Direct Investment of Foreign Capital in China and its Future Development

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Abstract
Since the reform and opening up, foreign direct investment in China has developed rapidly. In the past decade, more and more regions in China have been implementing policies to introduce foreign investment. Foreign investment in China is mainly in the form of direct investment, which has had multiple impacts on China's economic development. It can be said that it is a double-edged sword, bringing both opportunities and huge challenges to China. We should adopt the correct way to utilize FDI and maximize its positive role. This article provides a simple and concise analysis of the basic situation of foreign investment research in China.

Keywords
FDI; Foreign Capital Direct; Investment in China; Economic Growth; Sustainable Development.

1. Introduction
The report released by the United Nations Conference on Trade and Development shows that in 2022, global foreign direct investment decreased by 12% compared to the previous year due to factors such as the escalation of the Ukrainian crisis, high food and energy prices, and soaring public debt. Among them, foreign direct investment flowing into developed economies decreased by 37%. Compared to this, foreign direct investment flowing into developing countries increased by 4%. China's attraction of foreign direct investment continues to steadily increase, reaching a record breaking $189.1 billion.

In 2023, China's attractiveness to foreign investment remains strong. According to data released by the Chinese Ministry of Commerce in May, the actual amount of foreign investment used by China from January to April this year was 499.46 billion yuan, a year-on-year increase of 2.2%. [1] Among them, the manufacturing and high-tech industries performed outstandingly, with year-on-year growth of 4.1% and 12.8%, respectively. The news agency reported that in 2022, the Chinese Ministry of Commerce revised the "Catalogue of Industries Encouraging Foreign Investment" to further expand the investment areas of interest to foreign investors. China aims to attract more overseas funds by relaxing regulations, introducing preferential measures, and further opening up the market.

Numerous foreign companies have also voted with their feet, demonstrating their confidence in the Chinese market through practical actions such as expanding their business and increasing investment in China. The 2023 White Paper on China’s Business Environment released by the American Chamber of Commerce in South China shows that China is the most favored land for corporate investment, with over 90% of surveyed companies considering China as one of the most important investment destinations.

Analysis suggests that foreign investment in China has benefited from its huge market size, sound industrial system, and abundant talent reserves, reflecting the continuous optimization of China's business environment and the increasing level of investment facilitation.
Foreign direct investment is a double-edged sword. On the one hand, it has promoted sustained and rapid economic growth and increased fiscal revenue in China. Overall, it has optimized China’s industrial structure and export trade structure, improved China’s technological level and employment situation, and promoted China’s market economy reform; On the other hand, it significantly weakens the independent innovation ability of domestic enterprises in China, which has a strong impact on China’s national economy and poses a significant threat to China’s economic security and basic economic system[2]. We should fully understand FDL and make it more of a support for our social and economic development.

2. Literature Review and Theoretical Review

Macdugal (1960) conducted theoretical research on the causes and impacts of international capital flows earlier, and later developed a general model of international capital flows through the analysis of M.C. Kemp and others. McDougall and Kemp believe that international capital flows will lead to a convergence of marginal capital output rates among countries, thereby increasing the world’s total production and welfare. After McDougall, with the significant expansion of the scale of international direct investment and increasing attention from the international community, Western scholars used macro structural analysis and micro behavioral analysis methods to conduct in-depth research on international direct investment, forming many international direct investment theories. Among them are the monopolistic advantage theory proposed by Hymer et al. (1960), the product lifecycle theory proposed by Harvard University professor R. Vernon 1966, the market internalization theory proposed by J.H. Dunning (1977), and the comparative advantage theory proposed by Ichibashi University professor Kiyoshi Kojima in Japan[3]. In the theory of the impact of international direct investment on the economic growth of developing host countries, a representative one is the "two gap" model established by American economists H. Chenery and A. Strauss in 1969. This model suggests that the economic development of most developing countries is mainly constrained by three factors: first, savings constraints, that is, low domestic demand is insufficient to support the expansion of domestic investment demand; second, foreign exchange constraints, limited foreign exchange income is not enough to pay for the import of capital and consumer goods needed for economic development; third, absorptive capacity constraints, that is, due to the lack of necessary technology and management, foreign investment and various resources cannot be effectively used, all of which will hinder economic development. In essence, the double gap model was developed in the new and ancient times[4].

