

# Bilateral Direct Investment and Global Value Chain Climbing

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**Abstract:** According to the spirit of the 20th National Congress report, China should not only adhere to the depth of embedding in the global value chain, but also enhance the height of embedding in the global value chain. Therefore, China should actively explore and develop towards the high-end of the value chain. This article aims to explore the relationship between two-way direct investment and the climb of the global value chain. According to the research results, two-way direct investment can promote economic development through multiple mechanisms and further achieve China's climb in the global value chain. Currently and even in the future, we need to further strengthen policy coordination, optimize the investment environment, improve the efficiency and quality of two-way investment, in order to promote the global value chain to a higher level.

**Keywords:** IFDI; OFDI; Bilateral direct investment; Global Value Chain.

## 1. Introduction

The Outline of the 14th Five Year Plan proposes for the first time a new requirement of "enhancing the level of international two-way investment and coordinating the development of foreign investment and outward investment", highlighting the development concept of balancing the growth of quantity and quality of two-way investment. At the 19th National Congress of the Communist Party of China (CPC), Xi Jinping put forward the requirement of "implementing the new development concept and building a modern economic system". He should focus on the construction of the "the Belt and Road", adhere to the principle of both bringing in and going out, follow the principle of joint consultation, joint construction and sharing, strengthen innovation capacity, open cooperation, innovate ways of foreign investment, promote international production capacity cooperation, and form a global network of trade, investment, financing, production and services, Accelerate the cultivation of new advantages in international economic cooperation and competition. This not only emphasizes the importance of outward foreign direct investment and foreign direct investment for economic development, but also emphasizes the organic connection between two-way direct investment and the global value chain.

According to the spirit of the 20th National Congress report, it is not only necessary to adhere to the depth of embedding in the global value chain, but also to enhance the height of embedding in the global value chain. With the development of economic globalization, the emergence and expansion of global value chains have been spurred, promoting the transformation of major economies from national industrial chains to global value chain production and trade models. This also means that the higher the position in the global value chain, the more beneficial it is for domestic production and trade. Therefore, China should actively explore and develop towards the high-end of the global value chain.

International two-way investment can not only drive the

flow of funds, but also drive the flow of various production factors such as personnel and technology, thereby promoting economic development and further realizing the climb of the global value chain. Therefore, in the irreversible historical trend of economic globalization, studying the impact of two-way direct investment on the climb of the global value chain is of great significance for the development of the economy and society.

At present, countries actively participate and continuously improve their position in the global value chain, and China is no exception. Most existing research focuses on the historical perspective of China's global value chain upgrading, with less attention paid to international comparisons of global value chain upgrading in order to derive China's strategies. Therefore, this article analyzes the current situation of international two-way direct investment and the global value chain, and finds the influencing factors of two-way direct investment on the improvement of the global value chain. In order to better play the role of investment, more targeted suggestions can be proposed to enhance the position of China's global value chain.

## 2. Literature Review

In terms of the impact of outward foreign direct investment (OFDI) on the global value chain (GVC) position. Taglioni and Winkle (2016) conducted a study on outward foreign direct investment in developing countries and found that reverse technology spillovers can promote the improvement of global value chain status [1]. Chi Ge (2018) used grey correlation theory to conclude that outward foreign direct investment has to some extent promoted the elevation of global value chain status. Wang Hui (2020) believes that outward foreign direct investment has a significant positive promoting effect on the overall, three major industries, manufacturing, and the global value chain division of labor status of different technology categories in China. Yu Haiyan (2020) and others used mathematical models to derive the conclusion that outward foreign direct investment can

improve the position of the home country's global value chain [4]. The study by Liu Yuandan (2021) and others shows that outward foreign direct investment has a promoting effect on the reconstruction of the global value chain. Compared to before the financial crisis, the promoting effect of outward foreign direct investment on the reconstruction of the global value chain is more significant later on [5]. Liu Yu et al. (2022) found that China's outward foreign direct investment has produced a significant GVC downgrade effect. From an industry perspective, outward foreign direct investment in the service industry has significantly dragged down China's global value chain upgrading [6]. The research results of Qiu Linlin (2022) indicate that China's GVC division of labor is currently in a middle position and showing an upward trend. The scale of OFDI will have a significant impact on the home country's GVC division of labor, and its impact is characterized by country heterogeneity and industry heterogeneity [7]. The research results of Huang Yanyan (2022) indicate that China's outward foreign direct investment has a significant positive impact on the global value chain improvement of the manufacturing industry [8]. It can be seen that there are differences in the conclusions of existing research.

