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1 *Introduction*

It is now well understood that economic development requires healthy growth of a nation's financial sector. Initially, nations tend to channel their savings and investment primarily, if not almost exclusively, through banks. But over time, savers in search of higher returns and firms seeking capital provide the foundation for the development of capital markets. Here, too, a sequence is evident: first, the issuance and trading of bills and bonds of national governments, followed by the issuance and trading of bonds and equities of publicly held corporations.

Capital markets cannot function effectively, however, unless a number of elements are in place. Exchanges and clearing and settlement systems must exist to enable trading, and money market arrangements are needed to facilitate settlements. A legal system must exist to enforce contracts. Information about the financial soundness and future prospects of companies must be made available on a timely basis to give investors confidence to purchase corporate instruments (both debt and equity). Corporations must be governed in a fashion that also gives investors confidence that their funds will not be wasted or stolen.

Events in recent years in both the developed and less developed world have underscored the importance of these straightforward propositions. In the wake of the Asian financial crisis of 1997–98 and follow-on crises in Russia and Latin America, experts from developed countries lectured those

in the affected countries about the importance of ensuring transparency and avoiding "crony capitalism." Yet only a few years later, the United States and, to a lesser extent, some European nations suffered their own embarrassing failures in corporate disclosure. Equity investors in each of these domestic capital markets suffered as a consequence.

It is appropriate, therefore, that the Fifth Annual Financial Markets and Development conference sponsored by the World Bank, the International Monetary Fund (IMF), and the Brookings Institution, held in Washington on April 14–16, 2003, focused on the future of domestic capital markets in developing countries. As in earlier years, this conference was attended by nearly 200 financial experts and policymakers from around the world. Attendees heard presentations of papers and comments from experts in various panels on aspects of the theme chosen for this year's conference. In this introduction, we highlight key features of those papers (and invite readers to review the panel summaries at the end of each section of the volume).

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Gerd Häusler, Donald Mathieson, and Jorge Roldos from the International Monetary Fund open the book with a broad overview of trends in capital markets in developing countries. Several points emerge from this survey.

In the aggregate, national bond markets in developing countries have doubled in size since 1993, from 18 to 36 percent of gross domestic product (GDP). This is still well below the average for developed countries, however, at 120 percent of GDP. As one would expect, most of the growth in domestic bond markets has occurred in government bonds, with corporate bonds lagging. Moreover, despite much of the attention given to sovereign indebtedness in various developing countries, domestic bond issues by governments have outpaced foreign currency issues by a factor of thirteen.

Equity markets in developing countries emerged as a serious alternative to local financing only in the 1990s, doubling from half of domestic credit in 1990 to an amount roughly equal to domestic credit by 1994. As a result of various financial crises throughout the decade, however, equity as a source of finance also was highly volatile.

What policies have been most effective in stimulating domestic capital markets? The authors suggest that there is broad agreement on the importance of sound market infrastructure, transparency, and corporate governance. Although the evidence is less clear-cut on other issues, they offer some conclusions.

One notion is that, while the existence of indexed instruments and derivatives can help to lengthen the maturities and deepen liquidity in the fixed-income market, these financial innovations require careful monitoring to prevent excessively leveraged positions and undesirable mismatches in the maturities of assets and liabilities. A second conclusion is that, although stock market reforms aimed at improving the conditions under which corporations issue and trade shares are desirable, governments should not protect local exchanges or the domestic brokerage industry from local or foreign competition. Third, foreign investors should be welcomed into domestic capital markets since they can deepen liquidity in those markets, even if they may add volatility in the process.

The next two chapters analyze domestic bond markets, in particular, in greater detail. Clemente del Valle, chairman of the Securities and Exchange Commission in Colombia, and Piero Ugolini of the IMF provide an overview of the key policy initiatives and reforms that are necessary for the development of government bond markets. They then survey the status of those efforts in seven regions of the world.

