Research on the Impact of China's Commercial Economic Investment Efficiency on Industrial Structure Adjustment

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Abstract. The rapid development of modern economy is mainly realized through the optimization and upgrading of industrial structure, which relies on the adjustment of industrial structure. Under the framework of efficient market hypothesis, information is not distorted in the transmission process, and investors can accurately measure the basic value of financial assets. The miracle of China's growth over 30 years has proved that investment is the main driving force for China's sustained and stable economic growth. Industrial structure has always been the main problem that perplexes China's economic development. Economic development is the process of continuous adjustment and upgrading of industrial structure. Therefore, it is imperative to adjust, optimize and upgrade China's industrial structure. This paper analyzes the influencing factors of investment efficiency from the perspective of matching human capital and industrial structure. In measuring the matching degree of human capital and industrial structure, the matching degree of human capital and industrial structure is measured and analyzed by using system theory and coupling theory.

Keywords: Industrial structure, Investment efficiency, Commercial economy.

1. Introduction

Since the reform and opening up, China's economy has made long-term development, especially since China's accession to the WTO. Under the background of economic globalization and integration, its speed of development is even more impressive to the whole world. Driven by policy support and the rapid development of the capital market, institutional investors have quickly become the dominant force in the capital market. Economic phenomenon is essentially a random phenomenon or probability phenomenon, for which financial phenomenon is particularly prominent [1]. More and more people have come to realize clearly the unique advantages and irreplaceable advantages of comprehensive application of mathematics knowledge in dealing with this problem. The improvement of investment efficiency is not only an important way to improve the quality of economic growth, but also a key factor to determine the sustained economic growth [2]. China's financial market has been greatly developed, including not only the money market but also the capital market. Moreover, with the deepening of capitalization, the financial market plays an increasingly important role in the allocation of social resources [3]. The industrial structure has always been a major problem that plagued China's economic development. The process of economic development is a process of continuous adjustment and optimization of the industrial structure. Therefore, it is imperative to adjust, optimize and upgrade the industrial structure of China [4].

In the context of globalization, institutionalization of investors has become a prominent feature of global capital markets. Classic financial market theory is based on the efficient market hypothesis. Under this assumption, the information in the market is fully disclosed, and every investor in the market can grasp completely symmetrical information [5]. In the context of economic globalization, China's industrial structure adjustment is also in the context of international industrial adjustment. The matching degree of China's human capital and industrial structure is relatively high as a whole, with an upward trend over time, but the differences between provinces are more obvious [6]. Enterprise accounting information is not only a reflection of the enterprise itself, but also affects the effect of national economic regulation and the efficiency of capital market

operations [7]. In practice, over-confident institutional investors not only failed to play a role in stabilizing market fluctuations, they even exacerbated the degree of market fluctuations. This article analyzes the influencing factors of investment efficiency from the perspective of matching human capital with industrial structure. When measuring the matching degree of human capital and industrial structure, the system and coupling theory were used to measure and analyze the matching degree of human capital and industrial structure.

2. Characteristics of Industrial Structure Adjustment in China

China's industrial structure has been continuously adjusted with economic development and has achieved great results on the whole, but it is still far behind the pace of economic development and international industrial adjustment. Assuming that future price changes are completely similar to the past, the current price level of market factors can be combined to directly simulate the possible price level of market factors in a future period. The long-term development is basically out of line with the adjustment of the international industrial structure. The match between human capital and industrial structure refers to the mutual promotion between human capital and industrial structure, and at the same time there is a dynamic relationship of mutual restriction [8]. The adjustment of international industrial structure is mainly a strategic adjustment of industrial structure, i.e. an open adjustment, in consideration of the global allocation of resources and in combination with economic operation and market development. For a long time, the goal of China's industrial development is to pursue a complete industrial system and implement a comprehensive construction strategy, which determines the closed adjustment of China's industrial structure. However, under the condition of economic globalization and integration, the adjustment strategy implemented by our country can not only not rationally allocate resources but also can not keep pace with the development of the international economy [9]. Sophisticated individuals maintain a proper pessimistic attitude towards their future behavior, knowing that they may not be able to do it. The naive individual is always optimistic that he will do the right thing in the future. The rationalization of industrial structure refers to the industrial structure which is coordinated with each other, has strong industrial structure conversion ability and good adaptability, can adapt to the changes of market demand and bring the best benefit.

