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THE IMPACT OF FDI ON GROWTH OF SAUDI ECONOMY: AN EMPIRICAL EVALUATION OF MANUFACTURING SECTOR

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Abstract

Foreign Direct Investment (FDI) inflows have produced considerable impact on the economy of the Kingdom of Saudi Arabia, both directly and indirectly, by playing major role in stimulating the growth potentials and providing stability to the Kingdom's economy. This study aims to evaluate the impact of FDI inflows on the economy of Saudi Arabia in general, and on the manufacturing sector in particular, over the last few decades, more specifically over the period from 1968 to 2014, by using Ordinary Least Square (OLS) method. The results showed positive significant impacts, but limited, of FDI on manufacturing sector in Saudi Arabia during this period. The results also found positive impacts of labor, non-oil private capital formation, and the latest Foreign Investment Act (FIA) enacted in 2000. Finally, conclusion and recommendations to promote the role of FDI in developing the manufacturing sector of Saudi Arabia.

Keywords: FDI, MNCs, Economic Growth, Manufacturing Sector, FIA

1. Introduction

The relationship between FDI and economic growth, both in the developed and developing countries, is still a subject of vigorous research. Empirically, FDI inflows have been recognized as an important source of economic growth in a long run. Many studies have confirmed the positive relationship between FDI inflows and economic performance of the host countries.¹ As the neoclassical model theoretically suggests, FDI inflows play a very important role in economic growth by enhancing efficiency of investment, transferring various technologies to host countries (Romer, 1986), diversifying productive base, increasing the productive capacity, helping to diversify income sources, creating new job opportunities, and improving quality and productivity of the rest of factors of production.

Increasing number of developing countries has relied heavily on FDI inflows as an engine for economic development. The FDI inflows are considered an important source of external financing for their economic development (Khan, 2007). In addition, FDI tends to improve management, technology, as well as labor skills in host countries (Todaro and Smith,

¹ For an extensive review on the effect of FDI on economic growth, see Ozturk (2007) and Almfrajia and Almsafir (2014)

2003, Hayami, 2001), and help the host country to reduce underdevelopment level (Hayami, 2001).

FDI can be defined as a bundle of capital, technology, management, and project management (Farrell, 2008). As such FDI, if chosen properly to fit local comparative advantages of the host country, is expected to improve growth performance of the manufacturing sector considerably by enhancing optimal utilization of factors of production and raw material that leads to increasing factor productivities. Application of new technologies in manufacturing, management and marketing, leads to improvement in quality of human capital by enhancing their productive skills and expertise.

Ever since 1980, Inward FDI flows increased in volumes globally, especially into developing countries reaching their highest level at \$681 billion with a 2 per cent rise in 2014. The major factors attracting FDI flows towards the developing economies were the availability of cheap labor and raw materials. In addition, the World Trade Organization (WTO) brought the FDI under special focus and emphasized to accelerate free flow of FDI among the member nations. Developing economies thus extended their lead in global inflows. Consequently, the share of FDI flows into developing economies accounted for more than 55% of the global volume in 2014, much of it went to such key areas as service, manufacturing and primary sectors in the developing countries. (UNCTAD, 2014)

Saudi Arabia is considered one of those countries that aim to achieve a high rate of economic growth focused on ambitious investment plans. For this, Saudi Arabia has upgraded its FIA in 2000 for the third time. This succeeded the kingdom to increase attracting FDI inflows reaching \$35.5 billion in 2009 as compared to \$183 million in the year of 2000. Even though the FDI inflows to Saudi economy started to decrease after 2009, its stock continued to grow, and standing at \$215 billion in 2014.

This study aims to evaluate the contribution of FDI to the growth of manufacturing sector of Saudi economy over the past few decades, specifically from 1968 to 2014, by undertaking statistical analysis using aggregate production function, to describe the effectiveness of inward FDI on manufacturing part of Saudi gross domestic product (GDPm). The rest of this study will be as follows: the next section will review related empirical studies, the third section will overview FDI influences on Saudi economy in general and manufacturing sector in particular, the fourth section will describe the methodology of the study, the fifth section will discuss the results, and the sixth section will have conclusion and offer recommendations.

