Literature Review of the Research on Real Estate Financial Risk

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Abstract

After a brief conceptual explanation and background introduction of real estate finance and its risks, this paper mainly focuses on the relationship between real estate price fluctuation and financial risk, real estate bubble, the formation and transmission of real estate financial risk, and the control of real estate financial risk. Several research categories were classified and related research was reviewed. In the end, it summarizes and puts forward that China's research on real estate financial risk also has the following problems and development direction: the research on the connotation of real estate financial risk needs to be improved; the research on real estate bubble needs to be quantified; the research on risk formation needs to be deepened from the mechanism; the research on risk transmission needs to be combined with the reality of China; and the empirical research on real estate financial risk needs to be improved.

Keywords

Real Estate Finance, Real Estate Financial Risk, Literature Review

1. Introduction

As a capital-intensive industry, the real estate industry has a strong dependence on finance. Real estate finance linked to real estate refers to the general term for investment, financing and related financial services through currency circulation and credit channels in the process of real estate development, construction, operation, circulation and consumption. While supporting the development of the real estate industry, real estate finance realizes and strengthens financial functions through the special carrier of real estate, which forms the main source of financial risks.

At present, China has initially formed a real estate financial system that is

based on commercial banks and serves real estate development and housing consumption. The real estate finance industry has also played a positive role in supporting urban residents to purchase houses, boosting housing vestment, expanding domestic demand, and promoting the development of the national economy. However, in the rapid development of real estate finance, a series of problems such as imperfect market, single financing channel and weak product innovation ability are also exposed. On the one hand, the rental income is higher than the bank deposit rate and the personal housing loan rate. On the other hand, the house price continues to rise rapidly, and the index keeps rising. In the case of other investment channels are blocked, a large amount of social funds have turned to home purchases for the purpose of maintaining and increasing value, which has further aggravated real estate financial risks.

At the same time, due to the impact of the real estate industry on the overall national economy, the real estate market contains huge financial risks, which will also threaten the security of the entire financial system and even affect the stability of the macro economy. Therefore, strengthening the research on real estate financial risk has important theoretical and practical significance.

Domestic scholars began to study the real estate financial risk from the land rent theory, and then the scholars studied the relationship between real estate and financial systems and macroeconomics from the macro and micro levels. This paper first introduces the concept and classification of real estate financial risk, and then mainly summarizes the research on the relationship between real estate price fluctuation and financial risk, real estate bubble, the formation and transmission of real estate financial risk, and the control of real estate financial risk.

2. The Concept and Classification of Real Estate Financial Risk

Real estate financial risk refers to the possibility of economic losses caused by the bank's actual income and expected income due to various uncertain factors when the bank provides financing, financing, liquidation and other financial service activities for the real estate industry [1].

Real estate financial risks include not only individual business, the risks faced by individual financial institutions, but also the risks of the entire real estate financial system. The real estate industry itself is a high-input, high-profit industry. It is inherently high-risk. After the financial industry is involved in the real estate industry, if it is over-supported, it will be more likely to cause credit expansion and thus induce a crisis.

Due to the division of service content, real estate finance is mainly based on real estate finance and financial services. Therefore, real estate financial risks can be divided into the following types:

- Credit risk: The risk that the borrower (real estate development enterprise or residential consumer) is unable to repay or is unwilling to repay, resulting in the real estate loan principal and interest can not be recovered on time or even recoverable.

- Liquidity risk: It is due to the lack of sufficient cash in the financial institutions and other assets that can be converted into cash at any time, so that it is unable to pay off the debts due and meet the risk of customers withdrawing deposits.
- Asset and liability structure risk: Since the asset structure of real estate financing is usually based on medium and long-term loans, if the financial sector's liability structure is dominated by demand deposits, liquidity risk may be formed.
- Asset quality risk: If there are more loans with poor quality (not overdue, insolvent, unrecoverable, etc.), the lending bank will face the risk of poor efficiency.
- Interest rate risk: If the deposit interest rate rises, or the loan interest rate declines, or the deposit and loan interest rate changes in the same direction but the interest rate difference shrinks, it may bring risks in operating efficiency.
- Inflation risk: Since the nominal interest rate minus the inflation rate is the actual interest rate, inflation will cause the real interest rate to fall when the nominal interest rate is constant, which puts the bank at risk.
- Exchange rate risk: If the foreign exchange appreciation value depreciates against the foreign currency, the debt burden of foreign currency denomination will increase. Therefore, when real estate finance borrows foreign debt or introduces foreign exchange, it will also face foreign exchange risk.
- Other risks: There are other risks in real estate finance, such as the risk of declining economic benefits or even loss due to poor management, the operational risks caused by other mistakes in business operations, and the lack of comprehensive attention to legal provisions in the business process leading to legal risks and national policies. Risk of change, risk in real estate fund transfer settlement, risk in real estate insurance, risk in real estate trust, etc.

