# The Impact of Two-pillar Policies on Real Estate Prices in China

# Yingze Zhu<sup>1,a,\*</sup>

<sup>1</sup>College of International Business, Liaoning Normal University, Dalian, Liaoning, China 116000 a. yz88s@missouristate.edu \*corresponding author

Abstract: Since the turn of the 20th century, China's real estate industry has been expanding, playing an increasingly vital role in fostering the growth of the national economy. On the one hand, rising housing costs can stimulate the growth of linked companies. Nonetheless, it also causes a number of social issues. Through theoretical research, this study examines the impact of two-pillar policies (monetary policy and macroprudential regulations) on real estate values in China. The analysis reveals that quantitative monetary policy influences real estate prices via credit scale, whereas price-based monetary policy influences real estate prices via loan interest rate. However, there is a tension in monetary policy between "boosting the economy" and "stabilizing property prices". When monetary policies govern housing prices, macroprudential policies, particularly LTV instruments, can avert systemic problems and compensate for the spillover effects on the real economy. Consequently, it is imperative to establish and enhance the regulatory framework for two-pillar policies.

**Keywords:** two-pillar policies, monetary policy, macroprudential policies, real estate prices

### 1. Introduction

In recent decades, China's housing market has seen a remarkable expansion because to the country's rapid urbanization and accommodative monetary policies [1]. Without a question, this has aided in the skyrocketing increase of China's property prices. The house is both a place to live and a good financial investment. Short-term home price increases are crucial to economic growth because they can fuel the expansion of supporting sectors. The fast increase in real estate prices, while beneficial in the short term, has long-term consequences for China's economy [2]. For instance, the high cost of living brought on by skyrocketing home prices in major metropolitan areas like Beijing, Shanghai, Guangzhou, and Shenzhen is a major contributor to the brain drain of young people from these areas. Also, many blindly pursue real estate investing because of investors' overly optimistic views of the market. As a result, real estate speculation is a social phenomenon. When the real estate bubble economy continues to expand, it is likely to cause another economic downturn.

China's real estate market has been stabilized by the introduction of monetary policy. Limiting the rate of increase in housing costs is made possible in part by a restrictive monetary policy. However, it also retards the growth of the national economy as a whole. When it comes to regulating property values, the single monetary policy can only do so much. Therefore, academics based on the macroprudential policy framework proposed the two-pillar policies in the hopes of achieving

<sup>© 2023</sup> The Authors. This is an open access article distributed under the terms of the Creative Commons Attribution License 4.0 (https://creativecommons.org/licenses/by/4.0/).

consistent growth in the real estate market while mitigating the effects of excessive economic oscillations [3].

The majority of the research done on how monetary policy affects real estate prices has focused on a particular policy. This study examines the effects of China's monetary policy and macroprudential measures on the country's real estate market from every angle. To help stabilize real estate prices and encourage the sustainable and healthy growth of the real economy, this can serve as a solid foundation for making decisions.

## 2. The Impact of Monetary Policy on Real Estate Prices

# 2.1. Quantitative Monetary Policy: The Impact of Credit Scale on Real Estate Prices

The central bank is the driving force behind quantitative monetary policy. By controlling the market money supply through measures including the legal deposit reserve ratio, market operation adjustments, credit scale management, and rediscount policy execution, it can affect the economy as a whole. The role that uncertainty about future monetary policy plays in the transmission of policy to financial markets [4]. To use just one example, fluctuations in real estate prices are caused by shifts in the entire supply and demand of the market, which in turn impact the financing strategy and volume of real estate developers and homebuyers from the supply and demand sides of the market.

Homes may be both a place to live and a good financial investment. The former seeks to satiate customers' insatiable want for homes, while the latter represents buyers' anticipation of price increases in the near future (also known as speculative properties). As developers stand to make more profits from real estate sales as home prices climb, we should expect to see a rising supply curve. When home costs go up, customers often opt to rent instead than buy so they can still afford the basics. More value is offered for customers, but the room for even more value is limited. Thus, real estate demand and prices are negatively correlated from both the standpoint of residential need and that of speculative need.

