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Further Analysis in Global Financial Crisis: The Panic of 1907 and 2008 Subprime Mortgage Crisis

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Abstract: Learning about the financial crisis and understanding its origin and internal causes could be helpful in better preparing and responding to the global financial crisis in the future. This paper briefly introduces the background of the Panic of 1907 and the 2008 financial crisis. The relationship between the crisis in 1907 and 2008 is mentioned and then the article mainly discusses the 2008 financial crisis and the causes of its occurrence. The 2008 financial crisis is also called the Subprime Mortgage Crisis which began in 2007 and is closely related to the concept of securitization. The financial crisis of 2008 brought a huge impact on the world economy. The conclusion would be drawn, and the main revelation would be discovered in this paper. This article wants to show that financial crises are closely related to each other. We can find similar cases from the previous crisis and bring them into the new crisis to find more perfect solutions. Experience of failure should be prevented in the future.

Keywords: the panic of 1907, 2008 financial crisis, global financial crisis, subprime crisis, internal causes of 2008 financial crisis

1. Introduction

Said Mark Twin, “It is not what you don’t know that gets you into trouble. It’s what you know for sure that just not so” [1]. A story could be used to simply explain the quote: Once upon a time, a man called Oliver heard about a record that there existed a magical leaf in the world, the leaf can help mantis to be invisible from other insects by using it while catching insects [2]. So, Oliver started to look for the leaf, he felt that he could steal from other people to support himself if he owns the magic leaf. He went looking for a basket of leaves, and then tried to cover his eyes using every single leaf and asked his wife to check if he was invisible, his wife went impatient after the tenth question, she lied to him that she could not see him anymore, and he believed that. He went to the street to steal goods with the “magic leaf” covered, but obviously, he was being arrested. The judge told him that he felt others could not see him because the leaf was blocking his eyes and he wanted to believe that there really was a “magic leaf”, the eyes do not always see the whole picture when you are deciding to depend on an outcome you want to believe, you would probably ignore clues that could help you find the truth. The message this story conveying is that do not overtrust what you see, and only rely on what you know for sure, because such overconfidence often leads to wrong judgment. People tend to make actions without thinking while they are overconfident in their decision. It makes people become irrational even if they are facing a situation that might lead their decision to a negative position. In the 20th and 21st centuries, there were several global financial crises in the United States, in particular, the subprime mortgage crisis in 2008 caused a very serious impact on the whole world, and many countries made changes in institutional supervision during the crisis. For example, on 9 August 2007, the Federal Reserve officials in the United States suddenly decided to implement a series of reforms aimed at ensuring that liquidity would be distributed to institutions that require it most since they realized that the historical instruments were unable to be applied to response the crisis [3]. People always learn experiences from history, but similar historical mistakes would be always repeated after years. But we still have to learn from the past and make changes so that it doesn't happen again. There are many articles discussing the cases separately since the financial crisis are very representative. Many countries want to learn from the history of experience to put forward countermeasures in time to solve the financial crisis in the future. Jon R. Moen and Ellis W. Tallman used quantitative research and descriptive methods to analyze the relationship between the 1907 and 2008 crises. They found that there are striking similarities between crises. They claimed that both financial crises were related to large banks. For a better explanation, trust companies can be regarded as shadow banks in the 2008 financial crisis (2007-2009). In these two crises, the institutions that played an important role in the 1907 crisis also had an inseparable impact during the 2008 crisis [4]. John V. Duca analyzed the financial situation in 2008 according to the economic environment during the crisis, and concluded that the real estate crisis damaged the overall economy because it reduced the construction industry and wealth, thus reducing consumer spending. In addition, the loan capacity of financial companies declined, and it was difficult for companies to raise funds from the securities market [5]. However, few papers talked about the relationship between the two crises. This paper helps in making a connection between these two cases and then provides a new aspect in the following understanding. In this article, it will talk about the Panic of 1907 and 2008 financial crisis in the US, particularly the 2008 financial crisis, since it was the worst global financial crisis in modern times which made a huge influence in the whole world economy. In the following sections, both the crisis would be presented and the relation between them would be discovered. This article would deeply talk about the implication behind these two financial crises, learning from the experience, make new intuition for more upcoming events might be happened in the future.

