Unraveling the Global Financial Crisis

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Abstract. The primary focus of this paper is on the causes of the financial crisis of 2008 and how it affected the world economy. The three main causes of the financial crisis are the Fed's monetary policy, subprime mortgage and credit default swaps. Irrational lending methods, the bubble economy in the housing market and unregulated insurance schemes became the inducement of the global financial crisis, which began with the bankruptcy of Lehman Brothers, the merger and acquisition of JPMorgan Chase and more and more people losing their jobs. This is not only an explosion in the American market, but also in the Asian and European markets are facing a depression. Therefore, the US government learned from the experience after 2008 and issued two corresponding important laws to prevent such incidents from happening again. The two proposals are the Dodd-Frank Act and Basel III. Therefore, this paper will introduce the two plans in detail and analyze their impact on the American economy.

Keywords: 2008 Financial Crisis; subprime mortgage; consequences; regulatory responses.

1. Introduction

Financial crisis has always been one of the topics widely concerned and discussed in finance. With the awarding of the 2022 Nobel Prize in Economics, the 2008 financial crisis is back on the table. The three Nobel laureates in economics for research on banks and financial crises in 2022 are Ben S. Bernanke, Douglas W. Diamond and Philip H. Dybvig [1]. By concentrating on the subject of financial crises, the three laureates illustrated the significance of these events. In a statement, the academy stated that the work of the three laureates had advanced "our comprehension of the function of banks in the economy, particularly during the financial crisis," and that one of the major conclusions was "why it is crucial to avoid bank failures." Now the banking study sheds light on "why we have banks, how to make them less vulnerable in a crisis and how bank failures exacerbate financial crises," the statement said. The research foundations were laid by the three laureates in the early 1980s, and the laureates' analysis "has helped us to improve our ability to prevent severe crises and avoid costly bailouts," chairman Thor Ellinson was quoted as saying. This ability to prevent severe financial crises and expensive bailouts has been particularly important in recent years. Take the novel coronavirus in 2019 and the crisis in Ukraine in 2022. In 2019, the novel coronavirus made many people unable to go out to work, so people's work income was greatly affected and many small and medium-sized enterprises could not maintain their operation and thus forced. The Russia-Ukraine conflict in 2022 caused global economic turmoil and high oil prices [2]. Both increase the expense of living and the likelihood that borrowers would default on their loans. At the same time, the recent two years have seen a heightened focus on financial crises as a result of extremely high unemployment. More and more people are at risk of losing their jobs due to force majeure factors such as the pandemic and war. The 2008 financial crisis and the global economic depression also caused more and more people to lose their jobs and even become homeless. Meanwhile, it was not just sky-high unemployment that hinted at a financial crisis: the collapse of major investment banks. China, Europe, the U.S., and the majority of other nations all witnessed a substantial decrease in GDP growth or even significant decline in March 2008 as a result of the bankruptcy of Bear Stearns and Lehman Brothers in September. Real economy, finance, and employment market are experiencing a major depression after a broad global economic crisis. The impacts of the economic crisis were so pervasive and far-reaching that they are still being felt in the global economy and financial industry today. There are even allusions to the economic crisis of 2019 and 2022. By studying the economic crisis in depth,

analyzing the data and drawing lessons from it, we can help the world's economic situation evolve toward greater stability and prosperity. To do so, it is necessary to go deeper into the crisis itself, analyzing its causes, its course and more scientific solutions.

2. Causes

The analysis of the causes of the 2008 financial crisis is crucial to learn its lessons and to draw policy responses to such financial crises. These causes of the financial crisis are complex and intertwined. None of them can be considered as a direct or fundamental cause, although irrational and unscientific monetary policies, unscientific credit problems, and collateral problems, as well as credit violations, are among the main causes. The 2008 financial crisis has brought varying degrees of influence to the global financial market. After the financial crisis, the global financial scientists began to analyze the reasons. There are many reasons for the financial crisis in 2008, among which the three most important reasons are the Fed's monetary policy, subprime mortgage and credit default swaps.