3. Research on the Relationship between the Real Estate Price Fluctuation and Financial Risk

Domestic scholars have done a lot of research on financial risks, including the causes, the measurement and the industries of financial risks. For example, Luo Fang constructed a dynamic game model between banks and enterprises to study the liquidity risk and credit risk faced by commercial banks [2]; Chen Jun and Wang Min used the evaluation model to measure the stability of the financial system [3]; Huang Jiajun and Jiang Hai believes that financial agglomeration and lack of information are the main factors for the formation of financial risks [4]. Financial agglomeration increases the asymmetric information and incomplete information, and increases the risk of financial markets. Zhang Lichao *et al.* assess the default risk of the industry and build the risk-warning mechanism [5]; Li Youhuan studied the financial risks caused by overseas hot money based on the impact of overseas hot money on the real exchange rate fluctuation of the RMB, the effectiveness of monetary policy, and the real estate market [6]; Li Yang *et al.*

analyzed China's sovereign balance sheets, studied the sovereign debt risk of China [7]; Li Youhuan pointed out that China's housing prices and rents showed a consistent upward trend, high housing prices and high rents amplified financial risks, mainly reflected in the risks of residents and real estate developers [8].

Financial risks may evolve into financial crises, in which asset price volatility plays an important role. Zhang Zhiying believes that when long-term accumulation of financial risks has not been resolved, financial risks will be transmitted to related parties, including transmission between financial institutions and financial markets [9]. Gong Xiaolin and Yang Shuzhen combined with China's macro financial data from 2000 to 2008, using the undecided equity analysis method to explain the evolution mechanism of macro financial risks. During the economic growth period, the value of various assets rose steadily, and when the economy was impacted by risks, assets the value usually falls sharply [10]. Li Youhuan believes that there are obvious financial risks in China, such as the weakness of the real economy, the emergence of real estate bubbles, and the high risk of local government debt. The improper handling will lead to "structural financial crisis" or "local financial crisis" [11]. Zhang Huayong pointed out that with the increasing linkage between financial markets, the transmission and destructiveness of financial risks are also increasing, which may lead to regional financial crisis, and the chain reaction of financial crisis has intensified the large-scale infection of financial risks. It has caused negative effects such as financial market turmoil, monetary devaluation, and shrinking of residents' wealth [12].

When real estate financial risks were generated and accumulating, time bombs were buried for the financial crisis. Xie Jingrong *et al.* found that among the 16 more serious financial crises that occurred worldwide since 1980, 12 of them had different levels of real estate bubbles [13]. Wu Kangping believes that the real estate market and the financial market are mutually symbiotic in the economic operation, and the two markets are important carriers of risk accumulation, which easily encourages the mutual accumulation of risks. Once the risks are excessively expanded and impacted, the real estate market will be led. Crashes and even financial crises [14]. Zhou Jingkui believes that excessive financial support leads to the emergence and expansion of the real estate bubble, and the bursting of real estate bubble will have a chain reaction, triggering a financial systemic crisis [15]. Ruan Jia and Liu Yanping pointed out that the rapid rise in housing prices masks a large number of credit risks. The sharp decline in housing prices has ignited credit risks, leading to a break in the capital chain of real estate developers and an increase in the default rate of mortgage loans, which ultimately impacted the entire financial system [16]. Chen Xuechu *et al.* studied the spatial distribution of housing prices in 34 major cities in China from 2003 to 2007. It was found that under the pressure of rising housing prices in core cities, housing prices in surrounding cities may be pushed up, triggering a global real estate bubble, and the systemic financial risks of the real estate industry will follow [17].

