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# THE INTERACTION BETWEEN REAL ESTATE AND NATIONAL ECONOMY

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**Abstract**: Using relevant data to demonstrate the function of the real estate industry in national economic development, and analyzing the interaction between the real estate industry and the national economy. this paper points out the effect of the development of the real estate industry on promoting economic development, optimizing urban industrial structure and promoting employment. Through a number of parameters and variables to illustrate the interaction and impact between the real estate industry and the national economy, on the basis of this premise, this paper also states the corresponding countermeasures for the sustainable development of the real estate industry.

Key words: Real estate, National economy, Interaction

During the past 20 years, especially in recent years, with the reforming forward of urban housing system, the accelerated process of urbanization and the implementation of the proactive fiscal policy, China's real estate industry has seen significant development. The real estate industry which is an important component of the big socio-economic system, as the basic national economy carrier, is the main forces to promote economic growth, and speed up the industrialization and urbanization. A deeper understanding of the relationship and interacting factors between the real estate industry and the national economy have a great meaning to promote the development of the real estate industry in a better way. Therefore, the author has made some discussions about how to correctly understand the function of the real estate in the national economy development, especially the relationship and interacting factors between the real estate industry and the national economy.

#### 1. REVIEW OF THE LITERATURE

During the late 1980s to early 1990s, with the reform of urban land utilization-system and deepening in urban housing system, the real estate industry has undergone an unprecedented development. In the early 1990s, the Ministry of Construction proposed the real estate industry as a pillar industry of the national economy; in 1996, the Central Economic Work Conference proposed to make housing development as a new point of economic growth, and hoped to promote economic recovery and growth through the development of the real estate industry. At the same time, the theoretical understanding of the status of the real estate also changed, and the voices of defining the real estate industry as one of the pillar industry are enforced (Qi, 1996). The National Economic Work Conference in November.1999 decided to still take the real estate industry as a key driver of economic growth. Since then, the practical real estate

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industry has undergone a faster development, and the theoretical field get a different awareness of the function of the real estate in the national economy One viewpoint thinks the real estate industry in the national economy plays a leading and basic role, and so a priority should be put, while not over-speeding, on developing real estate industry on the perspective of sustainable development (Hu Nai-wu, Dong Pan, 2000); another viewpoint is that the level of the development of China's real estate industry has gone beyond the stage of economic growth, which is in the later stages of the transition from "economic growth point" to the "pillar industry" (Wu Shao-Jun, 2000)

# 2. FUNCTION OF REAL ESTATE IN THE NATIONAL ECONOMY DEVELOPMENT

#### 2.1 Real estate investment effectively promotes GDP of the national economy

Contribution rate of real estate investment for the national economic growth development increased gradually. In 1997, after deducting the land purchase costs, the real estate investment took up 3.9% of the GDP, which increased to 7.5% in 2005. From 1997 to 2005, the incremental proportion of the GDP of the real estate development which is deducted the cost of land purchase costs reached 11.6%, of which, it was 16% in 2005. This does not include the indirect promotion, generated by the real estate industry and in a multiplier effect, for the other industries.

#### 2.2 The real estate industry led the development of related industries

Because of characteristics such as the long industry chain and obvious leading role of the real estate industry, its development and changes, to a large extent, influence the development of other related industries.

Real estate induces the largest effect on the construction industry, manufacturing. Each 10 billion yuan investment in real estate can induce manufacturing output 12.361 billion yuan, the construction industry output 9.076 billion yuan, mining 1.664 billion yuan, commerce 1.116 billion yuan, the real estate industry itself 1.098 billion yuan, electricity & gas & water supply industry 659 million yuan (Li, 2002). These research results help us evaluate, on quantitative level, the affect of the real estate industry on the development of other related industries.