According to the framework of classical growth theory, the new growth theory represented by P. Romer, R. Lucas, and others suggests that opening up to the outside world and participating in international trade can generate a spillover effect, accelerating the transmission of advanced science, technology, knowledge, and human capital worldwide, thereby promoting economic growth in developing countries. In terms of empirical research, Western scholars mainly adopt two methods: one is to study the relationship between foreign capital inflows and economic growth through cross-border comparative analysis, and the usual approach is to regress the economic growth rate with the level of foreign investment and the accumulation of foreign capital; Another approach is to study the contribution of foreign capital to domestic economic growth through the growth equation derived from the production function[5]. In various empirical analyses of international capital inflows and domestic economic growth, especially in developing host countries, some scholars believe that international capital inflows promote economic growth in recipient countries, while others hold a negative attitude towards the promoting effect of international capital inflows on economic growth. Among them, V.N.
Balasubramanyam and M. Salisu used sample data from 46 countries to test that foreign direct investment has to some extent promoted the economic growth of host countries. The empirical analysis by Song Hong and Chai Yu (1998) on the impact of foreign-invested enterprises on the efficiency of China's industrial structure shows that the entry of foreign-invested enterprises reduces the overall efficiency of China's industrial structure and increases the degree of deviation of China's industrial institutions. The author found that on the one hand, foreign scholars have not studied the situation in China, and on the other hand, domestic scholars generally use data and materials starting from 1978 when studying the role of foreign direct investment in China's economic growth, that is, from the beginning of reform and opening up. However, this article believes that on the one hand, before 1990, China's utilization of foreign direct investment accounted for less than 1% of its gross domestic product, and the impact of foreign direct investment on economic growth was relatively weak. On the other hand, after 1990, foreign direct investment became the main body of foreign investment entering China's market, there have been significant changes in the following aspects: first, before 1990, the investment subjects were small and medium-sized capital such as Hong Kong, Macao, and Taiwan. After 1990, foreign investment appeared in both quality and scale[6]. Therefore, economic econometric analysis should be focused on the characteristics of China’s economic operation, with a focus on economic data from 1990 to 2021.

3. Overview of China’s Utilization of Foreign Direct Investment

(1) Distribution of Industries Utilizing Foreign Direct Investment in China
From the distribution of foreign direct investment industries, from the late 1970s to the early 1980s, foreign investment in China mainly focused on tourist hotels and mid to low end processing and trade manufacturing industries. Subsequently, investment projects in the industrial sector continued to increase, accounting for a major share of the actual foreign investment. In the early 1990s, foreign investment in the real estate industry increased rapidly, accounting for more than one-third of the actual foreign investment in some years. In recent years, this proportion has decreased. Overall, foreign investment in industry still accounts for the largest share, approximately 60%. In 2000, 72.75% of China's foreign direct investment projects were utilized, and 73.72% of contracted foreign investment was concentrated in the secondary industry; As of 2022, 72.99% of China's utilization of foreign direct investment projects and 60.87% of contracted foreign investment are concentrated in the secondary industry[7].

From the perspective of the industry structure of foreign direct investment, China’s main utilization of foreign direct investment is in the manufacturing industry. In 2000, 56.35% of foreign direct investment projects in China, 50.31% of contracted foreign investment, and 46.39% of actual foreign investment were invested in the manufacturing industry;

(2) Regional distribution of China’s utilization of foreign direct investment
The foreign direct investment absorbed by China is mainly concentrated in a few coastal areas. Throughout the 1990s, over 90% of foreign direct investment went to coastal areas. After the 1990s, this proportion has slightly decreased, but the overall trend has not changed significantly. Investment in coastal areas still accounts for 88% of the total investment. According to statistics from the Ministry of Foreign Trade and Economic Cooperation, in 1999, foreign direct investment in the eastern region accounted for 87.88%, the central region accounted for 9.29%, and the western region only accounted for 2.82%. As of 2015, the cumulative use of foreign direct investment in the eastern region accounted for 87.84% of the country, the central region accounted for 8.94%, and the western region only accounted for 3.22%[8].