2. Literature Review

The significance of FDI as an exogenous factor in accelerating economic development is well recognized in the Neoclassical Growth Models. Studies based on exogenous growth, known as neoclassical,² suggested that economic growth arose due to influences outside the economy or the concerned business firm. The exogenous growth model underlines the importance of external factors rather than internal in stimulating economic growth. It assumes, given a fixed amount of labor and static technology, economic growth will stop at a certain point of time, hence long-run economic growth is to be achieved by enhancing capital accumulation, labor growth, and productivity improvement, commonly referred to as technological progress (Solow, 1956).

However, this growth model has been criticized for its failure of explain how and why technological progress happened? On the contrary, an endogenous growth model "holds that investment in human capital, innovation and knowledge are significant contributors to economic growth. It also focuses on positive externalities and spillover effects of a knowledge-based economy leading to growth. The long run growth rate of an economy, according to this model, depends on policy measures" (Seck, 2015, p.133).

² Also known as Solow growth model, developed by (Robert Solow, 1956), he was awarded Nobel memorial prize in economic sciences in 1987.

Blomstrom and Kokko (1998) identified FDI inflows as channels of international technology transfer and diffusion, they noted that the bulk of technology dissemination is still undertaken through internalized channels within the networks of MNCs, but externalized channels have become increasingly important, such as competitiveness. Furthermore, foreign affiliates are able to disseminate technology and skills to local firms, specifically via backward linkages.

A study by Agosin and Machado (2005) of 12 countries, from 1971 to 2000, revealed that FDI did not make any changes to local investment in Africa, Asia, and Latin America; it even displaced local investment in Latin America. This study found no evidence of technology dissemination in these countries on short run, this is because weak linkages between causes and consequences in developing countries. The study also found no evidence that FDI leads to reinforcement of competitiveness and increasing the productivity too, on the practical level.

Graham and Wada (2001), in their study of the relationship between FDI and economic growth in China; found that FDI increase the productivity of production factors, only when its investments thrived. Bende-Nabende (2002) investigated five economies of Asian Group from 1970 to 1996, and found that FDI increased economic growth through factors of human capital and practice-based learning.

Nelson and Phelps (1996) stress the importance of human capital, which increases the firms' ability to absorb new knowledge and technology, and helps countries to benefit from capital flows in the long run. Borensztein *et al.* (1998) also confirmed the importance of human capital, and showed the negative effects of insufficient human capital on economic growth. They investigated FDI flows to 69 developing countries over the past two decades; the results found that FDI is an important tool of technology transfer, and it contributes to the economic growth more than local investment.

Furthermore, Blomstorm, *et al.* (1992) found positive impacts of FDI on increasing economic growth rates, especially in more economically developed countries. De Gregorio (1992), building on data of 69 developing countries, showed that FDI is a tool of technology transfer for economic growth, particularly when a high level of human capital development is available. In addition, De Mello (1997) found a positive relationship between FDI and economic growth in some Latin America countries, and showed that positive relationship of FDI is depending on high per capita income in developing countries, while study by Bosworth and Collins (1999) confirmed the positive relationship between FDI and economic growth in terms of total productivity. Adames (2000) showed the relationship between FDI and economic growth in Mexico, by performing a standard analysis during the period (1971-1995), and found a positive relationship between them in the long run. Nguyen (2006) also investigated the relationship between FDI and economic growth in Vietnam, by using three statistical methods to analyze date of 61 provinces of Vietnam, from 1996 to 2003; he indicated positive impacts of FDI on economic growth rate in Vietnam during this period.

Moreover, a study of Campos and Kinoshita (2002) that covered 26 countries from 1990 to 1998, confirmed a positive relationship between FDI and economic growth, especially in terms of modern technology transfer, while the study of that covered 17 countries from 1996 to 1998, showed no clear relationship between FDI and economic growth (Katerina *et al.* 2004). In addition, Ayanwale (2007), in his study of Nigeria economy, confirmed a positive relationship between FDI and economic growth, particularly at a sector-level. Zhang (2001) examined the casual relationship between FDI and economic growth in 11 developing countries in East Asia and Latin America, and found a positive relationship between FDI and economic growth in five of these countries.

Hansen and Rand (2006) confirm a positive relationship between FDI and economic growth in 31 developing countries between 1970 and 2000. By using cross sectional data analysis, Tiwari and Mutascu (2011) found a positive relationship between FDI and economic growth in 23 Asian countries from 1986 to 2008. Furthermore, Tast (2014) indicated a positive relationship between the FDI inflows and the economic growth rate in the SEE and CIS countries over the transition period from 2004 to 2011. While the study of Caves (1996) showed the importance of FDI on economic growth, it had a positive impact on economic growth, through technology transfer, development of management and marketing skills.

