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Research on the Housing Bubble and Monetary Policy

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Abstract: The real estate bubble and the economic problems caused by it are one of the biggest problems affecting the economy at present. However, in the process of national economic regulation, monetary politics is one of the factors affecting and forming the real estate bubble. In addition, there is a relationship between real estate bubble and inflation. This paper discusses and illustrates the relationship between monetary policy and real estate, and the relationship between real estate bubble and inflation from the perspective of monetary policy through the methods of theoretical analysis and case study. The critical role played by monetary policy in shaping the real estate market can be a catalyst for the formation of real estate bubbles in times of low interest rates. While effective monetary policy is a powerful tool to help stabilize inflation and stimulate economic growth, it can also increase economic instability and even trigger financial crises.

Keywords: Housing Bubble, Monetary Policy, Inflation, Economy, Real Estate.

1. Introduction

The real estate bubble and the economic problems caused by it are one of the most influential issues in the world at present. Housing is a necessity for people's survival and lives, and it is a place for daily living. However, due to the supply and demand relationship in the market and the economy and other factors, the price of housing will be seriously affected by a variety of factors, which fluctuate to a large extent, and there is unpredictability. A comparative analysis of past real estate bubbles that have had a great impact from multiple perspectives reveals that there is a relationship between real estate bubbles and inflation. In particular, monetary policy, in the case of low interest rates set by the central bank, may be one of the factors in the formation of real estate bubbles. A housing bubble is commonly understood as a sudden rise in housing prices, driven by market demand and supply, which may or may not have been foreseen. At the same time, the implementation of monetary policy will also influence the economy, as well as affecting people's expectations of the economy, which is the purpose of monetary policy. Usually the most significant impacts of monetary policy are on prices and the inflation rate, which are directly related to the housing bubble [1].

Therefore, through a theoretical analysis and case study approach, the aim and objective of this research is to explore and illustrate the relationship between monetary policy and real estate from the perspective of monetary policy, as well as the relationship between housing bubbles and inflation.

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2. Housing Bubble

A bubble is defined in the economic context as a monetary bubble in which assets rise sharply in the course of successive transactions, with prices eventually deviating significantly from the value of the assets and thus failing to reflect real wealth. However, as prices rise, or when they rise to unsustainable levels, there is often a reversal of expectations and a crash in prices, which can lead to a financial crisis. A housing bubble is a situation in the real estate industry where the price of a house deviates significantly from the value of the house due to real estate specifications and the market price is out of line with the actual users sufficient to support it. As of today, housing bubbles have occurred in different countries of the world at different times, for example, the Florida housing bubble in the United States in 1923-1926, the Japanese housing bubble in 1986-1991, the Southeast Asian housing bubble in 1991-1997, the housing bubbles in various countries in Europe from 2000 to 2006, and the United States housing bubble in 2001-2008, etc [2].

3. Case - The Irish housing bubble

3.1. Overview

The Irish housing bubble started at the end of the 20th century and the beginning of the 21st century. Based on the increase in population, rapid economic growth and rising per capita income levels, the demand for housing and the need to improve housing conditions are increasing with time [3]. This created dynamic conditions for the expansion of real estate. The huge demand for real estate has raised real estate prices and created conditions for the formation of a real estate bubble. From 2015 to 2006, the price of newly built housing increased by an average of 12% per year, and the price of second-hand housing increased by three times [4]. Since 2007, Ireland's real estate market has experienced an undesirable situation of supply exceeding demand as rising house prices have constrained demand. Many newly built homes were left unoccupied and the real estate bubble began to show signs of bursting. In addition, between 2000 and 2006 there was a sudden boost in the real GDP due to the interaction of real estate and the economy and then in 2007 there was a sudden drop in real GDP which dropped to its lowest point after 8-10 years. During the period of increasing GDP, the inflation rate declined significantly between 2002 and 2004. Combined with the prices and evolution of the Irish real estate market from 1995-2009, it can be demonstrated that the real estate economy and GDP are positively correlated. In the face of the subsequent financial crisis, Ireland government adopted a series of monetary policies to mitigate its effects on the country's economy, as monetary policy is one of the methods or techniques used to address the many economic problems associated with adjustment [4].

3.2. Interest rate adjustment to stabilize inflation

In the case of a financial crisis caused by the housing bubble, the most effective solution is generally considered to be an increase in nominal interest rates in order to stabilize inflation as well as to avoid a sudden drop in GDP. By summarizing and analyzing past cases, there are clear advantages and disadvantages to this solution. The methods of stabilizing the economy by raising nominal interest rates are more impressive in terms of results compared to other methods, it is also more efficient in achieving the purpose and more stable for the public. The increase in nominal interest rates reduces the rate of inflation in time to meet the needs of government. At the same time, due to the effective adjustment of inflation, the influence on the general public's production and life is less.

However, as one of the EU countries, the monetary policy should take into account the special union of the EU, as the monetary policy of a specific country may lead to the instability of the EU's monetary policy. Since the central bank of the European Monetary Union is to stabilize and adjust

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inflation in the euro area as a whole, its policies do not target single countries with economic problems, but rather as a whole. Some countries in the EU are lower economic ability compared to others, and their inflation rates are higher than the target for the EU as a whole, but some are lower than the target for the EU as a whole. Monetary policies targeted at specific countries can affect the inflation and financial situation in other euro area countries [5]. In addition, differences in economic levels between countries cannot be adjusted to a uniform level by the EMU as a whole. Therefore, since the countries of the European Union are in a union, the European Monetary Organization has to take into account every country in the euro area, which makes monetary policy not country-specific.