In the authors' view, the foundation of an effective government bond market must rest primarily on macroeconomic stability, a clear definition of the government's debt strategy (including the sale of "benchmark" obligations that are viewed as useful anchors for privately issued debt and the auction of initial government bond issues), a transparent and effective legal framework supporting bond issues and their subsequent trading in secondary markets, the presence of a wide investor base for purchasing the bonds (including an array of institutional investors), and a stable and liquid money market overseen and managed by the nation's central bank. The authors also emphasize the importance of having systems of taxation that do not penalize interest income and an efficient settlement system (ideally one that settles transactions in real time).

Although government bond markets in emerging-market countries still have a long way to go to reach the sophistication of developed-country markets, some country markets are considerably more advanced than others. Two of the most advanced government bond markets (among emerging-market countries) are in Mexico and Singapore. Somewhat less advanced, but still well ahead of many developing countries, are the markets in Brazil, Colombia, Korea, Morocco, and Turkey.

Government bond markets differ not only in their depth, but along other dimensions as well. For example, government securities in East Asia are primarily long term in maturity, with fixed interest rates, while those in

Latin America tend toward shorter- and medium-term maturities, often with variable interest rates.

Despite their differences, emerging-market bond markets face similar challenges: they need to diversify the investor base (beyond banks); tax policies must achieve neutrality between interest and other income, while not disadvantaging foreign purchasers; settlement infrastructure requires further development, especially to facilitate secondary-market trading; and governments need to upgrade their debt and cash management capabilities so that the market has both a credible supply of securities issued and a strategy that supports development of the market.

Philip Turner of the Bank for International Settlements addresses issues relating to emerging-country bond markets more broadly. He begins by documenting the significant growth in these securities in emerging markets, which doubled in volume outstanding to over $2 trillion at year-end 2001 in just seven years (from year-end 1994). Although debt issuance increased throughout the world, it was especially pronounced in East Asia, where governments ran large fiscal deficits following the financial crisis in 1997. Perhaps most significant, the total volume of domestic debt issued by emerging-market borrowers now exceeds that of foreign currency debt.

Turner argues that, although bond markets are central to the development of an economic system, a number of obstacles inhibit such markets in developing countries in particular. These include high and variable inflation (which deters investment in bonds), various forms of interest rate or loan market controls, narrowness of the investor base (attributable in part to investor tastes and in part to limited development of institutional investors), regulatory policies that inhibit secondary-market trading (such as accounting policies that recognize gains and losses only on sale rather than periodically as market values change), and tax policies that reduce liquidity.

Other government policies can hamper the development of domestic bonds, such as the now ill-advised attempts by governments to borrow abroad excessively in foreign currencies and at short maturities. Turner discusses in some detail how government decisions relating to the sterilization of excess reserves over the monetary base—a common situation in East Asia, where reserves exceed domestic currency by almost $400 billion—can influence the development of local bond markets. In particular, governments that issue bonds against these reserves can further the development of their own local bond markets. Of course, if that path is chosen, decisions must then be made about who issues the bonds (governments or central

banks) and at what maturities, and these decisions can affect the liquidity and depth of markets.

Turner also comments on the dangers that local debt markets run into when local currency debt is too short term, requiring constant rollover—a problem that exists in countries with a history of high and volatile inflation. The transition to long-term, fixed-rate debt must, however, be gradual. Part of the transition may entail some indexing of the debt to inflation and adoption of variable rates during some interim period.

Governments should also seek to promote liquidity in their debt markets by fostering effective institutional and operational arrangements for secondary-market trading. In particular, tax systems must not inhibit trading. Turner discusses the pros and cons of various other government measures to foster debt markets, including adopting monetary policies aimed at smoothing volatility in interest rates; establishing a primary dealer system; fostering repurchase transactions (in which government securities are used as securities for collateral); adopting more liberal attitudes toward short selling (which facilitates arbitrage and adds to liquidity); and building up benchmark security issues. Encouraging the development of non-bank financial intermediaries, especially insurance companies and pension funds, is also an important way of fostering local demand for domestic debt issues (by both government and private sector borrowers).

