

2008 Financial Crisis: Cause & Regulatory Response

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Abstract. The 2008 financial crisis brought about the worst economic depression since World War II. This paper covers the three main components of the economic meltdown, along with its cause, consequences, and countermeasures. The crisis emerged against a backdrop of rapidly expanding credit, high risk-taking, and heightened financial leverage. In particular, factors related to the real estate bubble are discussed, among which the subprime mortgage crisis has received widespread attention. The various impacts caused by the crisis are irreversible and affect the financial market to this day. Therefore, discussing various measures after the crisis is helpful to the development of the financial field. Whether it is analyzing monetary policy or fiscal policy, or the ever-renewing Basel Accords, they all help to improve global imbalances. Although the financial crisis emerges in the American market first, its widespread impact is beyond the scope. In this paper, the whole development of the 2008 financial crisis will be deeply discussed.

Keywords: Financial crisis; subprime mortgage; government intervention; banking responses.

1. Introduction

In his analysis of the 2008 financial crisis, Austin Murphy wrote that in order to remedy the issue and prevent such occurrences in the future, a study of the root causes of this "colossal failure" that has put "the entire financial system at danger" is necessary [1]. COVID-19 has been a deteriorating factor on economics. All economic sectors, including supply chains for agricultural products and high-tech industries, have experienced a severe rupture of value and supply chains, with international trade being particularly affected [2]. As an important role in international trade, China was impacted at the start of the pandemic. Based on data showing a large decline in GDP in the economies of the US and the EU, it is plausible to assume that the COVID-19 health pandemic resulted in an economic pandemic of unprecedented size in human history [2]. In addition, the Ukraine Conflict has led to changing trade flows and supply shortages, changing energy policy, etc. [3].

People are currently experiencing an inflation crisis brought about by COVID-19 and an energy crisis Ukraine Conflict, which in fact lead to a new financial crises. To learn about methods to properly deal with our current situation we are still in need of analyzing financial crises. In three decades preceding the 2008 subprime crises, the U.S had been accelerating the neoliberal economic policies. The failure of subprime mortgage lenders, the forced closure of investment funds, and the collapse of the US stock market were the causes of this financial crisis. In important international financial markets, it caused an illiquidity crisis. The subprime mortgage crisis of 2008 continues to have the greatest lasting financial impact. An analysis of its causes, consequences, and changes happened after will be elucidated.

2. Cause

The financial industry, which saw that the subprime market offered numerous prospects for larger earnings, had an influence on housing policies. The Federal Reserve's monetary strategy resulted in financial deregulation and low interest rates, which encouraged the growth and innovation of the financial sector. Financial derivatives' complexity has made it possible to underestimate the risks posed by such instruments. The collapse of the housing bubble had a profound impact on the whole U.S. financial system.

2.1. Loose Monetary Policy

Government's policy with the motivation of stimulating economy increases the price of houses, leading to the bubble of real estate market. From the 1980s, the Fed's monetary policy has been loose, which has contributed to an economic downturn that began in early 2000. The Fed has aggressively lowered interest rates since March 2001 in order to lessen the consequences of recessions. In addition to helping the U.S. economy quickly rebound from the recession and tragedies, such as the 9/11 terrorist attacks, the loose monetary policy and low interest rates were a major factor in the housing market's expansion in 2004 and 2005 [4]. Rapid growth in equity and real estate investment caused the housing boom to burst, with prices for homes exceeding what normal economic fundamentals would suggest.

There was also a series of policies encouraging high risk activities by banks, fueling the growth of subprime mortgage market. Deregulation had been a focus of U.S. government policy since the 1970s in order to promote business [4]. Policies including MMMFs and the Garn-St Germain Act of 1982 counteracted Regulation Q, resulting in no interest rate ceiling. The Gramm-Bliley-Leach Act, which replaced the Glass-Steagall Act in 1999, allowed major banks to operate as both commercial and investment banks. Investment banks were able to significantly expand the amount of debt they may take on because of SEC's relaxation in 2004 of the net capital criterion. All these policies gives banks higher risk tolerance, making them more willing to invest in subprime mortgage market. The subprime market was able to flourish as a result of an aggressive Congress, privately funded by the government, and a lax regulatory environment.

2.2. Subprime Mortgage

Subprime Mortgage is a type of mortgage loan aimed towards borrowers with lower degree of credit with higher interest rates than prime mortgage. Lending to subprime borrowers were at the same time risky because subprime borrowers were usually of low-income, and when the interest rate increased and housing price went down, the lenders were subject to higher rates of defaults. When the interest rate goes up, subprime borrowers are under growing pressure of loan repayment. The drop in housing prices is also crucial since it eliminates the options that borrowers might previously had when they ran into financial difficulties, such as selling the property or refinancing [5]. Given the risk in subprime mortgage, it was still very attractive to investors due to the higher interest rates and risk-supporting policies. Therefore, it has become enormous and significantly contributed to the financial crisis.