In terms of the impact of Foreign Direct Investment (IFDI) on the status of GVCs. Research by Luo Wei (2019) and others found that foreign investment, through its natural connection with the global value chain network of multinational corporations, strengthens the depth and complexity of China's integration into the global value chain. Lin Xuejun (2020) and others found through a fixed effects model that in the context of trade frictions, the promoting effect of foreign direct investment on the rise of global value chain status is weakened [10]. Liu Huizheng (2021) and others believe that foreign direct investment has a positive promoting effect on enhancing the stability of enterprises embedded in the global value chain, mainly reflected in the horizontal spillover effect within the industry [11]. In Ju Zongzheng's (2019) study, foreign direct investment was found to be detrimental to the enhancement of the host country's global value chain [12]. Therefore, there are differences in the existing research conclusions in this regard.

There is currently limited research on the impact of two-way direct investment on the position of GVCs. He Jinzhu (2019) used national data to empirically examine how the level of coordinated development of two-way FDI affects the upgrading of GVC, and found that the level of interactive development of two-way FDI has a significant promoting effect on China's GVC upgrading [13]. Qin Xueting's (2020) research shows that IFDI, OFDI, and two-way investment are positively correlated with the improvement of the value chain, indicating that two-way investment is a coordinated development, mutual promotion, and mutual benefit [14]. Zhang Zongbin (2022) believes that the coordinated development of two-way direct investment can enhance China's competitiveness in the international market and promote the elevation of China's global value chain position. Pian Sihuai's (2023) study found that OFDI, IFDI, and bidirectional FDI interactions all have a significant positive effect on the GVC status of the manufacturing industry [16].

Through sorting and analyzing existing data, this article believes that existing literature has provided us with many ideas and perspectives on the relationship between OFDI, IFDI, and the global value chain, but there are also some shortcomings. On the one hand, existing research has mainly

focused on the impact of OFDI on the global value chain and the impact of IFDI on the global value chain, while there is little research on the relationship between bidirectional FDI and the global value chain from an international perspective. On the other hand, many studies only focus on enterprises, a certain industry, or a certain country, which has certain limitations. Based on the above understanding, this article systematically draws on and learns from previous research results to study the current status of global value chain development and two-way direct investment, in order to contribute to the improvement of China's global value chain position.

### **3. Bidirectional Direct Investment and the Current State of the Global Value Chain**

#### **3.1. Definition of Theoretical Concepts**

##### **3.1.1. Theory of Foreign Direct Investment**

IFDI refers to the economic behavior of investors in a country, who directly or indirectly invest in enterprises in other countries and gain certain management and control rights during the investment process. Compared to OFDI, IFDI emphasizes more on the process and behavior of international direct investment. From the perspective of capital flow, IFDI is based on the perspective of the host country, referring to a country's enterprise accepting investments from multinational corporations in other countries or regions.

##### **3.1.2. Theory of outward foreign direct investment**

OFDI refers to the economic activity in which investors in a country invest their capital in foreign enterprises and hold certain management and control rights during the investment process. Compared to IFDI, OFDI emphasizes more on the results of capital investment abroad. From the perspective of capital flow, OFDI is based on the perspective of the home country, referring to the behavior of investors from one country investing in other countries or regions.

##### **3.1.3. Bidirectional Direct Investment Theory**

Two way Foreign Direct Investment, currently there is no clear definition in the academic community for this theory. Generally, we define it as a country or region participating in international investment activities as both the host country and the home country, that is, a country or region conducting both IFDI and OFDI activities simultaneously.

##### **3.1.4. Global Value Chain Theory**

GVC refers to a global cross enterprise network organization that connects production, sales, recycling, and other processes to realize the value of goods or services. It involves the entire process from raw material procurement and transportation, production and distribution of semi-finished and finished products, to final consumption and recycling. GVC emphasizes cross-border division of labor in production, with a wider coverage and richer connotations.