However, in Gulf Cooperation Council (GCC) countries, Faras and Ghali (2009) found uneven impacts of FDI on economic growth, while Hussein (2009) showed a weak relationship between FDI and economic growth in GCC countries. He indicated a weak relationship between FDI and GDP in the panel of the GCC, concluding that obtained result supports the endogenous growth hypothesis for this group of countries. In addition, Saddam and Kari (2014) investigated a long-run dynamic relationship of GDP, crude oil export and FDI inflows in GCC countries by using 195 observations collected from 1998 to 2008. The study's findings indicated that a shock of FDI inflows causes a similar negative effect on the oil export and GDP as FDI inflows are related largely to GDP, compared to oil exports

In a major review of the relationship of FDI and economic growth, Ozturk (2007) discussed the results of 50 studies published since 1986 around the world. He showed that most studies support the hypothesis of positive effects of FDI on economic growth in general. He concluded that the achieving economic growth is deepening on host countries' policies to attract investments. Meanwhile, Almfrajia and Almsafir (2014) reviewed a large number of studies in the developed and developing countries during the period (1994-2012), and found positive effects of FDI on economic growth of the host countries, which have high level of human capital, developed money market, trade openness, and political stability.

As far as Saudi Arabia is concerned, studies on FDI's impact on GDP show mixed results. Al Khathlan (2013) using co-integration analysis for Saudi Arabia over the period between 1980 and 2010 and concluded that FDI has a positive but insignificant impact, whereas government expenditure impacts Saudi economic growth both positively and significantly in the long term.

For the effect of FDI on manufacturing sector, studies by Chudnovsky and Lopez (2008) and Alfaro (2003) indicated a positive impact of FDI on the manufacturing sector, while a study of Liu and Zou (2008) confirmed that Greenfield investment had a strong impact on creative performance of local manufacturing companies. Whereas, Smaraynska (2002) concluded that preference of MNCs to invest heavily on high technology in the manufacturing sector, leads to gradual disappearance of local producers from the market of the host country. Cobham (2001) added, the consequences are contraction of manufacturing sector, layoffs, and weaken of workforce.

Despite the differences in the results, most of the empirical studies establish the fact that FDI tends to increase economic growth rates; however, the developed countries benefit from FDI considerably as their local economic institutions become more productive (Globerman, 1979). It is not the same for developing countries, which some of them benefit from technology dissemination (Blomstorm, 1986), and other countries do not make any noticeable progress in economic growth (Aitken, *et al.* 1997; Pitic *et al.* 2014).

It could be concluded that the positive effects of FDI depending on the ability of domestic economies to absorb technology, type of investment, and investment climate (Obwona, 2004), and therefore, the effects of FDI are uneven, it differs from country to country, it could be positive, negative, or neutral. In general, FDI depends on the level of economic development, and the business cycle of every individual country (Zhang, 2001). Banejee *et al.* (2005) explained the differences in the results of studies that covered a group of countries that it depended on false hypotheses, and recommended conducting researches for every individual country, to reach the proper results.³

As we have seen in the above review of related work, debate over the effects of FDI on economic growth still exists, and deserves more attention and more study. This study aims to examine and evaluate, for first time, the effects of FDI on economic growth in Saudi Arabia by

³ Some of these studies supposed the same production functions of the countries covered in the study, however, due to production technology, policies to attract FDI, and institutional frame differs from country to country, therefore, the effects of FDI on economic growth also differs from country to country.

assessing the effect of FDI on the manufacturing sector, a sector that has been aimed to develop through attracting FDI in order to diversify the Saudi economy.⁴

3. FDI in Saudi Arabia

Saudi Arabia, endowed with world's largest proven oil reserves, achieved economic development mainly by the utilization of its great oil reserves. Since 1938, the gradual discovery of additional oil reserves enabled Saudi Arabia to build institutions and basic infrastructure. The country stands as world's leading oil producer and exporter. With increasing oil revenues as a result of 1974 and 1979 oil price shocks, Saudi Arabia underwent rapid economic growth since early 1970s, followed by contraction from the early 1980s to 2005, and again expansion till the end of 2014. The contribution of both public and private sectors to GDP has been fluctuated over time depending on the world oil prices. In fact, the percentage share of oil in Saudi GDP rose from 46% in 1968 to 79% in 1974 as oil price increased and then start to decrease to as low as 23% in 1986, afterward began to fluctuate according to the world oil price, reaching 41% in 2014.