2. The Panic of 1907

The 1907 crisis in the United States was the last serious financial crisis experienced by the United States during the period (1864-1913). The financial crisis lasted three weeks, and the recession caused panic, it has an unusual significance in U.S. financial history. It was a booming period of speculation in the American banking industry, in New York, large sums of bank loans were secured by high-interest trust companies and then invested in risky stocks and bonds. On October 16th, 1907, speculator F. Augustus Heinze Charles W. Morse failed in his attempt to corner the stock of the United Copper Company, a copper mining company traded on the curb, causing the stock to plummet in two hours, they failed and suffered huge losses. The collapse soon bankrupted United Copper and sent the New York copper Stock market into a convulsion, with heavy losses for copper holders. Then on Monday, October 21st, 1907, Knickerbocker Trust was refused to request a loan from the New York Clearing House since the president of Knickerbocker, Charles T. Barney was an associate of a minor speculator. Charles W. Morse. Then Barney was dismissed due to the personal connection. The National Bank of Commerce then stopped the service in Knickerbocker's clearing agent and resulting in the suspension of Knickerbocker Trust. Furthermore, Knickerbocker Trust had rejected the request of aid by J.P. Morgan (1837-1913) due to Knickerbocker's uncertainty of solvency based on their financial situation. Therefore, the full-scale financial crisis in New York City was caused, by the runs on deposits spreading among the trusts, especially in the United States. Later, before the run spread from trust companies to commercial banks, Morgan changed his mind and released aid together with the New York Clearing House banks, they raised liquidity and depositors were able to withdraw funds from Trust Company of America in the several weeks, he was the one that organizes counter-crisis efforts. This financial crisis led directly to the creation of the Federal Reserve System, and the stability of the financial system was enhanced. The crisis bears striking similarities to the 2008 crisis [4].

3. The Financial Crisis Between 2007 and 2009

The subprime crisis of 2007 stemmed from an earlier expansion of mortgage credit, including loans to borrowers who had previously struggled to get mortgages, such as those with weak credit, which both contributed to the rapid rise in house prices [5]. The recession, which lasted from December 2007 to June 2009, was the longest since World War II [6]. The 2008 financial crisis is also known as the subprime mortgage crisis. The causes of this crisis all originate from the securitization of real estate loans, this was also known as Mortgage-Backed Security (MBS). Asset securitization plays a very significant role in the financial market. It can make some illiquid assets become active and promote the effective circulation of assets. The securitization of bonds makes enterprise financing easier. At the same time, securitization also brings serious risks to the financial market. High returns are usually accompanied by high risks. Excessive indulgence of market risks may lead to serious crises, such as the subprime mortgage crisis in 2008. This paper will precisely discuss the advantages and downsides of securitization, as well as the impression of securitization on the financial crisis, which is closely related to the financial crisis. Securitization is to convert some illiquid assets into investment financial products for sale in the market, which promotes the capital flow between companies and banks. However, due to the complex internal structure of some securities assets, it is also very difficult for the government to effectively supervise them. If someone is an inexperienced financial investor, it is easy to be attracted by the high return accompanied by low risk, but the hidden risk may lead to the loss of your money. For example, MBS and Collateralized Debt Obligation (CDO), the most famous ones in the financial crisis, played an important role in the history of the financial crisis. It was precise because they packaged and sold some loans with poor credit into financial products with high return and low risk, which led to the bubble of financial assets and finally burst.

