

Global Financial Stability Report

Market Developments and Issues

April 2004



International Monetary Fund
Washington DC

© 2004 International Monetary Fund

Production: IMF Multimedia Services Division

Cover: Phil Torsani

Photo: Padraic Hughes

Figures: Theodore F. Peters, Jr.

Typesetting: Choon Lee

ISBN 1-58906-328-7

ISSN 0258-7440

Price: US\$49.00

(US\$46.00 to full-time faculty members and
students at universities and colleges)

Please send orders to:

International Monetary Fund, Publication Services
700 19th Street, N.W., Washington, D.C. 20431, U.S.A.

Tel.: (202) 623-7430 Telefax: (202) 623-7201

E-mail: publications@imf.org

Internet: <http://www.imf.org>



recycled paper



CONTENTS

Preface	vii
Chapter I. Overview	1
Risks	1
More Attention Needed for Structural Issues in Major Financial Centers	2
Reallocation of Credit Risk to the Insurance Sector: Impact on Financial Stability	3
The Role of Institutional Investors in Emerging Securities Markets	4
Policy Conclusions	5
Chapter II. Global Financial Market Developments	8
Developments and Vulnerabilities in Mature Markets	10
Improved Fundamentals and the Quest for Yield Buoy Emerging Market Bonds	19
Surge in Issuance by Emerging Markets Meets Strong Investor Demand	26
Banking Sector Developments in Emerging Markets	36
Structural Issues Should Be the Focus in Mature Markets	41
Appendix I: Determinants of the Rally in Emerging Market Debt— Liquidity and Fundamentals	60
Appendix II: Current Status of the Asian Bond Markets and Initiatives	70
References	75
Chapter III. Risk Transfer and the Insurance Industry	77
Market Structure and Regulatory Framework	78
Comparison of Different National Systems in the Recent Market Downturn	89
Financial Accounting and Rating Agencies	99
Policy Conclusions	103
Appendix: Regulatory Capital Regimes	105
References	109
Chapter IV. Institutional Investors in Emerging Markets	111
Mature Market Institutional Investors	112
Local Institutional Investors	128
Policy Conclusions	143
Appendix: Hedge Funds and Recent Emerging Market Currency Crises	146
References	148
Glossary	152
Annex: Summing Up by the Acting Chair	158
Statistical Appendix	161

Boxes

2.1 The Shift to Tightening: Parallels Between 1994 and 2004	13
2.2 Bond Market Convergence of EU Accession Countries: Recent Setbacks and Prospects	24
2.3 Emerging Market Borrowers Improve Debt Structures: Case Studies	30
2.4 Collective Action Clauses: Update on Market Practice	35
2.5 State Bank Recapitalization in China	40
3.1 Credit Derivatives	90
3.2 EU Solvency II and the United Kingdom's CP 195 Initiative	92
4.1 The Benefits of Portfolio Diversification: Do They Really Exist?	113
4.2 The Behavior of Mutual Funds During Periods of Emerging Market Volatility	124
4.3 Pension Fund Regulations and Local Yield Curves: The Case of Mexico	133
4.4 The Impact of Emerging Market Crises on Insurance Companies	139