(3) The ways and sources of utilizing foreign investment in China
In the early stages of absorbing foreign direct investment, foreign investors in China mainly adopted two methods: Sino foreign joint ventures and Sino foreign cooperation. Since the 1990s, the proportion of foreign-owned enterprises has increased rapidly. Since 1997, the number of foreign-owned projects in newly established projects has exceeded that of Sino foreign joint ventures. Since 1998, the contract amount of foreign-owned enterprises has exceeded that of Sino foreign joint ventures. However, in cumulative terms, Sino foreign joint ventures still account for the largest share of investment, accounting for nearly half of the actual investment amount, while foreign-owned enterprises account for less than one-third. According to the statistical data of the Ministry of Foreign Trade and Economic Cooperation (as shown in the table below), as of 2000, China's actual utilization of foreign direct investment accounted for 31.58% of wholly-owned enterprises, 45.99% of joint ventures, and 20.52% of cooperative enterprises.

As of 2015, the statistical amount of foreign direct investment by mode is in billions of US dollars

<table>
<thead>
<tr>
<th>Mode</th>
<th>Number</th>
<th>Percentage</th>
<th>Use of Foreign Investment</th>
<th>Use of Foreign Investment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>364055</td>
<td>100.00%</td>
<td>6760.22</td>
<td>100.00%</td>
</tr>
<tr>
<td>Joint venture</td>
<td>206,74</td>
<td>56.79%</td>
<td>2904.80</td>
<td>42.97%</td>
</tr>
<tr>
<td>Cooperative enterprises</td>
<td>49,779</td>
<td>13.67%</td>
<td>1487.36</td>
<td>22.00%</td>
</tr>
<tr>
<td>Sole proprietorship</td>
<td>107,352</td>
<td>29.49%</td>
<td>2319.86</td>
<td>34.32%</td>
</tr>
<tr>
<td>Collaborative development</td>
<td>177</td>
<td>0.05%</td>
<td>48.20</td>
<td>0.71%</td>
</tr>
</tbody>
</table>

Source: www.Chinafdi.gov.cn

From the perspective of utilizing foreign direct investment sources in China, funds from Hong Kong, Macao, and Taiwan have always accounted for a large proportion of foreign direct investment[9]. Before the 1990s, investment from Hong Kong, Macao, and Taiwan accounted for about 80%. Since the early 1990s, major multinational corporations from other developed countries have significantly increased their investment in China, with the proportion of funds from Hong Kong, Macao, and Taiwan decreasing year by year, but still accounting for nearly 60% cumulatively.

4. Empirical Analysis of Foreign Direct Investment and China's Economic Growth

The neoclassical economic growth theory holds that a country's output is a function of capital, labor, and comprehensive factor productivity. Foreign direct investment affects economic growth by acting on the aforementioned variables. This article starts with the relationship between foreign direct investment and domestic investment, employment, technological progress, etc. in the host country, and studies the mechanism of the impact of foreign direct investment on China's economic growth within the framework of neoclassical growth theory.

(1) Foreign Direct Investment and China's GDP

Figure 1 shows the changes in China's economic growth rate (GGDP) and foreign direct investment dependence (FDI/GDP) from 1983 to 2000. Professor Shen Kunrong (1998) used GDP data calculated at constant prices in 1990 and converted to US dollars for the analysis of economic growth rate and foreign direct investment dependence. The author believes that as an investment in the host country, FDI's purchase of various raw materials and payment of worker wages must be calculated based on current year prices. Therefore, using the ratio of FDI to GDP calculated and converted into US dollars at current year prices as an indicator of foreign direct investment dependence is more scientific. From Figure 1, it can be seen that before 1990, due to the fact that China's utilization of FDI accounted for less than 1% of its gross domestic
product, its relationship with economic growth was not very clear. After 1991, China's utilization of foreign direct investment achieved rapid development, especially in 1992 and 1993, where the proportion of foreign direct investment to GDP almost linearly increased[10].


