

Analysis of the Development Process and Trend of China's Real Estate Industry

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ABSTRACT

The real estate industry has been a significant pillar of the national economy in China. This paper first divides the development of China's real estate market into four stages: the initial stage, the leap stage, the destocking stage, and the regulation and stabilization stage, and then analyses relevant policy regulations and events in each stage. Besides, the effect of real estate on the national economy from different periods is further surveyed. At present, China's real estate economy has entered into a new round of adjustment, economic slowdown, as well as the property prices, oversupply of the property, needs to be digested gradually. The government has further strengthened regulation and supervision of the real estate market by introducing various control measures on properties to suppress the bubbles and ensure sound development of the industry. The transformation of real estate enterprises is an urgent task. Starting from Country Garden, this paper puts forward some suggestions on the possible development prospects of real estate enterprises by analysing the transformation direction of several typical real estate enterprises.

Keywords: *China, Real estate, Three red lines*

1. INTRODUCTION

1.1 Background

China's real estate industry has been in a state of rapid development which drives the development of other industries. Despite its contributions to the nation, there are still many problems in the actual development process of the industry. The benefits of real estate investment are enormous which attracts many companies competing to have a piece of, causing chaos in the entire industry and imperfect market mechanisms. Because real estate prices rise more and fall less, the government continues to seek suitable solutions, hoping to solve various problems existing in the real estate industry by suppressing housing prices. With the reduction of market bubbles, China's housing prices have gradually stabilized. The development model of "high leverage, high debt, and high turnover", which was regarded as the standard in the past, is no longer the case, and the real estate industry has entered a new era of development.

1.2 related research

Evaluating the developing periods of China's real

estate industry, Wu and Wang analyse the four stages of real estate since the reform and opening up. 1978-1991 was the initial stage of China's real estate marketization, which constituted the basic framework of China's urban land market. 1992-1997 was the stage from irrational speculation to adjustment and promotion. 1998-2001 was the stage of rapid development of the whole real estate market. From 2001 to now, it is the stage that government regulates and controls real estate to make it develop healthily [1].

For the current situation of this industry, Wang et al. analyse the real estate situation of each level of cities separately and conclude that the main problems are the difficulties of macroeconomic regulation and control brought about by regional differentiation and the potential harm of industrial bubbles to the economy [2]. Ebenezer's study uses a dynamic slacks - based measure (SBM) model based on inter - connectivity between consecutive periods to estimate the operating efficiency of 110 listed Chinese real estate companies in his first step analysis [3]. Zhao et al. point out that China has a large real estate inventory, characterized by significant regional differentiation and different types [4]. Li and Zhang's research analyses the contribution of

the real estate industry to national economic growth from start-up development, production, and consumption [5].

In regarding the development prospect of China's real estate industry, Han's research predicts that China's real estate economy will develop rapidly, but the rigid demand for real estate is unstable [6]. Zhao's paper summarizes the current problems faced by the real estate industry and puts forward measures to promote the healthy development of the real estate industry for the first-, second, and third- and fourth-tier cities in combination with the actual situation [7].

2. THE DEVELOPMENT PERIOD OF THE CHINESE REAL ESTATE INDUSTRY

2.1 Overview of the four stages

The theories of housing commercialization and land property rights in 1978 were widely accepted as the beginning of China's real estate market. So far, with more than 40 years of development history, real estate has undoubtedly become a pillar industry of China's economy and has made outstanding contributions to stimulating the development of the national economy.

As shown in Figure 1, according to the policies of different periods and the development of the real estate industry, the development of the real estate industry can be divided into four stages: the first stage (1978~1991) the initial stage, the second stage (1992~1997) the leap stage, and the third stage (1998~2015) the destocking stage, the fourth stage (2016~present) the regulation and stabilization stage. Figure 1 shows the changes in the real estate climate index from 1995 to present. Figure 2

presents the China's urban residential floor space per capital from 1975 to 2016. Table 1 indicates that four developing stages and relevant influences.

