

Dennis Chao
Professor Becker
Econ 145
September 22, 2010

Understanding the Causative Factors of the Subprime Mortgage Crisis:
An Examination of Current Literature

Though we are bombarded with facts and figures about the recent financial crisis continuously, our understanding of the crisis evolves daily. We are constantly hypothesizing and revising ideas about causes and consequences of the crisis – many of which will not be confirmed for years to come: U.S. Treasury Secretary Paulson, who was a former Wall Street banker, warned that the crisis is not short term and will be with us for a while (Callan, Grant, & Barber, 2007). In order to learn from past mistakes, it is critical that we attempt to develop a complete understanding of how and why this crisis occurred– the worst since the Great Depression, longer than those of 1973-1975 and 1981-1982 (Harding, 2010). This paper will examine and review current literature on the recent financial crisis, specifically, a history and overview of the financial innovations involved and a synthesis of the causes of the crisis.

In order to fully understand the recent financial crisis, it is first necessary to examine both a general overview of the instruments involved as well as some brief history of the financial world. Listening to the news, one may have gleaned that economists have generally accepted that the recent financial crisis is largely connected to the collapse of the housing bubble. Along with this notion, a multitude of acronyms for financial instruments – MBS, CDOs – along with the phrase “subprime mortgages” come to mind. Kregel (2008) points to the government, particularly its formation of the Federal National Mortgage Association (Fannie Mae), the Government National Mortgage Association (Ginnie Mae), and the Federal National Mortgage Corporation (Freddie Mac), as an important initial proponent of the housing bubble. These institutions, known as government-sponsored enterprises (GSEs), in order to increase the velocity and turnover of loans and allow Americans to achieve the “American Dream” (of owning property), securitized housing mortgages into Mortgage Backed Securities (MBS). Securitization allowed mortgage companies and banks, who originated these loans, to take on more loans as they moved the MBS off their books (Lim, 2008). At the time, these securities seemed to be a magic bullet, as evidenced by this statement by Lewis Ranieri (2000), who brought investment banks into the mortgage market:

“The goal was to create an investment vehicle to finance housing in which the investor did not have to become a home loan savant. He or she did not have to know very much, if anything, about the underlying mortgages. The structure of the deal was designed to place

him or her in a position where, theoretically, the only decisions that had to be made were investment decisions. No credit decisions were necessary. The credit mechanisms were designed to be bullet-proof, almost risk-free. The only remaining questions for the investors concerned their outlook on interest rates and their preferences on maturities.”

Contrary to Ranieri’s hubris, a “this time it’s different” attitude that is typically “preceded by talk of new paradigms, perfect models, and fail-safe strategies” (Woyke, 2007), Kregel (2008) points out some key troubles in converting mortgages into a security: “Unlike a bond issued by IBM or General Motors, mortgages are not uniform. Each borrower has a different credit history, the collateral underlying each mortgage is different, and each originator bank has its own underwriting criteria and documentation.” Nevertheless, these issues were overlooked and MBS were experimented with in the 1970s by the GSEs. By the 1990s, they had become a major player in the financial world with few if any complications.

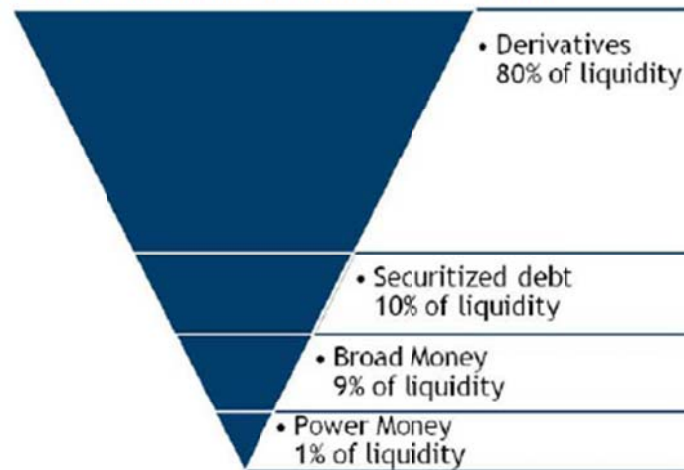
With over twenty-five years of stable use, how is it possible that these instruments brought about such a severe collapse of the global financial system? Firstly, as more and more private institutions rather than thrift institutions began selling these securities, the motivations of the mortgage brokers changed. The mortgage broker’s motivations “shifted the market from one of ‘buy and hold’ the mortgage for the income generated by the difference between deposit rates and lending rates to one of ‘trade’ the securitized mortgage assets to generate income from the difference between buying and selling prices” (Kregel, 2008). In effect, increasing turnover and trading volume became incentivized and credit assessment lost importance. Second, lenders in search of more income through new mortgage borrowers began to lower standards. This was coupled with the fact that there was pressure from the government for lenders to expand loans and lower standards. According to Kregel (2008), starting in around 2005, loans began being given simply based on the borrower’s declaration of income with no credit assessment: no verification of income, assets, or employment. These loans were made attractive to borrowers through “teaser” rates, which offered low initial rates and adjusted to the market rate after two or three years, as well as other adjustable-option mortgage and even fraud documentation. This in effect, provided mortgages to borrowers who would never be able to meet repayments. This also negates Ranieri’s (2000) original goal for MBS, which was to avoid the necessity for buyers to be concerned about credit assessment.

