

In-Depth Analysis of the 2008 Financial Crisis

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Abstract. The financial crisis began in the 19th century. The international financial crisis has the remarkable characteristics of wide scope and great impact. Almost no nation in the world is untouched by the global financial crisis after it starts, and the losses incurred can take a long time to fully recover from and even continue to have an impact on the world economy. This paper chooses the most significant 2008 financial crisis as the study object and conducts a thorough analysis of it based on the basis in fact of the 2008 financial crisis brought on by the global financial crisis in the United States. The 2008 financial crisis was the worst crisis the world economy has encountered since the Great Depression of the 2030s. The global credit market and capital market have received an unprecedented and violent impact, and the economic development of many countries around the world has stagnated or even declined. By studying the causes, consequences and corresponding adjustments and changes of the 2008 financial crisis, we can grasp the international economic environment more scientifically and analyze the trend of world economic development after the financial crisis from a more targeted perspective.

Keywords: Subprime loans; Dodd-Frank Act; Federal Reserve.

1. Introduction

Ben Bernanke, Douglas Diamond, and Philip Dibrogue were honored for "research on banking and financial crises" when the list of 2022 Nobel Prize in Economics winners was revealed in the late afternoon of October 10 (Beijing time). Our understanding of the function of banks in the economy, particularly during the financial crisis, has been significantly increased. One of the key findings of their research is why avoiding bank failures is crucial. Their analysis has important practical implications in regulating financial markets and responding to financial crises. Tore Ellingson, chair of the Economic Science Prize Committee, said: "The insights of the laureates enhance our ability to avoid severe crises and costly bailouts [1]. It is worth mentioning that Ben Bernanke, one of the winners of this economics prize, served as chairman of the Federal Reserve during the global financial crisis. This demonstrates the need of studying the financial crisis, particularly given the current global environment, the complicated economic position caused by the new coronavirus, and the Russian-Ukrainian Conflict.

With the gradual advancement and in-depth development of economic globalization and financial integration, as well as the continuous upgrading of information technology, short-term international capital has been significantly improved in terms of scale, flow channels and speed. A country's economy will benefit from the infusion of scarce foreign cash and managerial expertise, but if the national or global economic environment changes drastically, the "halt" or "reverse" of foreign capital flows could have a significant negative effect. Large-scale global capital flows have always been present in conjunction with financial crises. Therefore, how to rationally use international capital to promote domestic economic development and technological progress while preventing the possible impact of international capital flow is a research topic with both theoretical and practical significance [2]. The United States' economic might surpassed that of all other nations between the end of the 19th and the start of the 20th century, making it a superpower with the quickest economic growth, the highest level of technological and scientific advancement, and the support and influence of enormous monopoly capital groups. With exception of Pearl Harbor, its motherland generated money during both world wars instead of losing anything. When compared to all other nations combined, its GDP made up 50% of the global economy after the Second World War [3]. The U.S., which has the largest financial market in the world, has a relating to financial regulatory structure that many other nations

have adopted and learnt from. After the US financial crisis started in 2008, Western nations like the US and Europe experienced capital operation issues one after the other. The finance system and institutions started to exhibit clearly negative earnings, and the financial sector rapidly degenerated from the initial turmoil to collapse. The continuous increase in bank interest rates directly leads to a sudden increase in the repayment pressure of lenders, and it is difficult to recover bank loans. It eventually led to the emergence of a bubble economy, an imbalance between financial supply and demand, and eventually a financial crisis. The global financial crisis of 2008 hit several wealthy nations in addition to Europe, Japan, and other countries for the first time since it originally started in the United States. A black swan incident occurred on January 21, 2008, causing the London FTSE 100 index to close at 5578 points, a 5.5% decrease from the previous year. The Paris index closed at 4744, down 6.8%, and the Frankfurt index closed at 6790, down 7.2%. Stocks in Asian nations and regions, including Tokyo, Hong Kong, and Indonesia, also experienced steep declines. The Shanghai Composite Index dropped below the three key support levels of 5,100 points, 5,000 points, and 4,900 points in the afternoon, and the A-share market had its biggest plunge in half a year.