Tables

2.1 Emerging Market Financing	27
2.2 Individual Countries' Bank Net Asset/Liability Position vis-à-vis BIS Banks as a Ratio of Official Reserves	37
2.3 Selected Financial Soundness Indicators for Emerging Markets	38
2.4 Performance of Selected Hedge Fund Strategies	54
2.5 Results of Estimate	69
2.6 Size and Structure of the Global Bond Market in 2002	71
2.7 Structure of Financing in Selected Countries	72
2.8 Asian Rating Agencies	74
3.1 Size of Global Financial Markets, 2002	78
3.2 United States: Financial Market Size	79
3.3 Euro Area: Financial Market Size	80
3.4 Japan: Financial Market Size	80
3.5 United States: Asset Allocation for the Life Insurance Industry	82
3.6 United Kingdom: Asset Allocation for the Life Insurance Industry	82
3.7 United Kingdom: Financial Market Size	84
3.8 Euro Area: Asset Allocation for the Insurance Industry	84
3.9 Japan: Asset Allocation for the Life Insurance Industry	85
3.10 Credit Derivatives and Bank Credit	85
3.11 Global Credit Derivatives Positions by Sector, End-September 2002	86
3.12 United States and Japan: Comparison of Risk-Based Capital Weightings for Life Insurance Companies	87
3.13 Risk Weights for Credit Instruments in the United States and Japan	88
3.14 United States: Comparison of Bond and Equity Returns and Volatility	94
3.15 Japanese Life Insurers' Investment in Equity and Loans	98
3.16 United States: Authorized Control Levels	108
4.1 Mature Markets: Assets Under Management by Institutional Investors	115
4.2 U.S. International Mutual Funds: Total Net Assets	122
4.3 Pension Fund Assets	129
4.4 Pension Funds Portfolio Limits and Actual Asset Allocation, 2001–02	131
4.5 Assets Under Management by Insurance Companies	136
4.6 Emerging Market Mutual Funds: Total Net Assets	141

Figures

2.1	The Real Federal Funds Rate	10
2.2	U.S. Nominal GDP and 10-Year Treasury Rates	10
2.3	Inflation-Indexed Bond Yields	11
2.4	Long-Term Inflation Expectations	11
2.5	Inflation Expectations Less Current Inflation	12
2.6	Three-Month LIBOR Futures Strip Curves	12
2.7	United States and European Corporate Bond Spreads	16
2.8	Corporate Default Rates	16
2.9	U.S. Corporate Bond Spreads by Rating	17
2.10	Selected Equity Market Performance	17
2.11	Implied Equity Market Option Volatility Indices	18
2.12	Yen Probability Density Function	18
2.13	Euro Probability Density Function	19
2.14	Currency Volatilities	19
2.15	Hong Kong SAR: HIBOR Versus LIBOR	20
2.16	Foreign Exchange Reserves of Selected Asian Central Banks	20
2.17	Foreign Ownership of U.S. Securities	21
2.18	Returns During 2003 of the EMBI+ and Select Sub-Indices	21
2.19	Default Probabilities Implied by Five-Year Credit Default Swap Spreads	22
2.20	Emerging Market Average Credit Quality	22
2.21	Dispersion of Returns Within the EMBI+	23
2.22	Emerging Market Debt: Average Cross-Correlations	23
2.23	Cumulative Gross Annual Issuance of Bonds, Loans, and Equity	28
2.24	Quarterly Net Issuance	28
2.25	Cumulative Gross Annual Issuance of Bonds	29
2.26	Share of Bond Issues	29
2.27	Cumulative Gross Annual Issuance of Equity	33
2.28	Cumulative Gross Annual Issuance of Loans	33
2.29	Private Flows to Emerging Market Economies	34
2.30	Geographic Distribution of FDI Flows	34
2.31	Moody's Financial Strength Index	39
2.32	Emerging Market Countries: Banking Sector Market Valuation	39
2.33	United States: Household Net Worth	42
2.34	United Kingdom: Mortgage Equity Withdrawal	43
2.35	Japan: Household Net Worth	43
2.36	United States: Debt to Net Worth Ratio of Nonfinancial Corporations	44
2.37	United States: Financing Gap of Nonfinancial Corporations	44
2.38	Euro Area: Nonfinancial Corporations—Financial Situation	45
2.39	United Kingdom: Nonfinancial Corporations—Financial Situation	45
2.40	Japan: Corporate Profitability and Indebtedness	46
2.41	U.S. Commercial Banks: Delinquency Rates	46
2.42	United States: Mortgage Market and Hedging	48
2.43	United States: Government Bond Index, Three-Month Return Volatility	49
2.44	United States: Agency Duration Gaps	50
2.45	Euro Area: Jumbo Covered Bonds, November 2003	52