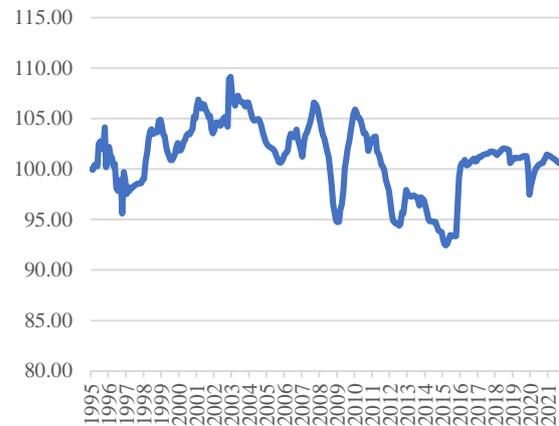


Figure 1 Real climate index (1995-2021)

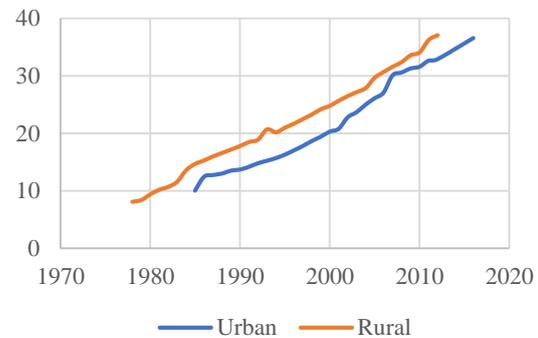


Figure 2 China's urban residential floor space per capital (1975-2016 urban, rural)

Table 1. Four developing stages and relevant influences

Stage	Year	Movements	Impact on the market
the initial stage (1978~1991)	1978	Issue the policy of "housing commercialization"	China's real estate has gradually become marketized.
	1979	Issue the policy of land property rights	China begins pilot program of selling houses to residents at full price.
	1980	Advocate the idea of "selling public housing, adjusting rents, and proposing individuals build houses and buy houses"	Kick off the development of China's real estate.
	1988	Revise the "Land Management Law"	China's real estate industry has officially entered the era of commercialization.
the leap stage (1992~1997)	1991	Hold the second national housing system reform Working conference and carry	A large number of funds poured into the real estate industry, and the real estate industry showed a clear tendency to overheat and bubble.

		out housing reforms in 24 provinces	
	1992	Hold the "Southern Talks"	The real estate industry system has been gradually improving which contributed about one-third of the GDP growth at that time.
	1993	Implement the housing provident fund system and issue a large number of housing bond	Enormous bubbles appeared in the real estate market in various special zones
The destocking stage (1998~2015)	1998	Issue the policy of the monetization housing allocation	The country's stock of vacant housing was quickly digested, and the process of China's real estate marketization was greatly accelerated.
	2003	Strictly control housing loans and promoted standardized and structural adjustments	Speculation opportunities have been greatly reduced, and the inventory of housing has increased rapidly
	2005	Issue several policies on stabilizing housing prices, such as "Six National Suggestions" and "Four National Suggestions"	Stabilize the housing prices
	2016	Issue the policy of "restrictions on purchases and loans" and "restrictions on sales and prices"	China's real estate industry has ushered in a stage of comprehensive regulation and stabilization. The housing prices in first- and second-tier cities quickly dropped
the regulation and stabilization stage (2016~present)	2017	Advocate the concept of "houses are used for living, not for speculation"	The macro environment has continued to tighten, and the growth rate of the real estate industry has slowed

2.3 Impact analysis of the real estate industry on China's economy

The development of China's real estate economy is inseparable from the sustainable development of the overall social economy. The growth of real estate has attracted many Chinese and foreign investments which provided effective economic support for real estate development and promoted the sustainable development of the overall social economy. Real estate development needs to be closely linked with the country's policies and regulations and conform to the country's strategic development plan to promote the continuous growth of the economy. Real estate occupies an important position in China's economy, and the sound development of real estate helps to stimulate economic growth and promote development and construction in a modern country.

