# Financial Risk Prevention of Real Estate in Nanyang City of Henan Province

#### **Abstract**

In recent years, China's real estate industry in the economic field plays a pivotal role. But it should be noted that the operation of real estate finance is not stable, which also contains many uncontrollable factors, may lead to the occurrence of various risks. The focus of this article is on the third-and fourth-tier cities, which are less well-known but have a very large coverage. Take Nanyang, a prefecture-level city in southwest China's Henan province as an example, through the analysis of the real estate market and the risk of the real estate market, this paper takes the qualitative research as the main method, the practical research as the auxiliary method and the theoretical research method. Based on the related theories of real estate risk, this paper analyzes the present stage of the real estate financial risk in China, the present situation, the existing problems and the causes of the real estate financial development, then it uses the three commonly used international measures of real estate bubble, the ratio of house price to income, the growth rate of house price to GDP, and the vacancy rate, to measure whether there is a real estate bubble in Nanyang, the corollary is that there is a financial risk of a bubble in Nanyang's property market. At last, this paper puts forward some suggestions on how to prevent the financial risk of urban real estate.

Keywords: Real estate market, Financial risk, Nanyang

# Sample

- 4 Measurement of Nanyang's real estate market bubble and financial risk analysis
- 4.1 Measures of Nanyang's property bubble
- (1) Analysis of house price-income ratio

The ratio of house price to income = the average unit price of commercial housing in the area/the average annual household income of the residents, Formula (4-1)

Year	Housing Price Yuan /m²	Average unit price of real estate (Yuan)	Average annual	House
			household income	price-to-income
			(Yuan)	ratio (%)
2016	3547	425640	34842	12.22
2017	3773	452760	38238	11.84
2018	4443	533160	41648	12.80
2019	4735	568200	45276	12.55
2020	5231	627720	46962	13.37

Table 4-1 Nanyang House price-income ratio

Data source: Henan Province Statistical Yearbook

At present, China's real estate industry is in a state of rapid to slow development, the ratio of housing prices and income between 5 and 8 times the value of the city residents on the purchase of commercial housing at a normal level. Nanyang's rural population is the main source of buyers, with few outsiders coming to the city to buy. In calculating Nanyang's price-to-income ratio, the average annual household income includes only rural and urban household income levels. As you can see in table 4-1, from 2016 to 2020, the price-to-income ratio was between 11.84 and 13.37 times. These values indicate that the average annual income of the average household in Nanyang is extremely low, the average price of a single commercial house is too high, and the price-to-income ratio has far exceeded 8 times, indicating a local property bubble.

## (2) Analysis of house price growth rate/GDP growth rate

The above ratio, to a certain extent, can reflect the size of the real estate market growth. The GDP growth rate mainly evaluates the degree of development and change of the final economic development result in a certain region in a certain period of time, which simply means the degree of development and change of the real economy in a certain region. House price growth rate as the name implies, refers to the growth rate of house prices. The house price growth rate/GDP growth rate can reflect the comparative relationship between the house price and the real economy, and predict whether there is a bubble in the real estate market. The evaluation standard is generally that the ratio of less than 1 indicates that the development of the real estate market is in a reasonable degree, and that the ratio of more than 1 to less than 2 indicates that the real estate market should carry out early warning measures for bubbles. If the ratio is directly greater than 2, it shows that the real estate market is in a state of bubble, and the increase of house price is too high and unreasonable. A study of early-warning indicators of our country's housing bubble found that Li Weizhe and Qu Bo put the measure a little higher, at 2.5.

In table 4-2, we see that until 2017, house prices and real economic development were in a reasonable range, but in 2018, house prices surged to 4443 yuan per square metre, bringing

the ratio to 3.83, well above the 2.5 mark, the risk of a property bubble in Nanyang at a time when house prices are too high suggests that they are unreasonably high. The ratio has been well above the threshold for two consecutive years, suggesting that the real estate market is in serious trouble. Through policy intervention and other means, in 2020 have been some control, but still within the scope of early warning.

