Viewing the Financial Crisis from 20,000 Feet Up

by Stephen Figlewski[1]

Executive Summary

The U.S. economic crisis is seriously damaging both the financial system and the real economy. The crisis is systemic but the system itself is so complicated and the individual parts of it are so complex, that commentators, policy makers, and the general public are focusing on the details rather than on the big picture. This article offers a different perspective: an overview of the whole system, as if from 20,000 feet above it, that allows us to see the systemic nature of the crisis without being distracted by its complex details. From that perspective one can gain an intuitive understanding of what is happening, and a framework for assessing the damage that is still ongoing as well as possible actions to deal with the situation.

The first part of the article explains a crucial property of financial securities, including all derivatives no matter how complicated, that allows us to look at the whole financial sector as a unified system without having to consider all of its moving parts. Taking this broad perspective reveals how the economy can be stabilized by government intervention that would effectively disconnect the financial system from the enormous risk that is being generated in the real economy and is causing it to break down.

Here are the main points of the argument, that are set out in detail in the article.

1. Every financial instrument, like an insurance contract or a home mortgage, has two sides. If the party on one side pays a dollar the other party receives that dollar. If one party defaults and fails to pay a dollar that it owes, that is a dollar the other party loses. This makes a financial security a "zero-sum game," meaning that one party's loss is a gain to the other, and the gain plus the loss must always sum to zero.

2. The entire financial system is made up of zero-sum contracts, so it is also zero-sum in aggregate. Since each contract has a winner and a loser, the financial sector does not create losses and it does not eliminate losses. Profits and losses, and the uncertainty about those profits and losses which translates to risk, are generated in the real economy. These are passed dollar for dollar through the zero-sum financial system, which distributes them to the ultimate investors who receive those profits and losses and bear the risks.

3. The financial system operates as a zero-sum game, but because it facilitates the efficient transmission of credit from lenders to borrowers and creates financial instruments with return and risk characteristics that investors want, its existence produces large economic gains for the economy as a whole. Those gains lower the cost of credit to borrowers, make returns for investors higher and less risky than they would otherwise be, and cover the costs of running the system. We will begin to lose these benefits if we allow significant portions of the financial system to break under the strain of the current crisis.

[1] Stephen Figlewski is a Professor of Finance at the New York University Stern School of Business, where he is Director of the NASDAQ OMX Derivatives Research Project. He is also Editor of the Journal of Derivatives.

4. Right now the housing bubble of the last several years is deflating, which is producing a loss of trillions of dollars in the total value of real estate in the real economy. That loss is being pumped through the financial system. But the system does not have the capacity to handle such a large loss, and the extreme risk of more to come, and it is breaking down under the strain.

5. The pressure on the financial system can be removed by effectively disconnecting it from the source of the risk that is too much for it to bear. Doing so would allow it to stabilize immediately. One way the Federal government could do this is by stepping in between the homeowner and the mortgage lender and guaranteeing that the monthly payments on all mortgage loans would henceforth be made as originally scheduled. The financial system has no trouble at all in valuing default-free securities with known cash flows, so this would remove the uncertainty that has paralyzed it. Mortgage-backed securities, no matter how complicated, would immediately become as safe and as marketable as Treasury bonds.

6. In this approach, the government would also take the place of the mortgage lender in dealing with the homeowner. The terms of the mortgage could then be renegotiated freely, to reduce the number of defaults. The government would also gain control of the foreclosure process, which would allow it to limit the human cost of families being evicted from their homes, and the financial cost of throwing repossessed houses onto an overloaded real estate market where they can not be sold.

7. The most important element is to disconnect the financial system from its current exposure to risks from the real economy by transferring those risks to the government. Doing so would calm the financial markets and leave the government in a good position to defuse the effects of the credit crisis on the real economy. The Treasury's $700 billion bailout program will reduce the market's risk exposure and provide capital by purchasing mortgage-backed securities that have become too toxic. This will help but it is essentially treating the symptoms without curing the disease, so it is unlikely to be really effective until we also deal with the source of the losses in the real sector. Adding a program like the one proposed here would both remove the market's uncertainty about what these securities are worth and also reduce the amount of actual losses, which would make the Treasury's plan work a lot better and cost less.

8. The plan described below is not a full-fledged proposal. It presents a basic approach that the preceding discussion makes clear would stabilize the system. Implementation of any plan of this sort would inevitably produce winners and losers. The devil is in the details, and no effort is made to deal with those details here. However, the cost of even the basic plan could be surprisingly small considering the size of the overall problem. Aside from the relatively minor expense of administering it, it would only cost the government money if a homeowner defaulted and the amount recovered after the house was eventually sold did not cover the outstanding balance on the original mortgage loan. If the plan outlined below caused the housing market to stabilize quickly these losses, and the total cost of the plan to the taxpayers, would be relatively small.