In the field of commercial economic investment, investment is a process of preserving and increasing the value of capital. Both human capital and industrial structure are composed of different levels and different types of sub items, which are two complex systems. Coupling refers to the phenomenon that two or more systems influence each other through various interactions. It is a dynamic relationship that depends, coordinates and promotes each other under the benign interaction between each subsystem. Investment is the choice behavior of making the best decision in balancing the relationship between investment income and investment expenditure, short-term return and long-term value. In the process of industrial structure adjustment, China invests in the industry which is in urgent need of national development according to the national planning policy. However, there is no suitable incremental adjustment for free flow and reorganization of production factors among different industrial sectors and industries under the guidance of the market.

3. Influencing Factors of Industrial Structure Adjustment in China

The Chinese government should strategically recognize the role of technological innovation in promoting China's industrial structure adjustment and economic growth and try its best to improve the level of technological innovation in China. The following measures can be taken. Human capital as an input system of factors and industrial structure as an output system of products have close interaction. Innovative talents are the key to ensure the inexhaustible power of scientific and technological innovation. Scientific and technological innovation cannot be separated from talents with innovative ability, and the cultivation of innovative talents depends on education. China should

vigorously develop higher education, actively develop vocational and technical education, and gradually improve the education system.

The strong efficient market hypothesis holds that all information in the market has been fully reflected in the price of financial assets. For example, the future expansion plan of the enterprise, the change of management mode and the personnel adjustment of the company's top management, etc. Even if the information has not been made public, investors have already obtained it through various means. Therefore, the inside information that has not been made public has long become an open secret. The relationship between effectiveness and investment analysis is shown in Table 1.

Table 1. Relationship between market effectiveness and investment analysis

	Technical analysis	Basic analysis
Invalid market	Invalid	Effective
Weak and effective	Effective	Invalid
Semi-strong and effective	Invalid	Effective
Strong and effective	Invalid	Effective

The efficient market hypothesis holds that the price of financial assets can always fully reflect all information in the market. Under the framework of efficient market hypothesis, information is not distorted in the process of transmission, investors can accurately measure the basic value of financial assets, and the price of each financial asset is completely equivalent to its basic investment value. Sensitivity analysis can be carried out on each influencing factor of a single investment project, and risk management can be carried out on the project from the analysis results. The sensitivity analysis data of risk evaluation are shown in Table 2. The relationship between risk evaluation and risk factors is shown in Figure 1.

Table 2. Risk assessment sensitivity analysis

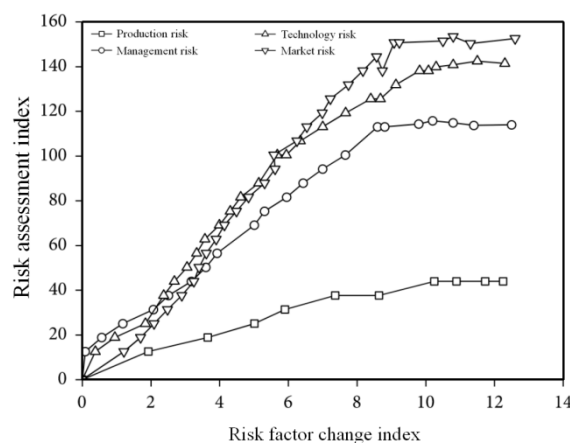|	Evaluation value	Post-change score
Production risk	0.757	0.851
Managing risks	0.817	0.947
Technical risk	0.719	0.732
Market risk	0.616	0.887