2. Cause

The global financial crisis that began on Wall Street in the United States in 2008 had a significant influence on the economies and politics of other nations. Causes of the crisis are complex, but this article argues that low interest credit and lax lending standards in the United States at the time contributed to the creation of subprime loans, subprime loan based CDS, and the lack of regulation of CDS. As a result, the 2008 international financial crisis broke out quietly without warning.

A housing bubble resulted from the federal government's stimulus-driven policies driving up property prices. According to the National Bureau of Statistics, more than 68% of US citizens must resort to a mortgage to buy a house, which is one thing. On the other hand, since housing is a basic necessity, its qualities suggest that the price of property may tend to increase, which might result in extraordinarily significant profits for producers. As a result, capitalists who are driven by greed, huge profits, and the law of excess profit continue to build homes for sale, but because of the growing housing prices, many Americans lack the savings necessary to purchase real estate. This is how relative overproduction and inadequate effective demand conflict. Insufficient effective demand and relative overproduction led to the global financial crisis of 2008, but they were disguised as excessive virtual demand and relative overproduction. The invention of loans allowed individuals to purchase homes and other goods in advance during a time when they couldn't afford to do so and business owners wanted to sell them to them to make large profits. The fake need for housing among individuals has tremendously expanded, but this want is fictitious. It is driven by avarice, which in turn leads to subprime mortgages being given to borrowers with bad credit and inadequate repayment capacity. The inconsistencies of the present will only be carried into the future by this type of behavior, and eventually they will explode [3].

Some lenders offer subprime mortgages to clients with bad credit and low salaries. After the recession of 2001, the U.S. housing market flourished greatly encouraged by extremely low interest rates, contributing significantly to the economic recovery and ensuing steady expansion, and the subprime mortgage sector expanded quickly. Although many consumers in the subprime mortgage industry could not repay their loans on time as a result of the U.S. housing market's sharp cooling and rising interest rates, some lenders suffered significant losses or even went out of business as a result. The U.S. subprime mortgage crisis of 2008 fueled investor worries about the state of the country's financial systems as a whole and the possibilities for economic development, causing the stock market to see dramatic fluctuations in the years that followed. The subprime mortgage crisis was the initial sign that the real estate bubble in the weakest sector of the financial system had burst. The American real estate bubble burst, leaving many low- and middle-income people unable to pay back their mortgages. As a result, many families sold their homes at steep discounts, which led to a dramatic reduction in housing demand and a drop in real estate prices, which exacerbated the real estate

bubble's deflation. It can be said that subprime loans are only the weakest link in the entire real estate loan, and it is also the first link to bear the brunt of the real estate bubble burst [4]. More importantly, the subprime crisis cannot be solved by the direct intervention of central banks. The way the world's major central banks deal with the subprime mortgage crisis is always a joint intervention of injected funds, which only provides some emergency loans to institutions whose capital chains are on the verge of breaking, even if it buys them time to solve the problem, but it is obviously unable to fundamentally solve the problems of the subprime loan market itself. Over time, banks stop performing these risky transactions in accordance with standard standards due to the significant risk of leveraged operations. So someone devised a technique to treat leveraged investment as "insurance." The name of this insurance is CDS. Large-scale financial derivatives, including CDS based on subprime loans, further aggravated the financial crisis of 2008.

The subprime mortgage crisis, which started in the US home market in the second half of 2007, rapidly spread to the rest of the world. To address this crisis, the US federal government has provided trillions in bailout funds, and foreign governments have also made significant financial investments to reduce the financial system's lack of liquidity. The bad debts of the subprime mortgage itself are only a few hundred billion yuan, but the subprime mortgage crisis is getting worse. The reason is most likely CDS. Investment banks often use 20-30 times leverage to earn huge profits to avoid risks, so they buy an "insurance" for their investment, that is, sign a CDS contract. The U.S. government maintained a low interest rate policy for a long time before the outbreak of the 2008 financial crisis, property prices continued to rise, and bank lending reviews and lending standards became more and more relaxed. Many people apply for subprime loans to invest in real estate, and house prices in the United States continue to rise. Bank of America uses asset securitization to package and sell subprime mortgage ratings to investment banks or hedge funds. To address the issue of selling these loan packages, the underwriters issued CDS. CDS is traded on financial markets as an independent security. At the same time, the Bank of America made a second loan of the funds obtained, so a mortgage was enlarged several times. Subprime mortgage borrowers were unable to pay back their loans on time as a result of the housing bubble crash and the Federal Reserve's subsequent interest rate increases; as a result, defaults soared and CDS's credit terms were activated [5]. Furthermore, because CDS transactions are over-the-counter financial instruments, most participating financial institutions are not required to reveal the size of their holdings of these products, and most banking institutions do not release relevant data while executing relevant transactions because they involve proprietary information, making it even harder for financial markets to assess market risk conditions, and it will be especially difficult in the case of CDS contracts, which are not disclosed.