4. Research on Real Estate Bubble

In recent years, as China's real estate market continues to heat up, a large number of literatures on real estate bubbles have emerged [18]. Some scholars try to find a scientific method to measure the rational bubble and irrational bubble of real estate. More scholars tend to use the indicator method or construct an early warning indicator system to judge whether there is a real estate bubble in China.

Domestic scholars mainly have the following three viewpoints: The first one is the bubble theory. There have been local and regional real estate bubbles in China [19] [20]; the second is non-bubble theory. There is an imbalance between supply and demand in some areas of China's real estate market, but this is not entirely the performance of the real estate bubble [21]; the third is the bubble inequality. There is bound to be a real estate bubble in China. The key is to pay attention to the extent of the existence of the bubble and the extent of its impact on the financial economy [22].

Regarding the cause of the real estate bubble, He Xiaoxing and Zhao Hua believe that the underdeveloped land market, the excessive dependence of local governments on real estate, the large amount of credit investment by banks on real estate, and financial liberalization are the main causes of China's real estate bubble [23]. Ge Yang and Yan Xiaoyan analyzed the real estate bubble mechanism. The real estate market situation is the long-term factor of the real estate bubble. The financial policy and tax policy promote the generation of real estate bubble, and the market expectation changes lead to the expansion of the real estate bubble [24]. Li Wenhu studies the real estate bubble based on the perspective of virtual economy, and believes that real estate is virtual, and the non-equilibrium, symbiosis and inductivity of the virtual economy have led to the emergence of real estate bubbles [25]. Chen Xuechu *et al.* pointed out that China's urban housing prices are seriously divided at two levels. High-price cities and low-price cities coexist. High-price cities may trigger real estate bubbles in low-price cities through housing price correlation and risk transmission effects [17].

In response to the real estate bubble in Japan in the 1980s, many domestic scholars studied the background and reasons for its occurrence. Zhou Jian believes that the main reason for the Japanese bubble economy is that the Japanese government over-trusts the "yen appreciation of the yen" and the drawbacks of the financial system, leading to financial out of control [26]. Lu Peng believes that the Japanese bubble economy has historical inevitability, and the wrong macroeconomic policy is the key factor for the emergence and breaking of the bubble economy [27]. Feng Weijiang and He Fan attributed the bursting of the Japanese real estate bubble to the mismatch between the financial system and the corporate system caused by the failure of the economic system reform, and the mistakes brought by the game of government power [28]. Zhang Ruoxue mentioned that Japan had basically completed industrialization and urbanization in the 1970s, and accelerated the expansion of the real estate bubble under the influence of financial liberalization and the Bank of Japan's wrong policy [29].

5. Research on the Formation of Real Estate Financial Risk

Domestic literature on the formation of real estate financial risks mostly explores the accumulation of real estate financial risks in China from the perspective of economic entities such as banks, local governments, investors, and buyers. Li Lanying and Li Wei pointed out that the formation mechanism of real estate financial risk lies in the information asymmetry of real estate developers and banks, the failure of government regulation, the uneven development of the real estate market, and excessive speculation in the market [30]. Figure 1 shows the relationship between capital flows and individual participants.

In the bank-led real estate economy, banks provide a large amount of funds for the real estate industry, which plays a key role in the formation of real estate financial risks. Li Jianfei and Shi Chenyu verified the inevitable connection between real estate price volatility and bank credit growth through empirical research, which effectively explained the overheating of real estate in China in recent years [31]. Li Rui believes that China's real estate financing channels are single and highly dependent on indirect financing of banks, which makes real estate loans imply a large credit risk, while bank financial innovation guides the real estate mortgage loan securitization, further aggravating real estate financial risks [32]. Zheng Yi explored the process of real estate mortgage loan securitization from the aspects of demand, risk and credit of securitization products, and simulated the relevant institutional arrangements, and found that real estate mortgage loan securitization hides the inherent risks [33]. Ge Hongling analyzes the innovation of China's real estate investment and financing model, especially the mode selection and risk characteristics of real estate investment trusts [34] (Figure 2, Figure 3 and Table 1).