2.46 Euro-Denominated Bond Market: Gross Issuance Volumes, 2003	52
2.47 European Securitization, Quarterly Issuance	53
2.48 Parmalat: Credit Default Swap Spread	57
2.49 U.S.-Based Equity Mutual Funds: Weekly Net Flows	59
2.50 Cumulative Flows into U.S.-Based Mutual Funds	61
2.51 Federal Funds Rate and Excess Emerging Market Bond Market Yield over Three-Month LIBOR	62
2.52 EMBI+ Bond Spreads and the Slope of the U.S. Yield Curve	62
2.53 EMBI+ Bond Spreads and Equity Market Implied Volatility	63
2.54 EMBI+ Bond Spreads and Credit Fundamentals	63
2.55 Deviations of Actual Spreads from Ratings-Based Spreads	67
2.56 Selected Asian Countries: Outstanding Amounts of Domestic Bonds	70
2.57 Korea: ABS Issuance and Direct Financing	73
3.1 Asset Allocation for Life Insurance Industry, 2002	81
3.2 United States: Total Nonmortgage Credit to Private Nonfarm Sectors	83
3.3 International Insurance Sector Equity Indices	96
4.1 Composition of Emerging Market Debt	123
4.2 Estimated Portfolio Exposures of Hedge Funds and Local Emerging Markets	148

The following symbols have been used throughout this volume:

... to indicate that data are not available;

— to indicate that the figure is zero or less than half the final digit shown, or that the item does not exist;

– between years or months (for example, 1997–99 or January–June) to indicate the years or months covered, including the beginning and ending years or months;

/ between years (for example, 1998/99) to indicate a fiscal or financial year.

“Billion” means a thousand million; “trillion” means a thousand billion.

“Basis points” refer to hundredths of 1 percentage point (for example, 25 basis points are equivalent to $\frac{1}{4}$ of 1 percentage point).

“n.a.” means not applicable.

Minor discrepancies between constituent figures and totals are due to rounding.

As used in this volume the term “country” does not in all cases refer to a territorial entity that is a state as understood by international law and practice. As used here, the term also covers some territorial entities that are not states but for which statistical data are maintained on a separate and independent basis.



PREFACE

The *Global Financial Stability Report* (GFSR) assesses global financial market developments with the view to identifying potential systemic weaknesses. By calling attention to potential fault lines in the global financial system, the report seeks to play a role in preventing crises, thereby contributing to global financial stability and to the sustained economic growth of the IMF's member countries.

The report was prepared by the International Capital Markets Department, under the direction of the Counsellor and Director, Gerd Häusler. It is managed by an Editorial Committee comprising Hung Q. Tran (Chairman), W. Todd Groome, Donald J. Mathieson, and David J. Ordoobadi, and benefits from comments and suggestions from Axel Bertuch-Samuels, Peter Dattels, and Eliot Kalter. Other contributors to this issue are Francesc Balcells, Elie Canetti, Jorge Chan-Lau, Toni Gravelle, François Haas, Anna Ilyina, Janet Kong, Markus Krygier, William Lee, Gabrielle Lipworth, Chris Morris, Jürgen Odenius, Kazunari Ohashi, Li Lian Ong, Lars Pedersen, Magdalena Polan, Jorge Roldos, Calvin Schnure, Manmohan Singh, Rupert Thorne, and a staff team from the Monetary and Financial Systems Department (MFD) that included S. Kal Wajid, Udaibir Das, Nigel Davies, Gianni De Nicoló, and Kalin Tintchev. Martin Edmonds, Ivan Guerra, Silvia Iorgova, Anne Jansen, Oksana Khadarina, Yoon Sook Kim, Ned Rumpeltin, and Peter Tran provided research assistance. Caroline Bagworth, Jane Harris, Vera Jasenovec, Elsa Portaro, and Ramanjeet Singh provided expert word processing assistance. Jeff Hayden of the External Relations Department edited the manuscript and coordinated production of the publication.

