Introduction

In the past 18 months, we have witnessed a major credit and liquidity crisis in the banking system as losses from subprime mortgages, structured investment vehicles, and "covenant-lite" leveraged loans generated significant knock-on effects worldwide. Major financial institutions have taken more than $500 billion in write-offs, and central banks around the globe have initiated emergency measures to restore liquidity. CEOs have been replaced at such venerable institutions as Citigroup, Merrill Lynch, and UBS. Bear Stearns, a firm once viewed as having a conservative approach to risk management, has been the target of a rescue by JPMorgan that was driven and to some extent sponsored by the Federal Reserve. Lehman Brothers has filed for bankruptcy. Goldman Sachs and Morgan Stanley have changed status to become bank holding companies. To the experience of the present crisis we can add our memories of many others: the savings and loan crisis in the 1980s, Black Monday in 1987, the Russian debt default and the related collapse of Long-Term Capital Management in 1998, the dot-com bust of 2000, and the Enron-led merchant-power collapse of 2001.

Interest in risk tends to come to the fore at times of crisis and then recede as conditions revert to normalcy. This rhythm is the outcome of risk being overwhelmingly discussed in terms of its downside. But the resounding message of such crises is that risk is always with us, for good as well as ill. And as recent events have demonstrated, a grave mistake is made, and a promising opportunity missed, in waiting until everybody else has perceived the problem.

If this tendency is to change, financial and strategic risks must be managed in an integrated fashion, with ownership vested at the CEO level. The tools and techniques to make this possible are well established. What has been missing in most organizations is a practical process that makes such integrated management possible.

The subjects of this working paper are understanding risk and implementing risk tools. The paper is organized into four sections. The first discusses the historical emergence of risk management. The second reviews some of the theoretical and market developments that allowed financial institutions to transfer risk and examines the enormous impact of these developments on the financial sector. A third section on risk in the corporate sector focuses on developments in the energy industry to exemplify how risk management can transform the fortunes of nonfinancial companies. Finally, the paper sets out a comprehensive framework for how institutions can employ a disciplined, strategic risk-return management process.[1]

Another article, "A Primer on Tools and Techniques of Risk Management" (ID# 737072), complements this paper and provides a more detailed discussion of some of the basic

1 This working paper is a revised and updated version of McKinsey Staff Paper No.68 published in July 2008. It is not a history of risk, although it covers some important developments. Anyone interested in the long history of risk should read Peter L. Bernstein's entertaining *Against the Gods: The Remarkable Story of Risk,* New York: Wiley, 1996, which remains the most accessible book on the subject. Those seeking a deeper understanding of some of the financial theory that underpins modern risk management should read Bernstein's book *Capital Ideas: The Improbable Origins of Modern Wall Street,* New York: Free Press, 1992, in which the author explains the emergence of portfolio theory and the capital asset pricing model, among other important innovations.