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## Introduction

The calm before the storm? That question dominated the stage at the seventh annual conference on emerging markets finance, cosponsored by the World Bank and the Brookings Institution and held at Brookings in late April 2005.

At the time of the conference, it had been a little less than eight years since the onset of the Asian financial crisis, an event that had depression-like effects throughout much of Asia and, for a time, seemed to threaten global economic stability. That this outcome never happened can be attributed to a combination of aggressive monetary easing by the Federal Reserve Board in the United States, emergency lending to the countries in the region by the International Monetary Fund (IMF) and other international institutions, the concerted rollover of some of Korea's private external debt, and a dose of good luck.

The Asian economies have since recovered from their financial crises to varying degrees, as have the other major emerging-market countries that suffered their own crises shortly afterward: Argentina, Brazil, Russia, and Turkey. What has been learned since these crises in key parts of the developing world? How exposed are countries in different parts of the world to another, perhaps entirely different kind of financial and economic crisis?

These are among the questions that the conference papers address. This introduction provides a brief overview of their main findings. The subsequent chapters contain the papers as well as a summary of the panel discussion with private sector representatives of commercial banks and rating agencies and select portions of the discussion by the roughly 100 financial experts from around the world who attended the conference.

James Hanson led off the conference by examining the challenges and economic vulnerabilities in East Asia and Latin America. Countries in both regions suffered financial crises in the 1990s and the early part of this decade. In chapter 2, Hanson discusses the common features of the crises in both regions and the very different paths that countries in each region have taken since their crises.

Almost all of the crises in the 1990s and post-2000 in both regions were not just external crises; they often began in the domestic banking sectors, and banking sector problems complicated policymaking in all cases. In the typical case, runs on banks quickly turned into runs on currencies, forcing central banks to abandon attempts to peg the exchange rate and deal with bank failures. In some, but not all, cases, excessive government borrowing contributed to the crises, unlike the 1980s-era Latin American crises, where excessive government borrowing was the dominant cause.

There also were common elements among the policy responses to the more recent financial crises. Governments typically bailed out bank depositors. They incurred massive debts to the banking systems in the process, since governments also had to pick up the tab for losses on unpaid bank loans that typically were transferred to separate asset management companies. On the macroeconomic front, pressure from the market and the IMF, which provided emergency finance to many of the countries in both regions, sooner or later forced the governments to tighten monetary and fiscal policy.

Hanson does not add to the well-known and vigorous debate over these policy responses; instead he focuses factually on what happened in the economies as a result. One of the postcrisis macroeconomic outcomes, common to both regions, was a dramatic drop in inflation, an unusual experience for Latin America, where much higher inflation rates had been common. Lower inflation rates helped the working of the financial system after the crises in all the countries.

In terms of growth, the postcrisis experiences have differed between (and within) regions. The East Asian countries generally have rebounded from their crisis-induced downturns. Annual growth recently has been in the 4–6 percent range, good for developing countries, but below their growth rates in the first half of the 1990s. Korea recovered the most rapidly, using the unorthodox strategy of promoting consumption, but its growth then slowed as the approach reached its limits. Indonesia suffered the most from

its crisis, in part because of the political turmoil surrounding the end of the Suharto regime and realignment of the political economy as the country developed a democratic government. The Latin American countries that suffered crises in the 1990s recovered quickly. Nonetheless, despite their upswing in 2004, their average growth remained low.