#### **3.2. Current situation of two-way direct investment**

From the perspective of the development of bidirectional FDI in the world, IFDI and OFDI as a whole show a stable growth trend. In the past decade, global IFDI and OFDI traffic has continued to grow, especially in emerging market countries and developing countries where investment growth is more significant. The proportion of OFDI outflows from

these countries in the total global OFDI outflows is gradually increasing, indicating that these countries are actively promoting outward investment, seeking more international cooperation and resource sharing. At present, the global investment landscape is undergoing profound changes. Traditional developed countries remain the main destinations of IFDI, but the position of emerging market countries and developing countries in IFDI is gradually increasing. At the same time, emerging market countries and developing countries are also actively exploring new ways and models of foreign investment, such as the "the Belt and Road" initiative, to promote the development of domestic foreign investment. In addition, the impact of digitalization and globalization trends on IFDI and OFDI is becoming increasingly significant. Digital technology is changing traditional investment models and supply chain structures, and multinational corporations are actively exploring digital transformation to improve efficiency and reduce costs. At the same time, the trend of globalization is also driving IFDI and OFDI towards more diversified destinations and markets, thereby promoting the integration and development of the global economy. In the future, with the continuous integration and development of the global economy, the development prospects of IFDI and OFDI are still broad.

From the perspective of China's two-way FDI development, as shown in Figures 1 and 2, China's IFDI has shown a relatively stable upward trend from \$117.586 billion in 2013 to \$173.483 billion in 2021, especially with a significant increase in IFDI growth rate from 2020 to 2021. Although China's OFDI fluctuated from 2013 to 2021, it is generally on the rise. Especially since the COVID-19, all industries have been affected by large or small impacts. Our OFDI traffic has increased rather than decreased, which is enough to show the strong development momentum of OFDI. Therefore, this also indicates that China is increasingly valuing the use of foreign investment and outbound investment, becoming more active in international investment activities, and also in line with the trend of two-way FDI development in the world.

### 3.3. Current Status of Global Value Chain Position

Looking back at the past few decades, under the wave of globalization, multinational corporations have driven the development of GVC while seeking to maximize cost-effectiveness. Subsequent developments have gradually made GVC highly related to international process division of labor. By the year 2000, GVC had formed the Asia Pacific block centered around the United States and the European block centered around Germany. As China becomes the world's largest trading country for goods, by 2018, the global value chain network has evolved into a tripartite network centered around North America, Europe, and Asia. The core of each block is the United States, Germany, and China. In summary, GVC is a product of the deepening and broadening of international division of labor, and is based on the dominance of developed countries and the subordination of developing countries. Due to the impact of the COVID-19, Sino US trade friction, anti globalization and other situations, the division of labor status of countries in GVC is in dynamic change. The position in GVC is not only influenced by geopolitical and unexpected events, but also by production costs, production efficiency, scale, technological level, brand awareness, and other factors. At present, GVC is showing a trend of localization, regionalization, diversification, and complexity.

China is an important component of GVC and also the world's largest manufacturing country. Chinese manufacturing enterprises play an important role in GVC by producing and selling various products to meet the needs of global consumers. In recent years, China's position in GVC has been elevated, and the production efficiency and technological level of Chinese manufacturing enterprises have been continuously improving. Brand awareness has also been gradually increasing. At the same time, the Chinese government is actively promoting the transformation and upgrading of manufacturing enterprises, improving product quality and added value to better adapt to the needs of the global value chain. But as the economy enters a stage of high-quality development, the drawbacks of China's participation in GVC division of labor and competitive strategies are gradually being exposed, and the manufacturing industry is facing the dilemma of being large but not strong, and lacking core technologies. In addition, China's position in GVC also faces some external challenges. For example, some multinational corporations setting up production bases in China have caused certain competitive pressure on Chinese manufacturing enterprises. In addition, some developed countries are also strengthening their position in the global value chain, which has put pressure on Chinese enterprises. In short, China's position in GVC is gradually improving, but it is still in the middle and low-end position of GVC and still faces many challenges.

## 4. The Mechanism of Bidirectional FDI on the Rise of GVC

With the flourishing development of OFDI and IFDI worldwide, countries are both investors and recipients in the global market. It is no longer realistic to only consider the impact of OFDI or IFDI on the global value chain position and ignore their interactive synergies. Undoubtedly, everything has two sides, and bidirectional FDI does not necessarily have a promoting effect on the status of GVC. However, after in-depth research, it has been found that the positive effect of bidirectional FDI on GVC is far greater than the negative effect. Therefore, this article conducts an in-depth analysis of the mechanism of the synergistic effect of bidirectional FDI on the rise of GVC.