Table 4-2 Nanyang house price growth rate GDP growth rate table

Year	Housing Price Yuan / m²	The rate of increase in house prices	GDP(Billion)	GDP growth rate	Rate of increase in house prices/GDP growth rate
2016	3547	xxx	3114.97	XXX	xxx
2017	3773	6.37	3345.30	7.39	0.86
2018	4443	17.76	3500.56	4.64	3.83
2019	4735	6.57	3566.77	1.89	3.48
2020	5231	10.48	3794.99	6.40	1.64

Data source: Henan Province Statistical Yearbook

(3) vacancy rate analysis

Vacancy rate = completed unsold commercial housing area/nearly three years completed area, Formula (4-2)

Table 4-3 Nanyang housing vacancy rate 2020

Year	2018	2019	2020	Vacancy rate in 2020
Area to be completed (m²)	2668400	1979500	3670900	28.9%
Area for sale $(m^2)$	878800	1119140	1061690	28.9%

Data source: Henan Province Statistical Yearbook

The housing vacancy rate of our country and the housing vacancy rate of foreign countries have some differences in the number of caliber, can not be generalized. From the point of calculating housing vacancy rate, the initial housing stock area is not put into the total base area, only accounting for a certain period of housing incremental area. So domestic vacancy rate indicators can reflect the market bubble but can not reflect the overall situation of the real estate market. The difference of the economic development level and the ability to bear the economic pressure make the indexes of housing vacancy rate different in each city. Therefore, changes in vacancy rates do not represent the magnitude of the risks faced by cities. In the 1990s, this happened in the real estate market of our country. With the end of the "Southern speech", the real estate in Hainan province ushered in a prosperous era of development. The real estate market developed rapidly, and the real estate prices soared, a year later, with property Macroeconomic regulation and control curbed, half-built flats and 4.5 m square meters of vacant land, the huge housing bubble suddenly burst, wreaking havoc on the market. By comparison, at the same time, Shanghai had more than 2.5 million square meters of vacant housing in Hainan, accounting for about one-tenth of the national total. However, Shanghai's real estate market did not experience major turbulence due to the bursting of the bubble, only for a while afterwards, prices were low. Then, in the early 2000s, as migrant workers settled in, demand for housing increased, prices began to rise, and empty houses were gradually sold out.

Big cities like Beijing and Shanghai can withstand more than 10 percent of the vacancy rate

in the property market, but for second-and third-tier cities in China, the capacity to withstand the vacancy rate is much smaller. Small and medium-sized cities are extremely vulnerable to property bubbles because of insufficient economic development, small population, low income and lack of financial assets. As can be seen from table 4-3, Nanyang's estimated vacancy rate in 2020 was 28.9 per cent, well above the reasonable vacancy rate of 10 per cent in first-tier cities. Because of the lack of legal basis, investors will worry that when their own interests can not be effectively protected, there is no way to protect their interests through legal means, thus reducing the willingness to invest.

4.2 The relationship between the three ratios and the financial risk of real estate in Nanyang Table 4-4 the relationship between the three ratios and real estate financial risk table to draw the table

Target content	Ratio interval	Content
	<5	The development of real estate is slow
House price-to-income ratio	5-8	The development of real estate is reasonable
	>8	House prices are on the high side and there is a bubble
Growth rate of house price/ GDP growth rate	<1	The development of real estate is reasonable
	1-2.5	Warning of a real estate bubble
	>2.5	There was a real estate bubble
	<10%	Low vacancy rate, can accelerate development
W	10%	The reasonable vacancy rate of first-and second-tier
Vacancy rate		cities is slightly higher
	>10%	Weak bearing capacity, vulnerable to bubble burst

Note: refer to the research of Chinese scholars such as Li Weizhe and Cui Guangcan to draw the table

Combining the three indicators above, we can see that between 2010 and 2018, Nanyang's housing price-to-income ratio was between 11.84 and 13.37 times, in 2019, the growth rate of house price GDP was 3.48. In 2020, the estimated vacancy rate was 28.9% . This paper argues that Nanyang's real estate market is on the high side of housing prices, consumers' purchasing power is insufficient, and there is a bubble in the market at present, if it goes bust, there will be huge financial risks.

4.3 The reasons for the imbalance between supply and demand in Nanyang's property market

### 4.3.1 Weak industrial support leads to insufficient purchasing power

Nanyang is rich in mineral resources, and the city of these resources as the main source of income, the relatively late start of the industry, the strength is not strong enough to drive the employment capacity, unable to meet the needs of the local residents. Moreover, wages are relatively low, with migrant workers accounting for about 40 per cent of the population, who usually return only during the Chinese New Year and busy farming periods. If Nanyang were to build large factories, such as Foxconn, that would provide plenty of jobs, the net outflow of people would surely fall, stimulating demand for real estate in the city. It can be said that the lack of real economic support, the residents who buy homes do not have enough income and can not afford to live, is the main factor in Nanyang's current real estate situation. The main body of agricultural operation mainly includes farmers, professional large households, agricultural leading enterprises, agricultural cooperative economic organizations and so on, which is the main body of agricultural financing demand, the financing difficulty of the main body of agricultural management is one of the obstacles to agricultural modernization.