The first major reason is the Fed's monetary policy [3]. This policy was originally proposed by the U.S. government to stimulate the U.S. economy and the consumption of Americans. But in order to boost the economy, the US government further loosened mortgage lending requirements, reduced the minimum down payment and loan interest rate for middle- and low-income households, and mandated that government financial institutions involved in real estate purchase additional housing mortgage loans from low- and middle-income borrowers. This has led many low - and middle-income households who could not afford to buy a house to start thinking about applying for loans to buy a house. Moreover, these low - and middle-income people do not think about their ability to repay the same. At the same time, with the rise of housing prices, more and more middle class or lower middle class began to invest in real estate, which led to the rising trend of housing prices, resulting in a bubble economy in the market. As a result, more and more low - and middle-income people began to apply for mortgages, but they could not repay in time, resulting in more than two percent of the loans defaulted on. This has reached the international non-performing loan ratio warning line, and it also contributed to the subprime mortgage. At the same time, the high housing price will make more and more people cannot afford to buy a house and will also accelerate inflation. Once the government starts to adjust prices, it will be another shock to the middle class who have invested in their homes. The second major reason is subprime mortgage [4]. Loans offered to people or businesses with low incomes or bad credit histories but a need for credit are referred to as subprime loans. Banks typically set higher interest rates for loans since such borrowers and businesses have greater default rates. Since the 1990s, more American banks have lent to more middle - and lower-income people, and the government has relaxed its criteria for vetting borrowers. Then, with events like 9/11 and the dot-com bubble, the U.S. economy fell into a depression. The emergence of subprime loans led to more and more people unable to repay, so the United States began to appear financial crisis. Subprime loans are very risky in the financial market, which allows banks to make loans to borrowers who are likely to be unable to pay them back, which is likely to lead to a financial crisis. The third major reason is Credit Default Swap (CDS), which is also a derivative of subprime loans [5]. CDS can be thought of as a form of insurance. A CDS enables a shareholder to exchange or counterbalance their credit risk with that of another shareholder. Even said, CDS and conventional insurance have some distinctions. First of all, there is a significant risk that Credit Default Swaps can be issued at will because the issuance of CDS is not governed by the Banking and Insurance Regulatory Commission and other departments. Second, buyers can buy CDSs on bonds they do not own. CDS is a completely different form of insurance than traditional rules, which typically occur when a buyer owns something before he or she writes insurance on it. In plain English, CDSs allow a buyer to buy a bond that is unrelated to the person who bought it, and to buy insurance that exceeds the amount of the debt by several times. This means that when the bond goes bad, the insurance company will pay out a huge amount of money. In the 1990s, CDSs were not very widespread. However, with the rise of subprime loans, after 2002, subprime loans and other major risk loans have become the focus of investment

targets of CDSs. At the same time, along with the huge risk of subprime loan borrowers unable to repay loans in time and the bubble economy of high housing prices in the real estate market, CDSs laid a huge hidden danger for the global economic crisis in 2008. The above analysis explains to a large extent the causes of the 2008 financial crisis. These major causes are not independent of each other, but rather mirror each other and interact with each other to ultimately cause the financial crisis of 2008.

3. Consequences

The global economy and all sizes of economies have been significantly and widely impacted by the economic crisis. In addition to the severe impact of the investment bank failure on world economic markets, it also reflects a surge in the number of workers losing their jobs. High unemployment is a great obstacle and danger to steady economic development. First, the first and most notable result was the succession of investment banks, led by Lehman Brothers, that went bust or were taken over. Because of a series of policies by the United States government that made the cost of borrowing too low, more and more people invested in assets, which led to the skyrocketing of stocks, bonds and house prices. This wild rise in the stock market leads more and more people to borrow and invest, but when the returns from the stock market and investments become less and less, people start to sell their stocks or bonds. Lehman Brothers is one of the most famous examples [6]. Lehman used short-term repurchase agreements to borrow more than $200 billion in total at the beginning of 2008, spending the money on a variety of assets, including its own liabilities. Lehman held more than $100 billion in assets, but in the second half of 2007 and 2008, as a result of market volatility, liquidity plummeted, and the price of the assets significantly declined, they were unable to be sold, put Lehman in a precarious financial situation, and they were forced to file for bankruptcy. A second consequence is sharply rising unemployment. The financial crisis caused a volatile trading market, many small and medium-sized enterprises faced bankruptcy and large companies faced layoffs and other problems. As a result, more and more people are gradually unemployed. Unemployment is a serious problem for the national economy. One of the most obvious and macroscopic effects is that rising unemployment will lead to a contraction in consumption, which means that what is produced will lag sales, causing businesses to close or become uneconomic, which means yet another layoff [7]. This will lead to a decline in GDP. Meanwhile, for the economy, high unemployment means how many workers should be laid off. These laid-off workers will not be able to give any resources to create wealth for a long time. Society and the state need to guarantee their basic livelihood and address their employment prospects, which will certainly tie up a lot of funds to ease their difficulties and promote their re-employment. The high unemployment rate has greatly affected the prosperity and stability of the whole society, making the whole society become relatively unstable and the political situation becomes tense. Furthermore, high unemployment also leads to higher crime rates. More and more desperate laid-off workers may turn to crime as a result.

4. Changes

The U.S. government learnt a valuable lesson in the wake of the 2008 financial crisis. The two most significant pieces of legislation were therefore passed to address and avert a similar financial disaster. The Dodd-Frank Act came first. President Obama signed the Dodd-Frank Act into law in 2010, making it the most extensive financial regulation in the US since the 1930s. The Dodd-Frank Act seeks to reduce systemic risk, offer a security solution for high risks that significant financial institutions might face, increase inspection of risky nonbanks, and reform derivatives trading. After the subprime mortgage crisis, the economy of the United States was hit hard. Two of the most obvious features are persistently high unemployment. The U.S. government began a series of actions to rescue failing financial institutions in an effort to save the economy. This behavior caused dissatisfaction from all walks of life and people and began to blame the greed of financial institutions and the lack

