The Impact of Foreign Direct Investment on Industry Structure in Developing Economies

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Abstract: The influence mechanism of Foreign Direct Investment on the industry structure was researched through the literature review in the essay. I discuss the impact of FDI on industrial innovation and industrial productivity from the positive and negative aspects. The positive effects on the industrial structure were explained.

1. Introduction

The impact of Foreign Direct Investment(FDI)on the industrial structure has stimulated a great deal of attention, with the increase of FDI inflow in developing countries. But the effects of FDI are ambiguous at both micro and macro levels. There is empirical evidence that this negatively impacts the industrial structure in developing countries. The research shows that the local firms are not developed by the foreign firms under FDI flowing (Gorg and Greenaway 2004)[1]. However, a great deal of research highlights that the FDI could result in a positive impact. The FDI could result in capital movement, influencing economic growth and industrial structure. The essay will analyze the influence mechanism of FDI on the industry structure and find that FDI inflow has positive effects on the industrial structure overall, while the direction of transformation of the industrial structure depends on the original industry.

2. The Influence Mechanism of Fdi on the Industry Structure

FDI plays an important role in industrial structure promotion, by impacting development factors in the capital movement. According to the comparative advantage theory, exogenous technology leads to differences in the specialization division. However, the regions without comparative advantages may still gather some industries (Krugman 1991)[2]. In other words, the distribution of industries is related to factors including economies of scale, transportation costs, market rules, and regulations, which will be changed as the FDI inflow (Krugman 1991)[3]. Thus, FDI is considered to be a significant component in changing the environment of industrial performance in host countries (Markusen and Venables 1999)[4].

FDI promotes the externalities factors to the host countries through multinational companies. Specifically, multinational companies will lead to greater competition, with new technologies and advanced management (Castellani and Zanfei 2003; Anwar and Nguyen 2014; Malik 2015)[5-7]. Moreover, the multinationals distribute the assets to the local companies, including advanced technologies, patents, brands, and advanced labour force (Blomström and Kokko 1996; Crespo and Fontoura 2007; Meyer and Sinani 2009)[8-10]. And they draw away the customers, investors, suppliers, and employees, by leading the competition (García et al. 2013)[11]. In other words, the FDI comprises capital, technology, know-how, skills, brand names, and organizational and managerial practices through multinational companies (Caves 1974). As the figure1, FDI will induce capital movement, technology movement, labourforce movement and market competition, which will impact technology innovation and the capital-labour ratio. Then the effect transmits to industrial innovation and industrial productivity, leading to industrial upgrading and the change of industrial structure.

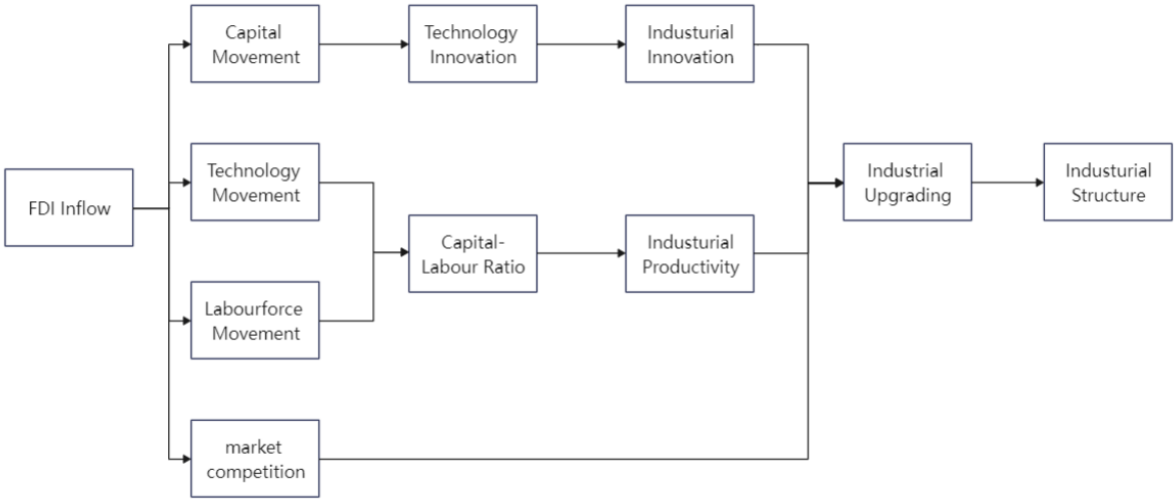

Fig.1 Influence Mechanism of Fdi on the Industry Structure

2.1 Fdi Influence the Industry Structure by Inducing the Industrial Innovation

On the macro-level, some researchers view that the effects of FDI might be negative on technology innovation in developing countries. The effects of FDI spillovers are constrained by local innovations, for example, the local value chain, and the intangible asset development [10]. Moreover, FDI flow into the countries with the capital movement, and technology transfer, but these resources might be invalid to the technology innovation. And the impact of technological innovation depends on the host countries' absorptive capability, such as the local human capital. Furthermore, local technology innovation will be influenced by the "crowding-out" effects, when FDI flows into developing countries due to weak market power. Thus, technology innovation would be improved under the FDI flowing in the domestic countries.

