Analysis Of Current Situation, Risk Causes and Countermeasures of Real Estate Finance--Taking Jiangsu Province as An Example

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Abstract. The real estate industry is not only an important engine of economic growth, but also a cornerstone of social stability and personal life. As a major economic province in China, Jiangsu Province is rich in natural resources and has a strong economic base. It is an important demonstration area for China's modernization and comprehensive development and plays an important role in promoting China's economic growth, scientific and technological innovation and social progress. In the economic structure of Jiangsu Province, the real estate market occupies a pivotal position, which not only contributes greatly to the local financial income, but also has a far-reaching impact on employment, consumption, investment and other aspects. The development of the real estate market in Jiangsu Province has an important impact on the national real estate market, thus this paper takes Jiangsu Province as the research object, discusses the credit risk of the real estate industry in Jiangsu Province from the perspectives of its status quo, risk causes, etc., and then puts forward policy recommendations to promote the sustainable development of the real estate market in Jiangsu Province.

Keywords: Real estate market; financial risk; credit risk.

1. Introduction

The real estate industry, as an important industry in China, is an important part of the national economy and an important investment area for economic development. It is not only related to the level of well-being of the people, but also plays an important role in production, investment and consumption. The real estate industry has certain financial attributes. Although its combination with the financial market has brought certain positive impacts and provide more financing channels for the real estate industry, the continuous expansion of the scale of real estate finance will also bring great risks, leading to fluctuations in the real estate market, which in turn affects the stability of the financial market. Increased financial risk could lead to a downturn in the real estate industry, affecting the job market and income levels of the population, which in turn would heighten uncertainty in the capital markets.

At the two sessions held in China in March 2023, the government work report continued the spirit and deployment of the work of last year's Central Economic Conference, listing the resolution of real estate financial risks as one of the eight important tasks in 2023.In the same year, the U.S. Silicon Valley bank mine incident triggered global concern and also pushed the prevention and resolution of financial risks to become a hot topic again. Real estate financial risk is an important part of systemic financial risk, and preventing real estate financial risk is the key to implementing China's financial security strategy [1]. The study of real estate financial risks can help financial institutions and the government to formulate effective regulatory policies and risk management mechanisms, so as to mitigate the impact of financial risks on the economy and promote the healthy development of the financial market. In addition, studying the risks in the real estate finance market can also provide reference and guidance to investors, helping them to better understand market risks and make informed investment decisions. Against this background, this paper uses the case study method to identify the financial risks of the real estate industry in Jiangsu Province as a research object and puts forward appropriate preventive countermeasures to serve as a reference for the national real estate market.

2. Research Status

The real estate market has been a hot topic of concern for scholars at home and abroad, in which the real estate financial risk represented by credit risk is particularly significant, and many domestic scholars have already provided in-depth insights for this field.

Different scholars have different views on the causes of real estate financial risks. Berger et al. argue that bank credit drives property price increases and financial risk creation [2]. Phang argues that when housing supply is not elastic enough, real estate speculation and housing bubbles are more likely to emerge, which in turn leads to real estate financial risks [3]. Coade identified the problem of adverse selection and moral hazard in the lending market as two of the causes of real estate financial risk [4]. Han has pointed out that the real estate financial risks are due to the lack of diversified financing channels for real estate enterprises and the imperfect personal credit collection system of the People's Bank of China [5].

