CHAPTER I OVERVIEW

The global financial system has yet again gathered strength and resilience. As before, this trend has been fueled by continued balance sheet improvements in the financial and corporate sectors in most countries. The continuing global economic expansion, together with determined efforts to restructure and cut costs, has enabled many financial institutions and corporations to generate substantial, or even record, profits over the past three years. As a result, their balance sheets have strengthened to the extent that the financial and corporate sectors can absorb a significant degree of financial shock before coming under systemic stress. With global growth most likely to continue, inflation under control, and financial markets generally benign, we expect the resilience of the global financial system to improve even further. This improvement provides an important cushion in the event that any of the more medium-term risks discussed below were to materialize. This cushion against risks and vulnerabilities in the medium term may have expanded, but risks have not disappeared altogether.

Balance of Risks, Current Assessment

Hence, in the short term, the current configuration of solid growth, low inflation, as well as low bond yields, flat yield curves, and compressed credit risk premiums provides the global financial system with a favorable environment. At the same time, growth and interest rate differentials in favor of the United States, and consequently private investors' current appetite for U.S. dollar assets, allow for a smooth financing of global imbalances.

The same benign forces underpinning continued growth and buoyant financial markets, however, have also created larger global imbalances and built up higher levels of debt, particularly by the household sector. Consequently, the potential for a substantial adjustment of investor preferences for asset classes and currencies in the medium term has grown. In short, recent economic and market developments have reduced risks in the near term, but they are storing up potential vulnerabilities for the future.

When assessing the balance of risks, however, experience shows that even at times of sharp asset price movements, countervailing forces tend to mitigate such developments before long. This report sheds light on a few trends that could act as "buffers" in times of stress.

The Search for Yield

The search for yield emerged about two-and-a-half years ago, when very low short-term interest rates, rather steep yield curves, and sizable risk premiums triggered a larger amount of carry trades. The search for yield first took the form of directional bets on lower yields and tighter credit spreads, and more recently took the form of relative value trades using complex and leveraged instruments such as credit derivatives.

Carry trades and market expectations of contained inflation have exerted downward pressure on bond yields. In addition, increased secular demand for long-term bonds by institutional investors such as pension funds and life insurers has contributed to low bond yields and flat yield curves in the United States and Europe. In the case of the United States, the yield curve has flattened despite tightening moves by the Federal Reserve. While it is difficult to quantify precisely the influence of various factors leading to low bond yields and flat yield curves, their implications are clear.

Low bond yields and flat yield curves have encouraged investors to move out on the credit curve, compressing credit spreads, including those in emerging bond markets. Tight credit spreads have helped borrowers—sovereign and corporate—to engage in extensive liability management, which we have advocated as an important step to improve the structure of their debt, thus reducing their balance sheet vulnerability. In addition, low bond yields, and therefore low mortgage rates, have helped sustain activities in the housing market, and more generally the economy, of the United States and other countries.

While the search for yield has benefited emerging bond markets, the improving fundamentals of many emerging market countries have also attracted investors' interest. Specifically, many emerging market countries have experienced strong growth with moderate inflation, improved their current account and fiscal performance, and accumulated substantial reserves—even though many countries have adopted flexible exchange rates. Although total debt remains high, active debt management has reduced the share of foreign currency debt to total debt, and the average maturity of the debt stock has lengthened. Furthermore, most emerging market countries have prefinanced their 2005 borrowing requirements, and several have begun to prefinance 2006. The improvement in fundamentals and superior long-term risk-adjusted returns have convinced institutional investors such as pension funds to make strategic allocations to the asset class. These flows have served as a stabilizing factor for emerging bond markets, despite mature credit market corrections and growing political noise in several emerging market countries facing a heavy election calendar in 2006.

Low yields and tight credit spreads, in turn, have focused the search for yield on relative value trades, using complex and leveraged instruments such as credit derivatives and collateralized debt obligations (CDOs). Reflecting this trend is the recent phenomenal growth of credit derivatives and of hedge funds, which tend to be active in these investment strategies. Overall, these are positive developments that help improve market efficiency and liquidity.

Potential Triggers for Market Corrections

The current low bond yields and tight credit spreads, and low risk premiums more generally, have made financial markets vulnerable to corrections, if fundamentals deteriorate and/or investors' risk appetite diminishes for other reasons. After examining some of the risk factors that might trigger market corrections going forward, we will analyze some of the trends that, in our view, create self-stabilizing forces in the financial markets.