Securitization started when housing mortgages were pooled by U.S. government agencies, in the 1970s [7]. At the beginning of the film “The Big Short”, the background of the American financial market before the crisis was that banking as a boring industry, people went in to make small sums of money, and bonds were immutable, and bonds was immutable [1]. People tended to buy their children bonds when they were young, and then children might get the money back with a low profit. However, the banking industry has stopped being boring since the MBS was put forward by Lewis Ranieri in Salomon Brothers. It is known that an average person’s mortgages would have a fixed rate, and a certain maturity. They are safe with small payoff. But if they are bundled together, the payoff is higher and the risk is still small since the bundle is a package of thousands of safe mortgages, which is AAA-rated [1]. After MBS was introduced, stocks and savings barely mattered, and people made millions every year on mortgage bonds and dozens of other securities. People believed that everyone would pay their mortgage. Nevertheless, in 2008, the market went crashing down, and MBS mutated into a monstrosity that collapsed the whole world economy, which bears out that quote of Mark Twin’s “What you know for sure that just not so”. Nobody had a clue that it was coming. To find out the clues, people need to jump out the self-righteousness. A housing bubble was detected when someone looked closely. Michael Burry, a fund manager from California, found that the housing market collapsed nationwide by roughly 80% during the 1930s, and about half of the mortgage debt was in default [1]. One of the most striking signs of this is the rapid rise in complexity and an increasing trend in the rate of fraud. That’s the highest fraud rate since the fourth year of the Great Depression in the 1930s. Then how did he find out the fraud inside of those mortgage bonds, he looked carefully.

He focused on the top 20 of the sold mortgage bonds and then observed the FICO scores of the mortgages in each bond (March, 2005), he was the first person who put forward the idea to short the housing market even if it was considered as a “rock solid” that impossible to be shorted [1].

The main reason for the Subprime Mortgage Crisis is that there is a giant lie at the heart of the economy. American financial institutions developed financial derivatives in order to evade the government’s financial supervision, which made the leverage ratio of financial products soar, bringing huge profits to financial institutions while expanding risks infinitely. Finally, the bubble burst and the crisis occurred. To be specific, financial derivative products refer to the derivative financial products that are built on the base products and whose prices depend on the base capital products. Take CDO as an example, CDOs are complex structured finance products backed by pools of loans and other assets that are sold to institutional investors, it is different from other products since it is a special type of derivative that derives its value from another underlying asset. If the loan defaults, these assets become collateral. The emergence of CDOs accelerated the crisis. As introduced in the previous sections, the original mortgage bonds are thousands of mortgage bonds bundled together, they are AAA-rated and guaranteed by the government of the United States. In common, the highest level bonds are bonds rated AAA which is getting paid first, they were considered less risk and guaranteed with a certain payoff, and the lowest rated bonds Bs with rock-bottom FICO scores are getting paid last with the highest default rate since those bonds do not require income verification, have an adjustable rate if you buying Bs, possibly more profit would be made, but riskier, and there is the possibility that they fail [1].

People believed that mortgage bonds are guaranteed, but nobody knows the truth about the bonds, some are considered 65% AAA rated, but in fact, are filled with 95% subprime mortgages with a low FICO score below 550. Moreover, when some bonds were deemed too risky, banks did not simply give up the bonds, Yongheng Deng, Stuart A. Fabriel, and Anthony B. Sanders claim that the loans banks made to subprime borrowers and the “Alt-A” loans were typically sold to secondary market participants rather than remaining on bank balance sheets. To better explain, they repackaged those unsold bad bonds into CDOs, imagine those risky (low FICO scores) and unsold B, BB, and BBB-rated bonds were put together in a pocket, until the bonds are diversified enough and could be packaged and get 92%-93% AAA rating from rating agencies, according to the further clarification, CDO “A” has parts of CDO “B”, and CDO “B” has parts of CDO “A”. But then they both get put inside CDO "C" which is called CDO square. CDO-square is a CDO of CDO. CDO allows a housing crisis to become a nationwide economic disaste [1].

