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An Economic Analysis of Foreign Direct Investment (FDI) on Industrial Development in Jordan

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Abstract:- This study aims at identifying the relationship between foreign investment and industrial growth in the industrial companies in Jordan. The study society consists of all the industrial companies operating in Jordan. The study sample consisted of (73) companies. The study sample included all the industrial companies under study. Two methods of scientific research methods are: analytical descriptive approach and field research methodology, and the results of the study as follows The results of the study showed that there is a significant correlation between the foreign investment and the industrial production of the Jordanian industrial companies. The study recommended increasing the foreign investment in Jordan and creating the appropriate environment for it.

Keywords: *Economic Analysis, Foreign direct investment, industrial development, Jordan.*

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I. INTRODUCTION

Foreign direct investment involves capital flows from one country to another, granting extensive ownership stakes in domestic companies and assets. Foreign investment denotes that foreigners have an active role in management as a part of their investment. A modern trend leans toward globalization, where multinational firms have investments in a variety of countries. Foreign investment is largely seen as a catalyst for economic growth in the future. Foreign investments can be made by individuals, but are most often endeavors pursued by companies and corporations with substantial assets looking to expand their reach. As globalization increases, more and more companies have branches in countries around the world. For some companies, opening new manufacturing and production plants in a different country is attractive because of the opportunities for cheaper production, labor and lower or fewer taxes.

Foreign investments can be classified in one of two ways: direct and indirect. Foreign direct investments (FDIs) are the physical investments and purchases made by a company in a foreign country, typically by opening plants and buying buildings, machines, factories and other equipment in the foreign country. These types of investments find a far greater deal of favor, as they are generally considered long-term investments and help bolster the foreign country's economy. Foreign indirect investments involve corporations, financial institutions and private investors buying stakes or positions in foreign companies that trade on a foreign stock exchange. In general, this form of foreign investment is less favorable, as the domestic company can easily sell off their investment very quickly, sometimes within days of the purchase. This type of investment is also sometimes referred to as a foreign portfolio investment (FPI). Indirect investments include not only equity instruments such as stocks, but also debt instruments such as bonds. There are two additional types of foreign investments to be considered: commercial loans and official flows. Commercial loans are typically in the form of bank loans that are issued by a domestic bank to businesses in foreign countries or the governments of those countries. Official flows is a general term that refers to different forms of developmental assistance that developed or developing nations are given by a domestic country. Commercial loans, up until the 1980s, were the largest source of foreign investment throughout developing countries and emerging markets. Following this period, commercial loan investments, and direct investments and portfolio investments increased significantly around the globe.

II. STATEMENT OF THE PROBLEM

For several years the country has registered substantial growth and the Jordanian market is opening progressively. The government has made a remarkable effort in controlling public spending, which, according to IMF, has placed Jordan among the most dynamic countries in the Middle East. Jordan has also backed the human factor and its workforce is among the best-trained ones in the Arab world Jordan's economy slowed down in 2015 for the first time since 2010, largely due to the effects of security spillovers from the regional crises. Real GDP growth was at 2.4% in 2015, compared to 3.1% in 2014. Going forward, real GDP growth is forecast to rebound slightly to 3% in 2016, reflecting additional investment projects in the medium term. A deflationary environment persisted in 2015, amidst expansionary monetary policy and tight fiscal policy. On August 24, 2016, the IMF Board of Directors approved a three-year extended arrangement under the Extended Fund Facility (EFF) for Jordan to support the country's economic and financial reform program. This program aims at advancing fiscal consolidation to lower public debt and broad structural reforms to enhance the conditions for more inclusive growth.

Moving forward, it will remain critical for Jordan to continue diversifying its energy supply in the medium term in order to reduce its macroeconomic vulnerabilities. Sound economic policies and growth-enhancing reforms will also be necessary to reduce the country's sensitivity to external shocks. Finally, creating conditions for increased foreign investment and improved competitiveness will remain indispensable for Jordan to stimulate job-creating growth.