During the two decades of the budding period of real estate investment development from 1978 to 1998, real estate contributed to economic growth from two aspects: one was to indirectly affect the economy through the intermediary of policies, and the other was to directly affect the economy from the investment itself. With the implementation of housing reform and the emergence of real estate investment, the state can collect funds in the hands of citizens through the housing provident fund, thereby maintaining and increasing the value, greatly reducing the country's previous capital investment in housing construction, and indirectly stimulating the country's macroeconomic growth. In terms of direct impact, real estate increases residents' wealth holdings, promotes consumption, and stimulates the economy. In addition, the demand for housing has increased, development investment in the real estate industry has been promoted, and the construction of new houses has

continued to increase. However, these impacts are not great in this period.

From 1999 to 2005, due to irrational operations in the real estate investment market, the state carried out macro-control on it. At this stage, real estate was largely suppressed, which had a negative impact on the economy. In 2008, the global financial crisis broke out and impacted the developing real estate market in China. To maintain domestic economic growth, the state's policy on real estate investment changed from austerity to easing, allowing the development of the real estate market to drive GDP growth. The process of national urbanization has led to an increase in investment in fixed assets, which has accelerated the country's economic growth. Real estate investment is a key factor in promoting economic growth. [9] When the national economy is in a period of rapid development, the process of urbanization is accelerating, and urban construction is vigorously developed, the demand for real estate investment and housing is bound to increase, and the increase in overall income brought about by economic growth has brought the necessary capital foundation for real estate investment. At the same time, it has also promoted the demand for real estate, making the entire real estate industry develop vigorously, with steady growth in supply and demand, which in turn promotes continuous economic growth and mutual promotion, making the economy embark on a path of stable development.

In conclusion, the impact of real estate investment on economic growth is mainly demonstrated from two aspects. Firstly, the increase in real estate investment directly promotes economic growth. Secondly, the increase in real estate investment has a driving effect on related industries, which increases the demand for related industries and affects economic growth. Due to the long development cycle of real estate investment, the return period of funds is also longer than that of other industries,

so that there is a certain time lag in its effect, but in the long run, real estate investment will undoubtedly have a stimulating effect on economic growth. With the continuous development and maturity of the real estate industry, its relevance to the national economy will become higher and higher, and in a long period, the role of real estate investment in promoting the economy will become greater and greater.

3. ANALYSIS ON THE CURRENT SITUATION OF THE CHINESE REAL ESTATE INDUSTRY

3.1 Recent policies and influences

To control the growth of interest-bearing debts of real estate enterprises, the regulatory authorities have issued new regulations on real estate financing "three red lines". The "three red lines" for real estate refer to the three standards that the regulators tightened the financing of housing companies, requiring the control of the growth of interest-bearing debt in the real estate industry. The first red line is that the asset-liability ratio excluding advance receipts shall not be greater than 70%, the second red line is that the net debt ratio shall not be greater than 100%, and the third line is that the short-term cash debt ratio shall not be less than 1 times. According to the requirements of "three red lines", real estate enterprises are divided into four grades of "red, orange, yellow and green". The red grade means that all three red lines are touched, and no interest-bearing liabilities shall be increased. As shown in Table 2, this new regulation greatly restricts the financing of real estate companies. This policy strictly controls the financing of real estate enterprises and reduces the liabilities of real estate enterprises, it is conducive to correcting the blind expansion of some enterprises and enhancing the anti-risk ability of real estate enterprises.

Table 2. Details of "three red lines" policy of real estate enterprises

Redline	Requirements for financial indicators
Line I	Asset liability ratio excluding advance collection $\leq 70\%$
Line II	The ratio of net debt to equity $\leq 100\%$
Line III	The ratio of cash to short-term debt ≥ 1

At the end of 2020, the Chinese government issued "two red-line" policy, which are about the proportion of personal housing loans, which is the ratio of the balance of personal housing loans to the balance of various RMB loans of financial institutions. Preferential personal home loan interest rates have become a thing of the past and maybe higher for a long time to come. This policy controls the scale of real estate loans, it can prevent the potential systemic financial risks caused by the excessive

concentration of real estate loans by the financial system, control the scale of housing loans and reduce residents' leverage risk. As shown in Table 3, it sets different standards for banks of different scale. Among them, village banks are banking financial institutions established in rural areas that mainly provide financial services to local farmers which has the lowest upper limit of loan ratio.