4.3.2 Overemphasizing "Land urbanization" and neglecting "Population urbanization"

Population urbanization refers to the migration of the rural population from rural areas to cities, and the transformation of the rural population into the urban population, resulting in the transformation of their agricultural hukou into a Hukou system, because of this reason, the proportion of urban population in the total population is increasing, which is the product of the development of social productive forces to a certain stage. Land urbanization, also known as land urbanization, is mainly reflected in urban construction, such as large-scale infrastructure construction, bridges, commercial buildings, factories, office buildings, railways and highways.

- 4.3.3 Inadequate functioning of government departments
- (1) Blind planning leads to the imbalance of the real estate market

As can be seen from the above discussion, the Nanyang Municipal Government's urban planning plan for 2010-2020 is about three times that of the old city plan. However, the existing development land in the whole new area is about 13.6% of the planned, which is far from the target of 30%.

It can be seen that the city government in the planning did not take into account the local level of economic development, the phenomenon of blind planning, ignoring the development of the real economy. In the municipal economy, the government is the main manager, the decision-making of the government has an important guiding role in urban economic development, the correct policy is to guide the operation of the real estate market guarantee. However, on the road of development, the government's orientation bias understands the construction of cities and small towns as pure urban construction, including commercial housing, roads, greening, School and Hospital Planning, office areas, leisure squares, and so on. In this process, only the pursuit of urban landscape construction, as well as land transformation, so as to the migration of people, industrial agglomeration, job creation and other factors of neglect, Nanyang's urbanization of land is out of step with the country's economic development, wasting scarce public resources on image projects.

(2) Excessive support of the real estate industry leads to the tail risk

Real estate development in Nanyang is a relatively quick and effective way to improve the government's performance, not excluding some government leaders from selling large amounts of state-owned land in the name of land management to improve their political performance, officials do not care whether this is in line with the realities of local economic development. It is clear that land revenues help with image projects. As a result, more buildings have been built and roads have been widened, but this does not provide people with income commensurate with the construction of the city.

- (3) To "The folk loan" the neglect management causes the real estate credit risk
- Raising high-interest loans for private financing is common among Nanyang property developers. The owner of the property ran away because of financial problems, leaving behind a pile of unfinished buildings and unpaid loans, which had a very negative impact on the local economy. If the government were to tighten its grip on usury, developers would not run away, even if the market did not sell well.
- 4.3.4 Financial market Information asymmetry in the real estate sector

First, there is the Information asymmetry between the government and property developers. The most important component of real estate projects is land. All real estate projects that

need to be completed must be land-based. Real estate developers must first obtain the consent of government agencies to obtain land, at the same time, the government needs to formulate land policies, and basically have all the information about state-owned land, which property developers know very little about, leading to serious Information asymmetry, easy to appear in the government and real estate developers, triggering speculation, "Land King" and other phenomena. In addition, in the real estate industry, urban planning and construction as well as tax planning policies, there is also a phenomenon of information non-transparent symmetry.

Second, there is a Information asymmetry between property developers and the banks with which he works. Real estate companies in the Nanyang Region are required to provide the bank with materials to prove their business model and the actual financial position of the company during the corresponding loan application process. Real estate companies will provide favorable materials for their own financing credit, and banks will investigate financial statements, corporate liabilities, business statements and so on in order to reduce their credit risk. In the course of the actual investigation, we will find that most of the real estate enterprises in Nanyang, Henan province, have some problems in their profit model, such as excessive corporate debt and so on. As a result, there is often inadequate financial information in providing information to banks, leading to situations such as bank-enterprise Information asymmetry, and ultimately affecting credit for most real estate companies in Nanyang, Henan province.

At present, most of the policies related to the real estate market in our country focus on the development speed of the real estate market, and whether the development of the real estate market can effectively guarantee the housing demand of the local population, in this respect is less considered. Too much attention to the real estate industry as an important driver to promote national economic development, and the real estate should be the basic security of people's lives in this regard less considered. With the development of the real estate industry, many industries arise, such as construction, building materials and so on.