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Global Financial Stability Report
Market Developments and Issues

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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.



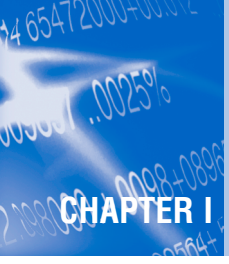
PREFACE

This is the fourth issue of the *Global Financial Stability Report*, a quarterly publication launched in March 2002 to provide a regular assessment of global financial markets and to identify potential systemic weaknesses that could lead to crises. By calling attention to potential fault lines in the global financial system, the report seeks to play a role in preventing crises before they erupt, thereby contributing to global financial stability and to the prosperity 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), Donald J. Mathieson, David J. Ordoobadi, and Garry J. Schinasi, and benefits from comments and suggestions from Axel Bertuch-Samuels and Charles R. Blitzer. Other contributors to this particular quarterly issue are Francesc Balcells, Peter Breuer, Jorge Chan Lau, Martin Edmonds, Toni Gravelle, Anna Ilyina, Janet Kong, Charles Kramer, Gabrielle Lipworth, Chris Morris, Martin Mühleisen, Jürgen Odenius, Li Lian Ong, Kazunari Ohashi, Jorge Roldos, Calvin Schnure, Srikant Seshadri, Manmohan Singh, R. Todd Smith, and Mazen Mahmoud Soueid. Oksana Khadarina, Yoon Sook Kim, and Peter Tran provided research assistance. Caroline Bagworth, Jane Harris, Vera Jasenovec, Ramanjeet Singh, Adriana Vohden, and Joan Wise 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, Germany, Hong Kong SAR, Hungary, Italy, Japan, Poland, Russia, Singapore, Switzerland, Thailand, the United Kingdom, and the United States. The report reflects mostly information available up to November 4, 2002.

The study 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 November 22, 2002. 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.



OVERVIEW: KEY DEVELOPMENTS AND SOURCES OF FINANCIAL MARKET RISKS

Investor sentiment deteriorated further in the third quarter, continuing the trend reported in previous issues of the *Global Financial Stability Report*. Uncertainty and then concern mounted over the strength and durability of the global economic recovery, the prospects for corporate profits, and geopolitical conditions. Financial market developments during the period under review can be characterized by heightened investor risk aversion that was reflected in a pronounced tiering by credit quality. Higher-risk corporate and sovereign borrowers continued to face difficult financing conditions.

Nevertheless, the global financial system so far has remained resilient. Markets, while unusually volatile, remained orderly and the financial system functioned smoothly. However, the cumulative impact of market declines in recent years has weakened the balance sheets of financial institutions, corporations, and households, increasing their vulnerability to further asset price declines. In the wake of the excesses of the bubble years, an adjustment in asset valuations has been necessary and healthy to re-establish a sound basis for the financial sector. At the same time, some retrenchment in the deployment of capital from risk taking activities by financial institutions is also appropriate. However, it is important to guard against an excessive swing in the pendulum away from risk taking. Accordingly, steps to rebuild confidence are needed to restore calmer financial markets and maintain financial stability.

Key Developments

Heightened investor risk aversion, discrimination, and aggressive tiering by credit quality—themes developed in Chapters II and III—were manifest in a number of noteworthy financial market developments.

- Concerns that the overhang of corporate leverage and excess capacity would persist in an environment of sluggish growth in demand and earnings led investors to withdraw from mature equity markets. The U.S. and European markets declined to lows not seen since 1997, and the Japanese market fell to 1984 lows (see Table 1.1). However, equity markets have recovered substantially since early October, notwithstanding weak economic indicators for consumer confidence and manufacturing activity, as investors deployed some of their high cash positions, following an initial set of positive corporate earnings announcements.
- Heightened risk aversion pushed U.S. government benchmark bond yields to 40-year lows, and high-yield credit spreads to near record levels, as investor concerns focused on the earnings prospects of highly leveraged firms. Investor discrimination was evident, however, in a sharp tiering by credit quality, with investment grade borrowers benefiting from a decline in borrowing costs. The high-yield market continued to experience a high level of defaults, and issuance declined substantially.
- Major equity and credit markets experienced high levels of volatility, suggesting that market risk and investor aversion to risk were both on the rise during the quarter.
- Bank financial losses from lending activities, and reputational losses and legal liabilities from questionable business practices, contributed to a decline in risk taking. As outlined further in Chapter II, banks are reconsidering their business models and strategies in the wake of losses in both mature and emerging markets.
- Emerging markets were affected by the retrenchment in bank lending. In addition, liquidity and trading volume in the second-