However, the view that the effects of the technology innovation will be negative, ignores the micro-factors and the existence of intra-industry and inter-industry spillovers. Officially, multinational companies under FDI inflow, result in market performance, by introducing new skills, and purchasing raw materials and intermediary goods from local firms. (Grossman and Helpman 1991; Javorcik 2004)[12-13]. In other words, FDI is the primary resource in the capital and technology of developing countries (Poelhekke and Van Der Ploeg 2009; Wang et al. 2016)[14-15]. And the endogenous and exogenous factors that will be impacted by the FDI inflow, should be taken into consideration when researching the positive or negative spillover effect of FDI (Crespo and Fontoura 2007).

The effects of FDI are positive on technology innovation in developing countries. The multinational companies will promote building the facilities and the R&D quantities in the host countries (UNCTAD 2006)[16]. Moreover, these movements occurring in the intra-industry and inter-industry could induce technological innovation in developing countries, since the domestic firms could learn from the exposure of the multinational companies' advanced technology (Crespo and Fontoura 2007)[9]. Thus, the FDI could induce technology innovation in foreign and domestic firms.

2.2 Fdi Influence the Industry Structure by Enhancing the Industrial Productivity

Some researchers have found that the FDI results in insignificant or even negative spillovers in industry productivity, which is biased. For instance, FDI showed negative effects on the owned plants' productivity in Venezuela (Aitken and Harrison 1999)[17]. And FDI seems insignificant in the productivity of the manufacturing sector in Morocco (Haddad and Harrison 1993)[18]. It showed the same result as Venezuela and Morocco in Poland and India (Zukowska-Gangelmann 2000; Sasidharan 2006)[19-20]. However, these studies ignore the time and various effects of industry productivity. The manufacturing sector is labour-intensive in most developing countries before the 2000s. The data of these researches concentrated in 1990-1998, which might be the reason for the insignificant or negative effects.

Others have reported that FDI has positive spillovers on industry productivity. For instance, there are positive effects of FDI inflow on the industry productivity of the manufacturing sector in Australia, and Canada (Caves 1974; Globerman 1979)[21-22]. Industry productivity is enhanced for the FDI inflow in underdeveloped countries such as Mexican (Blomström and Persson 1983)[23]. Moreover, labour mobility will take place when the FDI flows into developing countries because skilled workers shift from multinational companies to domestic firms (Cole et al. 2008)[24]. It means that multinational companies under FDI will induce a highly skilled workforce to the local firms on the micro-level, and enhance the industry productivity (Fosfuri et al. 2001)[25]. Furthermore, multinational companies will lead to the competition effect to compel local firms (Markusen and Venables 1999; Blomstrom and Wang 1989)[26]. And the entry of foreign companies could promote domestic firms to utilize the resources more efficiently and the industry productivity overall (Gorg and Strobl 2005; Fosfuri et al. 2001; Driffield and Taylor 2000)[27-28]. Thus, the industry productivity will be improved by the multinational companies, with the flowing of FDI on the micro-level.

Totally, the FDI inflow could promote the industrial structure transformation. FDI builds the networks between low-value activities and high-value activities in the global economy (Gereffi 2005)[29]. On the one side, the connection of technology promotes the development of industrial innovation, impacting the industrial structure of developing countries indirectly. On the other side, the sophisticated capital and skill-intensive production will be shifted to the developing countries through the FDI obviously (Gereffi 1999)[30]. These inflows could improve industrial productivity. Thus, the FDI could promote the industrial structure transformation, when the effect mechanism is taken to account.

3. Summary

The industrial structure would be rebuilt based on the original industry and the aspiration of foreign companies. Because the result of industrial structure transformation undermining FDI is endogenous in low-income countries (Lin and Chang 2009)[31]. Specifically, multinational companies are usually prone to invest in the industrial variety of regions for various opportunities and recombinant innovation (Frenken et al. 2012)[32]. Moreover, multinational companies provide facilitate knowledge recombinant to generate new industries based on the original industry structure (Zhang 2013)[33]. For example, the third-generation maquiladoras are developed based on the second-generation maquiladora plants and for the FDI inflow in Mexico (Carrillo and Hualde 1998; Gereffi 2005)[34-35]. Thus, the result of the transformation will be influenced by the FDI and the original industry.

In the essay, the influence mechanism of FDI on the industry structure was discussed from industrial innovation and industrial productivity. It is reported that the FDI inflow has a positive effect on the industrial structure, while the result of the transformation relates to the basis of the industrial structure in various countries (Fillat and Worz 2011). It means that the FDI inflow has positive effects on the industrial structure, however, the result of transformation depends on the factors about the basis of industry and the aspiration of foreign companies without industry policy constraint. Thus, it is necessary to apply the industry policy when the basis of the industry is defective, avoiding the country from falling into the comparative advantage trap.

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