The Influence of OFDI on Shandong Enterprise Productivity

Zhang Wei

Shandong Yingcai University, Shandong, Jinan, 250104
346591653@163.com

Keywords: OFDI; productivity; influence; Shandong Province

Abstract: The Outward Foreign Direct Investment (OFDI) in Shandong Province is an important part of China's OFDI. Accompanied by Going-out strategy, enterprises in Shandong Province also increase the pace of OFDI. Study on the economic effects of OFDI in Shandong Province will have an practical significance. Based on the author's years of practical experience, this paper firstly analyzes the current situation of the development of OFDI, then points out the impacts and proposes countermeasures of OFDI on the productivity of Shandong enterprises on the basis of the empirical research results of relevant scholars.

Introduction

Foreign direct investment strategy in Shandong Province started in the early 80's, and in recent years Shandong Province has become one of the country's provinces which has made comparatively significant achievements in OFDI. Through the implementation of OFDI, part of foreign trade enterprises in Shandong Province have increased the access to the international market, eliminated trade barriers, won the chance to learn more foreign advanced technology and management experience, and effectively improved the enterprise's level of production technology and management. By developing foreign resources, it greatly ensures the supply of raw materials for the domestic shortage of strategic materials, commendably complements the meet of the demand of resources in the province. It's crucial to further promote the economic development by analyzing the status quo of Shandong Province and obtaining the affect of OFDI on Shandong productivity.

Development Status of the Foreign Direct Investment in Shandong Province

Investment field is increasingly broadening. Due to the restriction of enterprises scale, capital, technology, manual labor, management and other aspects, the investors of Shandong Province's foreign direct investment have been limited to small minor enterprises. In order to adapt to the new situation of economic globalization, Shandong Province follows the "advance in regular order, trade guide, in various forms, stressing efficiency" principle, focuses on the foreign investment of resources development, export-oriented type, industrial transfer, technology research and cooperation, actively and steadily promotes large enterprise groups to implement transnational operation, so as to gradually changes the main part of Shandong Province OFDI from medium and small enterprises to large enterprise groups. On the basis of fully understanding foreign investment market, it has emerged Haier, Hisense, sunshine Sanmu metallurgy Mining Co., Ltd., and many other excellent large enterprise groups these years. Investment involves more than ten departments, such as textile, electro-machinery, metallurgy, ocean fishing and so on, nearly a hundred projects.
**Investment structure is gradually improving.** OFDI in Shandong Province is not only in trading companies or representative agencies, but also in the rapid development of production projects, especially those which can improve the domestic equipment, raw material, semi-finished product exported processing project. Compared with the developed countries and regions, the current OFDI in Shandong Province focus on labor intensive projects which has a great relationship with the Shandong province's large population, cheap labor. However, the manufacturing industry of Shandong province is relatively complete. It has both advanced technology, management experience, and suitable intermediate technology and management experience, in this respect the foreign investment is promising. According to the statistics of foreign trade and Economic Cooperation Bureau of Shandong Province in 2008, Shandong Province newly increased 69 non-traded production enterprises in 2007, of which manufacturing enterprises accounted for 50. One of the focus of OFDI in Shandong Province is international engineering contracting, which can make full use of abundant labor resources in. Moreover, OFDI in Shandong province also chooses some resource development industries.

**Investment region is continues expanding.** With the rapid development of the scale, OFDI in Shandong Province continues to expand. By the influence of the Shandong export pattern for a long time, most companies are concentrated on the developed countries of Europe, the United States, Japan, Australia and Hongkong. In recent years, Shandong province has increased investment in developing countries, while maintaining and increasing the size of investment in developed countries. For those small scale, little projects, labor-intensive enterprises, greater attention should be paid to encourage them to invest in developing countries and regions. Many developing countries and regions are badly in need of capital due to the development. In order to attract foreign investment, they have developed a number of preferential policies, which provide enterprises in Shandong province with opportunities to expand to investments in such countries and regions. In addition, in the level of economic development and technological development, industrial structure, consumption preference, many developing countries and regions are with China relatively close. It helps the enterprises in Shandong Province exert comparative advantages and gain comparative advantages. At present, investment in developing countries has become a key area of the foreign direct investment in Shandong province.

