An Essay on the Credit Crisis

Given the speed at which unexpected and unprecedented actions are taking place in the banking and capital markets, we have tried to take a step back and see if there is a story here which explains the past and casts some light on how the future might unfold.

The question to be addressed is how a foreseeable loss of $500 billion from US subprime lending got magnified into a $20 trillion reduction in equity values and the complete shutdown and then remaking of the US - and global-financial system. How did this come about? What caused the complete lack of confidence in financial and real assets that requires a metaphor even more vivid than a perfect storm?

In our view, there were four primary factors which contributed to the crisis.

The first factor ("credit losses") resulted from the bursting of the housing bubble. Housing had become unaffordable and had to re-price at levels which were consistent with incomes. Because the magnitude of the required re-pricing was so large - down 25%-30%, or back to levels which prevailed at the beginning of 2004 - participants were slow to recognize the magnitude of the problem. The initial write-offs were simply not large enough, and the natural buyers of distressed assets entered too early. As the second and third rounds of loss recognition took place, the market became paralyzed by the thought that prices had no floor and most assets supported by real estate became unmarketable.

The second problem ("deleveraging") was that the financial system was already substantially overleveraged when the subprime crisis began. Market participants thought that this leverage had been widely dispersed by the capital markets. However, certain regulatory policies allowed banks and other institutions to provide back up support without allocating capital to those obligations. As losses began to be realized, these policies pushed much of this excess leverage back into the banking system, both through normal credit and collateral actions and, more importantly, as off balance sheet and other contingent obligations came back on balance sheet. With capital ratios stressed by increasing asset balances while net worth was declining, the process of deleveraging began in earnest and the first round of forced selling began.

The third problem ("the rush to the door") reflected a secular shift in the way investors viewed debt securities. Once upon a time, lenders looked to the cash flows generated from assets as the principal source of repayment. As the capital markets matured and deepened, lenders became increasingly comfortable with relying on refinancing as the principal source of repayment. Borrowers became comfortable assuming this risk as well since they believed that asset sales were a satisfactory back-up in instances where refinancing was not possible. When these assumptions were invalidated by market activity, a classic spiral resulted that forced liquidations at fire sale values.

Finally, a general panic occurred ("the run on the capital markets") when it became unclear which institutions were healthy enough to survive. The lack of transparency in the market – a necessary result of the outsourcing of credit decisions to the rating agencies – was a major contributing factor to the rout. But inadequate disclosure played its part as well. Questions for which there were no answers abounded. How many institutions had "gone long" credit in the CDS market on a speculative basis at a scale which dwarfed their abilities to meet their obligations without having made any disclosure? Who had these undisclosed losses? Who was the ultimate loser on credit default swaps? Who had to sell to meet maturing short term liabilities? Were credit default swaps an accurate barometer of a company's finances? Was there another Bank Herstatt?

Ultimately, these and other concerns caused a general withdrawal of liquidity from the system. Everybody wanted out of all risk assets at the same time. And once that happened, it was "game over." No financial institution can meet its short-term obligations when they come due solely from its normal operating cash flow. Financial intermediaries, by their very nature, assume a maturity mismatch between assets and liabilities. They can exist only if lenders have confidence in their continued existence. But once that confidence is shattered, none can survive. And, unfortunately, that confidence can be shattered for solvent institutions as well as insolvent ones.

If these are the causes of the problem, then we can identify a number of things which have to happen before the problems are finally resolved.

First, confidence and stability must be restored to the system, both on the liability side (to buy time) and then on the asset side (to create earnings).

We believe the recent moves by the Treasury go a long way toward providing a solution for the liability side, at least for the foreseeable future. In our view, the most important part of the recent package – far more so than the switch from buying bad loans to buying preferred stock – was the decision to guarantee both all bank checking deposits (that is, free funds) and all new issues of bank debt which have a maturity of up to three years. This combination of policies immunizes banks from any deposit or other capital flight, and gives them up to three years to solve their asset problems. Whether the government will be able to step away from these guarantees as the three year period expires, however, remains an open question; convincing investors that it is once again prudent to assume credit and other risks will require a major deleveraging of all financial institutions and other structural changes in the pricing of risk.

On the asset side, real estate prices must stabilize at affordable levels, and the excess inventory worked off through normal absorption. While we think that the declines to date have come close to restoring affordability in most markets, additional support may be required. Our favorite solution is to announce that TARP will buy mortgages based on prices that restore affordability to the housing market, which we think would provide a floor at roughly 2004 price levels.

Once stability has been restored, the financial system must be recapitalized. The move by the Treasury to buy stock in banks is a first step in the process, but is not enough. Private capital will be needed as well in substantial amounts. The recent funding moves by the Treasury should also help in this regard since bank profitability will increase now that banks will now fund themselves as government guaranteed credits. History would indicate that three years of enhanced profitability should be enough time to absorb the losses still in the system or which will result from a severe economic downturn, but that remains to be seen.

In addition to recapitalizing solvent, but illiquid, institutions, excess capacity must be squeezed out of the system. The industry grew to support levels of transactions and leverage which are unlikely to return in the foreseeable future. Allowing unhealthy institutions to fail is an integral part of this process, but "right sizing" surviving institutions will be important as well.

On the regulatory side, bank regulators must adopt policies that provide for more transparency, prohibit the offering of credit without capital charges, create "look-through" provisions on leverage and allow for the increase in system-wide capital requirements when asset inflation gets out of hand. Our preference would be for regulators world-wide to adopt similar standards in order to prevent forum shopping, which played a large role in the current crisis. Securities regulators will have to revamp their disclosure requirements to make sure that information, not only data, is disclosed, and, as many people have pointed out, clearing-house markets for derivatives will have to be created and leverage restrictions imposed on these instruments.

While the financial system is being fixed, major work will be required on the macroeconomic side as well. In the short run, attention must be given to managing the slowdown which many observers have observed. Reduced economic activity is not good for the health of the financial system. A new round of losses will appear, and thought must be given to making sure that these losses will be contained by the earning power of a stabilized system.

Over the longer term, care must be given to how the system de-levers. Ultimately, the ratio of liabilities to income has to be reduced, and this can only be accomplished by increasing income or destroying liabilities. Increasing real incomes, of course, if far more preferable, but this will require capital deepening and investments in technology. Both of these actions will take time and will require an adjustment in consumer behavior and government policies to a less consumption-oriented economy. However, a world in which investment – especially investment financed with equity – is encouraged is one we would welcome. The destruction of liabilities has already begun as financial assets have evaporated in the face of higher discount rates and lower asset values. Whether policy makers can withstand the temptation to ameliorate the pain through inflation will be the challenge of the next few years.

Howard Newman
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