FDI by multinational corporations (MNCs) in Saudi Arabia can be classified as either vertical FDI (resource seeking) or horizontal FDI (market seeking). Vertical FDI is attracted by the country's abundant natural resources, such as crude oil, natural gas and minerals. Indeed, the first entry of an MNC in Saudi Arabia in 1933 was of the resource-seeking type, when the government of Saudi Arabia signed the basic concession agreement with Standard Oil Company of California (SOCAL), known today as Chevron. The vertical FDI has served as a tool of increasing for trade between Saudi Arabia and the rest of the world.⁵

Meanwhile, horizontal FDI has been attracted by the economic factors such as growing market size and various incentives provided by the government of Saudi Arabia. It simply increases competitive advantages of the MNC's exports, serving as a tool of import substitution, and reducing trade volumes.⁶ This type of investment could be an alternative to trade between the home country and the host country (Haile and Assefa, 2006; Maskus, 2002).

Both vertical and horizontal FDIs could be in the form of a greenfield investment where MNC starts a new venture in a host country by constructing new operational facilities from the ground up creating new long-term jobs, or "mergers and acquisition" investment when MNC purchases or leases wholly or partially existing production facilities to start production activity (UNCTAD, 2006). In addition, the foreign direct investor may acquire voting power of an enterprise by incorporating a wholly owned subsidiary or company, acquiring shares in an associated enterprise, or participating in an equity joint venture with another investor or enterprise, to benefit from the available economic advantages in the Saudi economy.

Saudi Arabia has created a positive business environment to attract more FDI with the aim of diversifying industrial sector to reduce its heavy dependence on petroleum sector's revenues. Though, Saudi Arabia is considered as an oil-based economy, the government has been encouraging the growth of the non-oil sector in order to diversify its economy through acquisition of new technologies and to create more jobs for Saudi population. Accordingly, the government policies are supportive of high value added economic activities, such as manufacturing, banking services, oil refinery, and petrochemical industries (SAGIA, 2010).

Between 1970 and 2013, the average annual growth rate for the manufacturing sector was 6.65% and the total compound growth rate was 294.68% for the same period. Figure 1 shows steady growth of the share of manufacturing sector in total GDP from 1991 to 2013.

⁴ As far as knowledge of researcher, this is the first study to evaluate the impact of FDI on economic growth of manufacturing sector in Saudi Arabia.

⁵ Vertical FDI occurs when an MNC locates different stages of production in different countries, with a goal to take advantage of the cost differences of raw material and factors of production as between the home country and the host country.

⁶ The MNC produces the same goods or services of that produced in the home country by simply duplicating its home country-based activities at the same value chain stage in a host country.

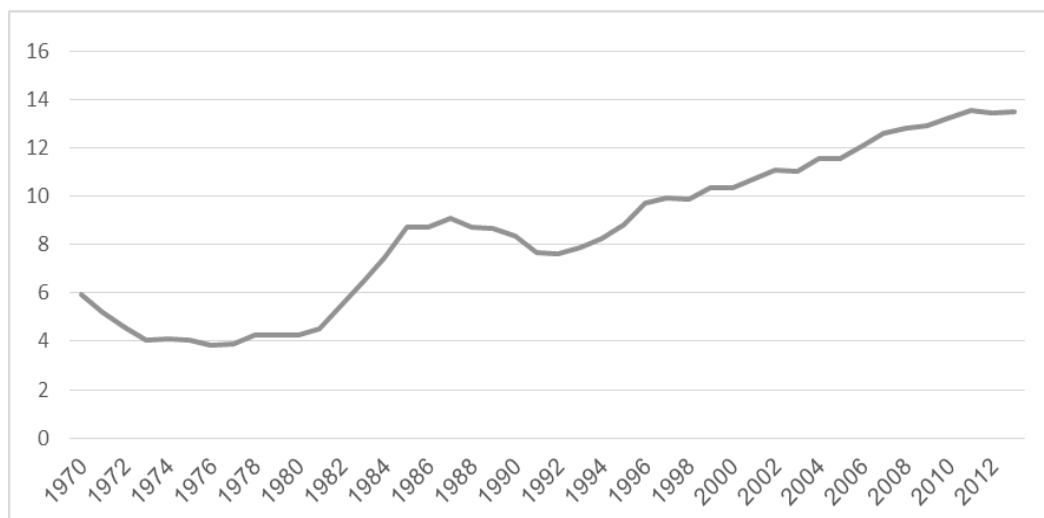


Figure 1. Percentage of Manufacturing to GDP

The ability of the Saudi government to attract steadily increasing FDI clearly indicates the Saudi economy is increasing integration with the global economy. To accelerate FDI inflows in Saudi economy, the Saudi government revised Acts on FDI three times over the past a few decades greatly improving the investment climate in the country. The last such revision was in 2000. As a result, in 2010 Saudi Arabia was ranked 13th globally for overall ease of doing business (World Bank, 2011).