In cyclical terms, the most important question for financial markets is the extent to which the current global expansion will be sustained. Recently, the rise of crude oil prices to record highs has lowered bond yields and equity markets—partly triggered by expectations that high oil prices would slow economic growth. If growth slows only moderately, bond yields would stay low, yield curves would remain flat, and the search for yield would continue, thus supporting generally benign financial markets. If, however, growth decelerates more significantly, balance sheets will start to weaken again. But even in this "worse case" scenario, the financial cushions described above would support the global financial system and lessen its resilience in a gradual manner.

Related to the question about growth prospects is the assessment of where we are in the credit cycle. This in turn will determine if, and to what extent, currently tight credit spreads are likely to be corrected. While current indicators of credit quality are excellent—very low default and loan delinquency rates, and low loan loss provisioning by banks—the credit cycle may be peaking. Corporate earnings growth is likely to slow from the robust rate in the past few years. Default rates of subinvestment-grade borrowers are likely to increase, partly because of the wave of high-yield issuance in the previous years. Future credit quality could be weakened through increased corporate leverage, be it through higher dividend payments, share buyback programs, or more active merger and acquisitions activities. Reflecting market concerns about credit deterioration in the medium term, the U.S. credit curve has steepened: spreads on longer maturity corporate credits have increased, while spreads at shorter maturities have hardly changed from their low levels at the beginning of the year.

The earnings outlook for banks and other financial institutions traditionally suffers when there is less scope for traditional carry trades in a flat yield curve environment. Moreover, the process of releasing provisions to improve earnings has meanwhile run its course given current low provisions to loan ratios in most lending institutions. Stock markets have anticipated this trend; banks have slightly underperformed market indices in major equity markets so far this year. In a nutshell, a slow but persistent weakening of corporate credit quality could lead to a widening of credit spreads, causing market corrections and losses for those investors who warehouse credit risk.

While this is all true, such risks need to be seen in perspective. Corporations would cope with eventual cyclical challenges from a position of financial strength—their balance sheets are at present quite healthy and liquid, and serve as a long fuse to delay a general credit downturn. Individual credit events—such as the downgrading of General Motors (GM) and Ford—have been seen by market participants as idiosyncratic, rather than as a general trend. Hence, credit spreads could, and probably will, correct, but they might do so gradually and moderately from their currently tight levels. In addition, the corporate sector in a number of mature markets is no longer taking up credit, but on a net basis, it has become a net investor. If this trend persists, a number of corporations will be increasingly exposed to the same type of financial risks as traditional institutional investors.

Compared with the risk of a sharp widening of credit spreads, corrections in credit derivatives and CDO markets are more likely to occur. These complex and leveraged instruments are used in the relative value trades, which tend to be crowded trades (with many investors putting on similar strategies). These instruments also depend on relatively untested models and default correlation assumptions for pricing. As such, they are vulnerable to corrections that could be aggravated by liquidity disruptions—similar to the market disruptions and losses triggered by the downgrading of GM and Ford in May 2005.

In contrast to the corporate sector, the household sector, especially in the United States, has become a net borrower of funds, accumulating a record level of debt. Similarly, in a number of other countries, household sectors have also increased their indebtedness. However, their net worth has also risen because of asset price increases, mainly in the housing market. On balance, these developments increasingly expose the household sector to the performance of asset markets.

Most likely, substantial asset price declines would undermine consumer confidence and reduce personal consumption. However, as in the corporate sector, the accumulated increase in household net worth can also act as a long fuse to soften the immediate impact of any adverse development. At present, there are signs that the credit cycle is peaking in the household sector as well. In the United Kingdom, the personal delinquency rate has risen from very low levels, and some U.K. banks have reportedly begun to raise their provisions. In the United States, marginal homebuyers have been attracted by mortgages designed to minimize interest payments in the first few years by pushing off the debt service burden into the future, and also by a relaxation of credit standards. The U.S. regulatory authorities have rightly expressed concerns about these trends, and it is important to monitor them in the foreseeable future.

Increasing growth and interest rate differentials in favor of the United States more recently have generated private capital flows to the United States and more than financed the U.S. current account deficit while supporting the dollar. Once again, the growing global imbalances turn out to be a medium-term issue, while in the short term, deep and liquid U.S. markets and the fundamental factors described above seem to be sufficient to attract the necessary capital inflows. In other words, investors' willingness to smoothly finance global imbalances today reduces the sense of urgency for policymakers to take corrective actions and increases the potential for a "snap back"—a sharp reallocation of assets away from dollar assets—some time in the future. Such a snap back may not have a high probability, at least not in the near term. It would, however, entail large costs in terms of sharply falling dollar exchange rates and rising dollar interest rates, thus causing disorderly financial markets and depressing global economic growth.