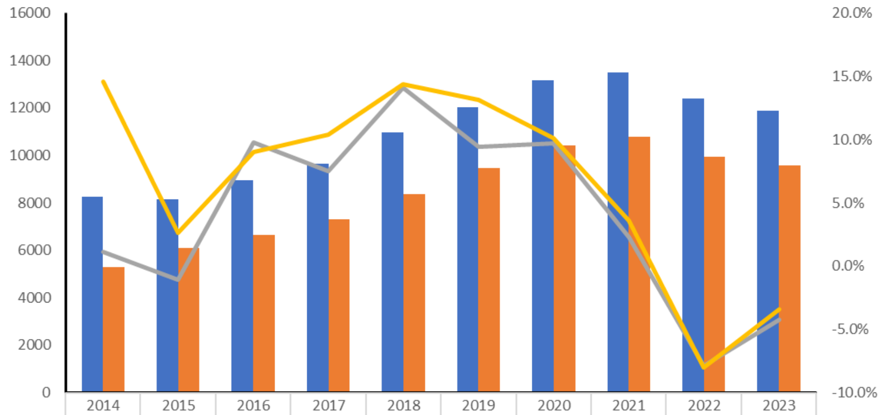
Credit risk is one of the most common risks in the real estate industry, and Yin found that real estate credit management is very important in preventing and controlling real estate financial risks through his research in Liaoning Province [6]. Merton found a significant ratchet effect between credit risk and real estate prices by looking at macroeconomic data from 2006- 2008 in the United States [7]. The results of the study show that real estate credit risk has a profound negative impact on the overall economy. Igan and Pinheiro take commercial banks as their research subjects and point out that the increase of credit risk is due to the high-cost rate of return of banks and the increasing ratio of loans to real estate companies. In addition, they suggest two ways to eliminate the occurrence of non-performing loans: raising the threshold of real estate credit loans and strengthening the pre-lending review mechanism [8].

Preventing and trying to differentiate real estate financial risks is also one of the hot topics of current research. Based on the previous research, Song constructed a credit risk management system for real estate enterprises, which manages and mitigates the credit risk of real estate enterprises from four stages [9]. Yang believes that China's real estate development funds mainly come from commercial bank loans, leading to the concentration of credit risk of real estate enterprises [10]. And she pointed out that credit risk can be reduced by strengthening the management of many aspects of the loan before, during and after the loan. By analyzing the actual real estate credit data of 31 provinces, municipalities and autonomous regions in China, Xu & Shen proposed to combine the banks' credit management policies with the government's monetary policies and implement differentiated real estate credit management policies to mitigate credit risks [11].

3. Current Situation

3.1. Real Estate Investment

From 2014 to 2021, the total real estate investment in Jiangsu Province rises continuously, reaching a peak of 134,745 million yuan in 2021, accounting for 9.9% of the national total. In 2022 and 2023, real estate investment in Jiangsu Province shows a significant drop due to factors such as declining economic growth, slowing urbanization and imbalance in real estate structure (See Fig. 1).



	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Investment in property development in Jiangsu Province (billion yuan)	8240.22	8153.68	8956.37	9629.11	10982.34	12009.35	13171.27	13477.45	12406.88	11891.28
Residential investment in property development in Jiangsu Province (billion yuan)	5294.51	6080.21	6628.87	7315.28	8366.18	9461.98	10416.03	10786.21	9923.81	9583.63
Investment in property development increased year-on-year	1.1%	-1.1%	9.8%	7.5%	14.1%	9.4%	9.7%	2.3%	-7.9%	-4.2%
Residential Investment in property development increased year-on-year	14.6%	2.6%	9.0%	10.4%	14.4%	13.1%	10.1%	3.6%	-8.0%	-3.4%

Investment in property development in Jiangsu Province (billion yuan)
Residential investment in property development in Jiangsu Province (billion yuan)
Investment in property development increased year-on-year
Residential Investment in property development increased year-on-year