How large does a country have to be to maintain a well-functioning bond market? Turner argues that the existence of liquid bond markets in many countries of different sizes suggests that most medium-size emerging-market countries can sustain more liquid bond markets than currently exist.

Turner concludes by advising small developing countries where debt markets are necessarily limited in size to eschew policies requiring local investors to invest in home-country bonds as a way of supporting local bond markets. Such policies deprive domestic investors of opportunities for useful diversification. Instead, small (and other size) emerging-market countries should follow outward-looking policies that welcome foreign banks and securities firms, which can bring investors from abroad as well as valuable expertise, while allowing local investors to diversify by investing abroad. Such capital account opening, however, calls for careful sequencing and coordination of a range of financial policy and macroeconomic measures to help manage the associated risks, a topic discussed in the next section of this volume.

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What policies are most appropriate for enhancing the development of financial systems in developing-country markets, while ensuring financial stability? The chapters in the second part of this volume address this question.

Three experts from the Bank of England—Glenn Hoggarth, Patricia Jackson, and Erlend Nier—examine the extent to which financial markets can contribute to financial stability by fostering market discipline, resulting in sounder banks and thus a safer financial system. The authors begin by laying out the channels through which, at least in principle, the market can exert discipline against excessive risk-taking by banks and other financial institutions: through changes in equity prices (for publicly held financial intermediaries), an intermediary's counterparties, and holders of subordinated debt. Whether and to what extent market discipline is effective depends on the quality and timeliness of information available and whether the parties supposedly supplying the discipline are protected against loss (as is the case with depositors in many countries).

The authors test the hypothesis that banks, in particular, have incentives to hold more capital as market discipline becomes more effective—since, then, the managers and shareholders of the bank want more protection against default. Confirming this hypothesis, one test finds a negative relationship between an index of depositor protection, which should weaken market discipline, and average bank capital-to-asset ratios, by country. Another test finds the expected positive relationship between per country bank capital ratios and the amount of disclosure. The authors find similar relationships for banks within individual countries.

These tests underscore the need for governments to create the right environment for market discipline to be effective. Among the conditions that the authors favor are keeping any depositor protection and financial safety net to a minimum; avoiding state ownership of banks and other financial institutions; keeping the domestic financial market open to foreign entry and competition (which enhances discipline); and maximizing disclosure about the financial condition of banks and other financial intermediaries (as the proposed revisions to the Basel international bank capital standards arguably would do).

Finally, the authors consider whether bank supervisors should be using market prices as guides to risk. Although, in principle, market measures are contaminated by the presence of the safety net, which may limit their usefulness to supervisors, the prevailing studies—for both the U.S. and European markets—provide mixed evidence about the added predictive

value of market prices of bank equity and subordinated debt (which, in theory, should not be infected by any safety net since its holders are not protected by deposit insurance). The authors conduct their own empirical tests, finding their market indicators for banks in the United Kingdom to be of only limited predictive value of bank risk and, perhaps most important, to contain large amounts of "noise," with large movements in prices often seemingly not related to a large subsequent event. In other words, the market data generate substantial "false positives," which, in the authors' view, limits their predictive value for supervisors.

The usefulness of disclosure about financial intermediaries is also the subject of the next chapter in this volume. Alan Cameron, deputy chairman of the Sydney Futures Exchange, distinguishes between two models of regulation: "merits" regulation, which in the financial context might take the form of regulators screening which companies can access the capital markets, and "disclosure" regulation, which requires public entities to disclose pertinent financial information about themselves but does not entail prior regulatory approval for capital offerings or other activities by regulators. Developed economies, such as the United States and Australia (the author's home country), have adopted the disclosure model for capital markets, but only a few developing countries have done so.

The line between the merits and disclosure models is not as clear as it may appear, however. Developed-country securities regulators rely primarily on disclosure, but they also engage in some screening of prospectuses (for fullness of the disclosure, but not worthiness of the investment) before companies are permitted to sell their shares to the public.