(2) Foreign Direct Investment and Domestic Investment in China

Generally speaking, a country's domestic investment consists of two parts: domestic investment and foreign investment. Foreign direct investment, as a part of the total domestic investment, has different impacts on the total investment due to its different forms of investment. Generally speaking, FDI used for mergers and acquisitions of existing enterprises does not actually increase total domestic investment, but rather replaces domestic enterprises with foreign or joint ventures, squeezing them out of the domestic market. Reisen (1996) conducted a comparative study on the absorption of international capital in Latin America and Southeast Asia, and found that in Latin America, most foreign investors invest in acquiring existing enterprises, and FDI exists in the form of debt equity swaps and privatization of state-owned enterprises, without forming new production capacity. The author refers to Shen Kunrong's teachings

The author refers to the equation established by Professor Shen Kunrong (1999) when studying the impact of foreign direct investment on the economic growth of Southeast Asian countries, and conducts econometric research on the relationship between China's FDI and domestic investment. [11].

\[ IY = a + b \cdot YG(-1) + c \cdot IY(-1) + d \cdot FDIY + e \cdot REXL + f \cdot IR + g \cdot IF + \varepsilon, \]

Where \( IY \) represents the proportion of investment to GDP, \( YG(-1) \) represents the economic growth rate of the previous period, and \( IY(-1) \) represents the investment of the previous period as a percentage of GDP, \( FDIY \) represents the proportion of foreign direct investment to GDP, \( REXL \) represents the actual exchange rate of the Chinese yuan against the US dollar, \( IR \) represents the one-year loan interest rate in the domestic financial market, \( IF \) represents the domestic inflation rate, and \( \varepsilon \) is a random term.

Using the EVIEW software package, the regression results are as follows:

\[ IY = 30.78 + 0.20 \times YG(-1) + 0.81 \times IY(-1) + 2.72 \times FDIY - 3.62 \times REXL - 0.95 \times IR - 0.36 \times IF \]

(3.35)** (2.66) (2.77) (-2.73) (-3.33) (-2.55)

\[ R^2 = 0.9896 \quad Adj-R^2 = 0.9689 \quad D-W = 3.51 \quad F = 47.67 \]

\[ IY = 32.79 + 0.88 \times IY(-1) + 3.27 \times FDIY - 4.24 \times REXL - 0.95 \times IR - 0.4 \times IF \]

(3.56)** (8.99)* (-5.26)** (-3.61)** (-3.38)**

\[ R^2 = 0.9883 \quad Adj-R^2 = 0.9737 \quad D-W = 2.65 \quad F = 67.61 \]

According to Professor Shen Kunrong's regression model, we obtain regression equation ③. Considering that the significance of the previous year's economic growth rate \( YG(-1) \) is not high and cannot pass the test, this explanatory variable is rounded off to obtain regression equation ④. It is not difficult to see from regression equation ④ that the goodness of fit of the equation is high, and all parameters can pass the t-test. Among them, \( IY(-1) \), \( REXL \), \( IR \), \( IF \) are significant at the 5% level, and \( FDIY \) is significant at the 1% level. Therefore, the regression equation is indeed effective. From the results of regression analysis, it can be seen that there is a negative correlation between domestic investment and domestic interest rates in China[12], and a positive correlation with last year's investment.

(3) Foreign Direct Investment and Domestic Employment in China

China is a typical labor surplus economy, with a large amount of surplus labor settling in rural areas. Accelerating the development of the secondary and tertiary industries, expanding the absorption capacity of non-agricultural industries for surplus labor, is the fundamental way to
accelerate the transfer of rural surplus labor from agriculture to non-agricultural industries, solve the problem of rural labor surplus, and also one of the core issues to maintain long-term sustained and stable economic development and social stability in China. Foreign investment inflows not only promote China’s economic development, but also create a large number of employment opportunities, directly or indirectly promoting the transfer of surplus rural labor to non-agricultural industries[13].

Can be collected up to 1999); From the perspective of the number of new employees absorbed by various economic types in different periods, the employment numbers absorbed by foreign-invested enterprises are also quite considerable. During the period of 1991 to 1999, foreign-invested enterprises added 5.46 million employees, while state-owned and collective economies not only did not increase employment, but also reduced the number of employees by 17.74 and 18.37 million, respectively.

uct econometric analysis with the number of foreign-invested economic employees as the dependent variable and FDI as the explanatory variable.

\[ N = 99.03 + 0.13FDI \]
\[ (3.47) (12.29) \]
\[ R^2 = 0.9497 \quad \text{Adj-} R^2 = 0.9434 \quad D-W = 1.54 \quad F = 151.08 \]

\[ \ln N = 1.63 + 0.57 \ln FDI \]
\[ (3.56) \quad (9.06) \]
\[ R^2 = 0.9214 \quad \text{Adj-} R^2 = 0.9102 \quad D-W = 2.09 \quad F = 82.14 \]