Fig. 1 Real estate investment
Source: National Bureau of Statistics

3.2. Price Trend

In the 1990s, China established housing marketization reforms, and housing was changed from welfare distribution to monetary wage distribution [12]. Against this background, the real estate market in Jiangsu Province has developed rapidly, and housing prices have risen sharply.In this paper, the average sales price of commercial houses and the housing rental income of real estate enterprises in Jiangsu Province from 2013 to 2022 are statistically presented (see Fig. 2).In terms of commercial property sales in Jiangsu Province, the sales price of commercial property in 2013 was RMB 6,909 per square meter, while the sales price in 2021 will be RMB 12,906 per square meter, which is about 1.8 times of that in 2013.The housing rental income of real estate development enterprises can reflect the level of rent to a certain extent. The housing rental income has increased from 666.4 billion yuan in 2013 to 1024.6 billion yuan in 2022, which shows that the rent of the real estate market has also undergone a huge growth in the past ten years. As an economically developed province, Jiangsu Province has attracted a large number of migrant workers and residents to move in. In addition, Jiangsu Province is densely populated and has tight land resources, resulting in an imbalance between housing supply and demand. As residents' incomes have risen, the demand for high-quality housing has increased, further inflating property prices and rental levels.

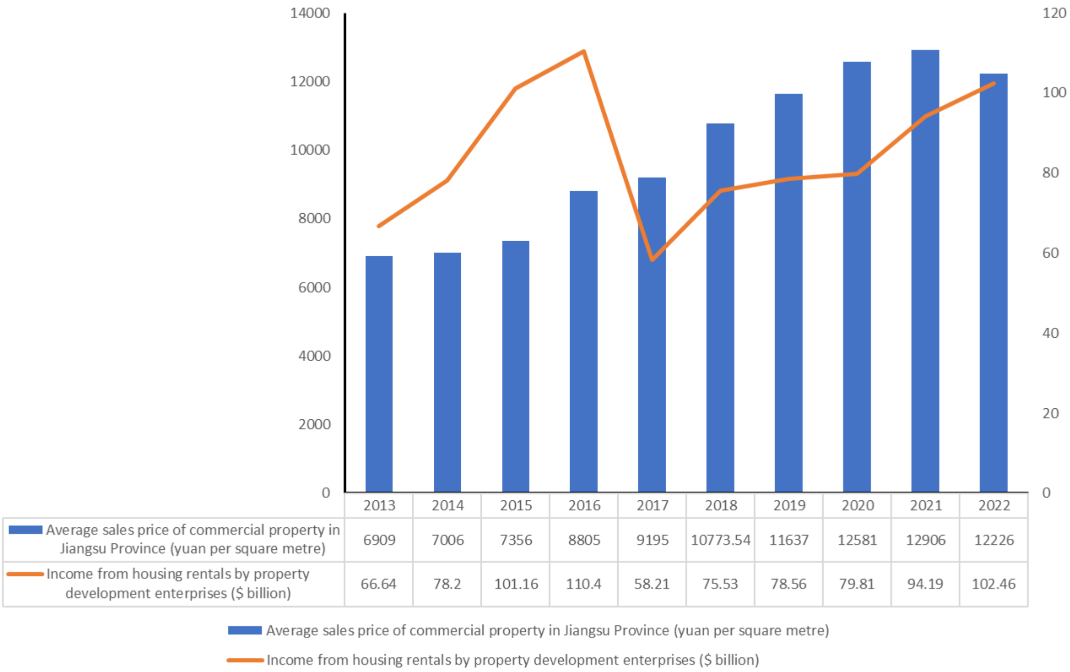


Fig. 2 Average Sales Price and Rental Income of Commercial Properties

Source: National Bureau of Statistics

3.3. Market Structure

The real estate market in Jiangsu Province experienced significant competitive structural changes between 2019 and 2023, with a lower overall market concentration and a more dynamic competitive environment. According to Table 1, Poly Real Estate's market share increased from 1.65% to 3.77% during this five-year period, demonstrating its increased market influence. In contrast, the market share of several other large developers, such as Vanke Real Estate and Country Garden, showed varying degrees of decline. The industry concentration (CR8 Index) declines from 24.10% in 2019 to 17.03% in 2023 on a yearly basis, indicating a decrease in market concentration and an increase in market competitiveness (See Table 2). The decrease in market concentration provides more market opportunities for new entrants and smaller-sized enterprises, which is conducive to the industry's innovation ability and service quality. The significant decline in the market share of enterprises such as Country Garden and Xincheng Holdings suggests that enterprises need to respond flexibly to market changes and strengthen their competitive strategies and internal management in order to maintain or enhance their market position.