Cameron considers in some detail the disclosure system relating to "penny stocks" trading on the Hong Kong stock exchange, a subject he studied as part of a larger expert group. The group found that the overall standards for listing in that market were too low, allowing the trading of too many weak companies that later failed. While failure is an inherent part of capitalism, the group concluded that excessive failure of companies listed on stock markets can damage the reputation of all stocks traded on an exchange, not just those that fail. With this in mind, the group urged that the quality of overall listing standards be raised in the future.

Can the kind of disclosure used in developed-country capital markets be applied in the same fashion to emerging markets? Cameron suggests several reasons for being cautious. For one thing, the infrastructure necessary to support disclosure—well-trained legal, accounting, insolvency, and securities analysis personnel—is much weaker in developing economies. Equally

important, investors in emerging markets tend not to be as well educated about the methods for assessing the relative merits of different classes of assets. Where governments are owners of listed companies, as they are in many developing countries, this can distort incentives for adequate and timely disclosure. For all these reasons, Cameron counsels emerging-market countries not to rely exclusively on disclosure when constructing and maintaining their capital markets; there is a need, in his view, for some merits-based regulation—prescreening of prospectuses, in particular—as well.

Peter Henry and Peter Lorentzen of Stanford University ask a related, fundamental question in their contribution to the volume: given the turbulence of capital flows to developing countries, is it a good idea for those countries to integrate their capital markets with the rest of the world? The answer to that all-important question is a nuanced one.

Too much of the recent criticism of developing countries for accepting foreign money has focused on debt finance, especially when it is denominated in foreign currency. The Asian financial crisis, and subsequent crises in Russia and Latin America, confirms the riskiness of that strategy. Accordingly, the authors urge emerging-market countries to liberalize their dollar-denominated debt flows slowly and cautiously.

Accepting equity capital, whether through stock market investment or foreign direct investment, has been much more attractive than borrowing from abroad. Nonetheless, less capital has flowed from rich countries to poor-country equity markets than has been implied by economic theory, which suggests that rates of return in developing countries, with less capital intensity, are likely to be higher, even when adjusted for risk, than rates of return in rich countries. As it turns out, however, rich-country suppliers of capital have been unusually hesitant to commit funds in emerging-market equities, where actual returns have proved to be unusually low. The authors suggest that developed-country investors are worried about adverse selection and agency problems, especially where information is less than transparent and protection of minority shareholders is not as well established as in richer countries.

In fact, cross-country econometric research has documented the importance of information problems as a key impediment to foreign investment in emerging-market equity markets. What limited empirical data exist suggest that local equity markets are likely to be larger, more efficient, and more stable as legal protections of investors increase. Perhaps the best approach to securing such protection is to provide strong disclosure laws,

backed by penalties in civil court for failure to adhere to them. As countries deepen their equity markets relative to debt, their economies are also likely to be more stable through time and less subject to repeated bouts of financial distress and crisis.

One especially important role for equity markets is to provide a venue for new companies to raise capital through initial public offerings (IPOs). In her chapter, Reena Aggarwal of Georgetown University assesses this function in emerging-market equity markets.

Taken together, equity markets in emerging markets have grown in importance through time. In 1970, stocks listed on U.S. equity markets constituted 78 percent of total world capitalization; by 1999, this share had fallen to just 45 percent. Aggarwal notes that a significant amount of the decline was attributed to the growth in capitalization of companies listed on exchanges in emerging markets or depository receipts traded on U.S. exchanges.

At the same time that equity markets are becoming more global, companies originating from emerging markets—Latin America—are finding it increasingly easy and attractive to abandon their listings on local exchanges in favor of listings in developed-country markets, especially the United States. This affords them access to a global roster of investors rather than the more limited set associated with domestic exchanges. But the adverse consequences for local exchanges are apparent, with declining numbers of listings over time, which in turn spells trouble for the ability of these exchanges to foster IPOs from local companies in the future.

