

The year 2001 has yet again demonstrated how resilient the international financial system was in the face of a number of serious challenges. In chronological order, the past year saw the continuing deflation of the telecom, media, and technology (TMT) bubble across global markets, the onset of a recession in the United States amid a synchronized global slowdown, a financial crisis in Turkey, the terrorist attacks on September 11, the record number of bankruptcies, and the default by Argentina after a long and drawn-out crisis. Throughout these events, several of which represented serious problems requiring prompt attention by the appropriate authorities, the international financial system has shown remarkable resilience. This capacity to absorb shocks has been bolstered by the robustness of the infrastructure of the financial system and the key players in it; the vigilance and ready action of the financial and monetary authorities to ensure the smooth functioning of the system, including through the timely provision of liquidity support; and the increasingly discriminating investment behavior of market participants. Going forward, this resilience would again be tested if a global economic recovery is subdued. However, the starting conditions this year would be weaker than those at the beginning of 2001.

As analyzed in *Chapter II*, financial markets ended the year on a positive note. Equity markets recovered and rallied noticeably from their lows of late September. In bond markets, yield spreads of corporates and high-yielding bonds, particularly emerging market bonds, narrowed against U.S. Treasuries. At the same time, the U.S. Treasury yield curve steepened, and the U.S. dollar has strengthened. Financial markets thus anticipate, and have priced in, a recovery in economic activity and corporate earnings during 2002. In the emerging market bond markets,

signs of financial contagion moderated markedly. Fallout from the Argentina crisis and default has been quite limited, in contrast to most previous experiences. The reasons for such noncontagion include more discriminating investment behavior by market participants, the lack of any surprise element as the crisis slowly proceeded to what the markets anticipated would be an inevitable default event, the generally better economic policies, including the use of more flexible exchange rate regimes, adopted by many emerging market countries, as well as various technical factors such as limited leveraged positions and the significant reduction in Argentina's weight in emerging market bond indexes, such as the EMBI+. New issuance by emerging market sovereign borrowers has revived since November and this rebound has continued in the new year. For those emerging market countries, which have so far avoided financial contagion from Argentina, it is important to reinforce the positive sovereign and credit risk assessment currently held by investors. This can be most effectively achieved by both strengthening sustainable economic policies where necessary and consolidating the structural reform achieved in recent years.

At present, the consensus view that the global economy will recover during the course of 2002 is being buttressed by recent economic statistics. In spite of this widespread expectation, as well as the demonstrated resilience of the international financial system, there is no reason for complacency. In the view of many market participants, the risk of a subdued global economic recovery, subjecting the world to a second straight year of slow growth, as well as opening a gap between financial market expectations and economic performance, is not insignificant. If that were to materialize, it would exacerbate the financial imbalances and some of the underlying weakness in the financial sector. From a historical

and cyclical perspective, it is important in the months ahead to see whether the recovery in economic activity and corporate earnings will validate market expectations, especially for equities. If not, the likely adjustment in asset prices and deterioration in credit quality could erode the still fragile business and consumer confidence. The implications of overleveraging and credit quality deterioration, which would be exacerbated by a subdued recovery, for financial market stability are explored in *Chapter III*. First, downward asset price adjustment and further deterioration in credit quality could weaken balance sheets of corporates, households, and financial institutions in the major industrial countries, all of which have increased their exposure to traded financial assets in recent years. Second, a subdued recovery would put further pressure on banks' profitability. These developments could be more worrisome in light of the fact that present levels of indebtedness in the major industrial countries, both in the corporate and the household sectors, are high from a cyclical perspective. Their debt servicing burden is also high relative to current income, despite the cyclically low interest rates. Consequently, adverse financial market developments could impair the incipient recovery and make a sustainable recovery more difficult to achieve. The appropriate policy response by the international community to help sustain demand has been described in the IMF's *World Economic Outlook*, December 2001. However, to the extent that the eventual recovery is accompanied by a further rise in the level of indebtedness, thereby increasing the sensitivity of these economies and financial systems to financial asset price fluctuations, the situation warrants close monitoring in the period ahead.

Of some concern is the health of individual financial institutions in the major industrial countries that have been weakened by the events of 2001. The resilience of the international financial system mentioned above has been due largely to the strength of banking systems, and financial systems in general, in key countries, particularly the United States. The banks in these

countries have built up their capital strength through improved profitability during the long expansion of the 1990s, ongoing consolidation, and improvements in operational technology and risk management practice. However, progress was not uniform or even among banks in the industrial countries; those lagging behind in the pace of consolidation and restructuring have continued to cope with overcapacity, stiff competitive pressure, and sometimes poor profitability in their home markets even before the synchronized growth slowdown. For some other institutions, diversifying into overseas markets, including emerging markets, and pursuing new activities, including lending to the telecom industry and engaging in credit derivative business, have exposed them to the potential of additional losses. In particular, in Japan, the weight of nonperforming loans amid a prolonged period of deflation has seriously weakened many banking institutions, leading to their downgrading by the major rating agencies. Adverse financial market developments would further squeeze the weak institutions between sharply reduced earnings expectations and a still rigid cost base, now burdened with the need for further loan loss provisioning. In the period ahead, such conditions would probably speed up the financial sector consolidation process, both in market and cross border.