Table 1. Market Share of Typical Real Estate Enterprises in Jiangsu Province, 2019-2023

	2019	2020	2021	2022	2023
Poly Development	1.65%	1.60%	1.36%	2.77%	3.77%
Vanke Real Estate	3.34%	5.06%	3.38%	2.60%	2.79%
China Resources Land	1.57%	1.50%	1.29%	2.00%	1.88%
Country Garden	5.70%	5.26%	3.60%	2.46%	1.54%
China Merchants Shekou	2.93%	3.14%	2.94%	3.32%	2.81%
New City Holdings	5.27%	3.66%	3.17%	2.19%	1.42%
Longhu Group	1.94%	1.97%	1.21%	1.27%	1.46%
Jindi Group	1.72%	1.74%	1.61%	2.16%	1.36%

Table 2. Industry Concentration of the Real Estate Market

	2019	2020	2021	2022	2023
CR8	24.10%	23.93%	18.56%	18.76%	17.03%

Source of data: Annual reports of enterprises, National Bureau of Statistics

3.4. Credit Risk

Real estate credit risk mainly refers to the loss that financial institutions or other creditors may suffer in real estate credit business due to the default of the borrower. At this stage, the source of funds for China's real estate enterprises is mainly bank credit, and the more assets the bank has, the larger the amount of loans it can provide. Thus, this paper has selected the balance of real estate loans from financial institutions in Jiangsu Province from 2013 to 2022 for analysis, as shown in Table 3. The data show that from 2013 to 2023, the balance of real estate loans in Jiangsu Province shows a stable growth trend, from 462 thousand million to 1,121 thousand million. This indicates that the demand for credit in the real estate market has continued to increase over the past decade.

Table 3. Loans from Financial Institutions

Year	Real estate loan balances ($100 billion)	Balance of real estate development loans ($100 billion)	Loan balances at financial institutions ($100 billion)	Real estate loan balances as a percentage of loan balances at financial institutions (%)
2013	4.62	2.37	64.91	7.12%
2014	5.53	2.25	72.49	7.63%
2015	6.08	1.88	81.17	7.49%
2016	6.08	2.30	92.96	6.54%
2017	6.61	3.03	104.01	6.36%
2018	7.58	2.84	117.81	6.43%
2019	8.59	3.09	135.14	6.36%
2020	9.81	3.84	156.58	6.26%
2021	10.5987	3.5069	180.5387	5.87%
2022	11.0555	2.4564	206.8454	5.34%
2023	11.2133	2.1642	236.4092	4.74%

Source: People's Bank of China, National Bureau of Statistics.

Although the real estate loan balance accounts for a decreasing proportion of financial institutions, Fig. 3 shows that the overall non-performing loan ratio in the real estate industry of commercial banks in Jiangsu Province is on an increasing trend, reaching 2.26% in 2023. The increase in the NPL ratio reflects the aggravation of real estate loan quality problems and the elevation of credit risk, which has far-reaching implications for financial institutions, the real estate market and economic development.

An increase in non-performing loans can expose financial institutions to deteriorating asset quality and declining capital adequacy ratios, which may lead to a tightening of credit policy, thereby discouraging new loan issuance and economic activity. In the real estate market, an increase in NPLs could reduce market confidence, cause volatility in house prices, and could lead to delays or suspension of real estate projects, further affecting market supply and stability. At the economic level, the emergence of such a situation could lead to a credit contraction and a downturn in the real estate market, slowing overall economic growth and possibly even leading to financial system stability risks. Therefore, regulators, financial institutions and the Government need to closely monitor the dynamics of non-performing real estate loans and take appropriate measures to maintain the health of the financial system and the economy.