3.3. Taylor rule

One of the commonly used monetary policy rules is the Taylor rule, which is a rule that adjusts interest rates in accordance with changes in the rate of inflation and the rate of economic growth. In contrast to the Interest rate adjustment approach, there are minimum requirements for the implementation of the Taylor principle. First, the government always has to consider the shock to push the inflation approximately 1 percent above the target and assume that there is no consequence for output [6]. Second, it needs to know that the percentage of nominal interest rate that the federal target to raise and this percentage is usually above 1 percent. The goal is to adjust the nominal interest rate to be more than 1 to 1 ratio to inflation.

Not only nominal interest rate, but Taylor principle also has connections to the real rate. The central bank in most time uses nominal interest rate as its tool but the real interest rate is more important for individuals or cooperative institutions. The Taylor rule is characterized by easy validation and favorable welfare properties. seeks to equilibrate and equalize values between inflation and the output gap. The rule is simply assuming that the equilibrium real interest rate is 2%, and the real GDP trend is 2.2% [6].

The objective of Taylor ruleis to simply increase real interest rate or nominal interest rate to cool down the demand and the demand shock. The Taylor Rule had both positive and negative effects on the housing bubble as well. The Taylor rule is one of the most effective methods currently available because of its targeted and predictive nature, and also because of its easier-to-implement nature compared to other methods with multiple requirements, but it cannot be proven to be the most effective method. It simply only requires central banks to move the inflation rate, and to cooperate with this, Taylor rule has to provide good and its description. The most important point in Taylor principle is to receive and respond to the inflation, so that it takes care of inflation to adjust the problem [7].

4. Discussion

The purpose of monetary policy is to stabilize the economy and control inflation, and the government rescues and adjusts the economy by implementing monetary policy. Whereas the relationship between monetary policy and housing bubbles is that when monetary policy begins to adjust the cost of debt as a direct result of lower nominal interest rates, the number and amount of loans will increase as a result of lower interest to be repaid.

Due to the general public's and investors' traditional thinking that housing is more valuable and preservative than other assets or financial investments, and considering that housing is still one of the necessities of production, the real estate market remains one of the more active markets, not only as a result of lower interest rates on housing debt, but also due to the fact that the demand for housing still exists. This makes it possible and feasible for house prices to rise [8].

However, this is not a positive approach to increasing GDP and the way in which houses are purchased based on normal supply and demand. Although lower interest rates on loans mean that people are paying back less, the buyer still has a loan and his or her original economic base has not changed. When house price rises caused by a house price bubble exceed the ability of home buyers to repay their loans, there can be a sudden drop in house prices, resulting in negative values and mortgages for individuals or organizations. This can trigger a huge financial crisis, which can lead to a sharp fall in total individual output. In the face of an unstable economic situation, the residents would opt for the most conservative financial management, increasing bank deposits and reducing consumption and expenditure, thus further affecting the economy in a regressive manner [9].

Overall, monetary policy is a two-sided sword. Properly controlled and used in appropriate times, monetary policy can stimulate the economy, maintain steady growth, or bring a flagging economy back to normal. However, if it fails to stimulate the economy effectively, spins out of control or is used inappropriately, it can have side effects that cause the economy to decline further. In addition, the adjustment of monetary policy will directly affect the prices of commodities and products, which directly affects the normal production and life of the residents. People are unable to benefit directly from monetary policy and choose a more conservative lifestyle. Instead of stimulating the economy, the economy will remain unchanged or even worse. Meanwhile, for enterprises, they will maintain the normal operation of the business by increasing loans and debts, or strengthening the cooperation of the company. However, in the absence of an effective alleviation of the overall form of the economy, companies are unable to repay their loans, thus further aggravating the mortgage risk and inflation risk of the economy.

5. Conclusion

Using monetary policy as a solution for solving housing bubble can bring both positive and negative effect.

From a diverse array of angles, this paper explored historical case studies spanning different regions and timeframes. These cases have provided valuable insights into how shifts in monetary policy can fuel the formation of housing bubbles, as well as the subsequent fallout on economic stability.

In essence, this analysis leads to a dual conclusion. Firstly, it recognize the pivotal role monetary policy plays in shaping the housing market, often serving as a catalyst for bubble formation when interest rates are low. Secondly, while monetary policy can be a powerful tool for stabilizing inflation and spurring economic growth, its mismanagement can exacerbate instability and trigger financial crises.

Despite the efforts, it's important to acknowledge the limitations of this study. This research primarily rely on historical data, which may not fully capture the nuances of future market dynamics. Additionally, this analysis is constrained by the complexities of global economic interdependencies and varying national policies.

Looking ahead, further research could explore more sophisticated models and consider a broader range of variables. Comparative studies across different regions and deeper dives into the impact of technological advancements could offer new insights into mitigating housing bubble risks and fostering sustainable economic growth.

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