Credit quality deterioration also provides an important test of the performance and stability of the market for credit risk transfers that has grown rapidly in recent years. Overall, the proliferation of credit risk transfer instruments, including credit risk swaps, credit derivatives, and collateralized debt obligations (CDOs), is a positive step. It has enabled banks to remove credit exposures from their balance sheets and to distribute them more widely among market participants. In 2001, the market seemed to be able to cope with a series of credit events, with payments by and large being made by credit risk protection sellers to protection buyers; even though in some cases only after arbitration (these cases have led to improvements in the International Swap and Derivatives Association documenta-

tion, widely used in the market). Further deterioration in credit quality, which as a lagging indicator could persist for some time even if the global economy recovers, would continue to test the market.

Independent of economic performance, several areas of risk are surfacing. First, to the extent that *regulatory arbitrage* drives the growth of the market, banks may be encouraged to originate more credit business than they would have done otherwise, and then to transfer the credit risks to non- or less-regulated entities, particularly with regard to capital adequacy requirements, such as insurance companies and, to a lesser degree, hedge funds. Banks, having significantly substituted traditional credit risks for counterparty risks, now depend on their counterparties to perform when a credit event occurs to keep their exposure within limits *ex post*. This, however, has been shown to be uncertain in many cases. Second, the group of important *non-traditional players* has expanded to include industrial companies with an active financial arm. Due to the lighter (or lack of) financial regulatory regime, their disclosure has been less adequate than from regulated financial institutions, leading to a lack of information and transparency about the overall development of the market and the pattern of risk distribution and concentration in the financial system. This makes it difficult for market participants to gauge accurately the creditworthiness of companies and institutions in a timely fashion. Third, the *complexity* of instruments and transactions has grown over time, and when a credit event occurs, it is not clear that all contracts can be expected to be automatically executed in a way that protection buyers expect and with a high degree of certainty. This is a risk even if one allows for the fact that new financial instruments will have “teething” problems initially as to solid legal documentation. The collapse of Enron, and subsequent events, illustrates the three areas of risk described.

As a consequence, there seems to be the need to review and possibly improve regulatory regimes in the industrial countries to keep pace

with the ongoing process of modernization and globalization of finance. Specifically, there is the issue of regulatory arbitrage that might distort the origination, distribution, and pricing of credit risks; and the need to identify and address the gaps in regulation that have allowed significant players in the financial markets, be they banks or nonbanks, not to operate under a comparable and consistent regulatory framework (“same business, same risk, same rule”). The national authorities are already looking to develop and enforce appropriate disclosure requirements to enhance transparency in these complex markets. In addition, accounting rules and standards are also in the process of being updated to address the increasing complexity of financial transactions. Of immediate interest is the enhanced transparency of off-balance-sheet risk management structures such as special purpose vehicles (SPVs)—particularly the extent to which such vehicles genuinely remove risks from the balance sheet of the originating entity rather than merely disguise them. Such enhanced transparency could strongly bolster the effectiveness of market discipline as the first line of defense against financial instability by enabling market participants to more clearly identify financial imbalances at an early stage. The resulting repricing of credit to those institutions could work to limit the buildup of such vulnerabilities before they reach an unsustainable level and potentially pose risks to financial stability.

On the heels of slow global growth and of crises in Turkey and Argentina, the need to further develop and refine early warning systems (EWS) as a tool for crisis prevention has again become relevant to the international financial community. *Chapter IV* analyzes the performance of existing early warning system models that focus mostly on foreign exchange markets. The way forward includes building models for banking and debt crises in addition to enhancing the existing ones on foreign exchange crises, examining the linkages among different types of crises and across countries (contagion), and making more efficient use of information embedded in financial asset prices. *Chapter IV* also

lays out a research program in this area for the IMF in the period ahead.

*Chapter V* addresses the role of alternative debt instruments—other than new “plain vanilla” bonds and regular loan issues—in enabling emerging market sovereigns to maintain access to global capital markets and better manage their debt through risk diversification. The need for such instruments may increase at times of financial stress, when investor appetite for emerging market debt could diminish and borrowing costs increase. In such circumstances, emerging market sovereigns often have adjusted

their debt management strategies, and have made use of debt instruments embodying innovative features, including debt augmentations, time varying and state contingent instruments, structured notes, and collateralized borrowing. *Chapter V* evaluates these instruments and presents a comparative analysis of the benefits and costs of their use, including the risks of locking into high debt-service costs for prolonged period of time and creating inflexible debt structures, as well as the implications of the difficulty that markets often have in pricing these instruments.