Following, we examine how quantitative monetary policy affects real estate values by constructing supply and demand curves. A vertical supply curve can be seen in the real estate market since new building takes a long time and the market expects a constant supply of homes in the near future. The long-term supply curve continues to slope upwards. Since real estate developers must make sizable upfront investments, expansionary monetary policy will help them save money and encourage additional building. The supply curve for housing will move to the right as a result, bringing down home prices. This is because there will be more homes on the market. To the contrary, if the central bank tightens monetary policy, the cost of loans for property developers would increase. If developers owe too much credit to banks, they will intensify supply and demand imbalances in real estate markets by construction delays, property hoarding and other means, resulting in rising real estate prices.

Consumer demand for homes, both for personal use and for resale as an investment, has been strong recently. However, most people need to rely on credit in order to make up for their lack of cash when purchasing a home. Loose monetary policy boosts customers' access to and volume of credit, boosting consumers' purchasing power and the demand for housing, all of which contribute to price increases in the market. More precisely, the equilibrium price of a home rises, and the demand curve moves to the right. Figure 1: This is how the evidence stacks up.

Demand elasticity in the real estate market is often higher than supply elasticity. That is to say, the change in demand from homebuyers has a larger influence on real estate price swings because of how sensitive real estate demand is to housing prices. So, rising home prices are a direct result of the Federal Reserve's expansionary monetary policy.

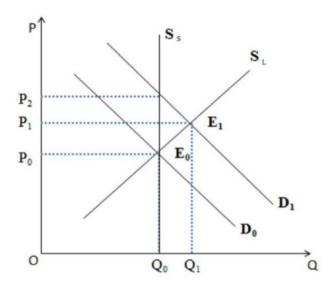


Figure 1: The long-run equilibrium of the housing market (original).

## 2.2. Price-based Monetary Policy: The Impact of Loan Interest Rate on Real Estate Prices

By altering the interest rate, the central bank can influence the income expectations and financial costs of micro subjects, which in turn influences economic activity and the entire market. The Chinese government has a hand in determining the trajectory of home prices by manipulating the interest rate on mortgages. Monetary policy can have a cooling effect on the real estate market if the interest rate attached to mortgages is greater than the rate at which the market settles. Monetary policy will stimulate the housing market if the interest rate on mortgages is kept at a level below the rate at which the market settles.

The influence of price-based monetary policy on real estate prices may be seen in the sustained rise of China's home prices throughout the COVID-19 epidemic. The COVID-19 epidemic that broke out in early 2020 hurt China's economy. While there was an upward tendency in home prices over this time period, there was a little decrease in February of 2020. Figure 2 depicts this.

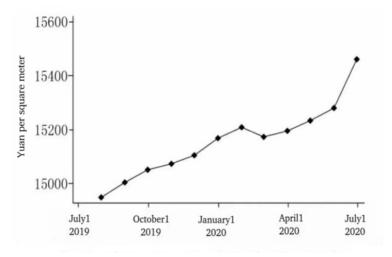


Figure 2: The average transaction price of residential housing in China from July 2019 to June 2020 (based on about 100 cities in China) [5].

In the wake of the pandemic, there has been a general upward trend in housing values, which may be at least in part attributable to people's psychological expectations. Comparable to the SARS pandemic in 2008, the COVID-19 epidemic in 2020 poses a threat to public health. Since the 2008 SARS pandemic, real estate values have increased. In light of this, many expect house values to climb after the COVID-19 epidemic, and this optimistic outlook drives up demand for real estate and boosts prices. More significantly, the COVID-19 epidemic has had a major effect on China's economy. With an eye toward preserving economic stability, the central bank has adopted a price-based monetary policy characterized by a gradual downward trend in interest rates. By April 20 [5], for instance, the federal reserve will have cut interest rates for both the one-year and five-year LPR twice. After an interest rate cut, real estate developers may make more money off of each housing unit they sell, which increases the number of homes available on the market. For homebuyers, falling interest rates mean lower monthly payments, and this has converted some would-be purchasers into committed customers. Also, since the decline in interest rates lessens the return on monetary assets, investors are shifting their focus to real estate, which is not a currency, in order to rebalance their portfolios. So, property values are increasing.