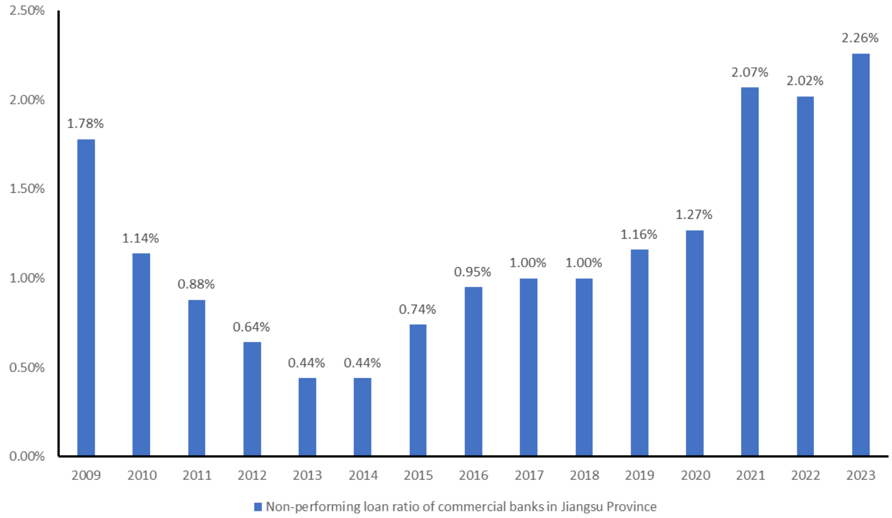


Fig. 3 non-performing loan ratio of real estate industry of commercial banks

Data source: wind database

4. Causes of Risks

4.1. Excessive Financial Leverage

Risks are now centered on the real estate sector, which is an industry that has never reduced its leverage since the deleveraging policy. The leverage ratio is a measure of a company's debt risk, and according to statistics, China's overall macro leverage ratio was as high as 281.5% by the end of 2022. Among them, the corporate leverage ratio was 173%, while the government and residential leverage ratios were 50.2% and 60.6%, respectively. China's debt risk mainly comes from enterprises, and China's real estate enterprises rely heavily on bank credit for development and investment funds, resulting in a high enterprise leverage ratio [13].

Gearing ratio is the ratio of total liabilities to total assets of an enterprise. As shown in Fig. 4, the gearing ratio of China from 2013 to 2022 values are all above 75%, and even exceed 80% in 2019-2021, which is in line with the gearing ratio greater than 70% in the three red lines. The higher the debt ratio of an enterprise, the greater the financial leverage, the greater the risk borne by the enterprise, and the higher the business risk.