Subprime bonds were not downgraded since the underlying loans were clearly deteriorating, rating agencies wanted to avoid losing customers, banks would go to other rating agencies if they did not get AAA ratings in bonds. A rating agency is more like a rating shop. Banking was a complete fraudulent system, a huge lie covering up the truth, banks knew that CDOs were bad, but they were hiding it [1]. Due to information asymmetry, people who do not participate in the economic system do not know the primary information inside the market, which led to the occurrence of this crisis. Since a trade is done because both parties think they are going to make a profit, but one of them is wrong, because everything needs to be balanced, and when the balance goes to one side or the other, one of them is out of balance, everything should be in equilibrium. In this equilibrium, normal people are on the unbalanced side because they have little information about what is going on in the market, leading to this unequal trade.

4. The Relationship Between 1907 and 2008 Financial Crisis

The Panic of 1907 had many elements in common with the 2008 financial crisis. Both crises began in New York City’s financial institutions and markets, and both affected the economy of the United States and the rest of the world. Carola Frydman, Eric Hilt, and Lily Y. Zhou claimed that in the following years of the panic, firms associated with the most affected trusts made fewer capital investments, paid fewer dividends, and experienced lower profitability and higher borrowing costs compared to firms without these relationships [8]. Kamin and Laurie DeMarco summarized the impact of the global spread of financial derivatives based on subprime mortgages in the United States in 2008, the problems with MBSs in the United States are a cautionary tale of worldwide banking problems [9]. They share important features that might lead to damage in financial system: with the rise of new industries, the rapid application of new communication technologies, and major innovations in financial instruments, there is increasing connectivity and increasing complexity [10].

5. Discussion

At the end of the movie "The Big Short", a seemingly perfect and unreal ending is conjured up a few years later the end of the crisis: Hundreds of bankers and rating agencies executives went to jail. The SEC (Securities and Exchange Commission) was completely overhauled. Congress had no choice but to break up the big banks and regulate the mortgage and derivatives industries. But the harsh reality is that banks were using American taxpayers' money to pay themselves huge bonuses and lobby Congress to kill big reform. Then they blamed immigrants and the poor. When everything was said and done, only one banker went to jail — Kareen Serageldin from Credit Suisse. He hid billions of dollars in losses on mortgage bonds, but he was just one of many who did so [1]. This is how most banks did during the crisis. They do not need all the people who caused it to suffer consequences, just one person to be the representative of the punishment. Then there are the implications of the financial crisis. First, for the government, the government can have housing in order to let more people in the United States, has been committed to make mortgage agencies unwarranted loans for people to buy a house, let the led to the government policy on buyers may not be on loan in securitized assets of capital chain rupture, the government allowed risk has been promoting housing policy is also the cause of the economic crisis, When conducting financial policies, the government should objectively evaluate the possible results of its issued policies. Then there is the need for governments to strictly regulate the moral hazard of rating agencies in case the bonds are overrated because of competition between agencies. For the banking, they should make the banking system more public to prevent the banking industry from becoming a completely fraudulent system.

6. Conclusion

No matter how to solve the problem, it is a race against time. Gain time, to seize the opportunity to act. Wasting time by hesitation only exacerbates the crisis. It is reflected in two crises, in 1907, it was a non-ferrous metal called copper that triggered the disaster; the 2008 financial crisis, which erupted in the U.S. housing sector. The Panic of 1907 was short-lived because institutions responded quickly, but the financial crisis of 2008 lasted a long time since the involved agencies did not act in time. Since the US subprime mortgage crisis in 2008, governments around the world have been actively seeking ways to deal with the global financial crisis since this crisis caused real damage around the world. The causes and solutions of the US subprime crisis as well as the financial operation and supervision mechanism of the US Federal Reserve system were discussed comprehensively, to prevent a similar global financial crisis, also to be better prepared to deal with it if it does happen again. By studying the financial crisis and its anti-crisis mechanism in the history of the United States, it is helpful to understand the operation mechanism, historical origin, and limitations of the Federal Reserve system of the United States. This paper has limitations since the aspect considering the financial crisis was based on the understanding during the lectures and the analysis was made by observing and reading the secondary resources. In future research, deeper connections between the crisis could be discovered and the internal causes could be better discussed, more aspects of reason should be considered.

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