Table 1.1. Financial Market Data
(Percentage change; unless otherwise noted)

	Change to November 22, 2002 from					
	Peak (March 24, 2000)	September 11, 2001	December 31, 2001	March 29, 2002	June 30, 2002	August 12, 2002
Equity market						
Major stock indexes ¹						
S&P 500	-39.1	-14.8	-18.9	-18.9	-6.0	3.0
Nasdaq	-70.4	-13.4	-24.7	-20.4	0.4	12.4
FTSE Eurotop 300	-43.3	-15.0	-25.5	-26.6	-12.3	-0.4
Topix	-47.6	-18.8	-16.8	-19.0	-16.2	-10.5
Bank indexes						
S&P 500 bank index	9.6	2.4	-0.1	-7.5	-6.4	-2.6
FTSE Eurotop 300 bank index	-17.4	-7.7	-20.1	-21.8	-12.2	0.8
Topix bank index	-59.2	-42.1	-20.5	-18.3	-17.6	-15.8
Bond market						
U.S. corporate bonds						
Yields (level change; basis points)						
AAA	-127	-58	-25	-54	-25	1
BAA	-72	-18	-31	-62	-38	6
High-yield bonds	72	9	-5	72	-30	-89
Spreads (level change; basis points) ²						
AAA	74	1	62	68	37	5
BAA	129	41	56	60	24	10
High-yield bonds	273	68	82	194	32	-85
U.S. corporate bond price indexes ³						
AAA	...	3.2	4.0	6.0	3.0	0.5
A	...	2.2	3.2	5.2	2.5	0.9
BBB	...	-4.5	-2.7	0.2	1.3	3.3
European corporate bond spreads ⁴						
AA	6	2	3	7	4	-4
A	11	-19	-1	1	6	-15
BBB	138	32	69	84	-2	-19
Japanese corporate bond spreads ⁴						
AA	-10	-2	-5	-3	0	-1
A	10	6	-17	-20	-8	-7
BBB	5	31	-6	-24	-13	-25
Government bond yields (level change; basis points) ⁵						
United States	-201	-59	-87	-122	-62	-4
Germany	-74	-29	-49	-75	-43	-3
Japan	-84	-39	-33	-36	-29	-23
Government bond price indexes ⁶						
United States	12.5	3.4	6.7	10.2	5.6	0.3
Germany	6.4	5.3	4.0	6.7	2.6	-1.3
Japan	10.3	6.7	5.6	6.5	5.3	4.1
Exchange rates						
Euro/U.S. dollar	-1.9	-8.4	-10.8	-12.6	-0.5	-1.8
Yen/U.S. dollar	14.9	2.8	-6.7	-7.5	2.8	3.2
Trade-weighted nominal U.S. dollar	5.0	-3.7	-7.4	-7.9	1.0	0.3

Sources: Bloomberg L.P.; and Datastream.

¹In local currency terms.

²Spread over a 10-year U.S. treasury bond.

³Merrill Lynch corporate bond indexes.

⁴Merrill Lynch corporate bond spreads; level change, in basis points.

⁵Ten-year government bonds.

⁶Merrill Lynch government bond indexes, 10+ years.

ary market for emerging market bonds declined, in part reflecting a reluctance by dealers to expose capital in market-making activities.

- Emerging market borrowers also experienced sharp tiering by credit quality. Issuers characterized by a combination of low borrowing requirements, stable debt structures, strong fiscal positions, and good prospects for policy continuity were able to maintain primary market access, and experienced positive returns in the secondary market.
- The cumulative gross issuance of emerging market bonds, loans, and equities during the first nine months of the year lagged issuance levels of previous years by a significant margin. Investment grade credits accounted for the bulk of new issues, further underscoring the theme of tiering by credit quality. Sub-investment grade credits, especially those in Latin America, faced unreceptive primary market conditions.

