

WEEKLY MARKET MONITOR

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THE CREDIT CRUNCH BITES

Credit markets, especially in the U.S. but also in Europe, are under stress. This stress manifests itself in terms of rising spreads between safe and risky assets, difficulty in price discovery for illiquid assets, and a rising refusal of banks and other market participants to lend to each other and to their clients. The credit crisis that began last summer has turned into a credit crunch. If prolonged, this credit crunch will inflict real damage on the mainstream economy. With the deepening gloom in financial markets as our chorus this week we will ask:

- What is a credit crunch?
- What are some of the signs of a credit crunch?
- What are some of the implications of a credit crunch?

There are a variety of forces interacting in a variety of ways, some foreseeable and some perhaps unforeseeable, which resulted in the current crisis in the credit markets. These forces include perverse incentives built into the financial system; failures in national and global regulation and accounting treatment of complex structured securities products; and major failures in valuation methodology and risk analysis and management; to name but a leading few. As the crisis spread and the affected market participants tried to contain the damage to their own institutions, their entirely rational self-protective actions in turn deepened the crisis.



Speaking last week, Timothy Geithner, president of the New York Fed and the lead U.S. regulator of bank holding companies said: “The rational actions taken by even the strongest financial institutions to reduce exposure to future losses have caused significant collateral damage to market functioning. This, in turn, has intensified the liquidity problem for a wide range of bank and nonbank financial institutions.” What Mr. Geithner was describing was the institutional version of a bank panic. In a typical bank panic, individual depositors rush to withdraw money from a bank because they are worried they won’t get their money back. In this modern version the banks themselves won’t lend because *they are the ones worried they won’t get their money back*.

The origins of the crisis can be found in the systematic mispricing of risk during the last several years. During the generally benign global financial environment which persisted roughly from 2003 to mid-2007 interest rates were low and spreads between safe and risky assets steadily declined. At the same time financial innovation brought forth a set of new and complex financial products, in which securities of many different types with many different risk and return characteristics, were packaged and sold as structured products such as, residential mortgage backed securities (RMBS), asset-backed securities (ABS), and collateralized debt obligations (CDOs). These structured securities often enjoyed high credit ratings from the ratings agencies; credit ratings generated using valuation models that assumed the unusual and atypically benign economic environment of this period would continue indefinitely.

Another widely unrecognized assumption underpinning both the credit ratings enjoyed by many new structured products and the general global reduction in risk spreads was the assumption of continuous, frictionless liquidity. This assumption proved to be a catastrophic mistake when the global repricing of risk began last summer. Liquidity evaporated like a shallow pool in a very hot desert. The credit crisis thus began as liquidity shock.

If the credit crisis had been treated as liquidity shock, the usual policy response by the monetary authorities such as, the Fed, would have been sufficient to limit and contain the damage to the financial system. The Fed has acted aggressively to provide liquidity to the banking system by lowering its target Federal Funds rate from 5.25% to 3.00%

and by providing liquidity through its new Term Auction Facility (TAF). This, however, has not been sufficient to prevent the credit crisis from becoming a credit crunch because the crisis now involves solvency as well as liquidity fears.

All large, modern financial institutions have counterparty relationships with many other financial institutions. A counterparty is simply the party on the other side of a transaction. Where assets trade and are priced on market exchanges like the New York Stock Exchange (NYSE) or the Chicago Mercantile Exchange (CME), we typically do not worry about counterparty risk because the trades are settled by a centralized clearing mechanism. In our modern financial system, however, most financial assets, especially all the structured products such as RMBS and CDOs, are not exchange-traded but are traded over-the-counter between individual financial institutions. In addition, almost all derivatives contracts are traded this way. On a recognized exchange like the NYSE or the CME price discovery is transparent and liquidity is provided by a range of market participants. The lack of transparent price discovery and liquidity in the over-the-counter markets consequently exacerbated the shock to the system when the great global repricing of risk commenced.

This systemic shock radiated throughout the markets because, market participants found themselves unable to price and trade many securities and the associated derivatives contracts, as risks, was being repriced and the low credit spreads and low volatility of the last several years were revealed as anomalies. The turn in the housing market revealed the folly of the credit ratings enjoyed by billions of dollars of RMBS based on subprime mortgages. As attitude toward risk changed rapidly the weaknesses in the valuation models used to price many complex structured products were also revealed and liquidity for these products evaporated as counterparties proved unable to agree on price.

As markets for a wide range of financial products disappeared—not just complex structured products, by any means—banks and other financial institutions were forced to retain many of these assets on their balance sheets, placing further strain on their risk-based capital ratios at a time when their capital was under stress, because of losses. With balance sheets and capital under stress these

institutions in turn reduced lending to counterparties. As the systemic shock continues to spread, even the strongest institutions have become decidedly more risk-averse, hoarding liquidity and reducing lending to counterparties, thus forcing a general deleveraging of the system.

Why is this matter of the greatest concern? This is a matter of the greatest concern because when banks won't lend to each other, they also won't lend to firms and to households. Credit is the lubricant in the engine of the modern economy. Without the credit lubricant, the economy seizes up as well. Consequently, if this credit crunch becomes severe it will have a measurable impact on the real economy and on economic growth.

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