This particular issue draws, in part, on a series of informal discussions with commercial and investment banks, securities firms, asset management companies, insurance companies, pension funds, stock and futures exchanges, and credit rating agencies in Brazil, Chile, China, Colombia, France, Germany, Hong Kong SAR, Hungary, Japan, Korea, Mexico, Poland, Russia, Singapore, South Africa, Switzerland, Thailand, the United Kingdom, and the United States. The report reflects information available up to March 8, 2004.

The report has benefited from comments and suggestions from staff in other IMF departments, as well as from Executive Directors following their discussions of the *Global Financial Stability Report* on March 26, 2004. However, the analysis and policy considerations are those of the contributing staff and should not be attributed to the Executive Directors, their national authorities, or the IMF.

Global financial vulnerabilities have subsided further since the September 2003 *Global Financial Stability Report* (GFSR). International financial markets have continued to improve, strengthening the balance sheets of financial institutions and other market participants. At present, financial markets seem to be enjoying a “sweet spot:” economic activity and corporate earnings have made a strong recovery, most noticeably in the United States but also in other parts of the world. At the same time, inflation remains quiescent, enabling the monetary authorities to maintain very low policy interest rates.

Emerging bond markets have benefited from the abundance of liquidity and the search for yield, as well as from the improved credit quality of many emerging market sovereign and corporate borrowers. As a result, the EMBI yield spread has declined to near record lows. Capital flows to emerging market countries have increased, and borrowing costs are much lower, compared with recent years. Including prefinancing done last year, many emerging market countries have secured a substantial portion of their 2004 external financing needs.

Overall, many market indicators suggest that the current benign financial conditions in mature and emerging markets will likely continue for the time being (Chapter II). The price consolidation in many equity and emerging bond markets since the beginning of the year is a welcome development to the extent that it reflects a degree of caution on the part of investors. But this outlook is not without risk. A closer look exposes some fault lines that could impinge on stability in financial markets some time down the road.

Risks

The main risk to the benign outlook for global financial markets is that such an outlook rests on a very fine balancing of opposing economic forces. Low inflation, sustained by rising productivity and substantial slack in the economy, should help to maintain low interest rates for some time and would limit the extent of any potential tightening in policy rates. Consequently, while expecting interest rates to rise eventually, markets have remained sanguine about the potential impact of such a rate increase on other asset markets. But this benign view has been tempered by global economic imbalances, which have focused market attention on the sustainability of the unprecedented gross and net capital flows into the United States. Such concerns contributed to a weakening of the U.S. dollar. In recent months, however, official inflows—largely reflecting foreign exchange market interventions by many Asian central banks—have increased substantially. In addition, private sector inflows—notably to U.S. equities and corporate bonds from European investors—have recovered. These developments have helped ensure a gradual and orderly adjustment of the dollar that, so far, has not noticeably affected most financial asset prices. At this time, market participants expect the orderly adjustment process to continue. If this delicate balance were to be impaired, leading to a reduction of the official and private inflows, the dollar could weaken more pronouncedly. At any sign of that risk materializing, foreign investors could demand a risk premium on dollar assets—including pushing bond yields higher and with more volatility than current market expectations. This would have a negative spillover effect on other asset markets, including pushing up yields in Europe and emerging markets. This

adverse development could reverse the strengthening of financial institutions' balance sheets and create headwinds to the economic recovery. This may also expose remaining structural weaknesses in several emerging market countries, so far masked by buoyant market conditions.

Another facet of the delicate balance is whether the abundance of liquidity, which has been instrumental in bolstering investor confidence and valuations in most asset markets, could at some point become more of a problem. Now that economic activities and corporate earnings have recovered strongly, the continued abundance of liquidity and a lack of two-way interest rate risk could lead to a sense of complacency and intensify the search for yield, while neglecting risk factors. There have been anecdotal signs of "herding behavior" as investors move to risky assets that may not be familiar to them, but have performed well in the past year. This process could lead to an overvaluation of certain financial assets, particularly in small and illiquid markets such as many emerging markets. The longer this process persists, the greater the potential for disruptive corrections.