Notwithstanding these developments, the risks to international financial market stability remain limited and manageable. A number of recent policy actions, private sector initiatives, and market developments underpin this assessment.

- Monetary easing by the U.S. authorities and low interest rates in the United States and elsewhere have helped to offset the effects of the considerable decline in equity prices on the financial conditions of investors and intermediaries, and have held down borrowing costs for households and investment-grade corporate borrowers. Low interest rates and a steep yield curve have helped support banking sector profitability.
- The low interest rate environment has also spurred a boom in mortgage refinancing that has helped sustain U.S. household demand. At the same time, rising house prices, in part supported by low rates, have moderated the impact of declining equity prices on household balance sheets.
- Steps were speedily taken to reassure investors about the reliability of corporate financial statements and to strengthen cor-

porate governance in the United States.

The Sarbanes-Oxley Act was enacted in the United States on July 30. And the August 14 deadline by which all corporate chief executive officers were to confirm the accuracy of their firm's financial accounts passed without major incident, helping to reduce investor concerns about the reliability of financial statements.

- As discussed in previous issues of the *Global Financial Stability Report* and in Chapter II, financial institutions have continued to repackage and distribute risk across a wide range of investors. The diversification of risk holders has helped to preserve the resiliency of financial systems.
- Financial institutions in the United States have responded to the difficult operating environment by reducing costs, curtailing activities based more on relationship-building than profitability, and improving the management and pricing of credit and other risks.
- Banks in European countries have attempted to address the difficult operating environment through efforts to improve credit risk management, reduce costs, and divest noncore activities.
- European insurance companies have responded to increased claims and losses on investment portfolios by mobilizing new capital and reducing equity holdings. At the same time, supervisory authorities have adjusted rules related to the evaluation of stock holdings.
- Leverage in the emerging markets is low, and contagion, as measured by the cross-correlation of emerging market bond prices, is currently limited.
- The ability of a number of emerging market countries to maintain market access at reasonable cost, notwithstanding a difficult external environment, highlights the importance of a strong commitment to the continued implementation of policies aimed at maintaining macroeconomic and financial stability.

Sources of Risk

The analyses of mature markets in Chapter II and of emerging markets in Chapter III suggest that while the resilience so far manifest by markets is likely to continue, there remain significant downside risks. While a global recovery has been under way, concerns about its pace and sustainability have risen significantly. There is a risk that further substantial market declines could undermine growth prospects. It is important to maintain the financial resilience of the U.S. household sector and the European—and in particular German—financial sector. The capacity of Japan's corporate and financial sectors to withstand further sluggish economic growth remains uncertain.

- Further declines in major equity markets constitute the most immediate risk. Although equity valuation indicators now approach historical averages, further falls cannot be ruled out if risk perception were to increase or if corporate revenues fail to grow. While corporate profitability improved somewhat in the third quarter, this improvement reflected cost reduction rather than revenue growth, which remained negative in an environment of sluggish demand and limited pricing power. Revenue growth will be needed to sustain the stock market recovery that began in October.
- Further stock market declines also would erode the balance sheets of U.S. households and key European financial institutions by decreasing their net wealth, thereby eroding their financial resilience. Such declines would also undercut the earnings of corporations that are exposed to equity markets through their financing activities and corporate pension plans.
- A prolonged deterioration in the operating environment of major financial institutions could undermine their profitability and credit quality, and spur further retrenchment of risk taking by financial intermediaries.
 - In banking systems, profits from capital market businesses could decline further,

while balance-sheet credit quality could continue to deteriorate. Many institutions, particularly in Germany, are facing the structural problem of poor profitability in their home markets, making them vulnerable to the present market environment and limiting their strategic options. In Japan, the longstanding problems in the corporate and banking sectors pose a risk to financial resiliency.