Among them, \( N \) represents the number of employees in foreign-invested enterprises (in tens of thousands of people), \( \ln N \) is the natural logarithm of \( N \), and the amount of foreign direct investment is in billions of yuan. It is easy to see that the above regression results are very good. From the results of the regression, for every 100 million yuan increase in foreign direct investment, foreign-funded enterprises will add 13000 new employees. For every 1% increase in foreign direct investment, the number of employees absorbed by the foreign-funded economy will increase by 0.57 percentage points[13].

(4) Foreign Direct Investment and China’s TFP

The neoclassical growth theory uses TFP to explain the remaining part of output that cannot be explained by the input of labor and capital. TFP covers factors such as institutions, resource structure, and technology, among which resource structure has a greater impact on the initial level of TFP and a smaller impact on its changes. Technological progress and institutional change can significantly affect the changes in TFP. Foreign direct investment promotes the improvement of comprehensive factor productivity in China mainly through the spillover effect of technology and the demonstration effect of institutions. The spillover effect of technology can be achieved through the hard path of technological progress caused by technology transfer and the soft path of direct investment driving technological progress accompanied by technology transfer. He Jie and Xu Luodan (1999) borrowed Feder's (1982) econometric method and used production functions to construct.

By establishing a regression equation, it can be concluded that for every 1 percentage point increase in technology level brought about by foreign direct investment, the technology spillover effect (i.e., the increase in output) of domestic industrial enterprises in China increases by 2.3 percentage points. In another study by He Jie (2000), he found that the overall quality of foreign direct investment introduced by China’s industrial sector has not been substantially improved since the 1990s. Compared with the domestic industrial enterprise sector, the overall marginal production rate of foreign enterprises in the industrial sector does not have a significant advantage. This indicates that there is no significant help in improving the overall resource utilization efficiency of China. Of course, the overall spillover effect of foreign enterprises on the domestic industrial sector is a reality, and this positive effect is constantly
increasing with the expansion of China’s opening-up and the acceleration of the speed of foreign direct investment introduction. Professor Shen Kunrong used the correlation analysis between the total amount of foreign direct investment in each province and the comprehensive factor productivity of each province as a horizontal interface, and also concluded that every increase of 1 unit in the proportion of FDI to GDP can bring about 0.37 units of comprehensive factor productivity growth.

5. Further Exploration of the Advantages and Disadvantages of FDI on China’s Economic Growth

The previous text used econometric tools to empirically analyze the role of foreign direct investment in China’s economic growth, and generally recognized that foreign direct investment has made a significant contribution to China’s economic growth. The following text attempts to analyze in detail the advantages and disadvantages of FDI on China’s economic growth.

(1) The benefits of foreign direct investment

The sustainable development of intermediary business refers to the sustainable and sustainable development of intermediary business, as well as the sustainable and sustainable resource environment that intermediary business relies on. Its connotation lies in: the development of intermediary business should include both qualitative and quantitative development, both of which are indispensable and neglected; The issue of quality and quantity in intermediary business is a contradictory unity. According to the requirements of sustainable development theory, in order for Chinese commercial banks to achieve sustainable development of intermediary business, they must first establish a market-oriented, customer-centric, and efficiency oriented business philosophy. Banks should consider the design, development, and marketing of intermediary businesses from the perspective of customers and market demands, and study the issue of handling amounts to maximize customer satisfaction and provide customers with perfect services.