Because listing revenues are likely to continue to decline, emerging-market exchanges must find other ways to generate revenue if they are to survive and, indeed, even prosper. The most likely prospects are trading and other services. In addition, exchanges in emerging markets are likely to seek out alliances with exchanges in neighboring countries as a way of cutting costs, although this avenue for survival is fraught with its own set of difficulties (as past attempts at alliances among European exchanges attest). Aggarwal concludes her analysis by considering a range of options that governments can pursue to encourage new listings and activity on their local exchanges.

In the last chapter in the second section of this volume, Cem Karacadag, V. Sundararajan, and Jennifer Elliott of the IMF discuss what they believe to be the appropriate sequencing of financial sector reforms to develop domestic financial markets while ensuring financial stability. The topic merits attention, in their view, because the financial crises of the 1990s

demonstrated that a weak institutional structure—in particular, failure to adequately supervise financial institutions and markets, excessive government involvement in the financial sector, poor central bank policies in an environment of weak money, exchange, and government debt markets, and the absence of reliable and timely information on both the financial and nonfinancial sectors—contributed to and exacerbated financial and economic risks in the course of financial market liberalization. As a corollary, the reforms to develop financial markets and institutions should be coordinated and combined with measures to monitor and mitigate the associated risks in order to realize the full benefits of liberalizing financial markets and capital accounts (to permit mobility of capital into and out of the country). What is the optimal path and sequencing of these reform measures, and how should reforms be coordinated with capital account liberalization?

In order to address these questions, the authors identify a hierarchy of financial markets, reflecting the degree and complexity of the risks created by each market and the technical interdependence among markets. At the base are the money and foreign exchange markets. The money market precedes all others given its central role in price discovery and in the setting and transmission of interest rates. An active money market is a prerequisite for the development of markets in foreign exchange and government securities. A well-developed government debt market, in turn, facilitates the development of markets in corporate debt, equity, and asset-based securities.

This hierarchy is based on two considerations: first, risks evolve into more complex forms and grow in magnitude as new markets develop, especially as new instruments and institutions emerge. Second, depth and liquidity in one market are linked to depth and liquidity in other markets due to shared infrastructure and behavioral linkages. These considerations imply that risks in any one market cannot be effectively managed, and its depth and liquidity adequately built up, in the absence of well-functioning markets at earlier stages in the hierarchy. In addition, a critical mass of reforms encompassing both market development and risk mitigation at every stage in the market hierarchy is necessary to avoid exacerbating financial system fragility and macroeconomic vulnerability.

Against this background and drawing on country experience, the authors review the range of specific operational and structural measures that need to be implemented to build up each market segment, illustrating the hierarchy and interdependence of markets. They stress that such private markets are essential to ensuring financial stability over the long run,

because they enable countries to reduce their dependence on bank-intermediated finance, which has its own vulnerabilities to financial crises. The authors also review the additional dimensions of risks introduced by the development of each market in this hierarchy—both financial and macroeconomic risks—and the associated risk mitigation policies that governments can pursue. Given the importance of ensuring financial stability, the authors urge emerging-market countries to sequence the establishment of the various financial markets so that the risks of each market are managed before other markets are developed and maintained. Although countries are likely to be in the midst of various stages of market development and risk mitigation, the proposed approach to sequencing and coordination of reforms can help to prioritize future financial reforms.

The authors conclude by combining the analysis of market development measures and risk mitigation policies into a set of general principles for sequencing financial market development and capital account liberalization. They stress that the liberalization of capital flows by instruments and sectors should be sequenced in a manner that reinforces domestic financial liberalization and allows for institutional capacity-building to manage the additional risks. In rough outline, this means that countries should not liberalize all at once and should seek to implement a critical mass of reforms at each step so that adequate depth and risk management capacity are achieved in each market segment.

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How are equity markets—exchanges in particular—changing in developing countries? What are the challenges facing regulators? And how, if at all, has corporate governance improved? These are among the questions explored in the next section of the volume.

Ruben Lee of the Oxford Finance Group provides an overview of changes in market structure, especially the trends toward "demutualization" of equities exchanges, in emerging markets. He also lends his perspective on the future of the trading of securities in these markets. In brief, he reaches several conclusions.