Another sharp contrast between the two regions relates to their external debt. Since the 1997–98 crises, the average ratio of external debt to GDP in East Asia has fallen. The opposite has occurred in Latin America, where the ratio of external debt to GDP in 2004 stood above the level of the mid-1990s. Borrowing from the World Bank and the IMF by Latin American governments is one factor contributing to this difference in external debt patterns. Other factors include an apparent increase in the risk tolerance of investors, coupled with improving economic prospects in many Latin American countries since 2000, which has enabled governments to sell their debt more easily. Indeed, by early 2005, the spread on interest rates on emergingmarket bonds relative to those on U.S. treasury bonds stood at an eight-year low. The lower spread, coupled with the lower level of U.S. rates, has eased the debt service of all emerging-market borrowers. It remains to be seen whether, and to what extent, high-borrowing countries will be able to keep on servicing their debts if interest rates rise. In contrast to Latin America, the East Asian crisis economies generally have taken advantage of the benign external financial environment since their crises to run tight fiscal policy, reduce their debt, and substantially increase their foreign exchange reserves. They should have an easier time avoiding future difficulties than their counterparts in Latin America.

Hanson points to a number of interesting structural developments in both regions during the past few years. While countries in both regions continue to rely heavily on banks for intermediation, pension funds have grown increasingly important in Latin America (Peru and Chile, in particular). Domestic currency government and private corporate bond markets have also developed in both regions, although trading in secondary markets remains low. Banks have recovered, but Latin American bank deposits remain low. In Latin America and Indonesia, banks' holdings of government debt have increased relative to deposits, crowding out private credit. This represents a major challenge to growth and development since private credit is a major factor in growth.

Banks also face some risks. The government debt carries market risk and is not free from default risk. Private loans are riskier than they were, with the most creditworthy private sector borrowers financing themselves abroad or in the domestic bond markets. Banks may lack the risk management capacity to deal with their expansion into consumer, small-scale, and mortgage lending, a problem that hit Korea. Many borrowers in Latin America continue to borrow in dollars, exposing themselves to currency risk, which contributed to previous banking crises. Improvements are slowly occurring in banks' risk management techniques and the information and legal frameworks on which sound lending depends.

State-owned banks, which were major factors in the previous crises, also continue to be important financial institutions in both regions and are even growing in some cases. In the current environment of tight fiscal and monetary policy, governments face political pressure to use public sector banks as economic policy instruments. The costs of this strategy are already becoming clear in some Asian countries. Meanwhile, the well-known international banks that once were thought to be a way to improve financial sector performance have become less interested in expanding into most developing countries. Regional banks are expanding, but they offer fewer benefits than the well-known international banks.

Finally, governments in both regions have strengthened prudential regulation of their banks, prodded and supported by the IMF–World Bank Financial Sector Assessment Program. Most countries also have indicated their intention gradually to adopt the about-to-be-implemented Basel II capital standards. It remains to be seen whether these measures will prove sufficient to prevent or minimize the damage from future financial crises, especially given the political constraints facing their application.

Central and Eastern Europe, too, were touched by financial crises of their own, but these were largely due to a wave of bank failures that arose as their economies were transformed from centrally planned to marketbased economies, as discussed in chapter 3 of this volume by Fernando Montes-Negret and Thomas Muller, both of the World Bank.

The "banks" that existed prior to this transformation were banks in name only; in fact, these institutions were administrative agencies that simply held credits from state-owned enterprises on their "books." When the institutions were converted into "banks," as part of the transformation to market-based economies, these bookkeeping credits proved largely worthless. The banks thus found themselves with insufficient assets to back the deposits that individuals and firms held in them.

At the same time, household assets were relatively liquid because the shortage of goods in centrally planned economies left them with little alternative other than to hold their meager income as bank deposits or buy foreign exchange. The new governments therefore faced a macroeconomic problem as well as a structural one: with a monetary "overhang," the new freedoms could have unleashed a wave of spending unmatched by the production of goods, causing a major bout of inflation. Central banks attempted to reduce that overhang by tightening credit, forcing so-called hard-budget constraints on enterprises that were not used to them. The predictable result was a wave of bankruptcies, which only reinforced the structural problems in the "banks" that had once extended them credit.