All this suggests that real estate prices are extremely vulnerable to shifts in price-based monetary policy. The value of real estate will swiftly adjust to any changes in the interest rate on mortgages. When the central bank uses a price-based monetary strategy to stimulate the economy, interest rates on loans go down and the value of real estate goes up.

When home prices are too high, however, the central bank often adopts a strict monetary policy that might slow the growth of an economy. Given this discrepancy, the government has recommended macroprudential reforms. When it comes to the economy, macroprudential policies should work hand in hand with monetary policy to ensure financial stability [6].

## 3. The Impact of Macroprudential Policies on Real Estate Prices

The People's Bank of China convened a work conference on February 5 and 6, 2018, with the goal of efficiently preventing and eliminating financial risks. It made it abundantly evident that more work needed to be done to bolster macroprudential control of real estate financing and enhance the regulatory framework behind it. To avoid cyclical variations and sector-to-sector transmission, the financial system must be managed comprehensively, from a macro, cyclical, and industry-wide viewpoint. This is what macroprudential regulation aims to do. When it comes to macroprudential measures, inter-institutional risk connections are given additional weight because of their potential importance in mitigating procyclical behavior among financial institutions [7].

In retrospect, the 1990s may be pinpointed as the beginning of China's housing reform. It is becoming increasingly common for houses in metropolitan areas to be sold for money rather than in kind. Even in the early stages of the housing reform policy's implementation, it was difficult for locals to acquire a house due to the high price of housing. Commercial banks adopt home mortgage loans to help people with their housing demands. After entering the monetary system, the real estate market expanded quickly. However, the rising share of real estate finance comes with rising financial concerns. Chinese authorities eased monetary policy after the 2008 financial crisis in an effort to jumpstart the country's flagging economy. Sales of commercial housing and sales area for commercial housing both increased dramatically in 2009 as a result, far more so than in the years leading up to the economic crisis. The government is paying close attention to the hot real estate market. After that, the government instituted a number of macroprudential measures that were far more stringent. Commercial housing sales and sales area both dropped last year. As a result, the government implements macroprudential policies in stages, and these policies have a direct impact on how real estate values move.

There are now three primary sources of systemic risk in the Chinese property market. The first is the danger of soaring home prices. A home should be used for living in, not as an investment. If home prices continue to climb at a greater rate than wages, the result will be a housing crisis as more and more individuals are priced out of the market. The second concern is the potential lack of available housing. Today, most Chinese urbanites own multiple homes on average. Thirdly, there is the danger of not having enough cash on hand. Properties are illiquid investments that aren't as easily traded as the stock market. Liquidity concerns will arise whenever there is a shift in financial policy, as the real estate market is strongly reliant on the monetary system. To achieve financial market stability in the real estate industry, it is crucial to propose macroprudential measures directed at systemic vulnerabilities.

In order to resolve the conflict between monetary policy and the real estate market, the central bank should implement a set of stronger macroprudential rules. It is the responsibility of the central bank to adapt monetary and fiscal policies uniformly in order to fulfill the needs of the people living there. Today, individuals tend to chase the inventory of available homes without giving much thought to other factors. The housing market has finally hit the one-house-per-person standard, but most of the homes are of poor quality and cannot be lived in. The Chinese government should diversify its housing security strategies to target people of varying incomes. The growing inequality in China's housing sector is a severe fundamental problem. Paying citizens of Tier 3 and Tier 4 cities should be eligible for a larger mortgage interest deduction. Some middle- and upper-class urban households long to upgrade their current dwellings. The government should revise the housing level categorization criteria, realign the housing supply structure, and loosen some limitations on high-end home consumption to meet the needs of the housing market.

Second, our government should focus on avoiding property market dangers by getting to the root of the issue, which is a financial one. The overzealous modification of real estate policy in both the United States and Japan contributed to the real estate bubble economy and the subsequent housing market catastrophe. Comprehensively evaluating the real estate market's connection to the economy and society allows the government to design relevant regulations to mitigate financial risks in the real estate market.