One is that the volume of trading on exchanges in many developing-country markets is small, in part because of the small number of public companies and also because of concentrated share ownership. Furthermore, as Aggarwal points out in her chapter, some of the more successful local companies increasingly have wanted listings on the larger developed-country markets (especially the United States).

Notwithstanding these real threats to their commercial viability, emerging-market exchanges nonetheless have the advantage of "network externalities"—being the only "game in town," they tend to attract all the local business, making it difficult or impossible for others to enter the exchange market. As for local companies listing off-shore, trading of their shares abroad may actually encourage trading of shares in home-country markets.

Still, the options for local exchanges to earn additional revenues are limited. The trend toward demutualization means that exchanges may not be able to rely on membership fees. If listing is provided by government, then revenues from listing can disappear. Although clearing and settlement revenues are attractive, most exchanges do not provide those services (and where this happens, it may invite antitrust scrutiny). Technology is forcing down the level of transaction fees, one of the primary sources of exchange revenue. Perhaps the most promising source of future revenues is the provision of quote and trade data, but this depends on regulatory approvals.

One possible response to these threats to their viability is for exchanges to achieve greater economies of scale through linkages, alliances, or even mergers with other exchanges. Lee notes, however, that most attempts at linkages have failed so far, for various reasons. He pays special attention to the lessons of the linkage among five Scandinavian exchanges, NOREX, which has had both successes and difficulties. Lee also reviews a number of exchange mergers, which he suggests may hold greater financial promise. He points out that mergers can be constructed so that the national identities of the different exchanges are preserved.

Lee concludes his analysis by surveying the costs and benefits of demutualization. He is skeptical that demutualization will prove to be as attractive or as widespread as many of its advocates claim.

Demutualization of exchanges is often touted for the improvements it may bring in corporate governance. How does corporate governance relate to the performance of public companies that may be listed on exchanges? Amar Gill of Credit Lyonnais Securities Asia addresses this important question in his chapter, concentrating on the evidence for emerging markets in particular.

Using his company's own scoring system for corporate governance, which covered more than fifty issues, Gill and his research team ranked companies in emerging markets and assigned them to quartiles. Gill then compares the corporate governance rankings to the returns on equity for the same companies. The results broadly confirm the view that investors value good corporate governance, at least over a three- to five-year time

horizon (but not in the short run). The firms in the top quartile of the corporate governance rankings tend to have superior equity returns than firms ranking lower in corporate governance.

Next, Olivier Frémond and Mierta Capaul of the World Bank examine how capital structures and control rights interact within corporations. The authors outline four basic patterns of ownership and control: dispersed ownership and diffused control, dispersed ownership and concentrated control, concentrated ownership and diffused control, and concentrated ownership and control.

The first two scenarios, where ownership is dispersed, foster portfolio diversification and liquidity. In this circumstance, it is more efficient for shareholders who are disaffected to "vote with their feet," or "exit," than to exercise "voice" by seeking to influence the way the company is managed. In contrast, in the third and fourth scenarios—where ownership is concentrated—liquidity is impaired, making exit comparatively more difficult, while voice, at least in principle, is a more effective mechanism to ensure that management does not expropriate shareholders' investments.

The concentrated ownership scenarios are especially important in the emerging-market context, where many firms are family controlled. Under this circumstance, the best way to ensure that minority shareholders have adequate voice is to provide one vote per share. The authors cite numerous organizations, largely in the developed world, that support "one share, one vote" as a matter of principle. Yet the authors also show that there are substantial deviations from this principle in many emerging markets: among other things, through the use of multiple-voting shares, nonvoting shares, shares with preferential rights, and cross-shareholding arrangements. The result is control by the few, even though there may be ownership by the many.

Surprisingly, the authors conclude from their review of the relevant literature that not all deviations from one share, one vote detract from value. Some studies show that firms that deviate from the principle actually outperform those that do not. Other studies, however, conclude the opposite.