The positive impact of foreign direct investment on China’s economic growth mainly includes six aspects: 1. increasing domestic investment and promoting capital formation; 2. Absorb labor force for employment; 3. Improve comprehensive factor productivity (TFP); 4. Promote the upgrading of China's industrial structure; 5. Expand the scale of China's foreign trade, improve its foreign trade structure, and promote the development of foreign trade; 6. It is an important source of taxation in our country. Firstly, the most direct effect of a large influx of FDI is to increase China’s capital stock, effectively filling the savings foreign exchange double gap proposed by Chanali et al. As of 1999, the actual inflow of FDI into China accounted for 17% of the total fixed assets investment in China. If domestic counterpart investment is considered, this capital formation effect is more obvious; From our econometric analysis of the relationship between domestic investment and FDI in the previous text, it is also clear that FDI plays a significant role in increasing domestic investment and promoting capital formation at the 95% level. Secondly, foreign-invested enterprises have absorbed a large amount of labor force for employment in China. According to relevant statistical data, from 1990 to 1999, China’s foreign-invested economy added 5.65 million new employees, alleviating employment pressure and directly or indirectly promoting the transfer of surplus rural labor force to non-agricultural industries, thus promoting China’s economic growth. Thirdly, FDI has improved China’s comprehensive factor productivity. From the research results of He Jie et al. and Shen Kunrong, we can see that overall, FDI has indeed improved China’s comprehensive factor productivity (although we will discuss the harm of foreign enterprises in conservative advanced technology to China in the later analysis).

(2) The Disadvantages of Foreign Direct Investment
Due to the fact that foreign investment in China is mainly driven by optimism about China’s vast market and cheap labor, and maximizing profits is its fundamental motivation, foreign direct investment inevitably has a negative impact on China’s economic growth. Moreover, with China’s accession to the WTO, the influx of large multinational corporations, and the gradual opening up of mergers and acquisitions, this negative impact has become increasingly apparent and must be highly valued.

Firstly, as mentioned in the second part of this article, since the 1990s, more and more foreign direct investment has adopted a sole proprietorship approach, and foreign investors in Sino foreign joint ventures have actively controlled their equity through various means. Foreign investors are making every effort to gain control of enterprises mainly because: on the one hand, with the continuous promotion of domestic system reform, the environment of China’s market economy system is forming, and the environment for foreign sole proprietorship in China is significantly improving. Foreign investors no longer rely on Chinese investors to cooperate with them in order to adapt to many characteristics of traditional planned economy; On the other hand, in order to preserve its technological secrets and maintain its competitive advantage. The more important attempt of foreign investors to adopt sole proprietorship is to control China’s industries and monopolize the market. Secondly, since the 1990s, foreign investment in factory construction has shifted towards more mergers and acquisitions of state-owned enterprises and brands, and has shifted from scattered and arbitrary acquisitions of state-owned enterprises to purposeful and planned mergers and acquisitions of large and medium-sized state-owned enterprises with good efficiency or backbone enterprises in the same industry in different regions. As analyzed in the third part of this article, if foreign direct investment appears not in the form of newly established enterprises but in the form of equity swaps or privatization of state-owned enterprises, then such investment cannot increase the production capacity of the host country.

Thirdly, foreign-invested enterprises often tightly control the diffusion of their technology, especially high-tech, and the goal of exchanging market for technology in China has not been well achieved. For many years, China has actively given up its market share in exchange for second- and third-rate technologies. Although as a developing country, considering attracting more workers for employment, China should consider choosing suitable technologies.

6. Summary

Absorbing and utilizing foreign direct investment is a significant measure and important symbol of China’s opening-up to the outside world. Since the reform and opening up, China has absorbed and utilized foreign direct investment on a large scale. However, foreign direct investment is a double-edged sword. It has both significant positive effects and undeniable negative impacts on China’s economy. There are many related works in China. Some scholars excessively exaggerate its positive effects and ignore or deny its negative effects; Some scholars inappropriately exaggerate its negative impact while ignoring its positive role. Obviously, both of these tendencies are biased. Only by starting from objective reality, correctly evaluating the dual impact of foreign direct investment on China’s economy since the reform and opening up, and correctly formulating and implementing strategic measures to respond to foreign direct investment, can China seize opportunities, seek benefits and avoid harm, and steadily advance the great cause of building socialism with Chinese characteristics.

Russian Grand Asia Television Station Recently, international institutions such as the International Monetary Fund, the World Bank, and the Organization for Economic Cooperation and Development have raised their expectations for China’s economic growth in 2023.

The Wall Street Journal website reported that the 14th Summer Davos held in late June demonstrated confidence in China’s economic development. In addition, Li Qiang reiterated
China's opening-up policy and called on all countries to further establish the concept of win-win cooperation and work together to address global challenges. According to reports, the Chinese government has been working hard to attract overseas capital to invest in China.

References