The tightening after 2004 of monetary policy due to demand pressures resulted in the rise of interest rate in housing mortgage and a correction of housing prices. In the 2008 subprime crisis, subprime mortgage defaults accelerated as the house prices were going down due to the liquidity crunch in the banking system which slowed the credit to the real estate market and resulted in a fall in housing price. Anthony Sanders claims that as a result, major delinquent subprime mortgage rates increased over the period between 2005 and 2008Q2 as property prices continued to decline [4]. Since subprime mortgage was of high risk, in order to lower the risk of investments in subprime mortgage market, lenders insure their debt against default. In order to make profit out of the debt insurance, they do credit default swaps (CDS).

2.3. Credit Default Swaps

Credit Default Swaps (CDS) played a significant role in the crisis. A CDS is an insurance contract of the debts of some entities (such as a designated corporation) that requires one party to pay a recurring fee to the other in order to guarantee against default for a specific length of time [1]. CDSs can transfer the credit risk of the debt from the seller to the buyer. CDSs are sold and buy for numerous times among banks and institutions, all of which gain profit from their investment and leverage operations on credit default swaps. The leverage operation enable credit default swaps to generate excessive profit for banks and financial institutions, and thus making credit default swaps popular

among financial institutions. However, it was the problem with credit default swaps that allowed for the excessive profit, and it's popularity exacerbated the situation.

The problem with credit default swaps was that it was completely unregulated with regard to their pricing and contract procedure. The credit default swaps whose principal amount has been assessed by the SEC to be \$55 trillion and may actually have the price surpassing \$60 trillion. These swaps are completely unregulated and frequently entered into over the phone without documentation [1]. The mistaken and ramped-up price, which blew up the bubble, as well as the unregulated contract process is the primary basic issue from which all other crises issues emerge. Due to the huge credit default swaps market, this issue became much more severe. This uncontrolled sector experienced a significant increase from \$900 billion at the turn of the century to over \$50 trillion in 2008 after Congress passed a law in 2000 exempting them from state gaming laws [1]. The bigger the credit default swaps market, the bigger the bubble it could blow up.

3. Consequence

This crisis has caused catastrophic consequences, affecting both banks and the general public. Subprime mortgage-backed securities (MBSs) saw a decline in value as more subprime borrowers experienced defaults and as home prices fell. By 2007, the steep decline in the value of MBSs had resulted in severe losses at a number of banks, hedge funds, and mortgage lenders. Even several significant and well-known companies were forced to liquidate hedge funds with MBS holdings, request for government loans, explore for mergers with stronger companies, or declare bankruptcy. Home sales and prices declined further as a result of banks' inability to finance subprime loans through the issuance of MBSs, which also deterred buyers with prime credit ratings from purchasing homes, further reducing prices and sales [6]. Due to the credit crisis, consumer confidence fell in the fall of 2008, causing the stock market to plunge and government officials to make panicky public pleas to taxpayers in order to bail out the failing financial institutions [1]. However, even with the government and Fed's intervention to rescue them from liquidity crises, many banks still declared bankruptcy within the year of 2007 and 2008, the largest of which in U.S history was from Lehman Brothers. With the Treasury Department's refusal to intervene due to "moral hazard", Lehman Brothers, the investment bank with 168 year history and \$639 billion in assets reported bankruptcy, further attenuated market confidence and fostered severe stock market decline [6].

As a consequence, the crisis could cast over \$10 trillion, affecting not only the U.S. but economy in various parts of the world [1]. Not only that, the catastrophe was also to the general public in the U.S. People suffered from job loss, unemployment, and home loss, with lasting effect through decades. Around 7.5 million jobs were lost between 2007 and 2009, which caused the unemployment rate to treble and reach almost 10% in 2010. Even with the economy progressively added jobs from the beginning of the recovery in 2009, which helped to lower the unemployment rate to 3.9 percent in 2018, many of the new jobs were lower paying and less stable than the ones that had been lost [6].

4. Response

Government has been interfering with the housing market by introducing several acts. The Fed's balance sheet increased by over a trillion dollars as a result of the Fed's quantitative easing program, which was launched in December 2008 and focused purchasing long-term government bonds and mortgage-backed securities [7]. The Federal Reserve has also implemented unconventional measures including inflation-targeting, currency depreciation, and money-financed transfers, but faced difficulty. The US economy had been suffering from high unemployment and disinflationary pressure as a result of the previous unorthodox policies, so the Fed created the strategy of "inflation- and price-level targeting" and focused its quantitative easing program on "safe" securities such US treasury bonds and mortgage-backed securities [7].