The authors therefore identify a policy trade-off: between promoting capital market development and creating an environment where companies can achieve the highest returns. Can these two objectives be achieved simultaneously, and what do voting and control mechanisms have to do with the effort? The authors wrestle with this trade-off, noting that the protection of minority shareholders remains paramount if countries want to attract both domestic and foreign investors to the capital markets.

What kinds of risks do the financial systems of emerging-market countries pose to the global financial system, and how can regulators and international financial institutions recognize them sufficiently in advance so as to prevent undue damage if they do occur? Patrick Conroy and Arne Petersen of the World Bank address these questions in the final chapter in this section.

The World Bank and the IMF developed the Financial Sector Assessment Program (FSAP) to address issues of country-specific vulnerability and to stimulate constructive dialogue between the officials of relevant countries and the international financial institutions. Since FSAPs were introduced, sixty-five countries have been assessed for their compliance with international financial standards, specifically those developed by the International Organization of Securities Commissions (IOSCO) and by the Basel Committee for International Bank Supervision (bank capital standards). Most countries formally comply, through legislative mandates, with the IOSCO standards in particular, although it can be difficult to assess the degree of compliance in actual practice.

The FSAP process has also revealed a number of generic weaknesses, including nebulous divisions of regulatory responsibilities between agencies, lack of adequate staffing in regulatory agencies, limited options for regulators to impose administrative penalties for noncompliance, inadequate supervision of risk management practices within financial intermediaries, and insufficient mechanisms to detect market manipulation and other unfair practices.

Regulators must also respond to financial crises of various sorts. The authors emphasize the importance of adequate disclosure as a way of warding off crises and refer to the ongoing efforts of IOSCO to improve transparency by private market actors. The authors also note that the faster pace and higher volume of cross-border financial activity underscore the need for regulators in different jurisdictions to cooperate with one another to address, and ideally prevent, cross-border financial contagion.

Over the longer run, both the World Bank and the IMF have stepped up their financial technical assistance to developing countries through the Financial Sector Reform Strengthening Initiative (FIRST). Meanwhile, regulators in developing countries themselves must respond to the need for more consistent and accurate disclosure by publicly traded corporations, as the accounting scandals in even as sophisticated a financial market as the United States have revealed.

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Equities markets exist to provide a means of financing for public corporations. If companies' shares cannot be traded, they are much less likely to be issued and bought.

But to what extent do corporations in emerging markets rely on external financing, and how, if at all, do they differ from firms in more developed economies? Jack Glen of the International Finance Corporation and Ajit Singh of Cambridge University address these questions by reporting the results of their analysis of financial statements of nearly 8,000 companies in forty-four countries during the 1994–2000 period. Their chapter contains numerous empirical findings, only a few of which we summarize here.

As a threshold matter, the authors report that the size of equity markets in the two different parts of the world is very different. In 1994, total world stock market capitalization was approximately $15 trillion, of which about $2 trillion was in emerging markets. By 2000, the disparity between the capitalization of stock markets in developed countries and that of markets in developing countries had grown significantly: whereas total world stock market capitalization had more than doubled, to $32 trillion, emerging-market capitalization had crept up to just $2.7 trillion.

The disparity in market capitalization for exchanges as a whole is mirrored at the company level as well. By and large, companies in emerging markets were smaller in the authors' sample than companies in developed countries, although there is significant variation across countries (the sample companies in Mexico, for example, are larger than those in the United States, while the companies in Peru are much smaller).

The authors investigate differences in capital structure in companies in different countries, since the amount of leverage can have a significant bearing on the exposure of the companies and their local economies generally to external shocks. Here, too, there is great variation across countries, within both the developed- and developing-country samples. Nonetheless, not surprisingly, the authors find a statistically significant greater leverage ratio at the beginning of the period, 1994, for companies in emerging-market countries relative to firms in developed economies. However, in the wake of the financial crises in Asia and other emerging markets in the latter part of the 1990s, firms in emerging markets were forced to deleverage, and this result shows up in the authors' data.

The authors also find a lot of cross-country variation in rates of return. But, again not surprisingly, the data reveal that, on average, returns on assets and equity for developing-country firms were below those for developed-country firms during the sample period.

