

Study on Industrial Investment Structure and Demonstration

Analysis of Henan, China

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The investment is the stamina of economic development. For China's economy, to keep constantly growth through transformation and upgrading of development mode, the premise is to optimize and adjust the existing investment structure, then adjust the economic structure, because the economic structure in future is determined by the investment structure, especially the industrial investment structure, which is the most important element in adjustment and it is related to the development of adjustment, transformation and upgrading of economic structure.

I. Relationship between Industrial Investment Structure and Industrial Structure

Industrial investment structure means that, within a certain period, the allocation proportions and interrelation of the total investment of fixed assets in industries of national economy and social development. The industrial structure is influenced by investment structure to a large extent, and the dynamic development of the investment structure is the fundamental cause and means to realize the evolution and development of industrial structure.

(I) The industrial structure is influenced by investment structure through structure of market demand

The investment structure is one of the important factors of composing the market demand structure, and the allocation of total investment in different industries and department will directly change the existing industrial structure pattern.

(II) The industrial structure is influenced by investment structure through supply of market resources

On one hand, the industrial investment structure forms fixed assets to determine the output capacity of each industry; on the other hand, after the formation of production capacity resulted from investment, supply will influence the adjustment of industrial structure.

(III) The optimization of investment is the guarantee of optimization and upgrading of industrial structure

The transformation of investment structure is the precursor of that of industrial structure, while the transformation and radiation effect of industrial structure are the guarantee of the upgrading and optimization of investment in dynamic, these formed the positive interaction cycle between investment structure and industrial structure.

II. Current Situation and Transformation Characters of Henan Industrial Investment Structure

As the world has entered into the new century, Henan is applying investment to promote the development, concentrate strength to reinforce the construction of basic industries and infrastructures, accelerate the course of industrialization, urbanization and agricultural modernization, thus, the status and function of investment in economy are further enhanced.

(I) The growth of investment has quickened continuously, and the total amounts has been enlarged continuously

In 2009, the total investment of fixed assets of entire society in Henan ranked the third place of the whole

country, the ranking moved up 5 places compared that of 2000, and the proportion to the country moved up to 6.1% in 2009 from 4.5% in 2000.

(II) The industrial investment is increased all-around, and the three industrial structures have changed obviously

Between 2000 to 2009, the completed annual average investments in the primary industry, secondary industry and third industry of Henna were separately increased by 19.2%, 34.3% and 22.6%, the investment growth took on the development pattern of "secondary, third, primary".

The investment proportion of the primary industry, secondary industry and third industry in 2000 was 7.2 : 33.1 : 59.8, while in 2009 was 5.6 : 50.9 : 43.5, of which the proportion of the secondary industry exceeded that of the third industry in 2007, and the industrial investment structure changed to the existing pattern of "secondary, third, primary" from "third, secondary, primary".(see table 1)

(III) The growth of investment in industry has made a leap, the inner structure has been further improved

1. The industrial investment accounted for more than half of the total investment

In 2000-2009, the annual average growth of the industrial investment in the whole province was 34.7%. In 2009, the proportion of industrial investment of the whole province to the fixed assets investment was 50.8%, increased by 19.8 percents than that in 2000, the industrial investment had accounted for more than half of the total investment.

2. The investment in manufacturing was in the lead of growth of industrial investment

The industrial development in the province firmly centered on the objective of the new road to industrialization, emphasized on the expansion of industrial chain and research and development of new products, the investment in manufacturing was enhanced obviously, becoming the most unique one in industries.(See table 2)

The constant enlarging strength of the investment in the manufacturing further optimized the industrial investment structure, expanded the industrial chain, and accelerated the optimization and upgrading of the inner structure of industry, which also improved the situation that the industrial economy chronically depended on industries of energy and raw material, thus laid a good foundation for the continuous, healthy and steady development of the industrial economy.

3. The investment in the advantageous industry has been further enhanced, and the scale of the emerging industry has been enlarged constantly

In recent years, on one hand, Henan enlarged the investment power in traditional pillar industries and advantageous industries such as coal, metallurgy, building materials, chemical industry etc. On the other hand, accompanied with the enlarging of the traditional pillar industries and advantageous industries, actively cultivate the new ones of energy, machinery, foodstuff, textile, etc.

In 2009, the town industrial investments grew with a year-on-year increase of 31.3%, the contributing rate of the growth of industrial investment to that of town investment reached to 56.0%.

4. The upgrading step is continuously quickened, and the high-tech industry investment increases rapidly

In recent years, through the establishment of high-tech industry zone, introducing a number of major projects, and shooting for a batch of high-tech projects financed by national debt, the investment in high-tech industries realized rapid growth. In 2009, the completed investment in high-tech industries was 3.0 times of that in 2006, the initial stage of the "Eleventh Five-year Plan".