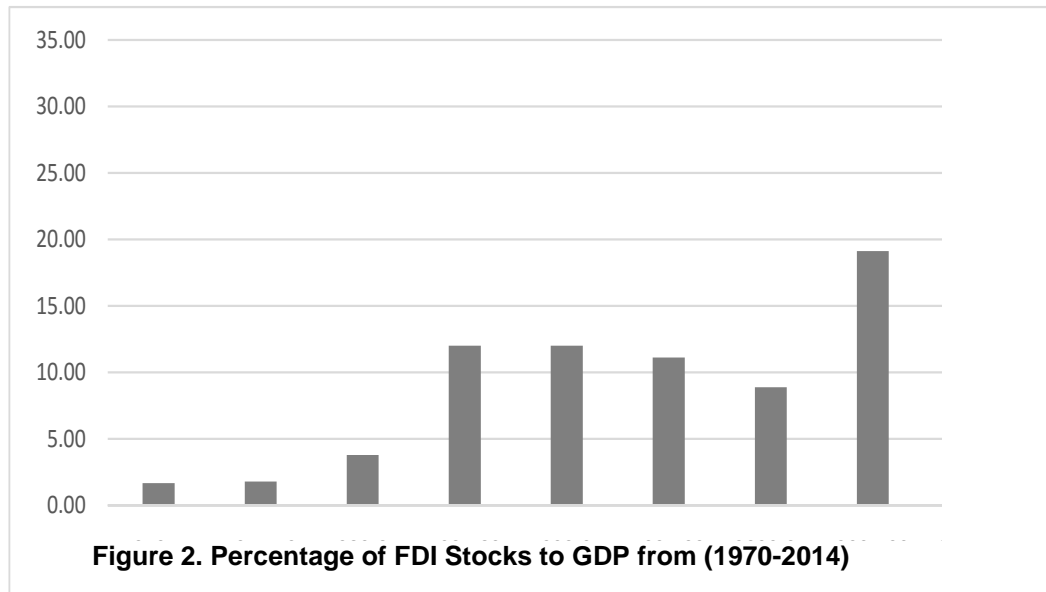
As part of its economic development strategy, Saudi Arabia has been looking forward to becoming a more attractive destination for FDI. In addition, the government is promoting the expansion of production and investment in the private sector supported by a strong increase in FDI owing to new FDI Act enacted in 2000.⁷ In addition, changes such as the establishment of Saudi Arabia General Investment Authority (SAGIA)⁸ in 2000, the accession to World Trade Organization (WTO) in 2005, the start of economic and administrative reforms through a number of related Acts such as such as Development Program, development of commercial initiative project, 10 X 10 program⁹ and implementation & development of facilities & infrastructure projects have promoted growth of FDI. The average percentage of FDI stocks to GDP increased from 1.7% (1970-74) to 29% (2010-2014) as it presented in Figure 2.

Unlike the FIA of 1979, which gave more incentives and benefits to foreign investors engaged in joint ventures in manufacturing, the FIA of 2000 had a comprehensive list of incentives and development schemes to attract FDI to Saudi Arabia in all sectors. This includes full ownership of enterprise, together with all the benefits, incentives and guarantees extended to national projects. These incentives relate to repatriation of profits, right to full legal recourse, real state ownership and investment by non-Saudis, employment sponsorship of non-Saudi investors and employees and treatment in accordance with the local tax code.

⁷ FDI Act of 2000 developed to manage and attract FDI to Saudi Arabia; there were three previous Acts (1957, 1964, and 1979) before it enacted in 2000.

⁸ SAGIA was established with the purpose of enhancing business climate and to make Saudi Arabia one of the world's top 25 most competitive economies, through implementation of (10 x 10) program, and establishing the one stop shop all over Saudi Arabia, to offer customers the convenience of having multiple needs met in one location.