#### 2.3 Development of real estate is beneficial to upgrade industrial structure

Currently, the value added structure of our nation's three major industries, comparing to the countries of the same development level, exists larger deviations. This kind of structural deviations behavior on two aspects: The first one is that the proportion of secondary industry is too high. During 1996 to 1999, the average proportion of secondary industry was 49.4% by calculating on the contemporary price, and 55.1% by the constant price, which was 10 to 20 percentage more than the countries of the same development level; the second one is that the proportion of tertiary industry is too low. During 1996 to 1999, the average proportion of tertiary industry was 32% by calculating on the contemporary price and 28% by the constant price, which was 10 to 20 percentage less than the countries of the same development level. Therefore, from "the Tenth Five-year Plan" period to 2010, the main tasks of Chinese readjustment of the industrial structure of the three major industries are to vigorously develop the tertiary industry. The real estate industry is an important industry in that. The development of real

estate, not only brings opportunities for product optimization of the second industry structure, but also brings more demanding space for the development of the tertiary industry.

#### 2.4 Real estate industry can promote the expansion of the consumer market

The continuing pursuit and update of people'demand on the property functions, environmental quality and community services will inevitably stimulate and promote the real estate and the expansion of the consumer market. With suitable housing, people also hope to create a more comfortable living conditions and space, such as improving the living environment through interior decoration, the purchase of new furniture, electric appliances and so on. This will no doubt increase demand of the decorative materials, household appliances, furniture, kitchenware and sanitary wares. At the same time with the increase of the use of the indoor area and standards, improving the indoor environment continuously, people ask for a higher requirements on the outdoor environment, such as virescence, traffic, quiet extent.

#### 2.5 Development of the real estate industry can improve employment

The construction industry is a labor-intensive industry, whose capacity of absorbing labor is great. Along with the development of the real estate industry, employment in the construction industry has greatly increased. According to statistics, in 2002 employment of Chinese real estate is over 20 million people, and according to statistics in September 2005, employment of the real estate industry (including construction industry) is nearly 40 million.

#### **Employment in China's real estate industry**

Unit: Ten thousand people

Year	1985	1990	1995	2000	2002	2004
Employment	911	1010	1497	1994	2245	3897

Source: "China Statistical Yearbook" (2005)

Of course, if the development of real estate is not proper, it may also cause adverse or negative impact on the national economy. Development of the real estate industry needs to maintain a certain ratio with the development of the national economy, and also the corresponding management, surveillance and control measures, otherwise there will be "Bubble Economy", which would threaten the financial industry, impact related industries, and influence the development of a region or even the whole national economy.

# 3. RELATIONSHIP BETWEEN THE REAL ESTATE INDUSTRY AND THE NATIONAL ECONOMY

Relationship between the real estate industry and the national economy is not only relationship between a part and the whole, but also has the inherent links and relevance. From the aspect of macroeconomic view, the real estate economy is an important component of the national economy, which plays an important role that can not be overlooked in a country's economic development and growth; while the level and pace of development of the national economy will restrict the level of development of the real

estate industry.

#### 3.1 Function of real estate to the national economy

The function of real estate in the national economy could be reflected from its role in promoting the national economy, which could be analyzed from the comparison against distribution induction extent of other industries and the comparison among distribution induction extent of the real estate industry, distribution induction extent coefficient and average distribution induction extent of the national economy, and distribution induction extent coefficient.

# 3.1.1 The economic implications of the distribution induction extent and the distribution induction extent coefficient

Distribution induction extent is the whole production-value of every national economy department, which is promoted by growth value of one industry, in other words, it is the industry's driving force for the national economy. Using the complete consumption coefficient matrix and outputs of the input-output table to calculate the complete distribution induction coefficient matrix and distribution induction extent is the row-summation of the complete distribution induction coefficient matrix.

Using formula expressed as:

$$d_{i0} = \sum_{j=1}^{n} d_{ij}$$

In the formula :  $d_{i0}$  ——distribution induction extent

 $d_{ij}$  ——complete distribution induction coefficient. It refers to the complete distribution amount of the added value of one unit in the i department, which means the total output of the national economic departments promoted by the added value of an unit in i department.

