

The 2008 Subprime Mortgage Crisis in the USA

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Abstract:

The 2008 financial crisis, triggered by the collapse of the U.S. subprime mortgage market, revealed deep vulnerabilities in the global financial system. Rooted in financial deregulation, aggressive lending practices, and the subsequent housing market bubble, the crisis quickly spread across borders due to the interconnectedness of international financial institutions and markets. Today, despite regulatory reforms, the risks of financial contagion persist, heightened by advancements in financial technology, faster capital flows, and increasingly complex global financial networks. To mitigate future crises, a global approach to systemic risk management is crucial, with stronger financial transparency, coordinated international regulations, and mechanisms to manage cross-border capital shocks.

Keywords:-subprime crisis; Financial network; Global risk.

1. Introduction

The subprime mortgage crisis in 2008 was the worst financial crisis since 1929 around the world. However, how can we imagine that the worst financial crisis happened in the USA who was thought to own the most regulated financial market in the world. Although the world's economic had already come over the 2008 financial crisis, but the potential risk exposed in 2008 still exist today. This paper will analyze the root cause of the financial crisis in 2008 and identify the potential risk which may bring a new crisis in the future.

2. Historical background

Subprime mortgages emerged because of financial innovation and the deregulation of the banking sec-

tor. Historically, mortgage lending was far more restrictive, with stringent criteria for loan approval [1]. However, starting in the late 20th and early 21st centuries, financial liberalization and the introduction of instruments like MBS led to more aggressive lending practices. This shift allowed more people to access loans, even those with lower credit scores, as financial institutions sought higher returns [2].

2.1 Economic Conditions and Monetary Policies Leading to the Crisis

In the early 2000s, several key monetary factors shaped the U.S. economy, most notably historically low interest rates and a rapidly appreciating housing market [3]. The Federal Reserve's low-interest-rate policies reduced borrowing costs, making homeownership accessible to a broader population. Financial

institutions, eager to capitalize on this environment, significantly increased their exposure to subprime mortgages, offering loans to borrowers with lower creditworthiness in pursuit of higher profits.

2.2 The Housing Market Bubble and Its Collapse

The housing market saw unprecedented growth as speculative investments and easy credit fueled soaring home prices[4]. This surge created a housing bubble, with residential property values increasing at unsustainable rates. However, as interest rates began to rise, many homeowners with adjustable-rate mortgages (ARMs) faced higher monthly payments. Unable to meet these obligations, default and foreclosure rates surged. As home prices plummeted, a growing number of homeowners found themselves “underwater,” owing more on their mortgages than their homes were worth, accelerating the collapse of the housing market.

3. Character of 2008 financial crisis

The 2008 financial crisis quickly spread globally, demonstrating the rapid diffusion of financial risk and the spillover effects inherent in an interconnected global economy. As subprime mortgage defaults rose, the value of MBS and collateralized debt obligations (CDOs) plummeted. Major financial institutions holding these assets faced significant losses, leading to liquidity crises and, ultimately, the collapse of firms like Lehman Brothers. The pathways of spillover from the U.S. to the global economy were multifaceted:

1. Cross-border financial flows: Many international banks and financial institutions had heavily invested in U.S. MBS and CDOs. When these assets devalued, European and Asian banks faced significant losses, creating a global liquidity crunch. The interconnectedness of financial institutions across borders allowed a crisis in one country to quickly affect others [5].
 2. Investor confidence and market contagion: The crisis sparked a global loss of confidence in financial markets. Uncertainty about which institutions held toxic assets led to a freeze in interbank lending, creating a global credit crunch. Stock markets across the world plummeted as panic set in, exacerbating the crisis [6].
 3. Impact on global trade and real economy: As the banking system faltered, businesses found it increasingly difficult to secure loans for operations, severely impacting international trade. Countries reliant on exports, such as China and Germany, saw sharp declines in demand, deepening the economic downturn worldwide[7].
- These spillover channels underscore how tightly knit

global financial systems had become by 2008, allowing what began as a local housing crisis to evolve into a full-blown global financial catastrophe.

4. Challenges today

Since the 2008 crisis, the degree of financial interconnectedness has only increased, and with it, the potential for global systemic risks. Advances in technology, capital mobility, and cross-border investment have deepened the complexity of the global financial network. While these developments have brought economic efficiencies, they have also heightened the risks associated with financial contagion:

1. Complexity of the global financial network: Today, financial markets are even more interconnected through complex instruments such as derivatives, hedge funds, and international portfolios. Different countries around the world were linked strongly with each other in both economics and financial market. As a result, one financial crisis in one country may spread quickly to other countries [8].
2. Larger and faster capital flows: The volume and velocity of cross-border capital flows have surged in recent years, making it easier for financial instability in one country to spread rapidly across borders [9].
3. Financial technology and market reactions: The rise of financial technologies, including high-frequency trading and algorithmic investment strategies, has increased market volatility. These technologies can amplify the effects of market disruptions by executing trades automatically in response to market signals, potentially leading to a synchronized global market reaction. Additionally, the growing prominence of cryptocurrencies and blockchain-related financial products introduces new, untested risks that could spread quickly across traditional financial systems [10].
4. Global supply chains and financial risk: Beyond financial markets, the globalization of supply chains adds another layer of systemic risk. Financial crises can disrupt production and trade, as seen during the COVID-19 pandemic, where supply chain disruptions led to significant global economic shocks. The interdependence of countries for goods and services means that any financial crisis affecting a key link in the supply chain can have widespread repercussions on the global economy [6].

5. Suggestion on the future’s risk management

Given the increased complexity and interconnectedness of global financial markets, future risk management efforts

must move beyond focusing on individual institutions or countries. So here is some suggestion of risk management in the future as below:

1. Global risk management organization: We need to enhance the function and power of the global risk management organizations like BIS and the IMF. Different countries should be open to share the data while the international organization should work more on the cross-border capital flow as well as the identifying and isolating the potential risk at the first time.

2. Strengthening financial transparency and regulatory frameworks: To mitigate future crises, global financial institutions must increase transparency regarding their exposure to complex financial instruments and risky assets.

6. Conclusion

The 2008 financial crisis exposed the dangerous of infectivity of global financial market which indicate one kind of risk can spread quickly to another kind of risk or the risk in one country can spread out quickly to another country. As time passed, the linkage between different country and different market is much stronger than before. As a result, more robust global risk management tool and organization are essential to prevent future disasters as soon as possible.

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