The risks facing emerging market countries themselves are also finely balanced and increasingly differentiated. As a group, emerging market countries have greatly improved their economic fundamentals: stronger growth with inflation still under control, current account surplus in the sixth consecutive year—meaning they continue to be net exporters of capital to the rest of the world—and substantial accumulation of foreign exchange reserves. These improvements have reduced their external vulnerability. However, the aggregate performance masks a widening gulf between countries that have made significant progress and those that have not. Among the former are countries enjoying credit upgrades, including to investment grades. Presently, more than 50 percent of the emerging bond market capitalization carries an investment grade, compared to less than 10

percent five years ago. Among the countries that have made lackluster progress are those whose level and currency-mismatched nature of public debt would make them vulnerable to a deterioration in the external financing environment. This vulnerability is all the more relevant since these countries have had a degree of yield spread compression comparable to that of the improving countries, given the abundance of liquidity mentioned earlier. In some emerging market countries, including some of those where elections are on the horizon, social and political instability pose potential risks to policy continuity.

More Attention Needed for Structural Issues in Major Financial Centers

Given the currently benign conjunctural situation, increased attention should be given to fundamental changes that could improve the resiliency of the international financial system to future shocks. One of the most important changes in recent years has been the transfer of risk—in particular credit risk—from the banking sector to the nonbanking sectors of the financial system and beyond. So far, this phenomenon seems to have strengthened the resiliency of the banking sector in the face of severe shocks, including record credit defaults in recent years. But it has also meant a transfer of credit risk from relatively more regulated institutions to relatively less regulated institutions, and from relatively more transparent institutions to relatively less transparent institutions.

The transfer of risk to nonbanking sectors has therefore raised several concerns: Where has the risk gone? Has risk been widely dispersed or concentrated? Are the recipients of risk able to manage the risk they have assumed? Given all the changes, is there the potential for regulatory arbitrage? Inconsistencies and gaps in regulation and supervision could create strong incentives and the temptation to exploit such shortcomings. Moreover, as many nonbanks have also begun to reduce

their own risk profiles, ultimately these risks would have to be transferred to end users of the financial system. Consequently, households, corporates, and public sector entities could become exposed more and more directly to financial risks.

A series of analytical chapters in this and future issues of the GFSR will examine the implication of these changes for global financial stability. In this context, financial stability is defined broadly to encompass not just the avoidance of bank failures that threaten payment systems and cause disruptions in economic activities. From this broader perspective, financial stability encompasses the absence of large and persistent changes in financial market prices and flows that interfere with efficient financial intermediation. Examples of this include exaggerated declines in asset prices, high risk aversion for a prolonged period, and market structures that allow normal market volatility to turn into financial instability.

The series of chapters will also attempt to analyze whether, given the increased exposure of the household sector to financial market risks, the authorities in major financial centers could feel pressured to add liquidity to help prevent large and sustained declines in asset prices. A large and sustained asset price fall could have huge economic costs, including contributing to the risk of deflation—as illustrated by Japan’s experience. Such high costs, and the natural inclination to avoid them, could make it harder for the authorities to accept a downward correction of financial markets. In fact, this perception could lead to a new form of moral hazard. Market participants might expect the bailouts of key asset markets “too important to fail,” while traditionally they could have expected rescues only of financial institutions “too big to fail.” As a result, market participants could become complacent and prepare to take on more risk than otherwise justified by fundamental developments. Ultimately, such behavior could contribute to more pronounced upswings in

certain asset markets, to be followed eventually by a correction that could be more prolonged and painful.

Beginning this series, Chapter III focuses on the transfer of risk from banking to non-banking institutions, in this case to the insurance industry, and examines the key factors shaping the risk appetite and risk management culture of life insurance companies. These factors include market characteristics, regulations, accounting standards, and rating agencies. Chapter III of the September 2004 GFSR will look at similar issues in the pension fund sector.

Chapter IV surveys the growth and development of international and domestic institutional investors for emerging market securities and the impact of these developments on the stability of capital flows to emerging capital markets.