Third, the loan-to-value (LTV) ratio is meant to limit the production of mortgage loans as part of macroprudential instruments [8]. Demand for purchasing a home will be affected by LTV because of its connection to the down payment ratio. That's why legislators are paying attention to it: The term loan-to-value (LTV) is most commonly seen in the context of mortgage loans for real estate. The formation of LTV policy is helpful in taming the real estate bubble economy and directing market expectations, which in turn reduces the market's volatility in home prices. Everyone is aware that monetary policy has both positive and negative effects. The growth of the real economy can be helped along by an expansionary monetary policy. As a result, the price of real estate will increase due to the multiplier effect. The LTV calculator offers a novel policy concept that bridges the gap between regulating the cost of housing and maintaining steady economic expansion. It has the potential to stabilize housing prices with little detrimental effects on production. There is an inverse relationship between the minimum down payment ratio and home sales. The minimum ratio of down payments mandated by the People's Bank of China is from 20% to 30%. Housing sales growth slowed from 24.8% in 2005 to 11.8% in 2006 as the minimum down payment percentage was raised to 30%. Real estate sales growth rates were also strongly impacted by subsequent modifications in 2010–2016 [9].

From what has been discussed, it is clear that the government needs to take into account the interconnected nature of the housing market with other sectors of the economy, society, and culture, and implement the LTV tool in a variety of policy configurations. This means that macroprudential measures and monetary policy can work together more effectively.

#### 4. Conclusion

In addition to having direct effects on the growth of the actual economy, monetary policy also influences real estate values through the size and cost of lending. Making up for the deficiency of monetary policy, macroprudential policy is helpful in fostering economic growth and stabilizing housing prices. Theoretical investigation suggests the following: To begin, China has to keep its focus on its two pillar policies of monetary and macroprudential regulation. Second, the LTV instrument should be utilized to its full potential in macroprudential policy to control housing costs without impacting the actual economy and to mitigate systemic risks. Third, because it has been around for some time, monetary policy is well-developed. China's macroprudential policy, however, remains in its infancy. The government, going forward, must continually investigate and enhance the two-pillar policy framework in light of national situations. Fourth, relevant departments should accurately identify the sources of economic fluctuations, make the optimal combination of different policies according to the characteristics of different policies and the sources of economic fluctuations [10], avoid the accumulation of financial risks, and promote the coordinated development of economy and finance.

#### References

- [1] Jia Pengfei and Lim, King Yoong. Tax Policy and Toxic Housing Bubbles in China[J]. The B.E. Journal of Macroeconomics, 2021,21(1):151-183.
- [2] Liu Jinquan, Zhang Yunfeng and Bi Zhenyu. Real estate price fluctuation, business cycle and monetary policy effect[J]. Contemporary Economic Research, 2022, (01):95-106.
- [3] Ma Li and Fan Wei. Research on the "Dual pillar" regulation of Monetary policy and macroprudential policy in promoting "A house is for living in, not for speculation" [J]. China Industrial Economics, 2021, (03):5-23.
- [4] Michiel De Pooter, Giovanni Favara, Michele Modugno, Jason Wu. Monetary Policy Uncertainty and Monetary Policy Surprises[J]. Journal of International Money and Finance, 2021,112: 1-33.
- [5] Li Peixian. The impact of loose monetary policy on housing prices under the pandemic—an event-based analysis[J]. Jiangsu Commercial Forum, 2021, (08):69-73.
- [6] Sui Jianli, Liu Biying, Li Zhigang and Zhang Chengping. Monetary and macroprudential policies, output, prices, and financial stability[J]. International Review of Economics & Finance, 2022, 78: 212-233.
- [7] He Guohua and Xu Mengjie. The effectiveness of macroprudential policy in regulating cross-border capital flow risk—based on the perspective of bank stability[J]. Studies of International Finance, 2022, (08):65-75.
- [8] Peter J. Morgan, Paulo José Regis, Nimesh Salike. LTV policy as a macroprudential tool and its effects on residential mortgage loans[J]. Journal of Financial Intermediation, 2019, 37: 89-103.
- [9] Ma Caoyuan and Li Yumiao. Analysis on the effectiveness of macroprudential policy instrument LTV in regulating real estate market [J]. Nankai Economic Studies, 2020, (06): 122-141.
- [10] Wu Di, Zhang Churan and Hou Chengqi. Housing prices, financial stability and macroprudential policy [J]. Journal of Financial Research, 2022, (07):57-75.