Measuring the Impact of Foreign Direct Investment Inflows on the Jordanian Exports Performance during the Period (1994-2022)

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Abstract

Purpose: The study aims at measuring the impact of the inflow of foreign direct investment on the Jordanian exports performance during the period (1994-2022) in light of the economic reforms adopted by the Jordanian authorities following the economic crisis that afflicted the Jordanian economy at the end of the eighties, which included free trade policy to stimulate large export-oriented investment projects.

Research Methodology: The researcher used econometrical analysis based on the methodology of autoregressive time-distributed delay of variables (ARDL) in order to measure the long-term relationship between the flow of foreign direct investment and commodity exports for the study period, using annual data from various issues published by the Central Bank of Jordan.

Findings: The results revealed that there was appositive weak long-term relationship between the flows of foreign direct investments and Jordanian merchandise exports during the study period, due to the fact that most of the foreign direct investments were directed to the local market rather than to the global markets.

Social implications: The study recommended the importance of improving the investment environment in Jordan and promoting attracting large foreign direct investments destined for export to take advantage of the free trade agreements signed by Jordan. It also recommended the exploitation of national economic resources and available raw materials to achieve high added values and benefit from economies of scale.

Keywords: Foreign Direct Investment, Export Performance, Jordan.

Introduction

Background

Foreign direct investment has an active and vital role in the economies of developing and developed countries alike, as it is one of the most important means of transferring technology and modern technologies. Moreover, it contributes to the accumulation of physical capital, raising the efficiency of human energy, and stimulates international trade. It is also considered one of the most important sources of safe and sustainable financing for

developing countries, especially the small ones, where the state's domestic savings are unable to meet the state's needs of various economic projects, away from foreign loans, which have become a huge burden on the general budgets of developing countries.

Jordan is one of these developing countries, which is characterized by its small size, weak economic resources, imbalanced productive structures, and narrow domestic market. Therefore, this has become a challenge to achieving sustainable development. Economic policy makers have sought to improve the investment environment by amending much legislation stimulating investment and opening foreign markets to Jordanian products through the liberalization of foreign trade. Thus, it signed many bilateral and multilateral free trade agreements during the nineties and joined Jordan to the World Trade Organization in order to get rid of the narrow domestic market that deprived Jordan of large foreign investments and to stimulate foreign direct investment and increase export opportunities by taking advantage of Jordan's middle geographical location, the instability experienced by the countries of the region and the consequent diversity in the needs of their markets within the framework of reconstruction in those countries.

Importance of the Study

The significance of this study emerged from the fact that it deals with one of the basic issues in economic life that raises a lot of controversy about its importance for developing countries, especially the Arab ones, as many economists consider that foreign direct investment is one of the most important sources of safe and sustainable financing, which fills the deficit in local capital and reflects positively on the economies of developing countries, especially on the foreign trade sector, both import and export, by increasing export opportunities of highprofile goods that need large capitals that are not available within the small developing countries, thus alleviating the deficit in the large trade balance, improving the level of the state's reserves of foreign currency, and reducing the burden of external indebtedness, which has reached a very dangerous level in Jordan.

Purposes of the Study

The study aims at measuring the impact of direct foreign investments inflows on Jordanian merchandise exports during the period (1994-2022) in light of the economic reforms undertaken by Jordan in the early nineties following the severe economic crisis that afflicted the Jordanian economy in the year 1988 and its negative repercussions. It also affected all pillars of the Jordanian economy, including Jordanian merchandise exports, as the economic reforms included liberating foreign trade to open new markets for Jordanian commodity products, through signing a large number of bilateral and multiple free trade agreements, joining the World Trade Organization and amending local legislation to improve the investment environment to stimulate and attract large foreign direct investments destined for export after the narrow domestic market was an obstacle to such investments.

Research Question

This research aims to answer the following question

- Did foreign direct investments inflows have long term positive impact on Jordanian merchandise exports during the study period?

Research Hypothesis

Hypothesis: There is a long run positive impact of foreign direct investment inflows on Jordanian merchandise exports.