Reallocation of Credit Risk to the Insurance Sector: Impact on Financial Stability

The recent growth in credit derivatives as complex credit risk transfer instruments and the lack of transparency on such transactions have prompted concerns about where risk has migrated from the banking sector (see March 2002 GFSR). Since then, various official bodies and private sector organizations have undertaken work, including surveys of market participants, to shed more light on this issue. In gross terms, banks have conducted credit derivative transactions largely with other banks to achieve their desired exposures. The insurance sector is a net taker of credit risk (through these derivatives), but these net positions form a small part (generally 3 to 4 percent) of their asset portfolios. Even more, exposure to traditional credit instruments, broadly defined, has been part of insurers’ investment portfolios for a long time, and substantial in volume. In recent years, there seems to be relatively stronger growth in the credit exposure of the insurance sector com-

pared to the banking sector. The broader and ongoing reallocation of credit risk could have implications for financial stability.

The patterns and levels of involvement of insurers in credit instruments, however, have differed widely by countries and regions, driven mainly by traditional market characteristics and regulations. Overall, credit instruments, with their low volatility and known cash flows, have proven to be appropriate for insurers to match against their long-term liabilities. They also offer a yield pickup over government securities, but at much lower risk than equity holdings. Moreover, a well-developed credit market, including credit derivatives, coupled with appropriate risk-based capital and accounting regimes create strong incentives for insurers to build their credit risk management capability. National insurance sectors that have a larger exposure to credit instruments than equities have been more stable during periods of financial stresses, most notably during 2000–03.

Driven by this experience, many large insurers—mainly in Europe—have raised their capital, increased exposures to credit instruments relative to equities, and strengthened their risk management capabilities. Taken together, these developments are likely to reduce the kind of balance sheet pressures encountered by the insurance sector in recent years. At the same time, previous issues of the GFSR have highlighted the improved resilience of the banking sector against financial shocks. Consequently, the relative reallocation of credit risk between these two sectors appears to have enhanced financial stability. This has been achieved by exploiting the insurers' comparative advantage in holding credit instruments and—more importantly—by encouraging further development in risk management capabilities in the insurance sector. This assessment, however, is subject to two caveats. First, in recent years, many insurers have changed their products in ways that have begun to shorten the duration of their liabilities. At some point in the future, this would

raise questions about the comparative advantage of insurers in holding credit risk. Second, as insurers have taken steps to manage their balance sheet risk, they would transfer some of these risks elsewhere, and ultimately to the household sector. This evidently will have implications for financial stability, and will be examined in a future issue of the GFSR.

The Role of Institutional Investors in Emerging Securities Markets

Despite a series of crises in recent years, emerging stock and bond markets have made progress in their maturation process. Key to this process is the increasing role played by institutional investors, both international and domestic, in emerging markets (Chapter IV).

The strong risk-adjusted returns of emerging securities, especially sovereign bonds, have led many international institutional investors, such as pension funds and life insurance companies, to make a strategic allocation to the emerging market asset class, mainly for diversification purposes. This has helped to widen the pool of funds committed to investing in emerging markets. Since these are long-term buy-and-hold investors, this is likely to enhance the stability of capital flows to emerging markets. This development could counterbalance the more frequent trading activity of hedge funds and other opportunistic investors. However, since the assets under management of these international institutions are so big, relative to the market capitalization as well as to the annual flows into many emerging markets, a relatively small reallocation by these players can have a disproportionate impact on the concerned markets.

Pension funds and insurance companies usually farm out funds to asset managers specializing in emerging markets or to mutual funds. Naturally these dedicated mutual funds also receive inflows from retail investors. The growth of dedicated emerging market funds has been accompanied by an improvement in the knowledge of portfolio managers and the professionalism of investment decisions. It has also

enabled these funds to invest in a broadly diversified portfolio of emerging markets. For retail investors, this would be a superior way to invest in emerging markets, compared with the recent experience of many retail investors in Europe and Japan. These retail investors, perhaps on the naïve assumption that sovereign borrowers do not default, had bought specific international sovereign bonds. Overall, the larger role of mutual funds—with more sophisticated portfolio managers—could contribute to more discriminating behavior in emerging markets, and streamline the debt-restructuring process in the unavoidable situation when one is needed.