The economies in the region took very different approaches to "cleaning up" their banking sectors, particularly in terms of transparency. In all cases, however, some form of government infusion of funds was required to make good on the deposits and compensate for the inevitable writedowns of the banks' previous credits. Most governments also attempted to introduce some semblance of sound bank supervision, consistent with international practice. But understandably, the countries did not have the expertise to carry out this program effectively, especially as long as the banks remained state owned and thus followed the directions of government leaders rather than market norms.

A number of countries in the region tried to offset the domination of their state-owned banks by allowing new entrants into commercial banking. But, as Montes-Negret and Muller discuss, many of these entrants were too small to be efficient, lacked experience, and were undercapitalized and thus the source of additional banking problems.

Notwithstanding all of these difficulties, the costs of banking problems in Central and Eastern Europe, computed as a fraction of total output, turned out to be substantially below the costs suffered by the crisis-ridden countries in East Asia and Latin America and by Turkey and even Japan. The authors suggest that in the European countries, the financial sectors were relatively much smaller to begin with, so they suffered and caused less damage than in countries where banks played a more central role in the economy.

Although the economies in the region during the transition period have performed very differently, the authors suggest that certain common conclusions can be drawn from their experiences. For example, after suffering initial downturns following the end of central planning, Central and Eastern European economies generally have enjoyed real growth, as have their financial sectors. At the same time, all countries in this part of the world could benefit from increased financial depth (measured by the ratio of financial assets to GDP) as well as stronger capital markets to supplement the dominant role being played by banks.

As for the country-level differences, the authors note that eight Eastern European countries that later joined the European Union (EU) in 2004 outperformed, along several dimensions, other formerly centrally planned economies that have transitioned toward some capitalism. They suggest that the prospect of EU accession encouraged reforms and foreign capital inflow that made this superior performance possible. Russia has benefited from favorable commodity prices and fiscal discipline since its 1998 crisis, but its banking and financial systems remain underdeveloped relative to those of other countries in the authors' survey. Central Asian economies, in the authors' words, seemed trapped in a "low-level equilibrium," with underdeveloped financial institutions and regulatory oversight. In Southeast Europe, financial sector development is very uneven, with Slovenia furthest ahead, having joined the European Union; finance in the countries that formerly made up Yugoslavia continues to be held back in the aftermath of civil conflict in the 1990s; and the financial sector is perhaps most underdeveloped in Albania and Macedonia.

The well-known association between financial crises in the developing world and external debt raises the obvious questions of whether external debt is going to lead to a new crisis and, more fundamentally, whether sovereign borrowing is an aid or a hindrance to economic growth. Indermit Gill and Brian Pinto of the World Bank address these questions in chapter 4 of this volume.

What is the likelihood of a sovereign debt-induced financial crisis in the developing world in the near future? The authors suggest that, in light of the frequency of past episodes, future crises always remain possible. Public debt (external and internal) remains high in the major developing countries with market access. Nonetheless, the authors argue that risks have receded for several reasons.

Taking the East Asian crisis economies first, along with reasonably strong growth, many of them have improved government balance sheets and now have strong fiscal positions (except the Philippines). The buildup of international reserves should provide protection against "sudden stops" in capital inflows.

The other four major crisis economies of recent years—Argentina, Brazil, Russia, and Turkey—have taken very different roads to recovery. All four got into trouble because of unsustainable exchange rate pegs, excessive sovereign borrowing, and, in the last three cases, weak financial systems. When the governments could not service foreign currency–denominated debt, they aban-

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doned the currency pegs; Argentina went further and stopped payment on its debt and later restructured it (to the consternation of its creditors). Russia also restructured its debt, but through more of a negotiation than the unilateral actions taken by Argentina. Brazil and Turkey adopted much tighter fiscal policies. Since these actions, all of the economies have rebounded to varying degrees. Primary fiscal surpluses (budget accounts minus interest payments) now exist, in the cases of Brazil and Turkey at unprecedented rates. The countries are building up hard currency reserves, and the adoption of more flexible exchange rates also will help (by discouraging excessive foreign currency borrowing). However, debt ratios remain uncomfortably high, especially in Brazil and Turkey, and the sustainability of debt depends on continued high primary surpluses, low international interest rates, and market confidence that translates into continued low sovereign spreads.