III. Objectives of the Research Study:

- To evaluate the industrial policy of the Jordan economy
- To evaluate the foreign direct investment policy of the Jordan economy
- To examine the impact of foreign investment on industrial development in Jordan
- To examine the trend in FDI in industrial development of Jordan

IV. Review of Literature

- FDI is when a company or an organization invests its capital outside the borders of its home country to affect the project's operations and benefit from its low labor cost. During the second half of the last decade, foreign direct investment has led to an important role in supporting the economy of developing countries, especially during the last two decades which witnessed a huge increase in the size of investments flow, intensively in the mineral sector, agriculture, public sector and infrastructure which had the biggest share in developing electric energy and telecommunication. And the foreign direct investment gave an important push for the global integration path through: transfer of technology, training and development of human capital, operational expertise, general development of the country and the major advantage is employment which has led to more income, more purchasing power, people are capable of paying taxes and an overall economic growth in the host developing country.
- Foreign direct investment has been viewed as a power affecting economic growth directly and indirectly during the past few decades. This paper reviewed an amount of researches examining the relationships between FDI and economic growth, especially the effects of FDI on economic growth from 1994 up to 2012. The results show that the main finding of the FDI- economic growth relation is significantly positive, but in some cases it is negative or even null. And within the relation, there exist several influencing factors such as the adequate levels of human capital, the well-developed financial markets, the complementarily between domestic and foreign investment and the open trade regimes.
- Nowadays the issue of foreign direct investments is being paid more attention, both at national and international level. There are many theoretical papers that examine foreign direct investments (foreign investment)'s issues, and main research on the motivations underlying foreign investment were developed by J. Dunning, S. Hymer or R.Vernon.
- Economists believe that foreign investment is an important element of industrial development in all countries, especially in the developing ones. The conclusion reached after several empirical studies on the relationship between foreign investment and industrial development is that the effects of foreign investment are complex. From a macro perspective, they are often regarded as generators of employment, high productivity, competiveness, and technology spillovers.
- Especially for the least developed countries, foreign investment means higher exports, access to international markets and international currencies, being an important source of financing, substituting bank loans. There is some evidence to support the idea that foreign investment promotes the competitiveness of local firms.
- Al-Salman;s study (2017) " The Effect of Foreign Direct Investments in Services on Economic Development Rate in Latin America Countries for the Period 2001-2002 "the importance of foreign direct investment has increased in recent years and in particular in developing countries not only for the foreign direct investment ability to offer capital , but also for its ability to transfer technology, skills and knowledge the thing which loans and other forms of finance can't offer. In addition to reducing unemployment and increasing productivity, foreign direct investments lead to exploiting the significant strategic sectors for developing the economy as whole as countries can't exploit these strategic sectors better due to the lack for enough capitals at firstly, and because these sectors depend on advanced technology secondly. These sectors are

the services and the infrastructures that constitute the base for economy and without developing this sector, economy stay backward in addition to its low productivity and increased costs of goods this economy produces. From this point, there has been a dependency on the hypothesis that foreign direct investment in services leads to increasing economic development rate for host developing countries, and to prove this hypothesis, there has been a sectional analysis for 13 countries of Latin America countries by using the simple linear paradigm with the method of small ordinary squares(Minitab) and using the OLS software .It was indicated that economic development rate expressed by individual's proportion in the gross local product is positively affected by the increase of foreign direct investments' flow in services in developing countries.