Real estate is a key area of government macro-control, and improper government macro policies or lack of financial supervision play a role in fueling real estate financial risks. Yi Xianrong believes that China's real estate is manipulated by the government and does not achieve complete market-oriented operation. Real estate that does not achieve real market operation will certainly have a bubble [19]. Song Bo and Gao Bo studied the impact of government interest rate policy on housing prices. In the short term, the central bank deposit reserve ratio and the actual loan interest rate have a negative effect on housing prices. In the long run, the actual deposit interest rate has a negative effect on housing prices. House prices have a positive effect [35]. Deng Fumin and Wang Gang established
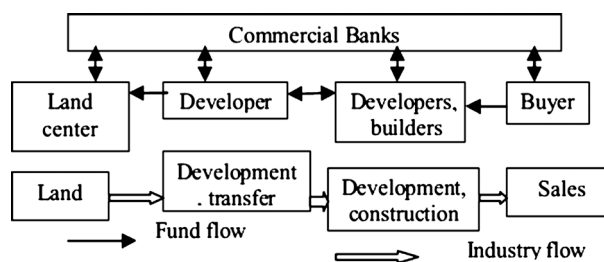

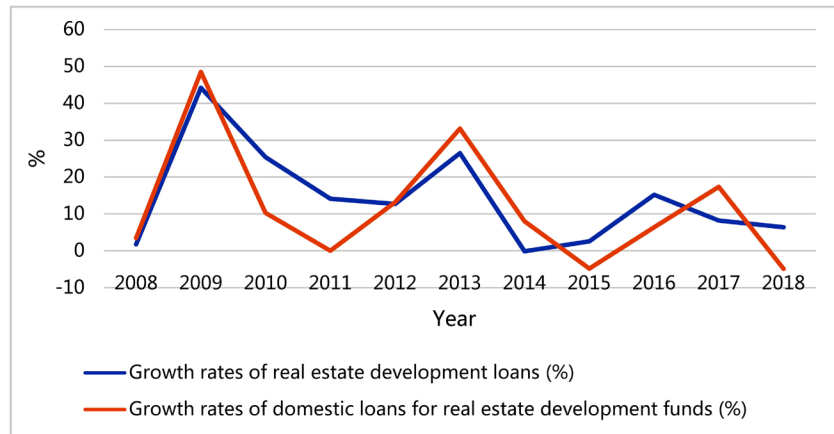**Figure 1.** Fund flow in China's real estate market operation.

Figure 2. China's growth rates of real estate development loans and growth rates of domestic loans for real estate development funds.
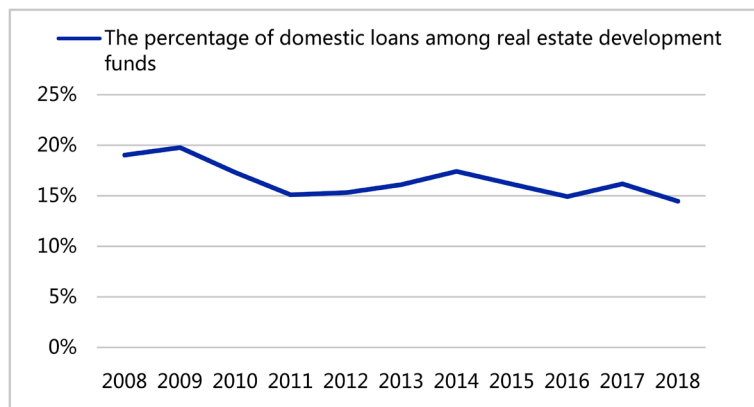

Figure 3. The percentage of loans from financial institutions among real estate development funds from.

Table 1. China's real estate development fund source breakdown between 2008 and 2018 (BN Yuan RMB).

Year	Domestic loans for real estate development funds	Foreign funds	Self Raised funds	From Other Sources	Total funds
2008	7256.55	726.33	15,081.27	15,081.88	38,146.03
2009	11,292.69	469.73	17,905.99	27,459.22	57,127.63
2010	12,540.48	795.56	26,704.58	32,453.72	72,494.34
2011	12,563.79	813.63	34,093.4	35,775.12	83,245.94
2012	14,778.39	402.09	39,082.68	42,274.52	96,537.67
2013	19,672.66	534.17	47,424.95	54,490.7	122,122.47
2014	21,242.61	639.26	50,419.8	49,689.81	121,991.48
2015	20,214.38	296.53	49,037.56	55,654.6	125,203.06
2016	21,512.4	140.44	49,132.85	73,428.37	144,214.05
2017	25,241.76	168.19	50,872.22	79,770.46	156,052.62
2018	24,004.52	107.98	55,830.65	6895.68	165,962.89