How did firms in the two parts of the sample finance their growth, at least during the sample period? Consistent with the deleveraging of firms from 1994 to 2000, the authors find that firms in emerging markets, on average, financed much less of their growth with debt than firms in developed countries. Of course, there is significant variation across countries in this respect as well.

The authors conclude with perhaps a paradoxical observation: the differences between firms in emerging markets and developed economies are not as significant as they expected. In this regard, the view held in some quarters that firms in emerging markets are subjected to less competition than firms in other countries may not be valid.

The finding that firms in developing countries have performed poorly in recent years is confirmed in the chapter by Dilip Ratha and Philip Suttle of the World Bank and Sanket Mohapatra of Columbia University. These authors find that the profitability of these firms was declining even before the Asian financial crisis. Since the crisis, despite the efforts of many surviving firms to pay down debt, the corporate sector in the affected countries remains highly leveraged and exposed to sudden withdrawals of capital by foreign suppliers. Indeed, companies in Latin America and Eastern Europe, also highly leveraged, have increased their dependence on foreign finance.

Of course, relying on foreign borrowing entails both benefits and risks. It is beneficial to the extent it is provided at lower cost than domestic funds. But it can be highly risky if short term in nature and denominated in foreign currency, thus exposing the borrowers to the risk of exchange rate depreciation. Problems among Asian companies—before the 1997–98 crisis—dramatically illustrated both risks.

As for the future, the authors stress the need to improve both the quality and timeliness of corporate financial reporting in developing countries, a challenge underscored by similar problems experienced in the United States.

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It is one thing for corporate borrowers to need funds, but capital markets need suppliers of funds as well. One critical challenge for all emerging-market economies is to develop a base of domestic institutional investors who will buy the securities that local public companies issue. The concluding chapter by Alberto Musalem of the World Bank and Thierry Tressel of the IMF examines this important challenge.

The authors begin by surveying the theoretical and empirical literature on the linkages between institutional investors—pension funds in particular—and economic growth. There should be a positive relationship between the two if contractual savings systems increase saving, as they should do if the systems are mandatory. Even if participation in pensions is voluntary, the plans may have a salutory demonstration impact on savings. Surveying the evidence, the authors study Southeast Asian and Latin American plans that are fully funded and report that they appear to enhance national savings. Furthermore, developing countries that shift from a pay-as-you-go pension system to one that is fully funded tend, over time, to experience an increase in saving, although initially such reforms may reduce saving.

Contractual savings institutions deepen the demand for securities and thereby enhance securities markets, a theoretical outcome that has some empirical support. In addition, the presence of institutional investors can indirectly improve domestic financial stability by signaling to foreign investors that a country is a safe place in which to invest. This stabilizing effect can be reinforced to the degree that institutional investors insist on transparency and sound governance by the firms whose equity or debt they purchase.

The authors report previous econometric work they conducted to assess the impact of contractual savings institutions on firms' capital structures. In brief, they find that, after controlling for firm characteristics, macroeconomic factors, and financial system characteristics, the level of development of contractual savings institutions is positively related to leverage and maturity of debt. That is, the deeper a country's institutional investor base, the better able are its firms to borrow, and the more likely are they to do so at longer maturities.

The authors also report on their previous study of the linkages between the development of a country's contractual savings institutions and characteristics of its banks. Among other things, they find that such development tends to reduce net interest margins by banks (due to the competitive pressure applied by the contractual institutions), lengthen loan maturities, and reduce credit risk.

The authors conclude with some thoughts about the policy implications of their work. They suggest that only countries with sustainable macroeconomic outcomes—especially low inflation rates—are likely to enable the growth of institutional savings systems. The authors caution

against limiting the asset choices of institutional investors, as these can harm their beneficiaries or clients.

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In sum, emerging markets require healthy capital markets if they are to reap full advantage of finance in promoting real growth in their economies. The chapters in this volume offer a guide for both policymakers and actors in the market about the progress that has been made toward development of capital markets in emerging-market countries and what policies might be employed to further their development in the future.