- Insurance companies could experience further losses owing to declining equity prices and rising credit spreads and defaults.
- Increased risk aversion in the major financial centers could reinforce the current trend of tiering in emerging market financing. Investment grade sovereign and corporate borrowers would maintain relatively ready access to capital markets. Countries with favorable regional or local liquidity support would constitute a second tier of borrowers maintaining market access. Finally, sub-investment grade borrowers not benefiting from regional liquidity would continue to face financing difficulties.
- Within emerging markets, developments in Brazil are particularly important, given the size of its economy, its importance in emerging market bond indices, and the correspondingly high exposure of emerging market bond investors to Brazilian paper. Ongoing confidence-building measures by the new government should help support the Brazilian debt and currency markets.

Measures to Promote Financial Stability

Recent developments have underscored the importance of restoring investor confidence and reducing excessive risk aversion through appropriate macroeconomic policies and regulatory initiatives. In the emerging markets, recent developments have highlighted the importance of a sustained commitment to strong macroeconomic policies, stability in the regulatory and legal framework, and debt management strate-

gies as a means of facilitating access to capital markets.

- As discussed in the IMF's latest *World Economic Outlook*, macroeconomic policies in the advanced economies must remain responsive to the uncertain strength and durability of the economic recovery. Supportive macroeconomic policies in the advanced economies are essential to the continued financial resilience of the corporate, financial, and household sectors, and to prevent excessive risk aversion.
- It is important to build on the steps already taken to reassure investors that recently revealed shortcomings in corporate governance, auditing, financial accounting standards, and investment banking practices are being addressed fully and on a sustained basis. Transparency is the key to strengthening the early application of the self-correcting mechanism of the markets. Regulatory forbearance should be avoided.
- Supervisors of nonbank financial institutions, particularly insurance companies, should be vigilant for signs of significant capital erosion stemming from losses on equity and corporate bond portfolios.
- The growing reliance by financial institutions on credit risk transfer markets to manage their risk exposure necessitates better disclosure and regulatory scrutiny to ensure that these markets and instruments continue to work as intended should the credit deterioration persist.
- In the emerging markets, recent developments have highlighted the importance of steadfast adherence to policies that are consistent with macroeconomic and financial stability. The ability of some countries to maintain market access notwithstanding heightened risk aversion suggests that a steady commitment to sound policies pays off.
- Recent developments also highlight the importance of avoiding debt structures that amplify external shocks. Excessive reliance on debt indexed to foreign currency move-

ments, very short maturity structures, or a preponderance of floating rate instruments should be avoided or gradually reduced.

- The development of deep local markets in emerging market countries can provide an alternative source of financing and help act as a buffer against changing global financial conditions. The development of local markets can over time facilitate the issuance of longer maturity debt in local currency, a structure that tends to mitigate rather than amplify external shocks.
- Firm commitment to the preservation of property rights, the rule of law, and stability in the legal and regulatory framework is needed to foster investor confidence, avoid financial contagion, and encourage capital inflows. Maintaining an international and diversified investor base also requires transparency, including the disclosure of debt management policies, financing requirements, and issuance plans.

Development of Local Securities Markets—Emerging Derivatives Markets

Successive issues of the *Global Financial Stability Report* have underscored the importance of developing local markets as a means of fostering financial stability. Recent developments further highlight the potential role of domestic markets as a buffer against a turbulent external environment. Previous reports have considered local equity and bond markets. Chapter IV continues this analysis with a review of emerging derivatives markets. The next *Global Financial Stability Report* will examine the policy implications of developing local bond, equity, and derivatives markets.

Financial derivatives allow investors to unbundle and reallocate various risks—foreign exchange, interest rate, market, and default risks—and thus facilitate cross-border capital flows and create more opportunities for portfolio diversification. However, the same instruments also provide opportunities to avoid prudential safeguards, manipulate accounting rules, and take on excessive leverage by shifting

exposures off balance sheets, highlighting the importance of fostering strong internal risk management practices in the firms employing derivatives and ensuring careful financial supervision

and regulation. Accordingly, Chapter IV focuses on how derivatives can facilitate capital flows to emerging economies and on the role derivatives played in past emerging market crises.