In order to bail out those financial institutions facing bankruptcy, related policy officials implemented a set of policy measures that included: (1) early access to sufficient resources and broad leeway for the objectives of financial sector recapitalization; (2) stress tests that made the balance sheets of the financial sector transparent; and (3) frequent allusions to the Japanese situation and participation of high level political figures to win over the populace [7]. In order to quickly correct flaws in the banking sector balance sheets, they conducted street tests. The TARP Act was established to justify reallocating TARP funds from their initial intended purpose - acquisition of toxic assets - to private sector recapitalization, neutralizing the substantial public resistance to financial sector bailouts by starting quickly, asking for a massive amount of money at the outset, promptly enlisting the highest levels of administrative office to generate public support, and getting maximum flexibility throughout [7]. Financial regulators used a forceful blanket bailout strategy that "provided a modicum of stability to financial markets" and put in place risk-based injections based on stress testing. Financial institutions are encouraged to hold onto troubled assets in the hopes of a future recovery, as opposed to accepting their losses and moving on, as a result of the suspension of mark-to-market accounting regulations in April 2009.

4.1. Dodd-Frank Act

The Dodd-Frank Act, passed in 2010, was a key piece of legislation intended to prevent a repeat of the crisis. The statute increased the Federal Reserve's responsibilities and power [8]. The act requires significant financial institutions to assess their own financial health, and it allows for the possibility of breaking up too-big-to-fail institutions to prevent systemic risk. CFPB was established to protect customers by preventing predatory lending and helping them to understand terms of related contracts. The Volcker Rule limits the investment, speculative and proprietary trading by banks. There's also SEC Office of Credit Ratings to regulate the credit ratings [9]. Derivatives of financial product are also regulated and made transparent [8].

The Dodd-Frank Act has been criticized for several reasons and still left several important gaps. Nonetheless, it can be argued that including these businesses in the government safety net is a viable tactic for lowering moral hazard and preventing the escalation of systemic risk among banking institutions and nonbank SIFIs. The regulator can use this act to successfully pull on two alternative levers: greater capital requirements or restrictions on asset holdings, with appropriate taxes based on asset-level systemic risks are (a) challenging to foresee and compute (though significant progress is being made), and (b) susceptible to severe regulatory arbitrage by financial institutions [8]. These two levers work in conjunction, and both have flaws. The problem with capital regulation is due to regulatory arbitrage, and the Volcker rule is controversial in several aspects but still effective to some [8]. The Dodd-Frank Act also has some implications and unintended consequences. The cumulative provisions of the Dodd-Frank Act may be excessive in a particular cost-benefit analysis [8]. The Dodd-Frank Act focuses on the market failure caused by systemic risks, yet these risks imply that government action is required to solve the problem because private markets cannot effectively do so. In addition, the act only focuses on the possible systemic risk that can be caused by large firms, ignoring the systemic impact by a collection of small firms. Aside from these, there are many other problems with the Dodd-Frank Act.

4.2. Basel III

Following the 2008 global banking crisis, bank authorities have re-evaluated their policies. Basel III is an international regulatory agreement that enacted a number of reforms to address Basel I and Basel II's inadequacies, which were exposed during the financial crisis of 2007–2008 and the collapse of the subprime mortgage market [10]. By requiring banks to maintain precise leverage ratios and keep a minimum amount of reserve capital on hand, these changes aimed to improve regulation, supervision, and risk management and to reduce risk within the global banking system. In order to lower the danger of shocks affecting the entire system and avert future economic crises, it works to make individual banks more resilient.

In order to accomplish this goal, it contains Minimum Capital Requirements, Countercyclical Capital Buffers Requirement, Leverage Ratio Requirement, and Liquidity Coverage Ratio Requirement, which will likely help to limit those risky funding tactics that marked the most egregious regulatory failure during the crisis. During times of economic expansion, banks are required to retain more reserves. However, Andrew W. Hartlage has argued that the requirement for the liquidity coverage ratio may serve to undercut the goals of effective liquidity management and instead lead to problems with systemic risk since the LCR's drastically different classification of retail and wholesale funding may actually damage financial stability by intensifying competition for the kinds of funds handled preferably under the rule. This fear has materialized in the current financial climate [11]. He contends that when adopting the liquidity coverage ratio in their respective countries, financial regulators must take care to prevent competition for traditionally more stable debt, such as retail deposits, from undermining the stability that underpins maturity transition and the contemporary financial system [11].

5. Conclusion

With the experience of the 2007-2008 subprime crisis, scholars have analyzed the causes of the crisis, which primarily include the Fed's overly loose monetary policy, the abused subprime mortgage, and the unregulated credit default swaps. However, with these causes being found, the root cause of the crisis was the problems within the entire financial structure. The crisis has led to devastating consequences, with banks going bankrupt and people losing jobs and homes, causing a total loss of trillions of dollars. After the crisis, Officials have been taking actions to prevent a repeat of the crises by establishing legislations and regulations to fix the problems in the financial structure. Those actions include the enacting of the quantitative easing program, the TARP, the Dodd-Frank Act, and the Basel III, as responses to the problems that caused the crises. Some of these actions have been working, but at the same time not working well enough and therefore need further improvement. Therefore, it is of significant importance to analyze past financial crisis because one can improve the presence and prevent future disasters only if one understands the happening of previous disasters. By analyzing past financial crises, similar crises can thus be avoided.

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