Despite their positive contributions, mutual funds have to cope with other risks that could contribute to volatility and thus bear watching. First, emerging market asset managers are subject to frequent (usually quarterly) performance reviews by the pension funds or insurance companies that invest in them, and those whose performance falls below a certain threshold will be replaced. This review process could lead asset managers to avoid making investment decisions that differ too much from the benchmark index or the investment behavior of their peers—the risk of having a substantially different performance from the average is too great. This could consequently introduce another element of herding behavior. Second, mutual funds have to cope with redemption risk as retail investors can quickly move money from funds containing assets tainted with potential credit events or losses. Sudden and large redemptions could force fund managers to liquidate assets in more liquid markets, even though these assets or markets may have little in common with the source of the problem causing the redemption in the first place. This, of course, is one of the usual channels for financial contagion.

Many emerging market countries have reformed their pension systems, in the process fostering the growth of funded pension funds.

In addition, life insurance companies and mutual funds have grown in several countries. The assets under management of these institutional investors have probably reached a critical mass and will likely grow further in the foreseeable future. In addition to spurring the development of local capital markets, the domestic institutional investors have exerted some stabilizing influence in external emerging market bond markets. However, relative to the growth of these institutions, domestic capital markets have tended to develop more slowly in terms of market capitalization, liquidity, and variety of instruments. Echoing the discussion in Chapter III, one noticeable feature is the relative underdevelopment of corporate bond markets, including securities of long duration. As a consequence, a major challenge for many countries in the near future is the mismatch between the growth of domestic institutional investors and the relatively less developed domestic securities markets that do not have sufficient size, liquidity, and instruments to satisfy the needs of these institutions.

Moreover, prudent regulations strictly limiting the holding of various types of assets, especially foreign assets, could lead these institutions to focus their investments in certain traditional products. This could lead to a concentration of risk, including a buildup of sovereign debt or asset bubbles in domestic capital markets.

Policy Conclusions

While the adjustment of global imbalances will take time, the key challenge for the authorities in major financial centers is to maintain orderly market conditions that facilitate the smooth financing of global imbalances without taking away the pressure for their adjustment. Any global cooperative effort, designed to reduce economic imbalances in the medium term, would greatly reinforce the favorable market prospects.¹

¹See IMF's *World Economic Outlook*, April 2004.

Conversely, any sign of policy discord among the major countries could upset the balancing act, leading to a more disorderly adjustment. Moreover, the authorities need to carefully manage the transition from a low interest rate environment, designed to guard against the risk of deflation, to a more normal interest rate environment commensurate with much stronger growth. Besides the timing and extent of any policy move, a communication strategy is essential in guiding market expectations and in avoiding misunderstandings that could contribute to market volatility and overshooting. Market overreactions of 1994 could serve as useful reminders to the authorities. Regulators and supervisors in the financial sector also need to be alert to possible mispricing of risk, excessive buildup of leverage, or concentrated risk exposures.

In the meantime, all countries should take advantage of the benign financial market conditions to persevere in their reform efforts. Mature market countries need to finish reforms to strengthen their market foundations—the ongoing scandals in the mutual fund industry and in companies such as Parmalat show that complacency is not warranted. Emerging market countries need to take steps to reduce the level and vulnerability of their public debt and to further develop local capital markets.

This issue of the GFSR highlights structural developments in key institutional investors and identifies policy measures aimed at improving their ability to manage risk.

In the case of the insurance industry in mature market countries, the policy recommendations refer to further development of credit markets and to the role of regulatory and supervisory regimes, accounting standards, and rating agencies in shaping the risk taking of insurance companies. These measures should aim at encouraging insurance

companies to strengthen their credit risk management capability.

