led to economic instability. See Frederic S. Mishkin, *The Next Great Globalization: How Disadvantaged Nations Can Harness Their Financial Systems to Get Rich* (Princeton: Princeton University Press, 2006). Alfaro et al., "FDI and Economic Growth: The Role of Local Financial Markets," (2004), find that FDI has a stronger growth-promoting effect when the local financial sector is better developed. Geert Bekaert, Campbell Harvey, and Christian Lundblad, "Does Financial Liberalization Spur Growth?" *Journal of Financial Economics* 77 (2005): 3-55, report the positive effect of liberalization on growth to be greatest when the quality of institutions and level of financial development are high. See also Eswar Prasad, Kenneth Rogoff, Shang-Jin Wei, and M. A. Kose, "The Effects of Financial Globalization on Developing Countries: Some Empirical Evidence," International Monetary Fund Occasional Paper 220, (2003).

<sup>35</sup> See Laura Alfaro and Esteban Clavell, "Foreign Direct Investment," HBS No. 703-018.

<sup>36</sup> See Laura Alfaro, Vinati Dev, and Stephen McIntyre, "Foreign Direct Investment and Ireland's Tiger Economy," HBS No. 706-007; and Laura Alfaro et al., "Rovná Daň: The Flat Tax in Slovakia," HBS No. 707-043.

<sup>37</sup> Laura Alfaro, Areendam Chanda, Sebnem Kalemli-Ozcan, and Selin Sayek, "FDI and Economic Growth: The Role of Local Financial Markets," *Journal of International Economics* 64 (October 2004): 89-112; Laura Alfaro and Andrew Charlton, "Intra-Industry Foreign Direct Investment," Harvard Business School Working Paper, No. 08-018 (September 2007); and Laura Alfaro and Andres Rodriguez-Clare, "Multinationals and Linkages: An Empirical Investigation," *Economia* 4 (Spring 2004): 113-169.

We are living in an era of globalization that is in many ways without historical precedent. Trade and capital flows have been liberalized in many parts of the world. In 2009 the world was coping with the first global slowdown since World War II. Many feared increased protectionism. While the potency of conventional macroeconomic policies may have diminished or been affected as a result of globalization, good policy-making and judgment become even more critical. Understanding the implications of these dramatic economic developments is crucial for students in their capacity as managers and leaders.