⁹ This program aimed at Positioning Saudi Arabia among the top ten most competitive nations by 2010 through the creation of a pro-business environment, a knowledge-based society, and by developing new, world-class 'Economic Cities.



Data from SAGIA (2010) showed increasing FDI flows to Saudi Arabia in 2009, which represented 192% increase compared to 2005, including multiple economic sectors (manufacturing 39%), (real estate 12%), (banking services and insurance 11%), and (contracts 10%), reaching total volume of FDI to more than \$35.5 billion; clearly that the manufacturing sector has received the biggest share of inward FDI inflows.

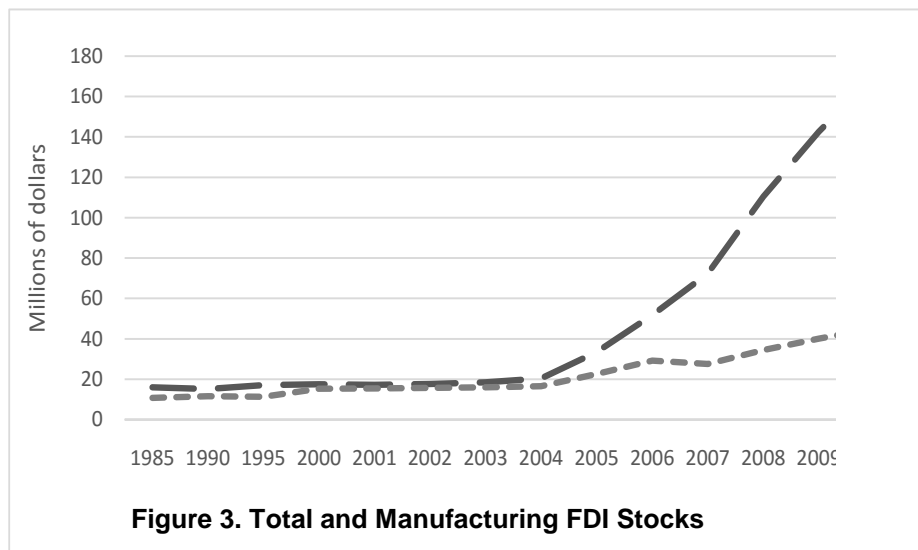


Figure 3 shows the trend of FDI stocks in manufacturing sector, indicating FDI in manufacturing sector contributed substantially to total FDI stocks before 2004 because of the privileges were given to manufacturing sectors in 1979 FIA. However, afterward, the share of manufacturing sector in the total began to decline accordingly to the effect of 2000 FIA, which extended incentives and benefits to all FDI inflows, therefore, the share of manufacturing sector declined, while the share of other sector increased.

In short, inward FDI steadily increased since 1930s, despite differences in its sources, types, and purposes. There were heavy FDI inflows in oil sector as vertical FDI in the early stage. Then, later in 1970s, there were great deals of new horizontal and vertical FDI in other economic sectors; especially manufacturing sector. This was a result of more benefits, incentives, and guarantees that Saudi government granted to foreign investors in manufacturing

sector through 1979 FIA. From Figure 4, it is evident that both FDI stocks and GDP in manufacturing had the same trend between 1972 and 2010.