Table 3. Details of two red lines of real estate loans

	Large banks	Medium-sized banks	Small banks	County rural institutions	Village banks
Red Line I: Proportion of real estate loans	≤40.0%	≤27.5%	≤22.5%	≤17.2%	≤12.5%
Red Line II: Proportion of individual housing loans	≤32.5%	≤20.0%	≤17.5%	≤12.5%	≤7.5%

In regarding to the reforming of real estate tax policy, this policy reduces the investment attribute of real estate and curb real estate speculation. It can solve the problem of land finance of local governments to a great extent.

3.2 Current development of the real estate industry

Since 2017, the cumulative year-on-year scissors gap between the newly started and completed areas of commercial housing in China has emerged and gradually widened. From January 2021 to October 2021, the newly started area of commercial housing in China was 1.235

billion square meters, with a cumulative year-on-year decrease of 6.80%, and the completed area of commercial housing in China was 414 million square meters. As shown in Figure 3, the growth rate of real estate development investment slowed down. In 2020, the cumulative amount of real estate development investment (from February to November) was 12949.236 billion yuan, with a cumulative year-on-year increase of 6.8%. In 2021, the cumulative amount of real estate development investment (from February to November) was 13731.396 billion yuan, with a cumulative year-on-year increase of 6.0% [11].

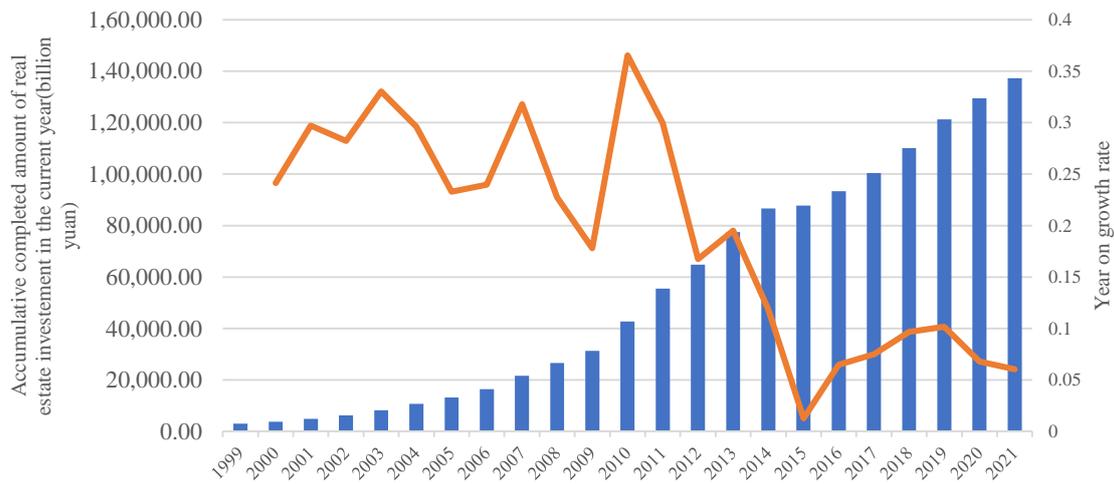


Figure 3 Real estate development investment

As shown in Figure 4, the contribution rate of the real estate industry to GDP has been stable at about 4% in recent three years. Generally speaking, the improvement of the policy environment, all parts of the real estate industry have cooled down to varying degrees. However, with the transformation of the new development model, the real estate industry has gradually entered a virtuous circle.

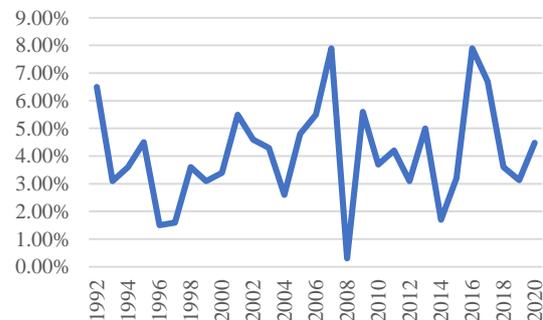


Figure 4 Annual contribution rate of GDP: real estate industry

We further conclude that there are five main existing problems:

1) The regulation of the real estate market is not clear, the effect of macro-control is not obvious, the land price in various cities rises, the cost of real estate projects increases. The above factors lead to a vicious circle for real estate enterprises and affect economic development.