The average induction extent (impetus) of national economy can be expressed by formula as:

$$s^d = \frac{1}{n} \sum_{i=1}^n \sum_{j=1}^n d_{ij}$$
 ..... Formula 1

Distribution induction coefficient is the relative level of impetus function for all sectors of the national economy by one industry, while in the complete distribution coefficient matrix; it is the ratio of the average value generated by the summation of row-summation of the complete distribution induction coefficient matrix in one industry and in every departments dividing the amount number of the departments.

$$\mathcal{S}_{i}^{d} = \frac{d_{i0}}{s^{d}}$$
......Formula 2

In the formula :  $\delta_i^d$  \_\_\_\_\_\_distribution induction extent (impetus) coefficient

If  $\delta_i^d > 1$ , it means that the distribution induction extent of one industry surpass the average induction extent of national economy, which has a greater impetus function for the development of the national

economy more than the other industries; if  $\delta_i^d < 1$ , it shows that the distribution induction extent of one industry is lower than the average induction extent of national economy, which has a weak impetus function for the development of the national economy.

# 3.1.2 Impetus of the real estate industry to the national economy

Using Formula 1, Formula 2 and 1997 year's input-output table of Chinese 124 departments to calculate, the results are that the average induction extent of the national economy is 2.011, the distribution induction of real estate is only 0.784, the distribution induction extent coefficient of the real estate industry is 0.390, arrayed in the 63rd, which is at the middle level, and the distribution induction extent of the construction industry is 0.99, while the distribution induction coefficient is 0.492, arrayed in the 38th, which shows that in 1997 the real estate industry (including construction) had a small direct impetus on the national economic departments. This illustrates that the more the economy develops, the greater the demanding pressure to the real estate products from the other industries, and then the real estate industry may become a "bottleneck" industry, therefore, the real estate industry plays an important role in the coordinated development of the national economy.

#### 3.2 Function of national economy to the real estate

Function of national economy to the real estate is mainly manifested on two aspects: driving and restraining. If development of societys total supply and total demand are balanced, currency is stable, structure is well coordinated, and development of national economy is sustained and healthy, the real estate industry would have good conditions for development; on the contrary, if the economy is overheated, structure is in imbalance, the overall quality of the national economy is not high, the development the real estate industry will be restrained. Sometimes, if economic life appeared uncoordinated, in order to stabilize the economy, government may also inhibit consciously the pace of development of the real estate to some extent, aiming to limit the real estate industry's negative effects of excessive development to the national economy. Practices show that the high quality of operation of the national economy, which has a fast pace of development in a certain period of time, will make the real estate industry a rapidly corresponding development; while the low quality or problems, such as inflation, economic stagnation, or both of them, of operation of the national economy will greatly restrain the development of the real estate industry.

#### 3.3 Proposals of improving the development of the real estate industry

From the above analysis, we can find out that the real estate industry as a pillar industry of the national economy has played a vital role in promoting the development of the national economy, and also makes an indelible contribution in speeding up urban construction, improving the economic environment, and optimizing the industrial structure, and so on. The real estate and the national economy have a mutual and close tie, and the far-reaching impact. There is a lot of work needed to further strengthen and improve in the process of sustainable development of the real estate industry, and the author gives the following policy recommendations.

- **3.3.1** Continue to take the real estate industry as an economic growth point, use the sustained and stable development of the real estate investment to lead economic growth. Through calculations we can see that the real estate industry, particularly the investment in the development of real estate, can provide the national economy an efficient stimulating growth. Hence, it should reasonably normalize and guide the real estate industry, to make this industry continue to play an active role in stimulating economic growth.
- **3.3.2** Avoid over-investment, because the over-investment will create a serious harm, which can is because there are balanced and stable relations between the GDP and construction investment as well as housing investment. If both of them increase too fast, and then the control of GDP will inevitably makes them return to a balanced value, which means the suddenly fall of the investment. So, Attention should be paid to control the pace and scale of construction investment and housing investment, in order to achieve an appropriate and rational growth , which is the premise of the current supportable national economy.
- **3.3.3** Establish a regular detection system for the real estate market, together with the real estate statistic

statements system, put the composite index reflecting bubble and overheated development of the real estate market into the real estate statistic statements. Establish regular detection system for the periodic summary and analysis of the various regions indicators, in order to provide the basis and reference to the government's macro-control.

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