Firstly, technological progress and innovation: The technology spillover effects of IFDI and the reverse technology spillover effects of OFDI help local enterprises acquire advanced technology, management experience, and market resources, thereby improving their own technological innovation capabilities. Through cooperation and competition with international advanced enterprises, local enterprises can continuously optimize product design, production processes, and operational management, improve product added value, and thus climb in GVC.

Secondly, industrial chain integration and upgrading: Bidirectional FDI helps enterprises integrate high-quality industrial chain resources on a global scale, achieving optimization and upgrading of the industrial chain. Enterprises can obtain international market share, key technologies, brands, and channels through external investment and mergers and acquisitions, as well as optimize the industrial structure caused by the development, innovation, and agglomeration effects of upstream and downstream industries triggered by IFDI. This will also promote industrial upgrading, help strengthen the upgrading effect of domestic

industrial structure generated by OFDI, and further enhance their competitive position in GVC.

Thirdly, market expansion and brand building: Bidirectional FDI helps companies expand their international market and increase their global market share. In the international market, enterprises can fully utilize domestic and foreign resources, improve the quality and reputation of products and services, build international brands, and thereby enhance the position of GVC.

Fourthly, talent cultivation and international cooperation: Bilateral FDI can promote the exchange and cooperation of domestic and foreign talents, and provide more high-quality talents for local enterprises. At the same time, enterprises can cultivate talents with international perspectives and professional knowledge through international cooperation projects, enhance their technological innovation capabilities and global competitiveness.

Fifth, industrial synergy and cluster development: Bidirectional FDI helps to promote industrial synergy and form industrial cluster effects. At present, China's two-way FDI is more inclined towards enhancing competitiveness in the global value chain through collaborative innovation and win-win cooperation among enterprises. The development of industrial clusters can reduce enterprise costs, improve industrial agglomeration effects, and further promote the enhancement of GVC's status.

If bidirectional FDI is fragmented and developed, it may hinder China's climb in GVC. When the scale of IFDI is too large, domestic resources will be heavily occupied. On the one hand, it will damage China's natural environment and even pose a threat to renewable resources. On the other hand, it will cause industrial duplication, leading to overcapacity and affecting the effective allocation of resources. In addition, a large amount of IFDI will affect the innovation and independent research and development capabilities of Chinese enterprises, thereby hindering the improvement of GVC's status. On the contrary, if the scale of IFDI is too small, the positive technology spillover effect will be insufficient, and Chinese enterprises will not be able to fully learn and utilize advanced technology systems, which will also hinder the innovative development of enterprises in technology and systems to a certain extent. In addition, too few enterprises introduced cannot make up for the industrial hollowing caused by a large amount of OFDI, thus hindering the improvement of GVC in China. When the scale of OFDI is too large, it will lead to the outflow of a large amount of domestic capital, talent resources, advanced technology, etc., resulting in an imbalance of domestic production factors, making it difficult to digest the technology spillover effects brought by IFDI, and hindering the rise of China's GVC. On the contrary, if the scale of OFDI is too small, it is not conducive to the implementation of China's "going out" strategy, affecting the expansion of China's enterprises and international reputation, weakening the reverse technology spillover effect, and not conducive to industrial upgrading.

## 5. Conclusion and Suggestions

### 5.1. Conclusion

From 2013 to 2021, the world's two-way FDI flow steadily increased, indicating that countries around the world are increasingly valuing OFDI and IFDI. Although developed countries have always been the main players in international investment, mostly as home countries in investment activities,

while developing countries and other underdeveloped countries are mostly host countries and investors, over time, developing countries and other underdeveloped countries have gradually attached importance to OFDI. In the past decade, China's IFDI has been steadily increasing year by year. Although OFDI has fluctuated, the overall trend is still on the rise. Therefore, China is increasingly emphasizing two-way FDI, which is in line with the development trend of two-way FDI in the world.