2) Under the guidance of the concept of "housing without speculation", the long-term risks in the real estate industry remain unchanged due to the impact of destocking, policy pressure, and the trend of population changes.

3) The liquidity cycle of "sales - capital recovery - construction commencement" is close to collapse, more real estate enterprises default and the market has a strong voice for liberalizing the policy.

4) At the current stage, the expansion of China's real estate industry is too fast, and the weak internal control and audit lead to financial management chaos.

5) The operation cycle of real estate enterprises in China is long-last, the output is lagging, and multiple links are added with leverage, which leads to the high debt ratio and high risk of the real estate industry.

3.3 Analysis of the Chinese real estate industry: Taking Country Garden (02007. HK) as an example

Table 4. Applying three red lines requirements on Country Garden [8]

Item	2020	2021
Asset-liability ratio excluding advance receipts	80.53%	78.50%
Net debt to equity ratio	55.89%	49.70%
Cash to short-term debt ratio	1.74	2.15

3.3.1 Redline 1

According to the indicator requirements, the current asset-liability ratio of the Country Garden excluding advance receipts is slightly higher than the yellow line. Although its debt-to-asset ratio is high, it has a downward trend year by year. It is reasonable to speculate that it will enter the green line at the established node.

3.3.2 Redline 2

The further decline in Country Garden's net debt ratio is due to its continued orderly reduction of interest-bearing liabilities. In 2020, Country Garden has begun to gradually reduce interest-bearing liabilities. In the first half of the year, interest-bearing liabilities further dropped from 326.49 billion yuan at the end of 2020 to 324.24 billion yuan, making the three red-line indicators exclude the net debt ratio.

Country Garden Holdings Co., Ltd., founded in 1992, is one of the top ten real estate companies in China. It regards real estate development as its main business, and the industries involved include construction, decoration, property management and development, hotel management, etc.

As shown in Table 4, country Garden maintained rapid growth and its revenue structure was further diversified. The asset-liability ratio is an important indicator to measure the long-term solvency of an enterprise. The asset-liability ratio of County Garden is always above 75%, which is at a high level, indicating that it has high debt and great debt pressure. The ROE ratio has been rising continuously in the past three years, reaching 31.82% in 2017, which is at a high level in the same industry. The operating net profit margin refers to the ratio of net profit to operating income. The operating net profit margin of Country Garden Group has been rising continuously in the past three years, which indicates that the profitability of the company is constantly improving, the company is developing rapidly, and its operating income is continuously increasing, and it is at an excellent level in the same industry. To better evaluate its business situation, the following will analyse it from the perspective of three red lines.

3.3.3 Redline 3

Country Garden's cash short-term debt ratio is 1.74 in 2020, and it reaches 2.15 in the first half of 2021. The ratio is much higher than the general standard of 1.0, indicating that the company has a better ability to directly pay current liabilities, but there is a lack of full utilization of current funds. The reason for this indicator's continuous increase is that in terms of debt maturity, Country Garden has replaced part of its short-term debt with long-term debt.

4. DEVELOPMENT PROSPECT OF CHINESE REAL ESTATE INDUSTRY

4.1 Real Estate Enterprise Transformation analysis—Taking Country Garden as an example

As a leading real estate company, Country Garden has invested heavily in transformation by using technology

to achieve high-quality development and is committed to the development of new forms of agriculture.