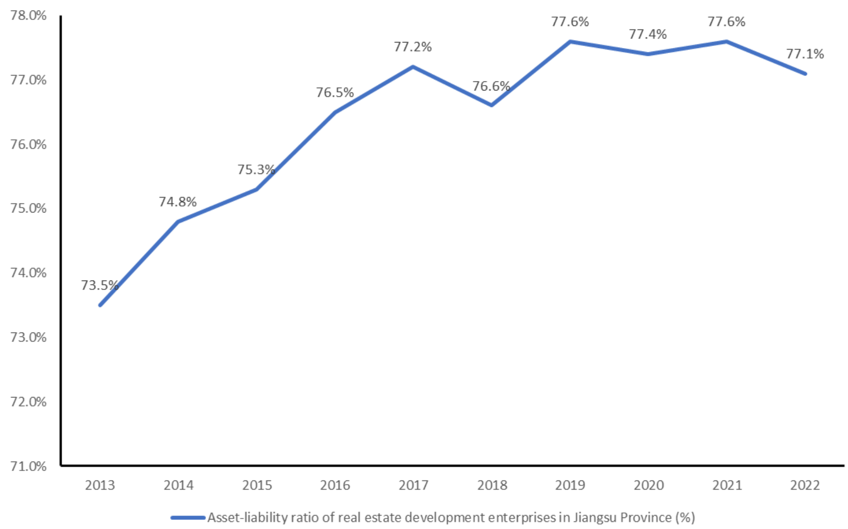


Fig 4. Asset-liability ratio of real estate development enterprises

Source: National Bureau of Statistics

4.2. Long Payback Period

The real estate industry is capital-intensive, and the payback period tends to be long. Investors may be subject to liquidity risk, market risk and so on. Due to the volatility of the real estate market, a long investment return period may result in investors having to face market changes for a long period of time in the future. Uncertainty and cyclicality in the market may affect real estate prices and rental income, which in turn may affect investment returns. If investors need to liquidate their properties quickly in a short period of time but are unable to find suitable buyers, this may result in a failure to recover their capital in a timely manner. In addition, the real estate market is affected by a variety of factors, such as economic cycles, policy changes, supply and demand. If there is an oversupply in the market, rents and property prices may fall, thereby reducing investment returns. On the contrary, if there is insufficient supply in the market, rents and house prices may increase, which may also lead to difficulties in leasing and affect capital liquidity.

As can be seen from Table 4, from 2019 to 2023, the payback period for investments in Jiangsu Province is on an overall upward trend, with growth in all years except for 2022, when there is a small drop. This trend suggests that real estate firms need a longer period of time to recoup their investments, reflecting the complexity of the market environment and the multiple challenges faced by firms. As a result, real estate companies need to focus more on cost control and market strategies to cope with the pressure brought about by the lengthening of the capital recovery cycle.

Table 4. Real Estate Total Asset Turnover Ratio and Payback Period

	2019	2020	2021	2022	2023
Real estate total asset turnover	0.1971	0.1923	0.1887	0.1979	0.1769
Payback period (years)	5.07	5.20	5.30	5.05	5.65

Data source: wind database

4.3. Insufficient Land Supply

Zheng proposes that land finance is the inevitable result of the development of China's land system, financial system and political system. With the continuous promotion of market-oriented reform, land as a valuable resource, has gradually highlighted its financial attributes and is regarded as an asset that can be used for financing [14]. Land is the basic resource for real estate development, without which real estate construction and development is impossible. Therefore, the insufficient supply of land will increase the financial risk of the real estate industry, leading to an oversupply in the real estate market, pushing up house prices, attracting more investors to enter the market for speculation, and leading to the formation of market bubbles. In this regard, scholars at home and abroad have discussed, Peng and Wheaton's study of Hong Kong's housing prices shows that the restriction of land supply leads to the shortage of total commercial housing, which in turn leads to the rise of housing prices [15]. Xie and Liu also pointed out that the oversupply of land in the real estate market led to the increase in house prices [16]. If problems occur in the real estate market, it may lead to instability in the overall economy and systemic risk.

5. Recommendations

According to the actual situation of credit risk appeared in Jiangsu Province, this paper puts forward the following countermeasure suggestions:

First, strengthening credit management

Credit is an important tool for promoting economic growth. Reasonable credit expansion can stimulate consumption and investment and can also enhance overall economic vitality. However, disorderly credit expansion could lead to resource mismatch and economic overheating. Timely adjustment of credit policy can prevent asset price bubbles and market crashes and maintain the long-term stability of financial markets.

First, macroprudential policies need to be strengthened. Adjustments to macroprudential tools, such as dynamic adjustments to minimum down payment ratios and lending rates for real estate loans, are needed to control the total amount of credit and limit excessive borrowing and speculation. Implement differentiated credit control measures based on market risks and economic conditions in different cities and regions, such as raising the cost of credit in areas with overheated housing prices or restricting multi-suite lending to enterprises and individuals. Second, improve credit transparency and information sharing. Improve credit information systems, strengthen information sharing among financial institutions, and establish a sound system of personal and corporate credit records to provide banks and other lending institutions with accurate information on borrowing and lending. Regularly release relevant data on the real estate market, including house price indices, transaction volumes, information on projects under construction, etc., to improve the transparency of market information and help financial institutions make more rational credit decisions. Finally, strengthen risk assessment and management. Financial institutions should strengthen the review process of loan applications, including the borrower's repayment ability, the value assessment of collateral and the completeness of relevant legal documents. Risk assessments of issued loans are conducted on a regular basis to identify potential risk points in a timely manner, and appropriate risk mitigation measures, such as additional guarantees and adjustments to loan conditions, are taken for high-risk loans.