All in all, while the near-term outlook is favorable, the increasing potential for a sharp correction in financial markets in the medium term makes it all the more important to address global imbalances and contain other risk factors, such as protectionist trends and/or "event risks" in emerging markets.

Trends That Could Enhance Financial Stability

In addition to the more cyclical factors discussed above, two observable trends could help enhance financial stability over time, especially to protect against the risk of abrupt and indiscriminate reversals of capital flows.

- Demographic changes and ensuing pension reforms increase the size and importance of institutional investors such as pension funds and life insurance companies relative to more short-term-oriented investors. To the extent that these long-term institutional investors need to match their assets to long-term liabilities, their corresponding asset liability management has shown a strong commitment to strategic asset allocation; such allocation is largely guided by long-term fundamentals as opposed to day-to-day noise in the markets. This type of investor is usually very large and can, by definition, move markets, especially if the markets are small and narrow. In addition, institutional investors' reallocations are typically infrequent and implemented at a rather deliberate speed. In short, the fast growth of assets under management of this type of investor will probably have a stabilizing effect on financial markets.
- A much enhanced transparency and disclosure in financial markets, including on the part of emerging market borrowers, together with a much more sophisticated investor base can reduce the likelihood of contagion risk, at least the "knee-jerk" contagion seen some years ago. Specific credit events or country problems may occur, but judging from market reactions to such events in the recent past, there is reason to expect that, in the foreseeable future, these events would be regarded as specific rather than generalized, further containing future market volatility.

Policy Measures to Mitigate Risks

As explained above, the short-term outlook for global financial stability is rather benign because of solid growth and favorable financial conditions. Traditional countervailing forces in financial markets, but also some of the more recent trends explained in the previous section, add to this benign assessment. As always, the ongoing risk management by and prudential supervision of individual market participants are the most important line of defense.

With regard to vulnerabilities of the relative value trades using credit derivatives and

CDOs, financial supervisors must ensure that regulated institutions maintain robust counterparty risk management practices, not the least to contain the spillover effect of market corrections should they occur. Given the complexity of these financial transactions and instruments, regulators need to upgrade their skill sets, where necessary, to be able to effectively perform their supervisory functions.

In this context, we welcome the release of the recent report of the Counterparty Risk Management Policy Group II that highlights, from a private sector perspective, counterparty and other risks and calls for action by financial institutions to deal with them.[1]

Financial supervisors also need to ensure—as they have begun to do in the context of household indebtedness—that lending institutions do not relax credit standards, which would in turn lead to tomorrow's nonperforming loans.

More generally, some monetary authorities face the challenge of gradually removing monetary stimulus, so as to contain excessive risk taking, without strangling financial markets or the economy as a whole. The Federal Reserve's program of "measured" tightening moves appears to have struck the right balance in this regard and should be continued.

For the medium term, the risk of growing global imbalances has to be addressed by a cooperative effort from the major countries, with each country adopting policies appropriate for its circumstances. As explained in various issues of the IMF's *World Economic Outlook,* these policy measures include efforts to raise national savings in the United States—both public and private—structural reforms and supporting measures to raise the trend growth rate of Europe and Japan, and financial sector reforms and greater currency flexibility by many Asian countries. Progress in implementing these mutually reinforcing policy measures can go a long way in maintaining investor, business, and consumer confidence, which in turn underpins the current configuration of benign economic and financial developments. In this context, the recent moves by China and Malaysia to alter their currency peg regimes are welcome steps in the right direction.

Emerging market countries have benefited greatly from benign financial markets over the last two or three years. They should not only continue to use the current favorable environment for further liability management operations, including debt buybacks but, even more importantly, they should consolidate their macroeconomic performance and persevere with structural reforms.

Global Asset Allocation Framework

As already mentioned above, the global asset allocation is driven not only by cyclical considerations but also by secular changes in financial markets. Chapter III provides insight into some of the structural trends that shape this process as well as their relevance for the IMF's multilateral surveillance.

Global financial assets held by nonbank institutional investors have more than doubled in the past 10 years, and more than tripled in the past 15 years to reach about $45 trillion (in the OECD countries), and they are expected to continue growing at a rapid pace. Demographic trends necessitate pension reforms that are expected to create more and larger "asset gatherers." The investment fund industry (comprising mutual funds, hedge funds, and so on), with the exception of those in the United States and the United Kingdom, is less developed in many mature and emerging market countries, and is likely to expand in the future. Consequently, the volume of financial assets under management by institutional investors such as pension funds, insurance companies, and investment funds will continue to grow.