(IV) Steady Growth of the Investment in Third Industry and Optimization of the Internal Structure

1. The aggregate investment in third industry has reached a new stage, and new changes have shown in the internal structure.

From 2000 to 2009, the annual average growth of the investment of third industry of the whole province was 22.6%, in which the total investment in 2009 was seven times of that in 2000.

The investment proportion of third industry in Henan Province has shown downtrend in recent years,

however, the investments of different trades of this industry have achieved comparatively balanced development. In the year of 2009, the investments of third industry in Henan Province were mainly invested into the industries of transportation, storage, post, wholesale and retail trade, real estate, water conservancy, environment and public facilities management, while the trades of the most rapid growth in third industry were mainly the emerging service trades, such as finance, scientific research technique service, geologic examination, health & social security, social welfare, culture, physical training and entertainment.

2. Investment in consumption service industry is still in leading position, and investment in productive service industry is expanding steadily.

The third industry equals service industry. Consumption service industry means the service trade which satisfies the final consumption, such as commerce, catering, tourism, medical treatment, entertainment, education and government service; productive service industry is the trade which satisfies the intermediate demands and provides intermediate service to productive activities of external enterprises and other organizations, which mainly includes trades of circulation service, information service, financial service, commercial service and technological service.

In the year of 2009, the investment in consumption service industry accounts for 87.5% of the total investment in third industry of Henan Province, the proportion is higher than the last year by 0.6%, the investment in consumption service was still in leading position of third industry. Meanwhile, the productive service industry, originally in a lower proportion, has shown a steady expanding trend in these years.

3. The uptrend of investment in real estate development is obvious, which becomes a new power of driving the investment increase in Henan.

In recent years, the development tendency of realty industry in Henan is strong and the market is prosperous, which has become an important growth point of national economy development in Henan. From 2000 to 2009, the annual average growth of the investment in real estate of Henan was 39.6%, which was higher than the growth speed of investment in the whole society by 13.1% in the same period. Consequently, the contribution rate of real estate investment to the growth of investment in the whole society was raised rapidly from 4.9% in 2000 to 10.8% in 2009.

III. Basic Evaluation on Industry Investment in Henan since "Eleventh Five-year Plan"

Since the "Eleventh Five-year Plan" period, the investment in fixed assets has played a crucial role in the economy development in Henan. However, there are still some difficult problems which hold back the healthy, sustainable and steady development of the investment in Henan to be solved.

(I) The industry investment growth is not independent adequately, and the internal growth system has not been set yet.

The function of investment to the economy development can be achieved by two ways: demand effect in short-term and supply effect in long-term.

Through the quantitative analysis method — Granger Test, it can be obtained that there is a unidirectional causal relations between investment growth and economy development in Henan. Firstly, there is a long-term and steady relationship between industry investment and economy development in Henan. The change of investment is the main reason of the change of GDP. Secondly, the reverse effect of economy development on the industry investment is not obvious in Henan, which shows that the independent internal growth system has not formed in the round in Henan.

(II) The investment growths among the industries are imbalanced, and the internal industrial structure is not reasonable.

1. Investment in the primary industry is growing fast, but the total scale still accounts for a small proportion.

Henan is the first agricultural province and the first grain-producing province in China. In the year of

2009, the investment in primary industry only accounted for 5.6% of investment in the whole society. The investment in agriculture was obviously deficient in Henan.

2. Investment in the second industry is growing rapidly, but the internal structure is unreasonable

(1) The second industry heavily relies on the investment in the energy and raw material industry, and the scale of high-tech industry investment is obviously on the small side.

The growth of industrial investment of Henan mainly relies on the growth of investment in the energy and raw material industry at the present stage. In the year of 2009, the proportion of energy and raw material industry in towns of Henan was as high as 48.9% of the whole industrial investment.

In the year of 2009, the proportion of high-tech industrial investment accounted for 4.3% of the industrial investment, which was 0.6% higher than that in the year of 2006. In recent years, the proportion of high-tech industrial investment is increasing in Henan, however, it is still obviously on the small side.

(2) The second industry has relied on traditional processing industry investment for a long time, and investment in processing industry with high added value is insufficient.

For a long time, Henan has laid particular stress on investment in the traditional processing industry, while the investment in processing industry with high added value is obviously insufficient, which resulted in that the investment proportion of processing industry with high added value is low in industrial investment in Henan.

(3) The investment proportion of high energy consumption industry is on the high side.

The trades of petroleum, chemical, metallurgy, electricity and so on belong to high resource consumption industry. In the year of 2009, the investment proportion of six high energy consumption industries accounted for 37.8% of the total investment in Henan, which is on the high side.