- The study of Moosa (2016) entitled " Foreign Direct Investment Determinants in Middle East and Northern Africa Countries " The researchers applied the maximum limits on a sample of sectoral data that covers 18 country . Results indicated that the most successful countries in attracting foreign direct investment were those which characterized by achieving high growth rates in addition to being concerned about the educational process and the followed educational systems there , and these countries also characterized by the existence of a decreased degree of risks and an increased return on capital.
- Ibn Zayyan and Al-A'rayib's study (2015)" Foreign Investment Relationship with Employment : Case Study on the Southern East Algeria " In recent years, the world has witnessed a great development in investments' movement and in particular the foreign direct investment. Algeria is among the countries that has received a proportion of the flow of this type of investment and it has directly or indirectly affected in local manpower employment. This study attempted to identify the role of foreign direct investment on increasing employment levels in the southern east region in the states of Bashar, Alna'amah and A'draar . It was found that foreign direct investment didn’t highly contribute in increasing employment levels there due to several obstacles among which that foreign companies resorted to exaggerate employment expectations to acquire projects and to benefit from tax advantages and later they break their agreements with the Algerian government using many ways. In addition, foreign companies discovered that educational facilities outcomes do not fit their needs within labor market on both the qualitative and the quantitative levels.
- Kardoosh's study (2014) The study aimed to identify the concept of qualified economic zones and the conditions for obtaining economic qualification and rules of origin in addition to identify exports size and number of the used manpower. The study indicated that investment in qualified economic zones faces a great competition from qualified economic zones in Egypt due to the availability of the raw materials for textile industries and the lower cost of production in addition to other obstacles represented in the Jordanians' lack to desire to establish long term trade relationships with foreign companies , the multiple nationalities in qualified economic zones and the lack for a clear legislative system that regulates the work of private qualified economic zones. Finally the study concluded that qualified economic zones lead to an increase in Jordanian exports.
- Jing's study (2014 (The researcher aimed to investigate the relationship between foreign direct investment flows to Jordan and their determinants including the real effective exchange rate , openness indicator and the gross nominal local product at market price. The study revealed that the real effective exchange rate has a significant statistical positive relationship with foreign direct investment share in Jordan relative to that in the world. In addition, the gross nominal local product has a positive relationship with foreign direct investment flows to Jordan and has a negative relationship with Jordan's share in the foreign direct investment compared to the international share and openness indicator has a significant statistical relationship with foreign direct investment flows to Jordan.
- Mohamed's study (2013)The study aims to explain the effect of foreign capital flow on saving, investment and economic development in Egypt. The researcher used regression analysis to identify this effect . The study indicated positive relationship between foreign capital flows and saving, investment and hence economic development , also there was a complementary relationship between foreign direct investment and local investment, results also indicated a strong positive effect for investment on economic development rate in Egypt, and finally the study indicated the significance of foreign capital in facilitating saving, investment and economic development in Egypt.

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- Saleh's study (2009) The study aimed to practically verify the determinants of efflux from Jordan during the period 1970-2000. The study revealed that each of external debt, income tax rate , profits , gross local product, the financial restraint represented by the interest rate differentials between Jordan and the United States in relation to the exchange rate, the differences in the rate of inflation between Jordan and the United States, the rate of growth of gross local product and the political instability, all these are factors that had a statistically significant effect on the efflux from Jordan while the weakest factor in determining the efflux was the external debt..

V. Methodology

The study used two methods of scientific research methods: analytical descriptive approach, which was used to review the most important literature related to the variables of the study, as well as reference to previous studies to cover the theoretical side of the study. The other approach curriculum field research: It was used to cover the practical side of this study through the annual actual financial statements issued by the Jordanian industrial companies analyzed during the study period (1975 - 2017), which attempted to study through which test the validity of hypotheses and draw results.

Study tools and sources of access to information

The study relied on two sources to collect data:

Primary Sources: These are the sources that covered the application side of the study, represented by the general budget of the companies in question, in addition to the trading price bulletin for the shares of these companies.

Secondary sources: The scientific books, periodicals, researches and previous studies related to the subject of the current study have been relied upon in order to construct the theoretical framework for this study.

Period of the Study: The study period is starting from the year 1975 to 2017

. **Limitations of the Study** The study, as limitations, is confined only to review and analyze the selected indicators for the period of years.