Perhaps the best test of the success of measures taken so far is how the market, specifically bond investors, has perceived them. By this test, the verdict, at least at the time this paper was presented, looked good: for virtually all of the countries that experienced a crisis within the last decade, interest rates relative to U.S. treasury bond rates have fallen significantly since the time they were in trouble.

Does sovereign debt help or hinder growth? Government borrowing (like private sector borrowing) can add to growth, provided borrowing occurs in moderation and the proceeds are used for investment rather than consumption. Crises, related to high debt, obviously slow growth. But even without a crisis high debt can slow growth as a result of direct crowding out of private investment, concerns about debt overhang, and reduced fiscal space for public investment and social spending.

The authors do not identify a specific debt-to-GDP threshold that should trigger concern, but they observe that the debt ratio seems high in a number of prominent market access countries. Countries are responding, to varying degrees, with fiscal discipline, changes in institutions to lock in fiscal discipline, and reforms to speed growth.

An important challenge for developing-country governments in the future is to manage foreign exchange risk and thus the risk of currency crises. One response, in some cases related to financial sector bailouts, has been to develop a domestic currency debt market and borrow more in domestic currency. Innovations in debt instruments can help: one idea is to issue bonds with interest payments tied to GDP growth (to help avoid unsustainable interest rate burdens in years when the domestic economy may be performing poorly for exogenous reasons, such as a slump in commodity prices). However, it appears that such instruments and markets will not play a major role in easing the burden of developing-country debt for some time.

Peering into the future is a lot more difficult than explaining the past, but Morris Goldstein of the Institute for International Economics takes up the challenge in chapter 5 of this volume, speculating on what the next emerging-market-economy financial crisis (banking, currency, or both) might look like. Admittedly, at the time of this exercise, the likelihood of such a crisis seemed lower than it had for some time: GDP growth in emerging markets in 2004 was the best in twenty years, primary prices were high, and borrowing rates were low.

But Goldstein warns against complacency: very good times often precede bad times. And the healthy averages conceal wide variation in country performance: in 2004 more than fifty developing countries had current account deficits exceeding 5 percent of GDP. And then there is the looming presence of the "haircut" that Argentina forced its creditors to take on foreign currency debt earlier this decade. When the next crisis occurs, investors may rightly fear the same thing happening to them and thus bolt for the exits at the earliest sign of trouble.

Of all the myriad things that could go wrong in the near future, Goldstein singles out two for special attention: a bursting of the apparent "investment bubble" in China and a sudden run from the U.S. dollar on account of the large U.S. current account deficit. Moreover, the two events are not mutually exclusive; they could happen simultaneously and thus have potentially synergistic negative effects on the world economy, emerging markets included.

China and the United States account for roughly 12 and 21 percent of the world's output, respectively, based on purchasing power parity exchange rates. In 2003–04, the two economies together accounted for nearly half of the world's expansion in output. Clearly, therefore, a slowdown in one or both economies could have potentially serious ripple effects on much of the rest of the world.

The main risk that could arise from China comes from the likely slowdown in its very high rate of investment, which as a share of GDP recently hit an all-time record of 46 percent of GDP. Although Chinese officials initially denied that investment spending posed a problem, more recently, the government has attempted to tighten monetary policy (through administrative controls and higher interest rates) in an effort to curb spending generally, which had pushed GDP up almost 10 percent in 2004. Of course, another risk is the impact of a change in exchange rate policy. (After the conference, this issue became more important when China announced a slight revaluation of its currency in July 2005.) Goldstein lays out the pros and cons of each of three possible future scenarios for the Chinese economy: a soft landing, a hard landing, and a long (but gradual) landing. He sides with the long-landing view, implying that China's GDP growth in 2006–07 could be 3–4 percentage points lower than in 2004.

