# A Literature Review of the Impact of China's Outward Foreign Direct Investment on Domestic Economy

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**Abstract:** China's outward foreign direct investment is huge, and a large number of scholars have explored its economic influence effects. By combing the existing domestic and foreign literature, this paper attempts to systematically discuss and summarize the impact of China's foreign direct investment on technological progress, industrial structure, export, employment, domestic investment, income and the appreciation of global value chain and studies the development status of Chinese economy. Based on this, it analyzes the progress of existing research and puts forward relevant suggestions for future work in this field.

#### 1. Introduction

With the in-depth development of economic globalization, the perspective of promoting national economic development with outward foreign direct investment (OFDI) has become increasingly mature. Since the outbreak of the global financial crisis in 2008, with the implementation and advancement of the "going out" strategy, OFDI has shown a trend of growth against the trend. The "Statistical Bulletin of China's Outward Foreign Direct Investment" issued by the Ministry of Commerce shows that China's outward direct investment has continued to expand. In terms of flow, it has increased from US\$2.7 billion in 2002 to US\$123.12 billion in 2014, with an average annual growth rate of 37.48%. In terms of stock, it has increased from 29.9 billion US dollars in 2002 to 882.64 billion US dollars in 2014, and the average annual growth rate was 32.59%. In this context, the impact of China's foreign direct investment on the domestic economy has become a research hotspot, and a series of insightful theoretical results have been formed.

In a nutshell, the current scholars' influence on the national economy of OFDI is mainly concentrated on the influence of OFDI on technological progress, industrial structure, exports, employment, domestic investment, income, and global value chain appreciation. This article will clarify the seven main effects of OFDI on the home country's economy from the above, based on the current status and development of OFDI in China in recent years, sort out the recent developments in related research at home and abroad, and put forward relevant suggestions for future work in this field.

## 2. Summary of Literature on the Impact of China's Outward Foreign Direct Investment

## 2.1 Influence of Ofdi on Technological Progress

According to most studies, whether OFDI can promote the technological progress of the home country is related to its absorptive capacity. The absorptive capacity of different countries, different environments, and different attributes of enterprises is heterogeneous, which makes OFDI's impact on technological progress different. From a national perspective, by exploring the factors driving OFDI by emerging multinational corporations (EMNEs) and the knowledge transfer model of six EMNEs from three BRIC countries (India, China and South Africa) (Baskaran, 2017), the study found that there are significant differences between the OFDI from EMNEs and developed

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multinational enterprise, which cannot be explained by using traditional FDI model. When EMNEs conduct OFDI with developing host economies, they transfer more technology and knowledge than they obtain; while for EMNEs and developed host economies, the knowledge and technology transfers appear to be more evenly matched, a two-way street benefitting both parties. OFDI between China and emerging market countries will be more beneficial to the learning and introduction of technology and knowledge, thereby further achieving technological progress.

From the perspective of the enterprise, Using an original linked firm-level panel data from Chinese manufacturing firms over the period 2002–2007 and conducting propensity score matching (PSM) techniques and differences-in-differences (DID) analysis to it (Huang Y, 2017), we find that the first OFDI promotes parent firm's productivity and this effect has strong corporate heterogeneity. The absorptive capacity of an enterprise is essential to the own-firm effect, and the absorptive capacity related with product innovation is more important than the process innovation for the own-firm effect. In addition, the OFDI strategy of acquiring advanced technology and investing in developed countries will greatly enhance the own-firm effect. Based on the background of marketization, from the perspective of technology spillovers, OFDI has promoted technological progress, damaged scale efficiency, and has no significant impact on pure technical efficiency. However, as the degree of marketization deepens, OFDI will improve the technical level and pure technical efficiency more than the reduction of scale efficiency (Gu Xuesong, 2018).

There are also most studies focusing on the reverse technology spillover effects of China's OFDI. Zhu Tong et al. (2012) studied the impact of reverse technology spillovers on China's technology level based on the international technology spillover theory. Overall, the host country's reverse R&D funds spillover and Reverse human capital spillovers have no significant impact on China's technological level, and China's human capital and R&D fund stocks can form a certain absorptive capacity, so that reverse R&D capital spillovers and reverse human capital spillovers have a positive impact on China's technological level. Li Mei et al. (2012) studied the regional differences and threshold effects of OFDI reverse technology spillover based on the threshold regression analysis of China's inter-provincial panel data. The results showed that there are obvious regional differences in the reverse technology spillover of OFDI and positive reverse spillover effects, which occurs in the developed eastern region.

### 2.2 Influence of Ofdi on Industrial Structure

Most of the research results are positive about whether OFDI helps to promote the upgrading of the industrial structure of the home country, while a few studies find that sometimes OFDI does not play a role in optimizing the industrial structure of developing countries.