[1]Counterparty Risk Management Policy Group II, 2005, *Toward Greater Financial Stability: A Private Sector Perspective,* July 27. Available via the Internet: *http://www.crmpolicygroup.org/docs/crmpg-II.pdf.*

Previous issues of the GFSR have examined in detail how the various nonbank sectors have—over the last decade or two—assumed a lot of credit risk previously held by the banking sector. These relatively new developments have increasingly put institutions such as pension funds and insurance companies more and more at the center of the financial system. Indeed, it is now virtually impossible to conduct multilateral surveillance in financial markets at large and not to understand the intricacies of nonbanks' investment decisions and their motivation.

Changes in the asset allocation decisions by these institutional investors will have an increasingly important impact on capital flows across asset classes and across national borders, as well as on asset prices. Both institutional and individual investors will seek to maximize risk-adjusted returns in an increasingly globalized financial system by diversifying their holdings to uncorrelated assets. In the process, a relatively small change in the asset allocation of funds—given their enormous size—may affect global financial stability and, by way of example, have a significant impact on the cost of external funding for emerging market countries.

To monitor and safeguard global financial stability, the supervisory community must understand and anticipate the systemic implications of the evolving global asset allocation. It needs to reflect seriously on developments that have taken place in the past decade. More importantly and looking ahead, private capital flows are likely to become ever more influential. As emerging market countries mature and open up their capital accounts over time, financial market integration will intensify, and these countries' financial sectors will increasingly compete for, open up to, and receive flows from the global pool of capital.

In Chapter III, a series of short modules explains the global asset allocation process and its various aspects. These modules examine the role of the key institutional investors, their decision-making processes, and factors that influence such processes. The modules analyze in greater detail recent developments and future trends in the investment fund industry, the changes in home bias and their implications for international portfolio diversification and capital flows, and the influence of accounting standards on the behavior of institutional investors.

These modules show that the investment of institutional investors, such as pension funds and life insurance companies, is increasingly shaped by their long-term liability structures. Partly because of regulatory and accounting changes. The resulting diversity in investment behavior and the growing importance of pension funds and life insurance companies—with their long-term orientation as opposed to short-term players such as hedge funds—have contributed to financial stability. Consequently, financial regulators should pay attention to preserving this diversity, as well as the long-term orientation of important institutional investors, in considering regulatory and accounting changes.

Corporate Bond Markets in Emerging Market Countries

Chapter IV builds on previous work in the GFSR related to corporate finance in emerging market countries. The domestic supply of credit to the corporate sector in most emerging market countries is channeled through the national banking system. In a number of cases, the corporate sector is unable to receive such bank credit with long tenors and moderate levels of interest rates, especially when the country in question has just weathered a period of high inflation. Typically, under such circumstances, corporations have tapped the international financial markets for long-dated finance, while being exposed to foreign exchange risk.

Recent work by the IMF on the use of the balance sheet approach to detect vulnerabilities in emerging market countries has highlighted the importance of corporate sector vulnerabilities and their linkages to other sectors and markets. In this context, the April 2005 edition of the GFSR demonstrated the importance of having alternative sources of financing for the corporate sector, both to finance growth and to reduce balance sheet vulnerabilities. Continuing this line of work, Chapter IV focuses on the development of corporate bond markets in emerging market countries. It highlights lessons from the experiences of mature markets as well as from a small group of emerging markets that either have large corporate bond markets or have seen them grow rapidly in recent years.

In terms of development issues, a thriving corporate bond market needs several sets of conditions to be in place:

- First, a country should have sufficient macroeconomic stability, so that market inflation expectation is anchored and bond yields are low enough to induce borrowing.
- Second, demand and supply factors have to be conducive to the use of corporate bonds. The development of local institutional investors such as pension funds, insurance companies, and mutual funds is crucial in generating demand for corporate bonds and other credit products. Local companies have to see the benefit of having access to an alternative funding source besides bank lending.
- Third, an appropriate legal and regulatory environment needs to be built up, so as to foster a credit culture in the local economy.
- Last, but not least, infrastructure for the primary and secondary markets for corporate bonds needs to be developed.

In terms of financial stability considerations, local corporate bond markets can help reduce the maturity and currency mismatches on balance sheets of corporations, minimizing their vulnerabilities to international capital markets and to cutbacks in lending by local banks. However, regulators need to monitor corporate bond markets that are growing quickly to guard against the risk of accumulating bad credits that can prompt market corrections and turmoil.