Goldstein also outlines alternative "landing" scenarios for the U.S. current account deficit. As his Institute for International Economics colleague Michael Mussa (former chief economist of the International Monetary Fund) has argued, one way or another, the U.S. current account deficit will have to be reversed, and when that occurs, three interrelated things must happen: (1) the dollar must depreciate against a basket of foreign currencies, (2) domestic demand in the United States must grow more slowly than production to make room for the additional exports that a weaker dollar will stimulate, and (3) domestic demand elsewhere in the world will have to grow faster than output to reduce net exports from the rest of the world. Yet when and how fast these adjustments will take place is highly uncertain.

How will emerging markets fare if and when the Chinese and the U.S. economies slow down or, worse, suffer sharp corrections? Clearly, the effects will be negative, but they will be manifested in several ways. One is through a decline in exports to a slumping China and the United States; through this channel, Hong Kong and Korea, the largest exporters to China, would suffer disproportionately, as would much of Latin America, which exports commodities to the United States and recently to China. European emerging economies would be the least adversely affected.

A second channel through which emerging economies could suffer is through higher interest rates in the United States, which the Federal Reserve has been engineering and which is likely to slow capital flows to emerging economies as a by-product. A higher U.S. dollar interest rate could also be a by-product of a slowdown in China's accumulation of U.S. government debt. In a worst case, the contraction of capital flows and higher domestic interest rates could precipitate another financial crisis, especially in countries with weak banking systems. The negative impact could also spread to other countries through "contagion" effects, similar to those displayed during the Asian financial crisis of the late 1990s. The countries that will suffer the most from high interest rates are those that still have high debt ratios, many of which are countries that still have not recovered fully from earlier crises.

Emerging-market economies may be somewhat defenseless against shifts in economic fortune because it is difficult for them, in a global environment, to run independent and effective countercyclical macroeconomic policies. Countries with relatively low levels of sovereign debt to begin with are likely to be best able to carry out effective countercyclical economic policy (because foreign investors will not necessarily flee from the country when its government attempts to offset a downturn with stimulus).

What do institutions with real money at risk believe about the outlook for emerging economies? A panel of three experts from major commercial banks and rating agencies offered their views at the time of the conference, which are summarized in chapter 6.

David Wyss from Standard and Poor's was much more optimistic about the general outlook for emerging markets than Goldstein. While he acknowledged that credit ratings are not perfect, he found it nonetheless a significant sign of optimism that the ratings of emerging markets had improved markedly in recent years. Wyss also was much less alarmed than others at the conference about the U.S. federal budget deficit, which he noted was not out of line with the deficits of other industrial countries. He was more concerned, though, about the large and growing U.S. current account deficit and the danger that foreign central banks would suddenly be unwilling to continue buying large volumes of U.S. government debt, thereby removing the financing of the large U.S. current account deficit and the associated large demand for U.S. assets.

Don Hanna of Citigroup noted that foreign central banks that are buying U.S. dollars are doing so out of their free will and presumably are making rational decisions in doing so. Indeed, in countries such as China where formal domestic interest rates are lower than in the United States, the central banks are making money in the short run through such purchases (although they are also assuming the risks of capital losses in the future if the dollar should decline in value).

On another subject, although better regulation supports higher credit ratings on Asian securities, Hanna questioned how much transparency in financial reporting had really improved in the region since the 1997–98 crisis. Furthermore, enforcing legal rights in some countries, such as China, can still be quite expensive.

Khalid Sheikh of ABN Amro was more nervous than the other two panelists, highlighting the possibility that some unforeseen event could trigger an economic downturn in emerging markets. In particular, since other Asian economies have become so dependent on the Chinese market, any slowdown of China's economic growth could have significant negative effects in the rest of the region. Furthermore, some of the countries that have been buying dollars have also had difficulty sterilizing the dollar inflows, which creates a danger of inflation.