VI. Analysis and Discussion

Foreign Direct Investment is playing a very dominant role in the development of an economy in developing countries. With the help of an increasing trend of FDI inflows, the country's export has increased year after year. The year-wise inflows of FDI secured by the country along with the amounts of exports are furnished in Table

Table (1): Rate of exports and imports

Year	Exports	Imports
1980	540.374	51.128
1981	774.952	82.19
1982	789.995	90.778
1983	783.547	75.3
1984	772.539	143.303
1985	774.249	129.134
1986	666.335	102.441
1987	707.816	134.51
1988	796.8	157.798
1989	944.719	275.526
1990	1335.351	331.002
1991	1304.437	307.203
1992	1822.04	350.325
1993	2028.468	410.883
1994	1940.3	508.357
1995	1961.802	661.171
1996	2237.297	609.224
1997	2193.167	645.637
1998	2146.279	636.99
1999	1998.143	683.931
2000	2424.262	744.063
2001	2633.246	1003.493
2002	2738.48	1189.757
2003	3058.892	1295.409
2004	4328.669	1844.793
2005	5392.112	2026. 751
2006	5873.863	2322.716
2007	7132.077	2440.218
2008	8819.045	3098.477
2009	7769.439	2587.856
2010	9452.091	3222.4
2011	8069.822	3448.73
2012	11539.089	3522.485
2013	11539.089	3737.83
2014	12287.359	4013.589

Table (1) presents a description of the exports and imports that were counted in the Jordanian economy and the proportion and imports of companies Industrial at Jordan From the years (1980-2014)

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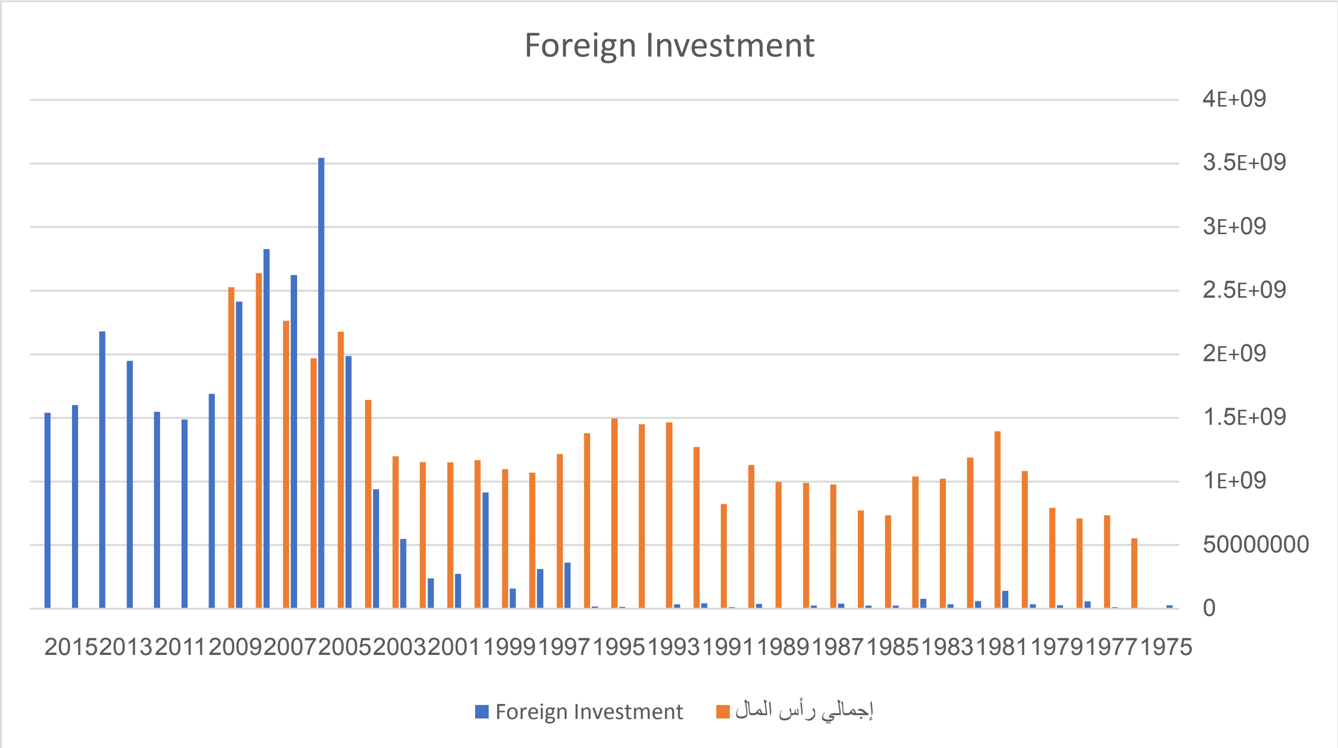
Imports play an important role in the economies of developing countries by providing intermediate goods And capital It is necessary to proceed with the development process Economic development and general development Especially industrial, in addition to providing consumer goods that can not be produced to meet the needs of citizens. Imports from the industrial sector Manufacturing (51.28) million dinars in 1980 and in 1987 Belkt values its imports (134.5) million in the period after the trade opening Asda imports of this sector significantly to meet the needs of this sector of the machinery and tools necessary, we note here in 1998 value increased by ((636.93) million dinars and reached in 2014 to (4013.589) million dinars. And we note the reason behind the increase of this indicator is to increase the needs of this sector and the need to provide the shortage in the sector and especially in light of the increase in labor and increase the importance of the industrial sector In the gross domestic product (GDP) and trade openness among the countries of the world.