- *Further development of credit markets.* Given the positive role of credit instruments—including credit derivatives—in the asset portfolio of insurance companies, authorities should seek to support and facilitate further developments of credit markets. The authorities can review and change relevant legal, tax, and other regulatory measures to make it convenient for issuers and investors to use credit instruments. Private sector initiatives, such as efforts by the International Swap and Derivatives Association to standardize credit derivatives contracts, are welcome as they can stimulate growth in the market.
- *Regulation and supervision.* As insurance regulators and supervisors pay more attention to financial safety and soundness issues, they should pursue a risk-based capital framework. Such a framework aligns more closely prudential requirements with underlying insurance risks and encourages improved risk management capability at insurers. There seems to be a welcome convergence toward such a risk-based capital regime, especially with the evolving Solvency II in the European Union and CP195 in the United Kingdom (see page 92 in Chapter III).²
- *Supervisory resources should be enhanced* so that supervisors have appropriate staff and skills to evaluate the risk management models they require of insurers.
- *There is a need for increased dialogue among supervisors* to share information and to deal with the global aspects of insurance companies' activities, particularly those of reinsurers.
- *Disclosure requirements need to be strengthened* to improve transparency in various sub-sectors of the industry (e.g., reinsurance)³ and in the holding of and dealing in complex instruments (such as credit derivatives).

²Solvency II is the European Union's "Review of the Overall Financial Position of an Insurance Undertaking" (initiated in 1999). Consultation Paper 195 is the United Kingdom's "Enhanced Capital Requirements and Individual Capital Assessments for Life Insurers" (2003).

³Also recommended by the International Association of Insurance Supervisors' Task Force on Enhancing Disclosure and Transparency in the Reinsurance Sector.

- *Accounting standards.* It is important to ensure that financial and regulatory accounts provide an accurate reflection of an insurance company's financial position (see discussion on Fair Value Accounting on page 99 in Chapter III). Assets and liabilities should be measured on a similar (e.g., market value) basis, reflecting all risk exposures. However, point estimates in financial statements are probably not so useful as a comprehensive disclosure that could help market participants understand the true business reality of insurers. It is also appropriate to encourage convergence in the principles of financial accounting and regulatory reporting standards.
- *Rating agencies.* While rating agencies play an important role in disseminating credit information about companies to market participants, it would seem desirable to reduce the disproportionate reliance on rating agencies as *de facto* regulators for reinsurance companies. To achieve this objective, supervisory oversight for these insurers needs to be strengthened. In addition, greater transparency of business activities and financial positions would be useful.

In the case of the investor bases for emerging markets assets, several policy conclusions can be highlighted.

- To attract and maintain the interest of international institutional investors in their sovereign and corporate securities, *emerging market countries should continue to implement strong economic and structural policies* to enhance their growth potential and the resilience of their financial systems. They should also improve disclosure and transparency through, among other measures, subscription to the Special Data Dissemination Standard (SDDS) and regular communications with their investor bases—for example, through investor relations programs.
- *Emerging market countries also need to have a comprehensive plan to develop domestic securities markets*, taking into consideration the growth and needs of domestic institutional investors. These markets should have sufficient size, liquidity, and variety of instruments—especially bonds of long duration—to meet the need of domestic institutional investors. More technically, they should improve market infrastructure, including a liquid secondary market and a good clearing and settlement system potentially in conjunction with other countries. A more developed local securities market could also attract international institutional investors. This would be a superior way for emerging market countries to attract portfolio capital flows as the currency risk (“the original sin”) is borne by international investors.
- Pension fund regulators need to *gradually loosen restrictions on foreign investments by local pension managers*, paying attention to the limitations of local markets and to the diversification benefits of international markets, while maintaining adequate “prudent man” regulations.
- There should also be a conscious effort to *gradually replace prescriptive regulations with risk-based capital regimes* that can encourage the development of risk management capability on the part of local insurers. These skills will serve them well when they begin to invest internationally.
- *Mutual funds need to provide adequate disclosure and education* to prospective retail investors so as to reduce redemption risk.