3. Consequence

The worst serious crisis to affect the world's financial markets since the 1930s occurred in 2008. As the spread's reach quickly expanded from local to worldwide, from Western rich nations to emerging nations, and from capital markets to the actual economy, established economies like the United States, Europe, and Japan entered a recession, developing countries' economic growth slowed, and the global economy took a significant hit. During the evolution from the financial crisis to the recession, the prices of primary commodities such as international energy and metal ores fluctuated sharply. International oil prices fluctuated sharply, and the price of New York Light crude oil futures soared from \$90 per barrel in early 2008 to \$147 per barrel in mid-2008 and fell sharply to \$44.6 per barrel at the end of the year. Commodity prices such as gold, agricultural commodities and minerals have also experienced such sharp shocks. The concentrated deleveraging of financial institutions has led to a further decline in the value of various financial assets and a high degree of financial liquidity. The global capital market has been sharply adjusted, with the Morgan Stanley Capital Market International Index falling by more than 45% from the beginning of the year, and the cumulative loss of global financial assets such as stocks, bonds and financial derivatives exceeding \$50 trillion [6].

On September 10, 2008, Lehman Brothers filed for bankruptcy protection. As a global investment bank founded in 1850. For overall research strength, Institutional Investor ranked BusinessWeek and International Finance Review as the top two investment banks in 2000 and 2002, respectively. Lehman Brothers served as a sizable, comprehensive, and varied investment bank that met the financial demands of international businesses, organizations, governments, and investors. Lehman Brothers is one of the world's most powerful underwriters and dealers of stocks and bonds. Its financial strength has backed its leadership in the business sectors in which it works. Additionally, the organization provides significant financial advice to numerous governments and multinational corporations all over the world, and it employs some of the greatest analysts in the field who are recognized globally. As a large, excellent investment bank that once attracted much attention, it was not spared the storm that swept the world in 2008.

The unemployment rate was still above 10% in the early 1980s of the 20th century, but in the 1990s, the country entered a "golden age" of economic expansion and employment development, and in 1998, the rate of unemployment in the country dropped to around 4.5%. However, affected by economic globalization and many uncertainties, the employment situation in the United States after entering the 21st century is not optimistic, reaching 6% in 2003, the highest level in the past nine years. More so than during the previous two economic crises, the United States' employment and unemployment rates reached a turning point in 2007 and the labor market condition deteriorated (1990 and 2001). The unemployment rate in the US reached 10.2% in October 2009, which is the highest level in 26 years of US history, according to figures [7].