a multivariate VAR model to study the impact of government monetary policy on the real estate market. In the long run, monetary policy will significantly affect housing prices and real estate investment [36]. Wang Liping based on the housing price data of 30 inter-provincial regions in China from 2000 to 2009, using the extreme boundary method to analyze the influencing factors of real estate price "stability", found that local government is the main force pushing up housing prices [37]. Xu Jing investigated the decoupling of housing price rise and economic growth in 35 large and medium-sized cities in China from 2001 to 2010. It was found that economic growth will drive the rise of housing prices, while the lagging real estate regulation caused abnormal fluctuations in housing prices [38].

From the perspective of real estate cyclical perspective, real estate price volatility, housing prices have risen and fallen in a real estate cycle, housing price reversal may lead to systemic risks. He Guozhao *et al.* believe that an important reason for China's real estate risk is the cyclical fluctuation of the real estate market, while the cyclical fluctuations are related to policies and investment. The real estate regulation and control policies have obvious cyclicality, the expansion of real estate regulation and control, and the tightening of policies. The period of real estate fluctuations is basically the same [39]. Liu Xuecheng believes that under the strong influence of external factors such as institutional policies, China has experienced short-term fluctuations in real estate, implying certain risks [40]. Liang Yunfang and Gao Tiemei pointed out that the price, output, investment and consumption of the real estate market affect the economic development level of a region, and the development level of the region determines the development of the real estate market. Therefore, the fluctuation of the real estate cycle also has a distinct regional nature [41].

The formation of real estate financial risks is also affected by other factors. For example, Xie Jingrong *et al.* believe that China's current real estate bubble is not national and regional, and regional land speculation directly leads to the formation of a real estate bubble [13]. Xu Jianbin and Lin Guanbiao analyze the micro-mechanism of real estate credit risk formation from the perspective of information economics. The information asymmetry between real estate developers and banks is the cause of risk [42]. Chen Hongbo and Wang Zhen pointed out that the financial supervision and regulation mechanism of China's real estate market is still not perfect, and relevant laws and regulations are relatively lacking. For example, the real estate mortgage system is imperfect, which can not effectively suppress real estate financial risks [43]. Shen Jianguang pointed out that the enthusiasm of land speculation in Japan in the 1980s boosted the formation of the real estate bubble [44]. Jia Shenghua and Li Hang introduced the noise trading model. Through the mathematical derivation of the model, the noise trader's expectation and expected deviation mean and proportion were found, and the trader risk was the main factor in the formation of real estate bubble, determined the extent of the real estate bubble [45].

6. Research on the Transmission of Real Estate Finance Risk

When domestic scholars study the real estate financial risk transmission in China, they find that the real estate financial risk will be transmitted to the banking system, macroeconomic system, land finance field and other actors through a certain transmission mechanism. The transmission path is mainly concentrated in the banking system. Among them, Wang wei'an and He Cong believe that with the continuous development of cross-regional investment in real estate enterprises, the regional risks of overheated real estate investment will spread to other regions, especially in less developed regions. Diffusion [46]; Zhou Hui and Wang Qing believe that real estate will influence investment through the "Tobin q effect", affect consumption through the wealth effect, and influence output through the industrial chain transmission mechanism [47].

Banks in China provide a large amount of funds for real estate developers. There is a complex credit and debt relationship between them. Real estate financial risks may first impact the banking system. Wu Kangping and Pi Wei believe that the cyclical fluctuation of real estate is closely related to the stability of banks. The fluctuation of housing prices directly affects the security of bank funds, and banks may shrink the scale of credit for real estate at any time [14]. Fan Xiaoyun *et al.* used the matrix method to analyze the risk-infective characteristics of China's inter-bank market. The degree of influence of inter-bank risk contagion mainly depends on the types of incentives, the changes in losses and the links between banks [48]. Chen Hongbo and Wang Zhen analyzed the impact of financial risks brought by the real estate industry on the stability of banks based on the characteristics of real estate loans. The research found that the related risks are concentrated in the credit loans of real estate developers [43]. Zhang Xiaojing and Sun Tao believe that the form of real estate finance is single, and most of the funds needed for the real estate industry come from banks, making the real estate market risk easily convert into bank credit risk [49].