In terms of international experience, the United States has strengthened financial regulation through the Dodd-Frank Act, which requires financial institutions to raise capital adequacy ratios, restricts high-risk lending, and establishes the Consumer Financial Protection Bureau to safeguard consumer rights. The European Union has implemented the Basel III Accord, which raises banks' capital requirements, enhances their risk-resistant capability and introduces counter-cyclical capital buffers to prevent credit over-expansion. Japan, on the other hand, implements a strict credit review system, especially for real estate loans, requiring borrowers to provide detailed financial information and repayment plans to prevent an increase in non-performing loans. By drawing on these international experiences, China can further improve its credit management mechanisms, strengthen risk control and promote sustainable economic development.

Second, broaden the financing channels of real estate enterprises

Broadening real estate financing channels is of great significance in enhancing market liquidity, reducing financing costs and improving market stability. First of all, real estate enterprises can actively use the capital market to encourage external investment. Encourage conditional real estate enterprises to go public or raise funds by issuing additional shares to broaden corporate financing channels. Support real estate enterprises to issue corporate bonds, medium-term notes and other debt financing tools. For large-scale projects, the use of project revenue bonds can be considered, linking risks and returns directly to specific projects. The restrictions on foreign investment in real estate have been relaxed, and foreign direct investment has been introduced to increase the diversity of capital sources. In addition, the inclusiveness and diversity of financial markets have been enhanced through innovative financial financing tools, such as asset securitization, green financing, private platform financing, regional chains and digital currencies to more effectively meet the capital requirements of different markets and different needs.

Third, stabilizing the land market

Rationalize land supply planning. The government should increase the transparency of the land supply program to help market participants accurately predict the amount and timing of land supply so that they can make more rational investment decisions. Adjust the pace of land supply to avoid oversupply or undersupply in the market and to reduce the drastic fluctuations in land and real estate prices; Implement land use policies. According to the development needs and market conditions of different regions, implement differentiated land use policies, such as the proportion of commercial, residential and industrial land use regulation, to support balanced regional development. Encourage multi-functional land use, promote mixed-use land development, and encourage the construction of mixed-use complexes integrating residential, commercial, and recreational uses to enhance land use efficiency and stabilize market demand; Strengthen land market supervision. Establish an effective monitoring system to monitor transactions and price changes in the land market, identify market anomalies in a timely manner, and take intervention measures. Strictly investigate and deal with irregularities in land occupation and development, including unauthorized construction and over-scope development, to maintain market order; Enhance the efficiency of land development. Encourage the adoption of modern construction technology and green building standards to improve construction efficiency and quality and reduce financial risks during the construction process.

6. Conclusions and Future Outlook

6.1. Conclusions

Real estate industry is an important part of modern financial system, which can reflect the economic development level of a country and society to a certain extent. This paper first clarifies the concept and types of real estate financial risk, and then uses case study method to study the real estate risk in Jiangsu Province. It is found that Jiangsu Province has a certain level of financial risk, mainly credit risk, due to high financial leverage, long investment return period and insufficient land supply.

6.2. Future Prospects

This paper focuses on the real estate financial risk in Jiangsu Province from the perspective of the current development status of the real estate market and credit risk in Jiangsu Province. Restricted by various conditions, this paper cannot cover all aspects, and the subsequent research can be expanded from the following two aspects:

First of all, for the current situation of real estate development in Jiangsu Province, this paper mainly analyzes from three perspectives: real estate investment, real estate price changes and market structure. The content is not comprehensive, and subsequent research can be optimized from other perspectives.

Secondly, for the risk analysis aspect of real estate finance in Jiangsu Province, the author only selected credit risk as the research object to focus on. There are other cases, such as bubble risk, which have not been systematically studied. Subsequent studies can analyze more abundant cases accordingly.

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