VII. DISPLAY RESULTS AND TEST HYPOTHESIS

Thehypothesis,which states: " There is the effect is statistically significant at the level of significance (α ≤ 0.05) For foreign investment on the development of industrial growth in the Jordanian industrial companies (per capita national income, unemployment rates, the number of labor force, international tourism, transport in container ports, the average capital per capita, energy use) .

To test this hypothesis has been used linear regression analysis to verify the potential impact of foreign investment in the development of the industrial growth of the movement of the industrial companies in Jordan through its impact on the national per capita income, unemployment rates, the number of labor force, international tourism, transport in container ports, Average capital per capita, energy use , and Figure 6 shows the relationship between the third hypothesis variables

Graph (1) The relationship between the variables of per capita national and between foreign investment



Notes from Graph 1 in the contribution of foreign investment capital , which is reflected positively on the relationship between the variables of the study and based on the relationship between the hypothesis variables used regression analysis as shown in Table (2) the following:

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Table (2):Linear regression analysis test results of the study to test the hypothesis

Dependent variables	T	R 2	R 2 Modified	Std error in estimation	Statistics of change				
					R 2 change	The calculated change	Df1	Df2	Sig
National income	.749	.561	.550	656841884	.561	51.140	1	40	.000
Low rates of unemployment	.449	.201	.181	886038488	.201	10.087	1	40	.003
The number of labor force	.723	.523	.511	684705452	.523	43.873	1	40	.000
International tourism	.663	.440	.426	742265070	.440	31.369	1	40	.000
Transportation in the container ports	.697	.485	.472	711379202	.485	37.701	1	40	.000
Capital of the individual	.204	.042	.018	970557609	.042	1.743	1	40	.194
Energy use	.239	.057	.034	962749959	.057	2.423	1	40	.127

* Statistically significant at the level of significance ($\alpha \leq 0.05$).

The table shows that there is the effect of the independent variable (FDI) in the dependent variable (industrial growth) for industrial companies of Jordan, a statistically significant effect, where the value of F It is calculated (9.247) which is higher than the value of F Tabulated (3.43) , and the level of significance (Sig = 0.000) Which is less than (0.05), while the correlation coefficient between the independent variable and the (R = 0. 658) This shows a positive relationship between the variables of the study , which means that foreign investment affects the industrial growth of industrial companies in Jordan and positively, and the relationship between the study positive relationship variables ie that any increase in investment will lead to an increase in industrial growth , as the table shows the value of the previous coefficient of determination of (The $R^2 = 0.433$) It indicates that (43 . 3 %) of the variation in industrial growth can be explained by foreign investment .