The financial sector, and the banking system in particular, has been at the heart of the financial crises discussed in this volume. To what extent have countries since introduced reforms to address the weaknesses that contributed to their difficulties in the first place? This is the topic of chapter 7, by Gerard Caprio and Patrick Honohan of the World Bank.

The authors observe that, in most cases, banks in crisis countries took speculative or unhedged foreign exchange positions that later contributed to their difficulties and to problems in the financial sectors generally, when governments were forced by events (and dwindling reserves) to float their currencies. In a few cases, like the Dominican Republic and Venezuela, outright fraud played an important role in the banking crises.

The authors discuss several features of how the financial crises in these countries were resolved. Although there were many differences among countries, the authors note that there also were common features. For example, with a few exceptions, banking difficulties in the crisis countries were confined to a minority of institutions and were not widespread throughout entire banking systems. In addition, problems arose at both public and privately owned banks. Governments rarely addressed banking problems quickly and all at once; instead they tended to recapitalize failed institutions in successive waves. Sharp currency depreciations typically affected the timing, nature, and scale of these recapitalizations.

The authors examine the postcrisis performance of thirty-eight countries that have suffered crises (a few more than once) since 1994. Again, despite the country variations, some interesting common features stand out. On average, GDP growth in the three years following the crisis was lower than in the three years preceding it; the same was true with inflation (suggesting that, with less pressure from domestic demand, prices were not pushed up as rapidly as in the precrisis period). Almost all countries increased their "financial depth" postcrisis—that is, deposits flowed into the banking systems, during and as they were repaired. The experience with bank credit postcrisis was much more varied; in some cases it grew, while in others it shrank (suggesting that government debt rose rather than loans to private borrowers, partly because of the postcrisis bank restructurings). At the same time, interest rate margins-the "spreads" between banks' earnings from interest and the costs of funds-have fallen pretty uniformly since the crisis episodes. In addition, the crises have moved varying amounts of ownership of banks into private and, especially, foreign hands.

One silver lining to the black cloud of financial crises is that experience has produced a reasonable degree of consensus about how to resolve troubled financial institutions. Ideally, the process should be clear and transparent, and banks' nonperforming assets should be removed as quickly as possible and sold to private investors. Parallel work should be done on strengthening the banks' main clients, the corporate sector. Losses should not be fully socialized. Government aid should "fill the hole" in the balance sheets of failed banks created by the loan and other losses that contributed to the failures, but only as part of recapitalization plans that draw in new, private capital and management to run the bank thereafter. Although foreign capital and expertise can often make a real difference, it is not always a panacea. If capital and management-domestic or foreign-cannot be attracted, then the institutions should be liquidated. The authors discuss specific additional principles for special situations, such as what to do with failed state-owned banks, how to realize value most efficiently and profitably for the banks' nonperforming assets, and how and to what extent to protect depositors.

In reality, countries varied in how closely they conformed to these "best practices." The authors suggest that many deficiencies in the implementation of "resolution policy" can be attributed to limited administrative capacity and limited independence from political elites who run the countries.

In addition to these lessons for authorities whose financial system has just emerged from a crisis, the authors conclude with a series of broader recommendations for developing countries in building productive and stable financial sectors in the future, including the advisability of attracting foreign banks and other financial institutions, reducing the reliance on banks, encouraging more intermediation through capital markets, and relying more heavily on markets than on regulators to discipline banks and prevent them from taking undue risks. They note that the lack of access to financial services in many developing countries is a source of vulnerability for emerging markets, not least because it could prompt calls, already being heard, for the return of development banks and subsidized credit schemes, which the authors warn could, as in the past in many countries, undermine financial sector development.