Theoretical Framework

Since the beginning of economic thought, the economic literature dealt with the factors for the emergence and establishment of foreign investments outside the borders of the mother country. The classical school believes that the surplus of domestic savings in developed countries can be directed to investment in developing countries so that it benefits both parties, the investor and the country hosting the investment. Moreover, the neoclassical thought (Harrod-Domar model) believes that there is a symbiotic relationship between direct foreign investment and domestic investment within the host country, as the first leads to the growth of the second due to the existence of links between them, and this in turn is reflected in all related economic indicators such as economic growth, trade, productivity and employment (Abed-alhameed, 2017).

According to the theory of monopolistic advantage formulated by the Canadian economist Hymer in 1960 (Nayak and Choudhury, 2014), the country's ability to invest abroad depends on the extent to which it enjoys monopolistic advantages that enable it to compete in the host country, and this often applies to multinational companies. Duninng summarized in his "Selective Theory" model the advantages that should be enjoyed by companies wishing to internationalize their production in OLI, which are advantages arranged by ownership, location, and international advantages (Dunning, 2001).

On the relationship of foreign direct investment with foreign trade, there are many opinions. Some of them believe that the relationship is symbiotic, whereas some see that it is reciprocal.

According to (Heckscher-Ohlin) model, exports and imports are considered an indirect exchange of production elements. If there are restrictions on trade, the relationship between investment and trade is mutual, except in the case of economic freedom, in which the relationship is complementary (Wei et al., 2001).

According to the model of "flying geese "formulated by Kanami Akamatsu, the relationship between investment and exports is a complementary one, as capital-exporting countries shift production operations to a country where production costs are lower, as it enjoys the advantage of lower wages, availability of labor and raw materials, with the advantage of being closer to trading partners. On the other hand, the host countries benefit from the transferring technology and from the administrative and production expertise accompanying the investment, and this increases the ability of the host country to produce and to export. It can also contribute to reducing the import bill (Sultan, 2013).

There is another theory called "The New Product's Life Cycle Theory", which was launched by (Vernon, 1966). This theory is based on the existence of disparities between countries in the field of technology. Vernon believes that the product passes through three stages. The first is the innovation stage, which is the stage in which the new product is created and sold in the parent country, and is characterized by large spending on the product and seeking to reach export markets. The second stage is the stage of growth and maturity, which is the stage characterized by rapid growth in production and an increase in the number of competitors. This prompts the parent company to transfer production units to other developed importing countries to reduce production costs and to protect its product from counterfeiting. The third

and final stage of the product's life cycle, which is the stage in which the product cannot be distinguished from other counterfeit products, whether in the parent country or the country to which production units have been transferred. Thus, the producing company seeks to reduce its production costs by establishing new production units in less developed countries to meet the competitive pressures faced by the parent company, because the differentiation between commodities has become in price only, and this in turn drives trade between the host country and other countries, including the parent country that owns the capital.

It seems that the concept of foreign direct investment has spread a lot in recent decades and occupied an important position in light of the growing phenomenon of globalization, opening borders and liberalizing trade. Therefore, foreign investment has become one of the main sources of financial flows, and governments of developing countries tended to develop appropriate policies to attract more of these investments to compensate for the severe shortage of domestic resources savings, as the domestic policy of the state determines the nature of the relationship between foreign direct investment and the rest of the economic variables, especially exports and imports. Direct investment flows may actually lead to an increase in exports or a decrease in imports if this is directed by the host country itself. However, if the goal of the investing company is to open new markets and benefit from the consumer energy of the host country, this could lead to an increase in imports and not an increase in exports. In general, the motives for attracting direct investment differ between the host country and the parent country, but there are common benefits that may accrue to both parties if the investment conditions are fair to both parties. Opening new markets, reducing risks, providing raw materials and ensuring their sustainability are motives related to the parent country. On the other hand, bridging the domestic resource gap, increasing capital accumulation, transferring modern technology, increasing exports and reducing imports are motives associated with the host country.