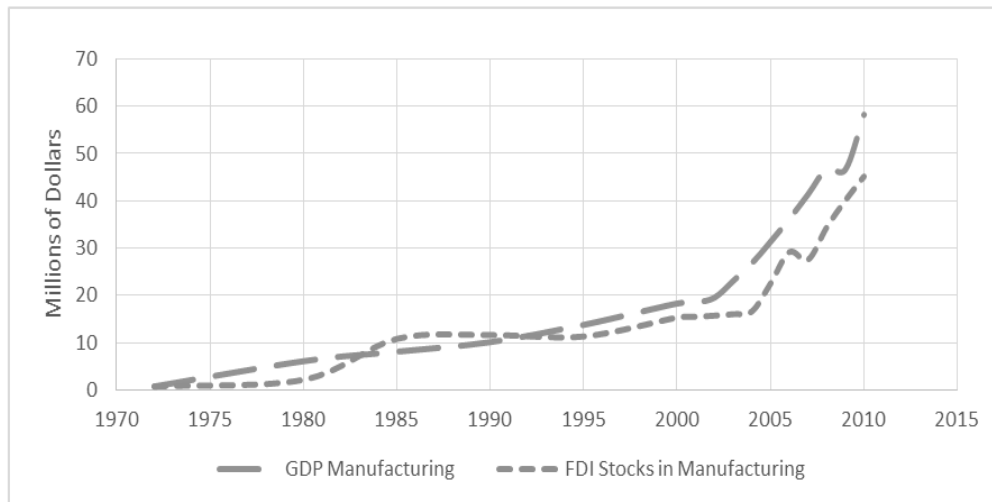


Figure 4. FDI Stocks and GDP in Manufacturing

4. Methodology

Most empirical studies, which have been conducted to evaluate the effects of FDI on economic growth in host economy, were based on cross sectional data, or panel data of several developed and developing countries, which provided different results. To avoid the possibility of inaccurate results, this study uses a time series data for Saudi Arabia to examine the effects in one country individually. The regression tools used in the estimation process are those specifically designed for time series data such as the Ordinary Least Square method (OLS). The data used contains several years of time series of annual data covering the period from 1968 to 2014. Data used is secondary data, collected from official publications of the government of Saudi Arabia (SAMA, 2010, 2015), and international publications and reports (UNCTAD, 2014).

4.1. Hypotheses

H1: There is a direct positive correlation between the volumes of FDI into Saudi Arabia during the period (1968-2014) and manufacturing sector development as economic diversification.

H2: Increasing of FDI flows lead to economic growth of manufacturing sector, through technology transfer, diversifying of production base, improvement of quality/quantity of work, and increasing of total factor productivity.

4.2. The Model

This study used Gross Domestic Product (GDPm) of manufacturing sector to as dependent variable (Y_m) to examine the effect of inward FDI on the diversification on the economy of Saudi Arabia. The used model is constructed by using the famous Cobb-Douglas production function:

$$Y_t = A_t L_t^\alpha K_t^\beta \quad (1)$$

Based on previous hypotheses, we can determine the following research variables in Saudi Riyals fixed at 1999 prices by using GDP deflator.

To evaluate FDI effects on manufacturing sector, the model is based on the total production function, which considering GDP of manufacturing sector (Y_m) as a dependent variable, and Labor Force (L), Non-oil private fixed capital formation (K), stock of actual foreign investment (FDIs), dummy variable to assess impacts of 2000 FDI Act (D) and total- factor productivity (A) as explanatory variables. So the equation (1) can be modified as the following:

$$Y_{mt} = A t L_t^\alpha K_t^\beta FDI_t^\lambda D_t^\Omega \quad (2)$$

where:

- Y: GDP of manufacturing sector
- L: Labor Force
- K: Fixed Capital
- FDIs: FDI Stock
- D: Development of investment Act that enacted in 2000
- α : Elasticity of output to labor Force
- β : Elasticity of output to non-oil private capital formation
- λ : Elasticity of output to Foreign Capital
- Ω : Elasticity of output to Investment Act enacted in 2000
- A: Total factor productivity

The above model is built on the assumptions of endogenous growth theory as referenced by Solow (1956), Romer (1990) and Mankiw, *et al.* (1992), which are employed by Balasubramanyam *et al.* (1996), Borensztein *et al.* (1998), Ayanwale (2007), Goss, *et al.* (2007) and Al Khathlan (2013) that stated FDI had direct and indirect positive effects on economic growth, due to its ability to transfer technology, and improving of institutional structure, infrastructure, and total - factor productivity (TFP), and human capital.

It is expected that effects of FDI on economic growth carried out through (A) variable, which represents total-factor productivity, based on its effects on improving human capital. Effects of FDI on total-factor productivity also are based on human capital, because it is considered an essential input of production function and determining factor of absorptive capacity of national economy.

Since this study aimed at quantitative assessment of the effects of FDI on economic growth, it considers other explanatory variables that affect economic growth, to controlling specification error, allowing its reduction to a minimal level.

To investigate the main hypothesis of the study, which is examining impacts of FDI on economic growth, we could formalize that model with the following equation:

$$Y_{mt} = a + \alpha L_t + \beta K_t + \lambda FDI_t + \Omega D_t + e \quad (3)$$

For the purpose of coefficient estimation, we converted it to a logarithmic equation, to be able to test the validity of hypothesis. So we can rewrite the equation as following:

$$\ln Y_{mt} = a + \alpha \ln L_t + \beta \ln K_t + \lambda \ln FDI_t + \Omega \ln D_t \quad (4)$$

