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Global Financial Crisis and Risk Management

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Abstract: This paper explores the 2008 financial crisis. It looks at its causes, consequences, and the changes that were effected to prevent the global economy from a similar crisis in the future. The crisis began in the United States, spread quickly, and ended up affecting the global population's jobs, homes, and savings. The paper identifies the Federal Reserve's financial policies, subprime mortgages, and credit default swaps (CDS) as the main causes of the 2008 financial crisis – each of these factors played a significant part in leading to the crisis. The combination of these factors made the effects of the 2008 financial crisis even more severe, leading to a broader economic downturn. The consequences of the crisis included increased regulation of the financial industry, government intervention through bailouts, a decline in housing prices, higher unemployment rates, and the breakdown of significant several major banks and financial institutions. These consequences were severe and governments had to come up with solutions to prevent a similar happening in the future through measures like the Dodd-Frank Act and the Basel III framework.

Keywords: financial crisis, government intervention, banking regulation

1. Introduction

The 2008 financial crisis was a turning point in the history of the global economy, triggering a recession that had far-reaching effects on financial systems, governments, and individuals worldwide. It is regarded as the worst economic crisis to hit the world since the Great Depression. The crisis originated in the United States and spread fast to other parts of the world with its impact being felt throughout the world. Several factors can be attributed to the 2008 financial crisis, including the housing market bubble and financial deregulation. The proliferation of various complex financial instruments was also a serious factor in the 2008 financial crisis. According to Murphy, financial approaches such as theoretical modeling based on unrealistic assumptions led to mispricing in a massively unregulated market for credit default swaps following the high residential mortgage defaults [1]. This statement shows the role of housing marketing and unregulated financial approaches contributing to the crisis. The effects of this crisis were severe, with people losing their jobs, homes, and even savings.

The Federal Reserve played a significant role leading to the 2008 financial crisis as Lin and Treichel explore [2]. The country's banker's low interest-rate policy, lack of appropriate financial regulations, and housing policies that facilitated the expanding mortgage market to low-income borrowers greatly fueled the 2008 financial crisis. Additionally, the crisis was a result of excess demand in the United States due to public debt, tax cuts, and overconsumption by households, which

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contributed greatly to the housing bubble and the subprime mortgage boom and bust [2]. The 2008 financial crisis did not happen overnight but was a result of continued financial deregulations by the government and financial institutions. The U.S. subprime mortgage boom and bust are closely related to subprime mortgage defaults and housing prices, thus the mortgage or housing market bubble that contributed to the 2008 financial crisis [3]. Sanders observes how more people defaulted on their subprime mortgages faster than it was anticipated as house prices dropped. Banks and other financial institutions introduced new loan and mortgage products to satisfy the insatiable demand for mortgages as house prices fell more; this led to the housing bubble, fueling the 2008 financial crisis.

The banking system was greatly affected following the 2008 financial crisis. Consequently, there was a need to develop and implement viable solutions to help the world economy to recover from the 2008 financial crisis. The first and most crucial solution was to solve bank insolvency crises. In their text, Zahariev et al. explore various policies for managing bank insolvency challenges in different countries as a way of handling financial crises [4]. These policies include the elimination of toxic elements from the banking system through voluntary insolvency, support for troubled institutions through nationalization and reform plans, and the liquidation of toxic elements through regulatory insolvency procedures. Every policy has its advantages and disadvantages. Therefore, it is important that international regulators develop new testing and address bank stress so as to provide early warning of insolvency. COVID-19 is yet another pandemic that almost led to a scenario similar to the 2008 global financial crisis. As so, stakeholders have come up with new ways for stress testing to ensure the creditworthiness of companies, households, banks, and countries or states. Zahariev et al. propose the Basel III framework as an important tool for identifying vulnerabilities in banking systems [4]. Generally, it is important to have effective crisis management policies to enable banks to stay stable and resilient during economic and financial shocks like the one that took place in 2008.