Previous Literature

There are many previous studies that dealt with foreign direct investment and its impact on various economic variables, especially in developing countries, and some of these studies are the following:

- The study of Goswami & Saika (2012) was to analyze the relationship of foreign direct investment with Indian exports after the policy of trade liberalization and the removal of all export obstacles that India followed after 1991, carrying out many reforms to attract foreign investment to the country. The researcher used the error correction model methodology (VECM) for the time period (1991-2011), and the study concluded that there is a two-way causal relationship between foreign direct investment flows and industrial exports during the study period. This came in line with another study conducted by Babu (2018) on the Indian economy, in which there was a positive two-way relationship between Indian exports and foreign investment in India.
- Ahmed & Mohsen's study (2023) was on Bangladesh economy, examined the relationship between FDI inflows and the exports performance for the time period 1972-2019, using A Johansen test of co-integration and VECM for causality direction, the study showed a significant long run and a positive relationship between FDI and exports performance.

- The study of Shaker (2015) was to examine the relationship between Egyptian exports and foreign direct investment during the time period (2001-2012), using longitudinal data of six trading partners of Egypt and applying the methodology of the random effects model. The study concluded that there is a bidirectional relationship between exports and foreign direct investment in Egypt during the study period. However, the results of this study contradicted the results of another study conducted by Barbari (2022) for the time period (1991-2019), in which he showed that there is no causal relationship between direct foreign investments and Egyptian exports, as the first was characterized by relative stationary, while the second was fluctuating during the study period.
- The study of Zhang (2006) dealt with cross-sectional data of 186 industries in China. The study concluded that there is a direct and strong relationship between foreign direct investment in China and Chinese exports, and the impact was greater in laborintensive industries. It also concluded that the impact of foreign direct investment on exports greater than the impact of domestic investment.
- Etale's study on the Malaysian economy in 2016 for the time period (1980-2013) showed a positive and highly statistically significant relationship between foreign direct investment inflows and Malaysian exports using causality analysis (Etale, 2016).
- Khan & Wang's study (2018) was on the Pakistani economy. It targeted the relationship between foreign direct investment and export-import goods, using Vector Auto Regression Model (VAR) and ARDL for the long and short run relationship. The study showed the existence of a complementary relationship between FDI and exports in the long run, while there was no evidence of a long-term relationship with imports.
- Regarding the Jordanian economy, the researcher found a study by Shehata and Al-Halalmeh (2022). It examined the impact of foreign direct investment on economic growth in Jordan during the period (1990-2017) using the error correction model. The study concluded that there is a two-way mutual effect between direct foreign investment and economic growth in Jordan.

The current study is a continuation of previous studies on the same subject, but it is the latest in terms of its uniqueness in measuring the relationship between foreign direct investment and Jordanian exports using the ARDL model, which is the latest model in measuring the relationship between economic variables, determining their direction in the long and short periods, as well as analyzing time series for the period (1994-2022), which is the period that followed the economic reforms in Jordan after the economic crisis that hit the Jordanian economy at the end of the eighties.

Study Variables and Methodology

To find the relationship between foreign direct investment and merchandise exports in Jordan in the short and long term, annual data were collected for the time series (1994-2022) for the variables of the study represented in foreign direct investment as a percentage of the gross domestic product and symbolized by the symbol (F), while exports were considered as a percentage of the gross domestic product (X). Moreover, applying the methodology of Auto Regressive Distributed Lags (ARDL), which is considered one of the latest methods used to process models based on time series rules, whereas the previous studies used co-integration

and error correction model which is considered as older and less accurate than ARDL, so the standard model was built and its parameters were estimated as follows (Nkoro, 2016):

$$d (Xt) = \alpha 0 + \sum_{t=1}^{n} \alpha_{1n} * d(X_{t-1}) + \sum_{t=0}^{m} \alpha_{2m} * d(F_{t-m}) - A_1 * X_{t-1} + A_2 * F_{t-1} + e_{1_t}...(1)$$