Finally, looking ahead, one of the larger financial challenges confronting all emerging-market economies (and developed countries too) is the pension system. Populations are aging, but the traditional way of providing support for the elderly—the extended family—is being eroded by migration and urbanization. At the same time, the standard pay-as-you-go pension systems

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for government and formal sector workers have become costly in many developing countries. Many countries have followed Chile and put in place some sort of fully funded system of individual pension accounts, but questions have arisen about these systems. In chapter 8, the last paper in this volume, Robert Holzmann of the World Bank examines these issues, drawing on a longer study by a World Bank team.

Holzmann argues that successful reform of pensions depends first of all on a careful consideration of whether the macroeconomic and fiscal environment can support the reform. It also depends on a credible commitment arising from the political economy of the country and a buy-in by the country's leadership. Finally, it depends on creating appropriate regulatory and supervisory arrangements and building capacity and governance to deal with the complex, intertemporal problems of providing retirement income. In reforming pensions, careful attention to the secondary developmental benefits of pensions is also necessary. Pensions are, after all, a claim on future economic output and should therefore be designed to leverage positive impacts from saving and financial market development and to reduce potential negative impacts on labor markets and macroeconomic stability.

Holzmann suggests that pension reform is now becoming based on five subsystems or pillars. In addition to the three well-known pillars—a public system linked to earnings and usually with pay-as-you-go financing; a mandatory, fully funded, and privately managed system (essentially an individual savings account or variant of the Chilean model); and voluntary savings for retirement—there is a basic, "zero" pillar to deal with poverty among the elderly and a nonfinancial pillar that involves intrafamily support, access to health care, the housing status of the elderly, and so forth. To be sure, this is an ideal system, and not every country has the resources to have all pillars—pension systems must be affordable and not create macroeconomic instability—but the full system is something to which all countries can aspire.

Holzmann concentrates the latter part of his chapter on three areas of the mandatory, fully funded, privately managed pillar that have drawn attention: country readiness and regulatory and supervisory issues, containment of fees and costs, and annuities for retirees, an often overlooked issue when systems are set up. Generally, most countries are ready to implement some sort of fully funded, privately managed pillar. The exceptions are countries with chronic macroeconomic imbalances. A credible macroeconomic framework and a sound banking system are preconditions for a sound pension system. For countries with immature markets, tight regulation and supervision of investments and close attention to provision of information for the contributors are desirable initially. As the system and capital market develop, the limitations on investments can be relaxed.

Fees have become an issue for contributors to private pension systems. High fees not only reduce the returns to retirees but also reduce the system's attractiveness to potential contributors outside the formal economy. The most successful approaches to containing fees seem to involve reducing costs by using a unified clearinghouse system for managing the accounts, limiting the incentives for marketing expenditures, and limiting the fees via competitive bidding or passive investment options.

The provision of annuities is becoming an issue as pension systems age and more contributors retire. Typically, the insurance sector is the most likely provider. However, information on insurance companies or specialized annuity providers is often opaque and needs improvement. A crucial issue, which has not yet been resolved, is to determine who will bear the risk of rising life expectancy and uncertain future investment income. So far, a combination of three approaches has been used: regulation of the insurance-annuity sector, the creation of variable annuities, and minimum pension guarantees by the government.

Much has happened in emerging markets, mostly for the good, since the financial crises of the late 1990s and the early part of this decade. At the same time, however, some of the conditions that allowed those crises to come close to getting out of hand, such as poor transparency and inadequate regulation, remain. Furthermore, some countries have not taken sufficient advantage of the current, benign conditions to strengthen their debt positions and their financial markets to better withstand future crises. Finally, there are significant global imbalances in saving and investment that may not be sustainable. It seems odd that the emerging markets are financing the leading economic power in the world. True, the United States may offer high returns, but so should many emerging markets themselves. At some point, the appetite for U.S. dollar investments may wane, and if it does so too rapidly, the economic fallout for the entire world will not be pleasant.