2. Causes

The 2008 financial crisis happened due to various factors and happenings, including the Federal Reserve’s monetary policies and regulations that led to the housing market bubble, subprime mortgages, as well as credit default swaps. All these factors contributed to the crisis differently, but their combined impact made the effects of the 2008 financial crisis even more severe.

2.1. Monetary Policy

The 2008 financial crisis presented challenges and mishaps to banks, including the Federal Reserve. There was a need to take action to reduce the damage the crisis was causing the economy. However, the Fed was initially to blame for the crisis – its monetary policy contributed to and even accelerated the crisis. According to Lin and Treichel, the Federal Reserve was a significant party to the 2008 financial crisis through what it viewed as fast “innovativeness” to shelter the economy from dipping even further [2]. Some of the Fed’s financial policies that led to the crisis include the low-interest rate policy, poor financial regulations, and housing policies that accommodated the expanding mortgage market to everyone, including those who had poor credit scores or ratings.

In the years leading to the crisis, the Fed had kept interest rates too low for too long, which led to the development of a housing bubble as home prices rose rapidly, fueled by speculation and easy access to credit. The Fed had also encouraged the growth of the subprime mortgage market, which allowed people with low credit scores and little or no income verification to obtain mortgages with low teaser rates that would later reset at higher levels [3]. Furthermore, the Fed's policy of deregulation, which allowed financial institutions as well as banks to take part in high-risk and complicated financial transactions, also contributed to this crisis. The majority of banks and financial institutions had invested heavily in mortgage-backed securities and other complex financial

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instruments that were now worth far less than their original value. This triggered a wave of bank failures, causing a freeze in the credit markets and leading to a broader economic downturn.

2.2. Subprime Mortgage

Subprime mortgages were also key factors in the 2008 financial crisis. A subprime mortgage refers to a loan type given to individuals who have a below-average credit score, thus, would not qualify for conventional mortgages, making them a high credit risk. As a result, lenders offer these mortgages at higher interest rates [5, 6]. Subprime mortgages became popular in the United States in the early 2000s, where lenders would offer them at adjustable interest rates a few years into the arrangement. Borrowers would start with low-interest rates but would face much higher rates after a few years. This arrangement means it is easier for borrowers to qualify for loans, but it also put them at a higher risk of defaulting on their mortgages.

As the housing market bubble took a toll on the economy, the majority of subprime borrowers continued signing up for mortgages that they could not afford, with little or no down payments. The housing or mortgage market eventually crumbled in 2007, leaving many borrowers unable to meet their mortgage payments. Many of them defaulted in their subprime mortgages as Sanders observes [3]. As more borrowers defaulted, the effect was felt throughout the financial system. Banks and other financial institutions that had made large investments in subprime mortgages suffered heavy and unbearable losses, as the value of these mortgages plummeted. This led to a liquidity crisis, as financial institutions were unable to meet their obligations to other institutions and investors. The subprime boom and bust of the mortgage market also had a ripple effect on the broader housing market [3]. More homes were foreclosed upon as borrowers were unable to make their mortgage payments. As a result, the supply of homes on the market increased, leading to a decline in the prices of houses. This, in turn, led to more defaults and foreclosures, creating a downward spiral that contributed to the overall economic downturn.

2.3. Credit Default Swap

CDS, as a financial instrument, also contributed significantly to the 2008 financial crisis. CDS are financial contracts between two parties where one party agrees to pay the other party if a specific financial asset or security, such as a bond or mortgage, defaults [7, 8]. In simple terms, CDS was some sort of insurance or guarantee against the borrowers' risk of defaulting on their mortgages.

However, CDS were often sold and traded in a manner that made them very risky since they were entirely unregulated as Murphy points out [1]. Some financial institutions sold and bought CDS in large quantities without having enough capital to pay out if the underlying security actually defaulted. This practice of buying and selling CDS became so widespread that it created a market for them. As the subprime mortgage market began to deteriorate and defaults increased, the value of these securities and the CDS that were tied to them plummeted. The widespread use of CDS and the lack of transparency in the market denied financial institutions the ability to analyze and understand their own exposure to the risk of default [9]. This uncertainty made people, particularly investors become less confident with the financial system, causing them to pull out their money and exacerbating the crisis.