Along with the development of two-way FDI in the world, GVC is also constantly evolving, and cooperation between countries is becoming increasingly close. Developed countries still dominate in GVC, while developing countries are also striving to catch up. The GVC network has evolved from the Asia Pacific and Europe blocks centered around the United States and Germany to the Americas, Europe, and Asia blocks centered around the United States, Germany, and China. The current and future development trends of GVC are localization, regionalization, diversification, and complexity. In recent years, China's position in GVC has been continuously improving, but there are also internal and external factors such as lack of core technology and obstacles from developed countries that hinder China's climb in GVC.

Through the analysis of the mechanism of action, it can be seen that bidirectional FDI can help enterprises improve their position in GVC through multiple mechanisms such as technological progress, industry chain integration, market expansion, talent cultivation, policy support, and industry synergy.

### 5.2. Suggestions

(1) Build an open global value chain top-level design pattern. We need to start from the national strategic level, clarify development goals, and formulate specific implementation strategies and policy measures. We should attach importance to the coordinated development of OFDI and IFDI. While focusing on the quantity of two-way FDI investment, we should also pay attention to its investment quality, so that investment policies and trade policies complement each other, forming a mutually beneficial and win-win pattern.

(2) Encourage enterprises to go global. At present, for China's development in GVC, IFDI is the basic condition, and OFDI is the key factor for GVC to climb. Therefore, the government should introduce more policies to encourage domestic enterprises to invest overseas, especially in research and development, production, and other areas. This will help to increase the reverse technology spillover effect of OFDI, allowing Chinese enterprises to be exposed to more advanced foreign technologies and cutting-edge processes, which can improve their international competitiveness and promote China's climb in GVC.

(3) Strengthen industrial chain integration and technological innovation capabilities. In the global value chain, enterprises need to have strong industrial chain integration capabilities and technological innovation capabilities to improve their core competitiveness. In the process of two-way FDI, enterprises should actively seek strategic cooperation with local enterprises, promote the upgrading and optimization of the industrial chain through technology transfer and research and development cooperation. In addition, the development of high value-added industries should be encouraged, while limiting the excessive development of low value-added industries. This

not only helps to reduce the environmental pollution caused by low-end manufacturing, but also helps to enhance China's position in GVC.

(4) Deepen regional economic integration. China should actively participate in the process of regional economic integration, sign free trade agreements with more countries, and use various free trade zone cooperation mechanisms to promote cross-border trade and investment facilitation. This will provide more diverse choices for China's OFDI and attract more IFDI. Diversification of investment destinations will help China's OFDI find industries that complement China's resources. The increase in IFDI will help higher quality enterprises enter China for investment, improve the quality of two-way investment, and promote China's position in GVC.

(5) Optimize the foreign investment policy environment. Foreign investment is an important force in promoting the upgrading of China's GVC status. We need to further optimize the foreign investment policy environment and provide a more fair, transparent, and predictable business environment for foreign-funded enterprises. By opening up the market, strengthening intellectual property protection, simplifying approval processes, and other measures, we aim to attract more foreign-funded enterprises to enter the Chinese market and promote deep integration between China and the global value chain.

(6) Digital transformation and industrial upgrading. In the context of the global value chain, digital transformation and industrial upgrading are key to enhancing competitiveness. We need to strengthen the construction of digital infrastructure, promote the deep integration of digital technology and traditional industries, and promote industrial innovation and upgrading. Through digital transformation, we can improve production efficiency, reduce costs, improve product quality, promote high-quality development of two-way FDI, and thus gain greater competitive advantages in GVC.

(7) Innovate financial support system to increase fixed asset investment. The government should innovate its financial support system to provide more and more flexible financing support for enterprises going global. In addition, financial institutions should develop more cross-border investment products to provide more funding sources for cross-border investment. For IFDI, increasing industry fixed asset investment can enable domestic enterprises to better absorb and digest advanced technologies when invested. Both OFDI and IFDI are developing, and GVC can only be better achieved by climbing.

(8) Strengthen talent cultivation and introduction. In the current stage of two-way FDI development, talent cultivation and introduction are important factors in enhancing the competitiveness of enterprises. We need to strengthen talent cultivation efforts, encourage cooperation between universities, research institutions, and enterprises, cultivate more talents in the fields of international economy, trade, finance, etc., and cultivate a talent team with an international perspective, familiarity with international rules, and mastery of professional skills. At the same time, we also need to actively introduce outstanding overseas talents to provide them with a better environment and conditions for working and living in China. This will provide better talent support for enterprises and help China climb in GVC.

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