**Effect of OFDI on Shandong Enterprises Productivity**

**OFDI has no significant impacts on total factor productivity(TFP), but has a remarkable positive influence on technological progress, and an obvious negative effect on pure technical efficiency and scale efficiency.** As the booming of economic globalization, China's enterprises have embedded into all the global value chains, especially in the past eight years, OFDI flows increased markedly, the stock has reached the forefront of the world. With the improvement of the economy of Shandong Province and the level of science and technology, growing companies take the initiative to "go out". Not only do they contact the frontier market in the world, but also get numerous reverse technology spillovers. By means of OFDI, access to more advanced technology is a purpose. More important, however, is how to adapt as well as apply foreign advanced technology to the local, and ultimately achieve the minimum input and maximum output, raise production efficiency, and even the whole society TFP. From the analysis of fixed effect panel data model we can conclude that OFDI in Shandong Province has no significant impacts on TFP growth, while
from the affect on the decomposition index of TFP, it’s positive and significant on technical progress. Similar to the data of conclusions of Shandong Province, the effects of three regional OFDI proportion on technical progress, pure technical efficiency and scale efficiency index are significantly positively correlated with technical progress, and negatively correlated with the pure technical efficiency and scale efficiency.

**OFDI proportion of GDP has no significant effects on TFP, but has a significant negative impact on scale efficiency.** According to direct investment contract project classified by industry of nearly 8 years, absorption of OFDI of Shandong province is still manufacturing. OFDI proportion of GDP has no significant effects on TFP, while significantly negatively correlated to scale efficiency. It indicates that the change of enterprises and the industrial scale caused by the raise of proportion is not appropriate, resulting in enhancement of the input-output ratio. Three regional foreign direct investment proportions of GDP have no significant effects on TFP and it's three decomposition indexes. Eastern region's influences of direction are consistent with the whole country, midland's effects on pure technical efficiency and scale efficiency are negative, and western region's effects on four indexes are all negative. The more underdeveloped the economy of an area is, the more foreign direct investment regards obtainment of the local cheap resources and labor as the main purpose, and more adverse to the TFP growth.

**There is a positive relationship between the government fiscal expenditure proportion on science and technology and the TFP and its decomposition index, but not significant.** Over the years, although the government of Shandong Province is increasingly aware of strategic role of the development of science and technology in economic and social growth, with the proportion of central finance science and technology funding increasing year by year, as well as the local fiscal revenue and expenditure sharply rising, the proportion of local science and technology funding of total fiscal expenditure has gradually declined. For Shandong Province, the leading role of the government is still very strong, the government should pay attention to stimulating effects of fiscal expenditure on science and technology enterprises and society. The proportion of government expenditure is positively related to TFP, but not significant. Although the raise of fiscal expenditure proportion can add the TFP growth, as results of fiscal spending structure, investment scale and other factors, the affect is not obvious.

**Higher education human capital ratio has a significant positive effect on TFP index, and different impacts on TFP index and its decomposition indexes.** Human capital is the carrier of knowledge and technology, and the source of social progress. Higher education human capital is more likely to easily accept new knowledge, imitation, innovation, and apply them to the research and development of new products and new technology, promote the improvement of total factor productivity. The raise of higher education human capital rate has a significant positive effect on TFP growth.

**Suggestions**

**Optimizing the structure of foreign direct investment, improving the reverse technology spillover.** OFDI has a negative effect on the technical efficiency, therefore, the measure to perfect positive impacts of foreign direct investment on technical efficiency is to optimize the pending issues in the process of economic growth. The methods are as following. First, ameliorating the
structure of foreign direct investment and turning economic growth to intensive mode. Second, promoting the development of the localization technology. Third, increasing the size and quantity of foreign direct investment.

**Improving OFDI industry as well as the scale and structure, attracting high new technology to OFDI.** In recent years, although OFDI proportion of GDP began to decrease, it’s economy is still the largest one in several open forms. The empirical study shows that OFDI has no significant impacts on TFP growth, but a significant negative effect on scale efficiency. Therefore, it is key to improve the industrial scale and structure. For the moment, OFDI is still mainly in the manufacturing industry. Investments in high new technology industry are very few, and they take major advantages of cheap labor and raw materials, don't care about benefits of scale economy. Measures can be considered from the following two aspects. On the one hand, attracting OFDI in high technology through the improvement of their degree of technological progress; On the other hand, by relevant promotion and restriction policies, optimizing foreign direct investment industry and size structure. Supporting the high-tech foreign direct investment and limiting manufacturing industries like those which cause heavy pollution, cost large scarce resources, so as to form and refine related policies and standards of OFDI.

**Lifting the education level of human capital, strengthening the cultivation of innovative talents.** The human capital influences learning ability, work efficiency, and even the overall level of social development and civilization. With higher education level, human capital can better imitate, absorb, innovate and explore more ways to improve technology and efficiency. Enhancing the education level of human capital is the trend of social development, and also the motive power to drive the TFP. Furthermore, it's also needed to strengthen the cultivation of innovative talents and lift the level of human capital development, which is conducive to the formation of the core competitiveness of enterprises, or perfection of TFP.

**Acknowledgements**

Proj: Shandong Province Natural Science Fund Project【2014ZRB019XV】

The Mechanism Research on OFDI, Overflow Effect and Improvement of Enterprise Productivity in Shandong Province

**References**