By the end of 2021, Guangdong Bozhilin Robot Co., Ltd., a wholly-owned subsidiary of Country Garden Group, has developed 46 types of construction robots, and another 18 robots have been put into commercial application. These construction robots will effectively replace manual labour to a large extent, and carry out safe, efficient, and accurate production and construction of building parts and components. At the same time, the use of construction robots also stands for safer, more efficient, and more environmentally friendly production to a certain extent. [8]

In 2021, Country Garden Agriculture signed a contract with the Guangdong-Hong Kong-Macao Greater Bay Area Modern Urban Agriculture Comprehensive Demonstration Base. With molecular breeding, smart agricultural machinery, research and development of unmanned control systems, and digital agricultural applications as the core and foundation, it will build a comprehensive demonstration base covering farming, planting, management, harvesting. The five major links of transportation are large-scale "unmanned" farms in the entire industry chain. It is committed to improving agricultural production efficiency and helping to solve food problems through the continuous improvement of unmanned farms.

4.2 Typical Transformation Directions of Other Real Estate Enterprises

4.2.1 Vanke Group: Refinement of development business and accelerated development of operating business

Under the pressure of the series of heavy control policies in real estate, Vanke Group believes that real estate enterprises have officially entered the era where management brings great benefits. Facing this challenge, Vanke Group focuses on two major channels. One is to consolidate and improve the fundamentals, that is, to improve the refined management of development business. The other is to accelerate the transformation and development of the new track and promote outstanding talents to devote themselves to operating businesses with the mentality of entrepreneurs.

4.2.2 Greenland Group: Create an "ecosphere" for coordinated development

For the transformation strategy in the new era, the general idea of Greenland Group is to actively extend to the upstream and downstream of the industrial chain and related industries and collaborative industries based on consolidating the original advantageous industries such as real estate, carrying out "limited and diversified"

operations, and create an "ecological circle" business model for collaborative development. In the main business of real estate, Greenland Group believes that it should strive to achieve high-quality development, further reserve high-quality land, deeply cultivate core cities such as the Yangtze River Delta and the Pan-Pearl River Delta region, and build a comprehensive real estate group. At the same time, it will continue to improve the management level to enhance the overall competitiveness and market influence of the Group.

4.3 Suggestions for the development of the real estate industry

With the concept of "housing and not speculating", asset properties of real estate that are different from other commodities are gradually weakening, which means that real estate is becoming more and more commercial in nature. Under strict government supervision, real estate companies can mainly focus on the following development directions.

4.3.1 Technological transformation and the digital revolution

The arrival of the 5G era means that the real estate industry is required to embrace new technologies more actively and drive industrial adjustment with innovative thinking. Real estate companies should actively build a bridge of communication between real estate and technology companies. On the one hand, they should use new technologies to improve housing construction quality and construction efficiency. On the other hand, they should utilize technology to improve user experience and actively improve the living environment to develop ecological housing.

4.3.2 Refinement of operation and expansion of stock benefits

In contrast, the technological barriers of real estate companies are not as high as other industries. To improve their competitiveness, real estate companies need to actively expand the benefits of management. Under the pressure of "three red lines", real estate enterprises need to improve the speed of capital utilization and intensify and simplify their business models. Real estate companies need to improve their management systems, marketing strategies, and financial systems to increase their brand value and market share [10].

4.3.3 Integrate the industrial chain and develop the ecosystem

It has been shown that China's main demand for real estate has changed from simply increasing the area of urban housing to improving housing quality. At this level, real estate companies are required to work hard to

improve their real estate projects. People-oriented, integrate the surrounding industry chain and bring customers a more comprehensive and better experience. At the same time, they can also meet the needs of different groups of people through multi-level and multi-variety methods, continue to explore possible combinations, increase the proportion of operating businesses, actively explore the development possibilities of new real estate enterprises, and use the advantages of real estate enterprises to integrate other emerging industries to bring new vitality to the company.

5. CONCLUSION

Through the analysis of the past decades, it is not difficult to conclude that the real estate industry needs to explore new development directions, and transformation is imperative. In the future, the demand for housing will still be strong, and the unbalanced development between regions will make the real estate market still have a large amount of demand. Real estate should not only seek development space in terms of quantity but also need to solve quality problems. They have been tested whether can improve residential services so that the majority of residents can enjoy the good life. Real estate has changed from chasing scale to focusing more on quality, adapting to green development and digital improvement. After saying goodbye to high growth expectations and putting down the burden, the industry will enter a new stage of development.

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