Real estate financial risks will impact the macroeconomic system, including investment, consumption, interest rates, and inflation. Duan Zhongdong pointed out that house prices affect the price level through total social demand, real estate price volatility has a significant relationship with inflation and output, and the long-term impact of real estate price volatility on inflation and output is more significant [50]. Tang Zhijun *et al.* (2010) found through VAR regression analysis that house price fluctuations significantly affect the total retail sales of social consumer goods. The fluctuation of house price fluctuations on the variance of consumption fluctuations is greater than 2.5%, and the increase in house prices tends to reduce social consumption [51]. When Yang Junjie studied the mechanism of real estate price volatility on the macro-economy, he found that the rise in housing prices caused consumption reduction and investment growth in the short-term, and quickly boosted GDP growth, but the pulling effect did not last, and from the global financial crisis and the current economic situation in China. The dilemma can also be seen that the real estate bubble will

have a negative effect on a country's macro economy [52]. Zhang Hong and Li Yang pointed out that the impact of housing prices has a pulling effect on the regional economy in the short term, but it has a crowding effect in the long run, and the impact on the eastern region is stronger than that in the central and western regions [53].

When discussing the real estate financial risk transmission in China, some scholars found that the financial risk of real estate will impact the land finance field. When Wei Runqing studied the impact mechanism of real estate, it found that real estate price fluctuations significantly affected the local government's fiscal revenue, and land transfer fees as an important source of local government fiscal revenue, with greater flexibility [54]. Li Lanying and Li Wei pointed out that the prosperity of the real estate market directly promotes the expansion of local government "land finance", and the financial risks faced by the real estate market may cause continuous pressure on local finances and trigger local debt risks [30].

In addition, the financial network has attracted a great deal of attention in recent years since it reveals the mechanism of the formation of systemic risk via interbank linkages in a clear and straightforward manner. Studies have demonstrated that the financial network accelerates risk contagion, promotes cascade defaults and causes systemic risk in crisis periods. Earlier studies, such as those of Rochet & Tirole [55], Kiyotaki & Moore [56], Allen & Gale [57], and Leitner [58], have indicated that the financial network, which has been considered as a risk-sharing mechanism in normal times, boosts risk transmission in crisis periods. Notably, Eisenberg & Noe proposed a model that can measure direct and indirect risk contributions from the default bank to other banks in the system [59]. Glasserman & Young estimated how much of the loss is attributed to the interbank linkages by comparing two different financial systems, where one is a connected system, and the alternative has no interbank borrowing. Their results documented that the financial network is the root of risk contagion [60]. In line with Glasserman & Young, Acemoglu *et al.* showed that financial networks exacerbate risk contagion when the magnitude of the initial shock exceeds a certain critical value [61]. Battiston *et al.* confirmed that the financial network is also more sensitive to extreme shock [62]. Related empirical evidence can also be found in, e.g., Martinez-Jaramillo *et al.* [63], Paltalidis *et al.* [64], and Affinito and Pozzolo [65].

7. Research on the Control of Real Estate Financial Risk

In order to effectively curb the real estate financial risk, domestic scholars mainly put forward suggestions from the perspective of government regulation, similar to foreign research. Zhang Yuming stressed that to carry out the total regulation and structural regulation of the real estate market, it is necessary to focus on the regional real estate market, and the way of regulation should start from the demand [66]. An Peng *et al.* established a set of real estate bubble forecasting

system that can be used for macro-control early warning based on the analytic hierarchy process, which provides a basis for the government to control the real estate bubble [67]. Dai Guoqiang and Zhang Jianhua elaborated on the important role of monetary policy in real estate transmission channels. It is suggested that the government accelerate the construction of real estate price transmission channels to ensure the orderly and efficient transmission of China's monetary policy [68]. Xu Jing believes that the effect of real estate regulation and control cannot be evaluated simply by the rise and fall of short-term indicators. Instead, comprehensive consideration should be given to the phased changes of various indicators. At the same time, the timeliness of policies should be fully considered when formulating real estate control policies, and the effect evaluation of policy implementation should be strengthened [38].