Figure 1. Relationship between investment risk assessment and risk factor changes

Our government should further deepen the reform of enterprises so that technological innovation runs through the entire production value chain of enterprises, improve the independent innovation mechanism of enterprises and improve the technological innovation capability of enterprises. At the same time, in the process of improving the independent innovation mechanism of enterprises, special attention should be paid to the role of entrepreneurs. Technological innovation is one of the main activities of entrepreneurs. Without entrepreneurs, technological innovation behavior will stop

[10]. The improvement of human capital level will accelerate the adjustment and upgrading of industrial structure, and the adjustment and upgrading of industrial structure will also promote the improvement of human capital level. Chinese enterprises, especially some small and medium-sized enterprises, do not have sufficient resources and capabilities to engage in research and development. Therefore, strengthening the cooperation between enterprises, universities and scientific research institutions is the result of optimal allocation of resources.

4. Summary

Under the condition of economic globalization and integration, China's re-implementation of such adjustment strategy not only cannot allocate resources rationally but also cannot keep pace with the development of the international economy. Under the economic globalization, the adjustment of industrial structure is already a global problem, and the adjustment of international industrial structure is also in full swing. Enterprises are the economic entities whose aim is to make profits. Making as much profit as possible is their main pursuit. As an individual investor, what he pursues is to maximize the utility function that reflects his satisfaction. The match between human capital and industrial structure refers to the mutual promotion between human capital and industrial structure, and at the same time there is a dynamic relationship of mutual restriction. The rationalization of industrial structure refers to the industrial structure which is coordinated with each other, has strong industrial structure conversion ability and good adaptability, can adapt to the changes of market demand and bring the best benefit. As a developing country, China must seize the opportunities brought by economic globalization, make clear the role of technological innovation in promoting the adjustment of industrial structure, and implement the priority strategy of science and technology to promote the adjustment, optimization and upgrading of industrial structure.

References

[1]. Liu Fei, Zheng Xiaoya. Measurement of Investment Efficiency of Small and Medium-Sized Listed Companies in China under Financing Constraints [J]. Business Economics and Management, 2014, 1 (6): 76-85.

[2]. Xing Guoli. China's Public Investment Benefit Status, Influencing Factors and Promotion Strategies [J]. Commercial Economics Research, 2015 (28): 103-104.

[3]. You Hongbing, Huang Yihan, Wen Yi. The Impact of Political Risks on China's Direct Investment in ASEAN under Different Investment Motivations [J]. Business Research, 2017 (12) : 90-98.

[4]. Zhang Xiaolong. Empirical Research on Investment and Financing Efficiency of China's Commercial Circulation Industry [J]. Commercial Economics Research, 2015 (26): 6-7.

[5]. Qiu Yuting. Whether Financing Constraints Can Suppress Enterprises' Over- Investment —— An Empirical Study Based on Small and Medium-Sized Board Manufacturing [J]. Commercial Economy, 2017 (1): 112-113.

[6]. Liu Hequn. Comparative Analysis of Input-output Efficiency of Commerce and Trade Circulation Industry in Different Cities of Henan Province [J]. Commercial Economics Research, 2016 (13): 154-156.

[7]. Wei Zongchao. An Empirical Analysis of the Factors Influencing the Efficiency of China's Logistics Industry [J]. Commercial Economy, 2015 (5): 77-78.

[8]. Zhong Weiping, Fang Ying. Evaluation of Operation Efficiency of Circulation Industry Based on Market, Enterprise, Investment and Labor Supply [J]. Commercial Economics Research, 2015 (2): 10-12.

[9]. Zhu Zhibiao. Quality of Earnings Information, Debt Maturity Structure and Investment Efficiency [J]. Business Research, 2016 (12): 24-33.

[10].   Li Xue. Research on the impact of group operation on investment efficiency from the perspective of internal market [J]. Business Times, 2014 (17): 95-97.