Thus, the variable on the left-hand side of equation represents dependent variable, while the variables on the right-hand side of equation represent explanatory variables. When we use OLS method to estimate equation (4), we obtained the following results:

$$\ln Y_m = 3.40 + .161 \ln L + .28 \ln K + .19 \ln FDI + .24 \ln D \quad (5)$$

(7.45) (3) (3.75) (5.15) (3.34)

Equation (5) reports the OLS estimates of the unconditional, linear effect of FDI on manufacturing GDP by including labor force, non-oil capital formation, FDI stock, and foreign investment Act for 2000. The regression equation is significant at 1% level by using ANOVAS

test, indicating that the linear model is appropriate one for estimating. It showed that the estimated statistical (F) is 420.73. This indicated that the equation, in general, is good at level of statistical significance of 1%, (where $n-k$, $n-1:F.01 < F$), which means rejecting the hypothesis of no effects of explanatory variables on dependent variable. The figures in the parentheses under each explanatory variable are the t-ratios of the estimated parameters in equation (5), reflecting the importance of explanatory variables. The coefficient of each explanatory variable is significant at 1% level and all variables have positive effects on real manufacturing GDP growth in Saudi Arabia, which is in line with economic theory. The estimated regression explained a high portion (97%) of the variation (adjusted R squared .97) in real manufacturing GDP in Saudi Arabia.

5. Discussion

The results of this study are compatible with theory of economic growth that referred to the positive relationship between labor force, capital formation, and economic growth. As the equation is expressed balance in long run, estimated coefficients could be interpreted as elasticity of each explanatory variable, as following:

- We can consider the positive coefficient of labor, with level of statistical significance of 1%, and value of (.16), as elasticity of labor in the long run. It could be said that, for 1% change of labor, thus, (Y_m) increased by 16%, and this showed the positive contribution of labor to manufacturing sector.
- We can consider positive coefficient of non- oil private gross fixed capital formation, with level of statistical significance of 1%, and value of (.28), as elasticity of gross fixed capital formation in the long run. It could be said that, for 1% change of non-oil capital formation, thus, (Y_m) increased by 28%, and this showed the positive contribution of non-oil capital formation to manufacturing sector.
- We can consider the positive coefficient of FDI stock, with level of statistical significance of 1%, and value of (0.19), as elasticity of FDI flows in the long run. It could be said that, for 1% change of FDI flows, thus, economic growth (Y_m) increased by 19% and this showed a limited the positive contribution of FDI flows to manufacturing sector.
- We can consider the positive coefficient of 2000 FDI Act, with level of statistical significance of 1%, and value of (0.24), as elasticity of 2000 FDI Act in the long run. It could be said that, for 1% change of 2000 FDI Act, thus, (Y_m) increased by 24%, and this showed the positive contribution of 2000 FDI Act to manufacturing sector.

6. Conclusion and Recommendation

FDI has played an important role in the economy of Saudi Arabia, especially in developing petroleum industry (oil extraction, oil refinery, and marketing of oil) in the early stage. This motivated the government to develop other economic sectors, especially manufacturing sector, using similar policies. This led to the amendment of the FDI Act several times to make it compatible with the requirements of each phase of development associated with trade liberalization, economic openness, and economic stability, to attract more investment.

Following of oil price increase in 1970s, the Saudi economy has relied on inward FDI to develop manufacturing sector, with an aim to diversify Saudi economy's production base and promote economic growth. On an average, the percentage of FDI stock to GDP in manufacturing sector was 84% from 1972 to 2010.

Therefore, even though, statistical results confirm a positive and significant correlation between FDI and manufacturing sector development at 1% level for the period 1968 to 2014, the coefficient value is considered small (0.19). Therefore, it can be concluded that the contribution of inward FDI to output of manufacturing sector (Y_m) is considered limited.

It is recommended that more incentives will be needed to attract FDI inflows that promotes economic growth in manufacturing sector, prioritizing FDI types, which are associated with greater technology transfer, to develop manufacturing sector, and boost local economy. In

addition, more Greenfield investment (FDI inflows) will be needed in order to build new productive industries in the long run that are consistent with comparative advantage for Saudi Arabian economy. The Saudi economy needs to upgrade infrastructure, optimize human capital, create competitive environment for foreign and national investment, and improve human resources to be able to increase new technology absorption, and to increase productivity.

Thus, it can be said that FDI inflows are necessary to accelerate economic growth, but FDI has to be compatible with requirements and needs of host country. The host country has to benefit from the comparative advantage of the host country, its good infrastructure and human capital in order to promote its economic growth, and improve its competitiveness.

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