

# Monetary Policy and Housing Bubble

Hanting Shen

Hangzhou Foreign Languages School, Hangzhou, 310023, China

**Abstract.** The 2008 housing bubble and following great recession is considered as the greatest economic shock in the 2000s. The Fed Reserve had set an extremely loose monetary policy during 2002-2006, and it was considered as the main cause of the economic crisis by many economists. This paper examines the role of monetary policy in the US 2008 housing bubble through reviewing the papers written by Taylor J. and Bernanke C. The paper identifies their essential ideas and their demonstration methodologies. It also summarizes other factors that contribute to the housing bubble by researching the other scholars' arguments.

**Keywords:** Monetary Policy; Housing Bubble; The Great Recession; Taylor Rule.

## 1. Introduction

During the first half of this century, the housing price in the US boom and bust, followed with the Great Recession. The economic crisis was so deep and protracted that it spread and caused a big strain on global economic state (Weinberg, 2013). Economists in the past decade had been working hard to identify the sources of this crisis and conclude the lessons for monetary policy, and their conclusions are quite controversial. Some scholars claim that the monetary excesses were the main causes of the burst of housing price. In contrast, the opponents take the attitude that there has no direct linkage between the loose monetary policy and the housing bubble.

This essay will first review the papers written by John Taylor and Ben Bernanke respectively, who hold opposite points of views towards role of government's monetary decision in the collapse of 2008. Then I will access their arguments based on historical data and relevant papers by other scholars. Finally, I will discuss my contention about the source of the US housing bobble and the role of monetary policy during that period.

The first contribution of this essay is to summarize different attitudes towards the role of monetary policy in 2008 housing bubble from previous scholars. Additionally, it aims to form a broad picture of how the loose monetary policies affect other sectors and finally shock the housing price. The study leads to a conclusion that the 2008 housing bubble is a result of interactions of variable factors, including loose monetary policy, lack of supervision and regulation, declining lending standards.

## 2. Literature Review

### 2.1 Taylor's view

Taylor J.(2008) claims that the too easy monetary policy account for the sharp expansion of housing price in early 2000s. Base on his study and analysis about several empirical research projects, the Fed Reserve's interest rate policies appeared to be inappropriate and is responsible for the resulting financial crisis.

In the paper, Taylor presented that from 2000 to 2006, the actual interest rates were well below the ones would have been if the Fed follow the Taylor rule, which links the interest rate to levels of inflation and economic growth (Taylor, 1993). By building up a model and an empirical counterfactual of the estimated house price when the interest rate was set follow the rule, he proved that the unusually low interest rate policy was the major factor in the housing boom.

Taylor also proposed that the government inappropriate interventions prolonged the financial crisis. By pointing out that the increased Libor-OIS spread from 2007 to 2008 coincided with an increased unsecured-secured spread, Taylor suggested that market turmoil in the interbank market was an counterparty risk issue rather than liquidity, which believed by policy makers in the early days.

Moreover, Taylor use cases of how financial markets react to various decisions and events from September to November 2008 to emphasize that the lack of a predictable framework for the support to financial institutions further increased the public worries and worsen the situation.

In conclusion, Taylor believes that government intervention caused, prolonged, and worsened the financial crisis. His implications are, first, Fed should return to the effective principles for setting interest rate. Second, any future government interventions should be clearly based on the rationale. Third, an exceptional access framework for financial assistance provision should be constructed.

## 2.2 Bernanke's view

Bernanke C. (2010) held opposite views with Taylor and argued that the monetary policies in early 2000s cannot be blamed for the housing bubbles. Instead, it is reasonable for Fed to make this loose monetary decision.

According to Bernanke, the approach of comparing Federal Reserve policies during that period to the recommendations derived from Taylor rule is quite limited, since the simple rule exclude a brunch of important factors and details that affect the efficiency of the policy. The precipitation of Taylor's approach will depends sensitively on the accuracy of certain assumptions and how measurements are taken. By using examples of policies about energy price and inflation over the past few decades, Bernanke proved that policies are not precisely following what suggested by the standard Taylor rule because of the time lag. The policy decisions in the early 2000s possibly are forward-looking and aiming for the achievement of long-term goals.

Moreover, Bernanke presented an statistical model that combined seven variables to show that, based on historical data and cross-country evidences, neither monetary policy nor other macroeconomic factors can solely account for the house price bubble.

All in all, Bernanke believes that there is no direct linkage between the monetary policy and 2008 housing bubble. The implication of Bernanke's analysis is that, instead of monetary policies, regulations and supervisions on mortgage underwriting practices and lenders' risk management are required to response housing bubble issues.