Moreover, the fact that the financial system works as a single unit meant the failure of one would lead the others into an unavoidable downfall, spreading the risk of default to other institutions. This was precisely what happened during the 2008 financial crisis. The collapse of large financial institutions like Lehman Brothers, which had significant exposure to CDS, led to a loss of confidence in the financial system and contributed to the overall market panic. Overall, the use of CDS contributed to the 2008 financial crisis as it created a market for risky financial instruments that were

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not properly regulated or understood, leading to a loss of confidence in the financial system and a domino effect of failures among institutions that were interconnected through these instruments.

3. Consequences

The effects of the 2008 financial crisis were on a global scale. Its consequences were far-reaching, affecting many aspects of the global economy. From individuals and institutions to states and countries, the effects or impact of the 2008 financial crisis was felt everywhere across the world.

One of the most significant and notable consequences of the global financial crisis was the breakdown of several major banks and financial institutions, such as Lehman Brothers, Bear Stearns, and AIG [4]. This led to investors losing confidence in the financial sector. The breakdown of these banks resulted in bankruptcies, mergers, foreclosures, and bailouts, causing a significant disruption to the global financial system [1]. The 2008 financial crisis also led to a rise in unemployment rates as many employers and companies downsized and went bankrupt. Some firms also underwent foreclosures. Consequently, consumer demand and expenditure declined, weakening the economy even more. The decline in housing prices which had been artificially inflated by the subprime mortgage market was yet another notable consequence or result of the global financial crisis of 2008 [3]. As the housing market bubble became more apparent, the majority of homeowners found themselves in mortgage debts as they were required to pay more than what their homes were worth. The result was more foreclosures and a further decline in the housing and mortgage market. Lenders also lost a lot as more borrowers defaulted on their loans and mortgages.

Additionally, governments around the world were forced to take drastic measures to salvage and stabilize the financial system. Such measures include bailouts by injecting money into failing banks and financial institutions to help them get back on their feet. For instance, the Federal Reserve implemented new lending policies, based on sound legal and economic foundations, to help financial institutions remain solvent. That way, it mitigated the panic among these institutions. An example of such is the Term Asset-Backed Securities Loan Facility (TALF), which the Federal Reserve implemented in conjunction with the Treasury. Through TALF, the Federal Reserve supplied the liquid funding, while the Treasury assumed the credit risk [10]. However, these government bailouts were met with public outrage, as taxpayers were forced to foot the bill for the irresponsible actions of banks and financial institutions. The crisis also made it necessary to regulate the financial industry more, as governments aimed to mitigate future occurrences. The Dodd-Frank Wall Street Reform and Consumer Protection Act (discussed in the next section) was passed in the United States in 2010, which imposed stricter regulations on the financial industry and established new government agencies to monitor and regulate the sector.

Other consequences of the 2008 financial crisis include economic contraction as many businesses failed, loss of public trust in financial institutions, increased economic interdependence, and the need for better international cooperation and coordination. Overall, the 2008 financial crisis had a significant and lasting impact on the global economy, leading to widespread job losses, bankruptcies, and bailouts, as well as increased regulation of the financial industry.

4. Changes

As mentioned above, several changes had to be effected to effectively handle the 2008 financial crisis and restore the global economy. These changes include Dodd-Frank Act and the Basel III Framework.

4.1. The Dodd-Frank Act

The Dodd-Frank Act, usually referred to as The Dodd-Frank Wall Street Reform and Consumer Protection Act is a federal law that was passed in 2010 as a reactionary measure to the 2008 financial

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crisis. The act was designed to prevent the possibility of the recurrence of the events that led up to the 2008 financial crisis. Its core motives were to enhance transparency and accountability in the financial system while extending more protection to consumers.