4. Changes

The Dodd-Frank Act, which regulates the real estate industry, is one of many measures that the U.S. federal government has introduced. The Dodd-Frank Wall Street Reform and Consumer Protection Act, a law addressing regulatory reform in the financial industry, was signed by the then-President of the United States, Barack Obama, in July 2010. The Dodd-Frank Act's real estate financial sector provisions are primarily concerned with improving credit rating oversight and asset-based mortgage reform. Eight provisions make up Chapter 14 of the Mortgage Reform and Anti-Predatory Lending Act, which is intended to ensure that debtors are matched with their mortgage loans and that loan terms and the lending procedure are open, reasonable, clear, and free of fraud. To ensure that the lender provides a suitable mortgage to the borrower, Chapter XIV, Section 1, "Criteria for Origination of a Residential Mortgage", states that the mortgage originator shall not collect fees directly or indirectly, and that any manipulative manipulation of the residential mortgage loan is prohibited. The most important thing about a good home mortgage is to make sure that the lender has a good ability to repay. Therefore, the Act requires in Section 2, Section 1411 of the chapter that a loan be granted after confirmation that the borrower has sufficient repayment capacity. The Act also defines a "qualified mortgage" in Section 1412, which strictly regulates the debt-to-income ratio, the amount of installment repayments, the term of the loan, etc., and allows the "qualified mortgage" to be exempted from the penalty of early repayment in Section 1414. Chapter 14, Section 6, "Valuation Activities", also requires accurate determination of the latest true value of the mortgaged house, control of the loan-to-value ratio to ensure repayment ability and provide a basis for measuring the real-time risk level of residential mortgage loans [8]. In the second quarter of 2014, the Dover Act added a new swap trading platform and eliminated DTEF, the previously limited over-the-counter regulatory platform for covered products. On the new SEF platform, many participants will be able to place buy and sell quotes or conduct swap transactions. The bill requires that small-scale OTC derivatives must be regulated. The emergence of SEF strengthens the market foundation, creates a more efficient price discovery mechanism, increases transparency, and standardizes many swap contracts, helping small money traders enter the market to enhance liquidity, and ultimately reduce insider trading and other market abuses [9]. The Dodd-Frank Act opened the barrier to market

information asymmetry for American citizens and greatly improved the quality of home mortgage implementation.

After the 2008 global banking crisis, banking regulators revisited their rules. Federal Reserve Chairman Ben Bernanke said on October 23, 2009, that the Fed would strengthen its oversight of banks' funding adequacy to ensure that the banking system could set aside sufficient funds in difficult times. On the same day, the Federal Reserve Insurance Corporation announced that it had taken over seven failed banks again. So far, 2009 has become the year with the most domestic bank failures in the United States since 1992. Bernanke, then chairman of the Federal Reserve Board, said the Fed was considering a series of measures to ensure that financial institutions had sufficient funds to deal with it. In its risk management and liquidity management issues, the Fed will ensure that the compensation levels of financial institutions act as incentives for performance and risk-taking. Bernanke said the Fed's increased regulation of banks' capital adequacy ratios is to avoid a repeat of the global financial crisis. He said Congress should ensure that all systemically important financial institutions are included in an effective mechanism for unified supervision, even those that are unbanked but whose failure could negatively impact the entire financial system [10].

In addition, the Federal Reserve introduced a new stress test on February 25, 2009. Although the crisis cannot be completely solved this time, the effect is obvious. First, the test increases the transparency of the banking system, which is conducive to bringing more individual capital to the financial system and improving the bank's ability to lend in the future. Second, stress tests show how strong and weak banks are. Concerns about banks' viability have also affected the ability of strong banks to raise capital and resume lending [11]. The U.S. government hopes to make a certain division between strong and weak banks, to minimize the need for well-funded and strong banks to be dragged down by weak banks that are about to be liquidated and win market confidence. More importantly, it shows the official attitude of the US government to ensure that the core capital of commercial banks is sufficient, and that commercial banks in the United States will not fail on a large scale in the future.

5. Conclusion

The most crucial aspect of the contemporary economy is finance. The development of the contemporary economy depends critically on the financial system's ability to operate steadily. Even the complete disarray of the financial system and a financial crisis might result from financial instability. The financial crisis also follows a universal development law, making it crucial to analyze the crisis and summarize the lessons learned in light of this law in order to create an efficient risk management system, enhance the market supervisory system, and encourage the financial market's steady development. Governments tried to strengthen the resilience and robustness of the financial system in the wake of the financial crisis, which originated with the global financial crisis in the U.S. and spread to the rest of the globe in 2008. Although a unified and fixed analytical mode to address the financial crisis is challenging, a thorough study of it is helpful in accurately choosing the timing and particular steps to address the financial crisis and ensuring that the economy recovers. Be prepared for danger in times of peace, take precautions, take precautions, and always be alert to a reversal of the economic situation in today's economic prosperity. Deepening the research on the formation mechanism and response measures of the financial crisis, timely summarizing the experience and lessons learned of various countries in the rescue of the financial crisis and improving the ability to respond to the financial crisis in multiple dimensions are undoubtedly of great practical significance to the prosperity and stability of the global financial market and the future economic development.

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