## 3. Discussion

The causes of 2008 housing crisis can be complex. Beside of the low interest rate policy of the Federal Reserve suggested by Taylor, a number of failures in the markets due to lack of proper regulation, like what emphasized by Bernanke were contributing to the housing price expansion at the same time.

First, the lending standards appeared to decline since 1990s. Fannie Mae and Freddie Mac, two government sponsored enterprises, dominated the secondary market for mortgage securities. In 1995, they are directed by the U.S. Department of Housing and Urban Development to increase their share of loans to low and moderate-income households. For instance, the percentage of mortgage purchased by low- and moderate-income households are increased from 40 percent to 55 percent between 1996 and 2008 (List, 2011). As a result, the demand for hosing was increased with easier availability of mortgage credit, which driven up the housing prices. However, since loans are sent to individuals with weaker credit, the default and foreclosure rates increased (Tomasz & Amit, 2018). When loan providers realized the risk and starts to withdraw from the market, the housing bobbles were about to burst.

Second, there is a large increase in household leverage from 2002 to 2006, which contributes to the collapse of 2008. In Atif Mian and Amir Sufi's study about the household leverage, house price appreciation and economic recession, they summarized that "the initial economic slowdown was a result of a highly-leveraged household sector unable to keep pace with its debt obligations." (Mian & Sufi, 2009)

What's more, the debt to income ratio reached 135 percent in 2007. Different from other forms of debts, interest payments on home mortgages were tax deductible. This system encouraged households

to wrap their debt into loans against their housing, which make the housing price increase and become vulnerable when facing unexpected economics changes. Therefore, the excessive indebtedness also contribute to the housing bubble and financial crisis (James & Joseph, 2009).

#### 4. Conclusion

Taylor and Bernanke shows opposite opinions towards whether the monetary policies should be considered as the major cause of the U.S. housing bubble. Taylor claims that loose monetary policy and government intervention is responsible for the financial crisis, while Bernanke argues that a regulatory system should be constructed to solve the problems. This essay believes that the loose monetary policy itself cannot result the housing bubble boost and burst solely. Other factors including declining lending standards, excessive leverage, increased household debt also contribute to the house price expansion.

The implication from this study: first, monetary policy plays an important role in economic activities, and it is important for Fed Reserve to properly set the interest rate based on historical data and experiences. Second, the recession is always a result of combination of complex factors, a single factor can never account for all the responsibilities. Clearly, additional research is required to identify other factors and completely interpret the causes of housing bubble. The number of papers I read limited the ability to form further analysis about housing bubbles.

#### References

- [1] Bernanke, B. (2010). "Monetary Policy and the Housing Bubble," Speech at the AEA Meeting, Atlanta, Georgia
- [2] James, G. D., & Joseph, C. (2009). *The Crash of 2008: Causes and Lessons to Be Learned*. University of Wisconsin-Parkside. Retrieved September 2, 2022, from <https://www.uwp.edu/learn/departments/>
- [3] List, J. (2011). *The market for charitable giving - american economic association*. Aeaweb. Retrieved September 2, 2022, from <https://pubs.aeaweb.org/doi/pdf/10.1257/jep.25.2.157>
- [4] Mian, A., & Sufi, A. (2009, November). *Household leverage and the recession of 2007 to 2009*. IMF. Retrieved September 2, 2022, from <https://www.imf.org/external/np/res/seminars/2009/arc/pdf/mian.pdf>
- [5] Taylor, J. B. (2009). "The Financial Crisis and the Policy Responses: An Empirical Analysis of What Went Wrong," *Critical Review: A Journal of Politics and Society* 21
- [6] Taylor, J. B. (1993). *Stanford University*. Stanford Education. Retrieved September 2, 2022, from <https://www.web.stanford.edu/~johntayl/Papers/Discretion.PDF>
- [7] Tomasz, P., & Amit, S. (2018, March). *Mortgage market design: Lessons from the great recession - brookings*. Brookings. Retrieved September 2, 2022, from [https://www.brookings.edu/wp-content/uploads/2018/03/PiskorskiSeru\\_Text.pdf](https://www.brookings.edu/wp-content/uploads/2018/03/PiskorskiSeru_Text.pdf)
- [8] Weinberg, J. (2013, November 22). *The great recession and its aftermath*. Federal Reserve History. Retrieved September 2, 2022, from <https://www.federalreservehistory.org/essays/great-recession-and-its-aftermath>