of adequate supervision of financial institutions by the US government. This is also why there has been a strong public outcry for financial reform. The Dodd-Frank Act is divided into three important parts. The first step is to increase the power of the regulatory system. People will put systemic risk regulation into practice and organize a council to oversee financial stability. Previously, insurance regulators did not have the authority to oversee institutions that made subprime loans and the like. Since then, the task of recognizing financial system instability, enforcing market discipline, and managing possible risks has fallen under the purview of the Financial Stability Oversight Council. Determine which financial institutions have a significant impact on the financial system, call on the Federal Reserve to give these institutions more attention, modify the "too big to fail" status of financial institutions, and minimize systemic risks. By establishing a Consumer Financial Protection Bureau, which would regulate mortgages, credit cards, and other personal financial products, it would strengthen investor and consumer protections by ensuring that consumers are informed about the products before making decisions and preventing predatory terms and dishonest business practices by financial institutions. The third component would tighten oversight of the derivatives markets by entrusting the duty of overseeing excessive speculation and derivatives trading to the SEC and CFTC. This legislation aims to the maximum extent possible to close the gaps in American financial regulation, increase loan issuing and insurance company oversight, guarantee stock market stability, and prevent a repeat of comparable financial crises. Basel III is the second contract. Basel III is the primary international regulatory framework for bank capital and risk that the Basel Committee created [8]. The United States is not a member of the Basel Committee. One of the Bank for International Settlements' four standing committees, it is composed of bank regulators from various nations. Basel is a crucial regulatory standard for the global banking sector and is one that has a significant impact on banks. Basel III is the result of a nearly decade-long overhaul of Basel II. Basel III has three of the most important topics. The first is higher capital adequacy requirements, which are designed to improve banks' ability to absorb losses in a recession and reduce the risk of being "too big to fail" [9]. The second is to introduce a leverage ratio. This is intended to close gaps in capital requirements calculations for assets that are converted using weighting coefficients. The third recommendation is to improve liquidity management, lower banking system liquidity risk, and implement liquidity supervision indicators [10]. This is to strengthen regulation of banks and markets. The creation of these two acts and agreements has helped to better regulate global economic markets and thus reduce the likelihood of a catastrophic global financial crisis.

5. Conclusion

In conclusion, the financial crisis is a global financial disaster. There may be many reasons for the formation of the financial crisis, such as the inadequate supervision of the bank supervision department, the excessive issuance of subprime loans by the bank, and the issuance of large unconventional and huge insurance policies by the insurance institutions. However, apart from man-made financial crises caused by financial institutions and banks, there are also other causes of financial crises caused by special disasters or wars. For instance, the low epidemic of the new coronavirus in 2019 led to the worldwide economic shutdown, the loss of many jobs, and the threat of closure for small and medium-sized businesses. The global prohibition of international travel and the incapacity of international shipping due to COVID-19 have a particularly negative impact on small and medium-sized businesses engaged in overseas trade. Therefore, small and medium-sized enterprises involved in foreign trade are difficult to maintain not low operating costs. On top of that, the Russia-Ukraine conflict broke out in 2022. As a result, many countries around the world imposed economic sanctions on Russia, which also affected the prices of oil, gas and steel. This is because Russia is mainly engaged in foreign trade such as oil, gas and steel industries. Once the global economic sanctions against Russia, then the global economy will also be affected. Within limits, however, the government could strengthen regulation of banks and financial institutions by revising

more coherent economic laws and agreements to prevent a repeat of the 2008 financial crisis caused by subprime lending and the housing bubble.

References

[1] Prize in Economic Sciences. NobelPrize.org. (2022, October 10). https://www.nobelprize.org/economic-sciences/. Last accessed 2023/1/22.

[2] The 2007-2008 financial crisis in Review. Investopedia. https://www.investopedia.com/articles/economics/09/financial-crisis-review.asp. Last accessed 2023/1/22.

[3] Federal Reserve Board - Monetary Policy. https://www.federalreserve.gov/monetarypolicy.htm. Last accessed 2023/1/22.

[4] What is a subprime mortgage? credit scores, interest rates. https://www.investopedia.com/terms/s/subprime_mortgage.asp. Last accessed 2023/1/22.

[5] What is a credit default swap (CDS), and how does it work? https://www.investopedia.com/terms/c/creditdefaultswap.asp. Last accessed 2023/1/22.

[6] Investment firm insolvency: reform of the client money distribution and special administration regimes. https://www.nortonrosefulbright.com/en/knowledge/publications/87b6e5c3/investment-firm-insolvency-reform-of-the-client-money-distribution-and-special-administration-regimes. Last accessed 2023/1/22.

[7] Hakim, C. The Social Consequences of High Unemployment. Journal of Social Policy, 1982, 11(4), 433–467.

[8] Basel III: What it is, capital requirements, and implementation. https://www.investopedia.com/terms/b/basell-iii.asp. Last accessed 2023/1/22.

[9] Basel III: An Essential Guide. https://www.delphix.com/glossary/basel-iii. Last accessed 2023/1/22.

[10] Basel III: The Liquidity Coverage Ratio and liquidity risk monitoring tools. Basel Committee on Banking Supervision. Bank for International Settlements, 2013.