The government interferes with the housing market by introducing several acts such as the Dodd-Frank Act as it includes various provisions for reducing systemic risks and making the financial system more stable. Murdock explores the Dodd-Frank Act with regard to the financial crisis and its possibility of preventing similar crises in the future [11]. The act has several components. One of the key ones is the creation of the Financial Stability Oversight Council (FSOC), whose main mandate is identifying and monitoring systemic risks in the financial system. The other critical provision is the creation of the Consumer Financial Protection Bureau (CFPB), which is responsible for regulating financial products and services that are marketed to consumers. The CFPB is designed to protect consumers from abusive and predatory lending practices and ensure that financial products and services are transparent and easy to understand.

Besides the creation of the FSOC and CFPB, The Dodd-Frank Act also aims to improve transparency and accountability in the financial industry. That is where the regulation of banks and other financial institutions comes in. For example, the act mandates all banks to disclose information about their activities and holdings. The act also establishes new regulations for credit rating agencies to ensure that every financial institution, including banks, provides accurate and unbiased ratings of their financial products. Although The Dodd-Frank Act ensures transparency and accountability in the financial system, adequate regulation of financial products and services, and better consumer protection, some criticize it for being too complex and burdensome for businesses. However, the act was a significant step toward preventing another financial or similar crisis in the future. For instance, it would be difficult or impossible for banks to extend subprime mortgages and cause another housing market bubble, thus, a financial crisis as they are subject to the provisions of the Dodd-Frank Act.

4.2. Basel III Framework

Given that banks and other financial institutions played a part in the actions leading to the 2008 financial crisis, there was a need to regulate and protect them from the vulnerabilities and uncertainties of the market. The regulatory framework governing banks and their capital adequacy had to be reformed. That is where the Basel Committee on Banking Supervision introduced the Basel III framework. King and Tarbert define Basel III as a set of international regulations designed to improve the resilience of the banking system and reduce the likelihood of future financial crises [12]. According to Zahariev et al., the Basel III framework is a crucial tool for identifying the vulnerabilities in the banking systems [4].

One of the main changes initiated under Basel III was an increase in the minimum level of holding capital for banks to ensure they have enough buffer to remain solvent during financial crises. Basel III also introduced new liquidity requirements – banks are required to hold a specific amount of high-quality assets that can be quickly and easily liquated during crises. Additionally, Basel III established new rules for calculating risk-weighted assets, which are key in determining banks’ capital requirements. That way, banks cannot employ overly optimistic risk models when ascertaining their capital. Basel III increased banks' minimum capital adequacy ratio, which is a measure of capital as a percentage of its risk-weighted assets, from 8% to 10.5% [13, 14]. Therefore, banks were required to hold more capital to withstand potential losses and reduce the likelihood of becoming insolvent during financial crises. Overall, the framework aimed to strengthen banks’ capital base, improve risk management approaches and establish new liquidity and leverage requirements to reduce systemic risk to ensure that banks could withstand financial crises in the future.

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5. Conclusion

The 2008 financial crisis shook the world's economy to its core. Its impacts were felt everywhere. It resulted from various factors, including the Federal Reserve's monetary policy, subprime mortgages, and credit default swaps. Financial systems, governments, and individuals worldwide were significantly affected by the crisis. People lost their jobs, homes, and even savings. The subprime mortgage market, in particular, played a significant role in the crisis as lenders offered loans to high credit risks at high-interest rates. These borrowers were unable to make their payments, leading to a significant number of defaults and foreclosures, creating a downward spiral and a housing market bubble that contributed to the overall economic downturn. As a result, governments and the global community had to establish and implement measures, such as the Dobb-Frank Act and Basel III, to prevent the possibility of a similar financial crisis in the future. Therefore, it is highly recommended that governments and stakeholders keep implementing and refining measures aimed at preventing another financial crisis like that of 2008.

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