

## How Does Systemic Risk Occur?

Systemic risk arises when the failure of a large financial institution, due to its actual or apparent insolvency or illiquidity, threatens the overall stability, liquidity, and solvency of the financial markets. One example was the case of Long Term Capital Management (LTCM) a highly leveraged hedge fund that failed in 1998. LTCM was never insolvent, but there were concerns over its solvency and its ability to keep rolling over its debt. A forced liquidation by LTCM of assets at fire-sale prices could have resulted in tremendous mark-to-market losses for other firms, starting a cascade of losses. Ultimately the New York Federal Reserve Bank intervened. More recently, the liquidation of Bear Stearns was conducted at least in part to avoid additional overall risks to the financial markets, with associated bond defaults and a general lack of liquidity. It was believed that Bear Stearns held large positions in securitized subprime mortgage debt and that the securities had the potential to depreciate significantly in value. The market's concerns over Bear Stearns solvency effectively created a run on the bank. Accordingly, the Federal Reserve stepped in, increasing liquidity to the bond markets and effectively liquidating the bank through a merger. Although the Fed was not required to act—given that Bear Stearns was not a regulated bank, the Fed did act to increase overall liquidity in the financial system. There was concern that the alternative would be a rapid devaluation of many financial assets and a general illiquidity in the financial markets generated by the failure of a major investment bank. The Fed acted to eliminate systemic risk.

The financial markets are interconnected: banks, investment banks, securities firms, bond markets, derivatives markets, commodity exchanges, and a host of additional players and international entities are connected through a variety of ongoing contractual relationships. Some of these players are highly regulated and have the right to obtain assistance from the Federal Reserve System in maintaining their ongoing liquidity. Other financial market participants are less regulated and in some cases may have fewer opportunities for obtaining liquidity during a time of diminished availability of money. One function which the various financial regulators at least implicitly recognize as necessary is the avoidance of overall financial market illiquidity; this is accomplished by through the purchase of financial instruments from institutions needing liquidity. The degree to which the Fed will provide liquidity to non-bank institutions has been an increasing issue in recent years.

Clearly individuals and organizations involved in interest rate sensitive businesses benefit from the maintenance of stable financial markets. In recent years there has been concern over the issuance of large quantities of bonds by financial institutions, the development of substantial derivative positions, and the valuation of assets with fluctuating and/or possibly temporarily depressed values. These actions result in the generation of long term and possibly illiquid assets; in some cases it may be necessary to roll over and/or refinance asset positions. There is concern about the availability of market liquidity in the event of financial stress. This concept of market liquidity is analogous to that experienced by the banking system prior to the creation of the Federal Reserve System. In recent months economic commentators have noted that in addition to supplying liquidity to the banking system the Fed is effectively the only institution that is able to provide liquidity to the non-bank parts of the asset markets. The degree to which the financial regulatory structure will be modified to address non-bank liquidity issues may attract additional attention in forthcoming years.