After studying 26 post-communist transition economies (China, Russia, etc.), Andreff (2017) found that OFDI was determined by the level of economic development of the home country, the size of the domestic market, its growth rate, and technological variables. Zhao Yunpeng et al. (2018) investigated the dynamic influence process of ODFI on the upgrading of China's industrial structure and the connection between the adjustment of industrial structure before and after it, and demonstrated that ODFI significantly promoted the upgrading of China's industrial structure, and it had a significant lag effect on the upgrading of industrial structure. Mao Haiou et al. (2018) studied the impact of ODFI in developing countries on industrial upgrading in their home countries from the perspective of export labor structure, and found that there were value chain transfer effect and technology spillover effect. The low-end value chain and industrial transfer effect of down-gradient OFDI increase the export technical labor share of the home country, which is conducive to the industrial upgrading of the home country, while the reverse technology spillover effect enhances the competitive advantage of low-technology labor-intensive links, reduces the export high-tech labor share, and impedes the export and industrial upgrading of the home country.

## 2.3 Influence of Ofdi on China's Export

As for the influence of OFDI on export, numerous studies have found that OFDI promotes the export of the home country. China's OFDI and export scale present a complementary effect (Lang Lihua, 2016). With the expansion of industrial structure difference between China and the host

country, OFDI's export creation effect of China is enhanced (Gu Xuesong, 2016), rather than a substitute for export. However, different types of OFDI have heterogeneous influences on export. Based on the optimization of China's trade structure determined by the trade competitiveness index (Hu,2017), the empirical results show that China's OFDI has a promoting effect on the export of capital, technology-intensive and labor-intensive products, while it has a certain inhibiting effect on the export of resource-intensive products. It is worth mentioning that Wang (2017) found that export growth also had a huge impact on China's OFDI. In addition, export platforms are an important part of China's OFDI.

## 2.4 Influence of Ofdi on Domestic Employment

The issue of the impact of OFDI on employment in the home country of transnational corporations originated in the United States in the 1960s. It mainly discussed whether the investment of transnational corporations in other low-cost countries would cause the so-called "industrial hollowing out", thus affecting employment in the home country (Harrison,2006). Whether OFDI has a substitution effect or a promotion effect on employment, most studies show that OFDI significantly promotes employment in the home country overall, but there is significant regional and industrial heterogeneity. Based on the national macro level, Huang Xiaoling et al. (2007) and Jiang Yapeng et al. (2012) found that OFDI had a substitution effect on the total employment in China, but it was relatively limited. In the long run, there is a positive correlation between OFDI and employment in China, but the employment effect of OFDI in the home country of provinces is different.

Based on the data of Chinese micro enterprises, Li Lei et al. (2016) found that different types of OFDI have different influences on the employment of their home countries, and the employment effect of resource-seeking OFDI on the parent company is affected by the industry category. The employment effect of horizontal OFDI and vertical OFDI on the parent company is affected by the income level of the destination country, the import and export of intermediate goods and the import and export of final goods. Compared with other investment motives, the investment in business services significantly promotes the growth of employment in the home country. However, investment in high-income countries significantly promotes the employment growth of enterprises in their own countries, while investment in low - and middle-income countries does not significantly replace domestic employment (Jiang Guanhong, 2016).

## 2.5 Influence of Ofdi on Domestic Employment

As for the impact of OFDI on domestic investment, most existing studies have found that OFDI has a significant promoting effect on the overall domestic investment. You & Solomon (2015) combined with the characteristics of different directions and degrees of OFDI influence on domestic investment, paid special attention to the influence of government support, and used industry data and GMM method to analyze and show that China's OFDI has a positive impact on domestic investment. However, OFDI's role in promoting domestic investment is conditional, and the level of opening to the outside world is the threshold variable that affects this role. OFDI in eastern China develops rapidly, and the export effect caused by the stock of overseas assets makes up for the extrusion effect of capital outflow. The total effect of OFDI on domestic investment is positive. In the central and western regions, OFDI will crowd out domestic investment. The main reason for the difference is that the influence of OFDI on domestic investment through capital channels and industrial association is regulated by the degree of domestic financial development and the level of opening to the outside world (Song Lin, 2016).

In terms of time, Yang Pingli et al. (2017) showed that OFDI had a substitution effect on domestic investment in the short term and promoted domestic investment in the long term. Different motives of OFDI had different influences on domestic investment, and only OFDI invested in developed countries and OFDI in business services significantly promoted the development of enterprises' long-term investment.