3. The proportion of third industry investment is decreasing continuously, and the unbalance of internal structure becomes serious.

(1) The proportion of the third industry investment is decreasing continuously

In the year of 2009, the proportion of the third industry investment was 43.5% of total investment of the society, which was 9.3% lower than the national average level, and 16.3% lower than that in the year of 2000. The proportion of the third industry investment has been decreasing continuously since 2000 in Henan.

(2) The internal structure of investment in consumption service industry is unbalanced

In the year of 2009, the proportion of consumption service industry investment was 87.5% of the third industry investment. The rapid growth of consumption service industry investment mainly relies on the investment growth of real estate, water conservancy, environment and public facilities management industries. In the year of 2009, the contribution rate of investment in real estate, water conservancy, environment and public facilities management industries to consumption service industry investment growth was as high as 69.8%, which shows that the structure of the consumption service industry investment growth is unbalanced in Henan.

(3) Speed of investment growth in productive service industry is low

From 2000 to 2009, the average annual increase of investment in Henan productive service was 13.1%, which is 13.1% lower than the average annual increase of investment in consumption service industry, and 9.5% lower than the average annual increase of investment in the third industry. The trend of longterm slow development of the investment in productive service industry had not been improved.

(4) Investment in real estate development accounts for a small proportion, the effect of driving the economic growth is not strong.

In recent years, investment in real estate development of Henan has increased rapidly, but compared with that of the whole country and some other provinces, the real estate development of Henan still has a series of problems, such as small in scale, low in proportion, and weak in driving economic growth.

In the year of 2009, the total amount of investment in real estate development of Henan ranked the ninth

in the country. The proportion of investment in real estate development accounted for 11.3% of investment in the fixed assets of the whole society, which is 4.8% lower than the national average level, which demonstrates that, for Henan, the role of real estate industry as pillar industry has not been established, and its effect of driving the economy of Henan is limited.

IV. Problems existing in the industrial investment structure of Henan and causes analysis

(I) Institutional Factor of History

Once capital in currency form is transformed into capital in physical form, its influence on economic structure will turn from initial flexibility to final rigidity". In recent 30 years, the pattern of diversification of subjects of investment, capital fund channel and decentralization of investment decision-making has been taking shape in fields of investment. However, in the view of development trend, investment and financing mechanism and institution suited to market economy development and diversified investment pattern have never been effectively established. The investment trend is in a disordered state.

(II) Macroeconomic Control and Policy Factors

In recent years, investment fields have been diversifying, the traditional macroeconomic control and policies are difficult to regulate and control the direction and field of investments. Even though China has promulgated industrial policies, policies in regulation tax and prosperity planning in recent years, but with an absence of powerful enforcement and supervisory measure, the performance of these policies can't reach expectation. The goal of structural readjustment, optimization and upgrading of industrial investment structure has been difficult to realize.

(III) Technological Confinement Factor

Recently, labor-intensive industries in Henna, like food processing, construction and building materials, textile and clothing industry, are in a dominant position. Though capital intensive industry has also been developed, but technology-intensive industry in general has the problems of being small in enterprises' number, little in aggregate, short in investment and low in development level.

Table 1 Proportion of completed investment of each industry in Henan in 2000, 2001, and 2005-2009

Year	2000	2001	2005	2006	2007	2008	2009
The primary industry	7.2	6.7	3.8	3.6	3.6	5.1	5.6
The secondary industry	33.1	31.4	45.0	46.4	51.4	51.7	50.9
# Industry	31.0	29.7	44.4	46.0	51.0	51.4	50.8
The third industry	59.8	61.9	51.2	50.0	45.0	43.2	43.5

Table 2 Proportion of completed investment of each industry in Henan in 2000, 2001, and 2005-2009

Year	2004	2005	2006	2007	2008	2009
# the mining industry	11.9	12.2	11.2	11.1	11.6	11.0
# the manufacturing	62.8	66.9	71.8	77.9	78.2	80.1
#electric power	25.3	20.9	17.1	11.0	10.2	8.9

ABSTRACT

Located in the central area of China, Henan is a province with the most population in China, and is also an

economic giant. In the new century, the fixed assets investment in Henan province continuously grows rapidly, and the rate of contribution to economic growth is increasing constantly. In 2009, it was above 70%, becoming the "stabilizer" of keeping the fast and steady growth of economy of Henan Province. At present stage, the economic growth of Henan possesses the obvious feature of pulled by investment; after the increasing rate up to a higher level, how to optimize the investment structure, improve the quality and benefit of economic growth, and realize the investment structural optimization and transformation of the development mode, these concern the economic transformation and upgrading both in Henan and China. Therefore, it has important operation significance to conduct demonstration analysis on industrial investment structure of Henan.