The researcher has conducted multiple linear regression analysis to test the impact of the independent variables (foreign investment) in the industrial production of industrial companies of Jordan, and as shown in the table (3) the following:

Table (3): The results of multiple linear regression analysis Regression Analysis To test the effect of independent variables (foreign investment) in the industrial growth of industrial companies in Jordan

Dependent variables	Predictions	Standard weights	Unstandard weights		T.test Value	Sig	Partial Corelation
		B	B	Standard error			
National income	Fixed		797057813	233957456	3.407	.002	
	Foreign Investment	0 .749	739 613	103425	7.151	.000	.749
Low rates of unemployment	Fixed		168824636	218679400	.772	.445	
	Foreign Investment	0 .449	61663083	19415472	3.176	.003	.449
The number of labor force	Fixed		130861406	165262644	.792	.433	
	Foreign Investment	.723	873	131	6.624	.000	.723
International tourism	Fixed		78451636	160835351	.488	.628	
	Foreign Investment	.663	42273848	7547798	5.601	.000	.663
Transportation in the container ports	Fixed		341932702	125137860	2.732	.009	
	Foreign Investment	.697	2265.773	369	6.140	.000	.697
Capital of the individual	Fixed		409013181	273310049	1.497	.142	
	Foreign Investment	.204	.293	.222	1.320	.194	.204
Energy use	Fixed		35060178	501702240	.070	.945	
	Foreign Investment	.239	879751.601	565 172	1.557	.127	.239

Evidenced by the statistical results contained in the table (3) that foreign investment has affected and are statistically significant in the per capita national income and lower lining ratios and increasing the number of labor force and stimulate international tourism and stimulate the movement of traffic in the ports and the average capital collected by the individual in Jordan The level of significance (Sig = 0.000), And at rates ranging from (0.45 - 0.75) , indicating that the impact of the impact of foreign investment was the moral of .

Therefore we accept partial hypothesis which states that: no effect is statistically significant at the level of significance ($\alpha \leq 0.05$) for foreign investment on the development of industrial growth in the Jordanian industrial companies (per capita national income, unemployment rates, the number of labor force, international tourism, transport in container ports)

VIII. Discussion Of Results

Following this discussion, the study recommends that:

- Providing an investment environment in different areas in Jordan.
- Encouraging the private sector to bring foreign direct investment to Jordan.
- Encouraging foreign direct investment in sectors with high export capacity such as manufacturing sector.
- Reduce the recruitment of foreign workers, and employment of local workers, in order to reduce remittances abroad, and achieve higher rates of economic growth.
- Intensified focus on infrastructure development and development of large-scale projects, thereby increasing FDI attractiveness.

IX. Conclusion

The results showed that there is an effect of foreign investment in the industrial growth of the Jordanian industrial companies. This is a statistically significant effect, where the calculated F value is (9.247), which is higher than the periodic value of (3.43) (R = 0.658). This indicates a positive relationship between the variables of the study, which means that foreign investment affects the industrial

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growth of the industrial companies in Jordan positively, and the relationship between the variables of the study is a positive relationship ie that An increase in investment will lead to an increase in industrial growth Table (11) shows that foreign investment has a statistically significant effect on national income per capita, low unemployment rates, increasing labor force numbers, activating the international tourism movement, activating the port movement and average capital collected by the individual in Jordan at a significant level (Sig = 0.000).), And ranged between (0.45 - 0.75) indicating that the effect of this effect on foreign investment was significant.

This result indicates the importance of foreign investment to the development of the industrial sector in Jordan on the one hand, and has a significant impact on increasing the per capita national income, reducing the unemployment rate, increasing labor force, increasing international tourism, increasing transport in container ports, Capital per capita, increased energy use.

This result is due to the abundance of skilled manpower operating in Jordan and the acceptable cost, which provides more employment for this workforce in foreign companies, which provides suitable income for the working person and increase national income, which reduces unemployment in Jordan, and increases international tourism and increase Rates of transport in container port.

X. References

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