#### 2.6 Influence of Ofdi on Household Income

Most research results show that OFDI promotes the increase of household income in the home country as a whole. Mao Qilin et al. (2014), using the database of Chinese industrial enterprises from 2004 to 2008, found that although OFDI of enterprises significantly increases the average wage level of domestic employees and the positive "wage spillover" effect is persistent and increasing year by year. However, there are differences in the impact on the income of high-skilled and low-skilled workers, and the impact on the income of manufacturing and service workers. Due to the bias between capital and highly skilled workers in the technological progress brought by OFDI to enterprises, the wage share of highly skilled workers has been significantly increased in enterprises' OFDI, but it has no significant or even negative impact on the wage share of low-skilled workers (Yuan Ziqing, 2018).

Regarding the income gap between enterprises, Yuan Qigang and Shang Hui (2015) used the industrial enterprise data of OFDI from 2005 to 2011 to test the relationship between OFDI behavior and wage level and the mechanism of action, and the study showed that OFDI widened the income gap between enterprises. As for the income gap within the enterprise sector, Liu Haiyun et al. (2018) showed in their research that China's OFDI narrowed the income gap, but the impact of OFDI on the income gap varied in different time periods. OFDI in low-tech sectors and resource and labor-intensive industries narrowed the income gap, while OFDI in high-tech sectors widened the income gap. And OFDI in capital and technology-intensive industries had no obvious impact on the income gap.

## 2.7 Influence of Ofdi on the Appreciation of Global Value Chain

With the deepening of countries' participation in global value chain, many scholars also focus on the impact of OFDI on the appreciation of global value chain. Most studies find that OFDI promotes the upgrading of the global value chain of a country's manufacturing industry, and the technology spillover acquired by a country plays an important role in promoting the improvement of its international division of labor status and its technological progress. Among them, the technology spillover of developed countries is an important way to upgrade the technology of developing countries, which is conductive to the promotion of the status of developing countries in the global value chain (Palit,2006; Brach, 2009).

Liu Bin et al. (2015) made an in-depth analysis of the "value chain upgrading effect" of OFDI by using the data of OFDI and the world input-output table, and the results showed that OFDI could significantly improve the "division of labor status" of enterprises in the global value chain system and promote the product and function upgrading of enterprises. Industry level and national level OFDI reverse technology overflow to the China council for the promotion of global value chain upgrade show significant effect, but the OFDI subdivision of different manufacturing industry the impact of the global value chain upgrade exists heterogeneity. In technology-intensive industries, especially high-tech intensive industries, the promotion effect of reverse technology spillover effect is not significant (Yang Lianxing, 2017), and OFDI with different motivations also has different influences on the upgrading of the global value chain of a country's manufacturing industry.

In recent years, more scholars have focused on the impact of China's OFDI on countries along the "One Belt And One Road" to climb the global value chain. Li Jianjun et al. (2017) and Yao Zhanqi et al. (2018) found that China's OFDI to "One Belt And One Road" countries along the route significantly promoted their GVC status index. This is mainly because China conducts direct investment in the countries along the Belt and Road, and uses a large number of raw materials and intermediate products provided by the host countries for production and export, while few intermediate products are imported from China for production.

Most of the research results are positive about whether OFDI helps to promote the upgrading of the industrial structure of the home country, while a few studies find that sometimes OFDI does not play a role in optimizing the industrial structure of developing countries.

### 3. Literature Profile

In conclusion, through the impact on China's OFDI research literature review and comb, this

paper sums up the following conclusions.

First, the OFDI can promote the domestic technological progress is related to its absorptive capacity, due to different countries, different regions, different industries, different attribute exists heterogeneity of absorptive capacity of enterprise, on the impact of technological advances to OFDI is different. Second, most research results show that OFDI helps to promote the upgrading of industrial structure, while only a few studies find that OFDI does not play a role in optimizing industrial structure in developing countries. Third, OFDI promotes domestic exports rather than substitutes for them, but the influence of different types of OFDI on exports is heterogeneous. Fourthly, most studies show that OFDI significantly promotes employment in the country, but there is obvious regional and industrial heterogeneity, and different types of OFDI have different influences on employment. Fifth, OFDI has a significant promoting effect on domestic investment. Some studies show that OFDI has a substitution effect on domestic investment in the short term, but it promotes domestic investment in the long term. The influence of OFDI with different motivations on domestic investment is heterogeneous. Sixth, OFDI increases domestic residents' income overall, but the impact on the income of high-skilled workers and low-skilled workers, and the impact on the income of manufacturing employees and service employees is different. Seventh, whether for OFDI promoted the global value chain upgrade, most studies have found that foreign direct investment to promote the global value chain upgrade a country's manufacturing, but for the influence of different manufacturing industry global value chain upgrade segment exists heterogeneity, different motives of OFDI on a country's manufacturing differences between the effects of global value chain upgrade.

Therefore, in recent years, scholars have made certain achievements in the research on the impact of OFDI, with a certain scale of framework. In the future study, further refine research and explore more effect should be the research focus on the influence of different areas, so as to improve the theory of China's foreign direct investment and economic effect.

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