As far as specific control measures are concerned, it is possible to establish an early warning mechanism for the financial system, carry out countercyclical regulation, and build a real estate market mechanism. Yi Xianrong believes that in order to establish an early warning indicator system for real estate price imbalance, the government should take comprehensive measures from housing policy, tax policy, land policy, etc., and financial institutions should also improve their risk prediction capabilities [19]. Duan Junshan found that there is a strong positive correlation between house prices and money supply. The government can curb the excessive rise in house prices by controlling the scale of real estate credit and minimize the negative impact of monetary policy [69]. Cai Mingchao *et al.* constructed the utility function of residents based on housing consumption, housing investment, other consumption and financial investment, and analyzed the response of macro-control policies. The research results for the government to carry out real estate counter-cyclical Regulation provides theoretical support [70].

8. Literature Summary and Review

Based on the existing literature research, scholars have studied the multi-angle, multi-modal financial risks, real estate bubbles, real estate financial risk formation and transmission, and revealed the state of real estate financial risks from the generation, expansion and outbreak. On the whole, the current academic research on financial risk, real estate bubble, real estate financial risk formation is relatively complete, but there are some shortcomings in the research on real estate financial risk. For example, the research on real estate financial risk evolution is still scattered, and further research is needed.

1) The research on the connotation of real estate financial risk needs to be improved

From the perspective of real estate, the literature on financial risk references is mostly concerned with the risks of real estate financial markets, while the research on financial risks in the real estate market is less. Especially for China, real estate risk interacts with financial risks. The risk of real estate financial market is only a part of real estate financial risk, which cannot fully reveal real

estate financial risk. In addition, domestic and foreign scholars generally include real estate financial risks into the real estate bubble and financial crisis categories, and there are not many studies on real estate financial risks.

2) The study of the real estate bubble needs to be quantified

Scholars at home and abroad generally believe that the real estate bubble is the root of financial risks, and many countries have a certain degree of real estate bubble. Scholars' research on real estate bubble is rich and perfect, especially the cause and mechanism of real estate bubble. It has carried out a lot of theoretical and empirical research, and also explains some typical real estate bubble phenomenon. However, the research on real estate bubbles at home and abroad is mostly qualitative research, and there are few quantitative studies. Most documents do not quantify the size of the real estate bubble, but only verify the existence of financial risks through the real estate bubble. At the same time, the research on the process of real estate bubble affecting financial stability is not deep enough, and it is basically in the stage of simple discussion.

3) Research on the formation of real estate financial risks needs to be deepened

Foreign scholars mainly discuss the formation of real estate financial risks from the aspects of market information asymmetry, bank fragility and financial liberalization. Chinese scholars also analyze the influencing factors such as housing system and land finance in China. However, the research on the formation of real estate financial risk by domestic and foreign scholars is based on the theoretical level and less on the factual level. Most scholars study the formation of real estate financial risk under a framework system, and use one or several economic theories to analyze real estate credit risk, government policy risk, etc., and systematically expound the real estate financial risk formation mechanism.

4) Research on real estate financial risk transmission needs to be expanded

For a long time, scholars at home and abroad have been biased towards the study of real estate financial risks under the banking-led financial system. The research on real estate financial risk transmission has focused on the impact of the banking system and less attention to other transmission paths. At the same time, most of the literature analyzes the transmission of real estate financial risks through complex models, and there are few studies on specific conduction paths. For China's specific national conditions, China's real estate financial risk is different from the foreign market based on the transmission mechanism of the financial system. The model for studying the risk transmission at home and abroad needs to be further revised.

5) Empirical research on real estate financial risks needs to be improved

Most foreign scholars use the United States, Japan, and the United Kingdom as research objects to conduct empirical research on the relationship between real estate price volatility and financial risk, and conclude that financial credit over-supporting to push up housing prices, or the real estate bubble triggered a financial crisis. Chinese scholars also follow the foreign research ideas. However,

China's real estate market started late, and the data on real estate financial risks are still incomplete, leading to imperfect domestic empirical research.

Conflicts of Interest

The author declares no conflicts of interest regarding the publication of this paper.

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