In addition, Lim (2008) reports that “in the early nineties, financial innovation took these MBS to a higher level in terms of complication and leverage with the introduction of collateralized debt obligations (CDOs),” which bundled MBS together and allowed them to be sold in different tranches with different credit ratings, interest rate payments, and priority of repayment. Diamond and Rajan (2009) argue that packaging mortgages together with mortgages from other areas creates diversification and reduces risk. Indeed, this is true when speaking of individual risk, but as Lin (2008) points out, because banks are able to

separate credit risk from market risk and to sell these risks away, the tendency is for investors to take on bigger bets with less down payment, and banks to issue more loans and other securitized assets. In other words, though individual risk has been dispersed, risk of the entire financial system has been amplified. CDOs further complicated matters because they could be used as underlying assets for higher levels of CDOs. This removed them further and further from the actual underlying asset and created a “house built on a deck of cards.” Pricing these assets when housing prices were rising and defaults were few was simple; as house prices leveled and defaults increased, matters got very complicated (Diamond & Rajan, 2008). At some point, the cards slipped and the house fell apart: subprime borrowers began to default and CDO investors in the lowest tranches began to take hits. As confidence plummeted, CDO investors in higher tranches began to panic, leading to a fire sale of assets, a plunge in prices, and a halt in investments in CDOs. This was the trigger for the recent financial crisis.

In addition to the risky assets themselves, Lim (2008), Diamond & Rajan (2009) and Kregel (2008) also agree that greed exacerbated the crisis. As commented by Professor Becker, greed is a normal human emotion and the market pressures individuals to take self-interested steps. People most likely have not become greedier in recent years, but rather the underlying behavioral incentives have most likely changed. As pointed out by Lim (2008), the large wealth and income imbalance in the U.S. has produced many rich individuals, institutions, and sovereign states with billions and trillions of excess cash, which have no option but to chase for higher yields. These higher yields are provided by financial institutions through innovations, however, with this crisis and many in the past, hubris may have led these institutions too far – success breeds a disregard of the possibility of failure. He notes that there has been a large decline in lending activities and a large increase in investment banking activities. In addition, trading, which now runs across the globe, 24 hours a day, is moving away from involving only underlying assets and toward highly leveraged derivatives. Traditional lending consumes too much capital and results in less profit than trading in less capital-intensive securities and derivatives. This greedy behavior is part of the Economic Value Added (EVA) school of thought, which states “the primary, if not the sole, objective of a company or economic enterprise is to maximize shareholders’ value, treating other stakeholders like employees and the public as irrelevant” (Lim, 2008) (this school of thought, though logical, may be somewhat simplistic, adds Professor Becker). Rajan & Diamond (2009) illustrate this kind of behavior well in their anecdotal statement, “Investment in MBS seemed to be part of a culture of excessive risk taking that had overtaken banks.” Rajan & Diamond also detail this greedy, excessively risky behavior: “The performance of CEOs is evaluated based in part on the earnings they generate relative to their peers. To the extent that some leading banks can generate legitimately high returns, this puts pressure on other banks to keep up.” This is illustrated clearly with a graph of the liquidity pyramid below, which notes that derivatives account for 80% of global liquidity.

Figure 1: Global Liquidity Market \$607 Trillion



Source: *Independent Strategy*, July 2007

These financial institutions and their new innovations, rather than democratizing credit, reducing credit risks, increasing efficiency, and making better use of capital, put sole emphasis producing profit. Unfortunately, the bankers invested their capital in MBS, and “thought these securities were worthwhile investments despite their risk” (Diamond & Rajan, 2008).

The sources analyzed, for the most part, agree on the major cause of the recent financial crisis, that being the securitization of subprime mortgages. That being said, Lim (2008), Diamond & Rajan (2009) and Kregel (2008) differ in their opinions about the process that brought about the financial crisis. Lim argues that the subprime mortgage defaults simply acted as a trigger; the financial crisis was a consequence of wealth and income imbalance, current account imbalance, and financial sector imbalance that together with financial innovations, dispersed and magnified risks for the whole system. This contrasts with the theory of Diamond & Rajan, who believe that process that brought about the crisis mostly surrounded the housing market: the US financial sector misallocated resources to the housing market in the form of exotic new financial instruments, a significant amount of these instruments found their way into commercial and investment bank balance sheets, and these investments were mostly financed with short term debt. Finally, Kregel again differs from the former two authors in her theory about the process leading to the financial crisis, which began with the deregulation of the financial system in the 1970s and was followed by the breakdown of the savings and loan industry, the development of GSE securitization, and the private financial system. These differences in opinion signify that much research must still be performed before economists will be able to achieve agreement.

It is evident from the examined literature that although certain major causes can be pinpointed with consensus, the process and mechanisms involved that brought about the subprime mortgage crisis have yet to

be agreed upon. That being said, it is critical that we continue studying the subprime mortgage crisis and pinpoint specific causes and processes that led to collapse. Though it may be many years until we see the final consequences of this crisis, the process of learning from our mistakes has already begun and must continue to prevent future crises, even in the light of hubris and greed.

References

- Callan, E., Grant, J., & Barber, T. (2007, September 12). No quick end to crisis, says Paulson. *Financial Times*.
- Diamond, D. W., & Rajan, R. G. (2008). The Credit Crisis: Conjectures about Causes and Remedies. *American Economic Review: Papers & Proceedings*, 606-610.
- Harding, R. (2010, September 21). Recession lasted 18 months in US, says panel. *Financial Times*, pp. 1, 9.
- Kregel, J. (2008). Changes in the U.S. Financial System and the Subprime Crisis. *The Levy Economics Institute Working Paper Collection*, 1-20.
- Lim, M. M.-H. (2008). Old Wine in New Bottles: Subprime Mortgage Crisis - Causes and Consequences. *Journal of Applied Research in Accounting and Finance*, 3-14.
- Raineri, L. (2000). The Origins of Securitization, Sources of Growth, and Future Potential. In L. T. Kendall, & M. J. Fishman, *A Primer on Securitization*. Cambridge, MA: MIT Press.
- Woyke, E. (2007, September 3). A History of Hubris. *BusinessWeek*, p. 32.