Where (dxt) refers to the first difference in merchandise exports, (α 1n) refers to the first difference slowdown parameters for exports (Xt), (n) refers to the length of the slowdown period for the variable (Xt), (α 2m) refers to the first difference slowdown parameters for foreign direct investments (Ft), and (m) refers to the length of the deceleration period for the variable (Ft). The first part of the equation (No. (1)) represents the relationship between the variable (Xt) and the independent variable (Ft) in the short-term period. As for the other part of the equation (No. (2)), it represents the relationship between the two variables in the long period, where (Λ 1) represents the error correction coefficient to reach the equilibrium state in the long period of the dependent variable, and its reciprocal value measures the number of years required to reach the equilibrium state, but its value must be significant and negative so that we can say that there is a long-term relationship between the two variables. Through the estimated value of (Λ 1), the value of (Λ 2), and the constant (α 0), we can estimate the value of the original equation that reflects the long-term relationship between the two variables, which takes the following form:

$$x_t = -\frac{\alpha 0}{\lambda_1} + \frac{\lambda_2}{\lambda_1} F_t....(2)$$

The ARDL Methodology Requires the Following Steps:

- Testing the rest of the time series to ensure data stationary at the level I (0) or in the first difference I (1), and this is a necessary condition for using the ARDL methodology. This step requires using the extended "Dickie-Fuller" and "Phillips-Peron" test (Philips & Perron 1988).
- Estimating the model using the method of Ordinary Least Squares method (OLS) for the model.
- Using the Residuals test (et) to ensure the integrity of the model and ensure that it is free from autocorrelation or heteroscedasticity, using the (LM test) for auto correlation, and the Breusch-Pagan-Godfrey test for heteroscedasticity (Pesaran et, al. 2001).
- Using F. Bound test, which is the most important test to determine whether there is co-integration between variables and find out if there is a long-term relationship or not (Pesaran et, al. 2001).
- Interpreting and reading the error correction coefficient extracted from the estimation stage and using it to estimate the correction speed and extract the inclinations of the equations if they are significant.

The General Trend of Foreign Direct Investment and Exports in Jordan

Before estimating the model, light was shed on the general trend of the movement of foreign direct investments inflows (the solid line) in Jordan compared to the movement of exports (the dashed line) during the study period, which is shown in the figure below:



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Graph (1) : Jordan's FDI and Exports (Billion J.D) (1994-2020)

It appears from the above figure that the flow of foreign direct investment was growing slightly and fluctuatingly during the first period of the study, and all its values were less than one billion dinars in all years, but it jumped in 2006 to record its highest value, amounting to 2.5 billion dinars. However, it decreased gradually and fluctuatingly during the subsequent years, especially after 2017, to record low values that were less than one billion dinars in all years. As for the export movement, it seems that it was, to a large extent, more stable than foreign direct investment, and it took a clear pattern and continuous natural growth.

The question that arises now is whether there was an impact of foreign direct investment on the growth of Jordanian merchandise exports during the study period.

To get the answer, the study model was estimated, and the results were as follows:

Estimation and Results

Data Stationary

To ensure data stationary, the Advanced Fuller test (ADF) and the "Phillips Perron", which is the unit root test scale, were both used. The results were as follows:

Table (1)

Augmented Dicky-Fuller test

Variable	-	Level Fir			rst difference		
		Augmented	nted Dicky – Fuller Result Augmented Dicky – Fuller		Result		
		t-statistics	probability		t-statistics	probability	
Ft	With	2.648739-	0.0956	none	7.299131-	0.0000	stationary
	intercept						
	With	2.591138-	0.2866	none	11.9636-	0.0000	stationary
	intercept						
	&trend						
	Without	1.618361-	0.0956	none	12.2838-	0.0000	stationary
	any						
Xt	With	1.366895-	0.5838	none	4.054536-	0.0040	stationary
	intercept						
	With	1.611477-	0.7625	none	3.848590-	0.0200	stationary
	intercept						
	&trend						
	Without	0.051341-	0.6570	none	4.137054-	0.0002	stationary
	any						

Table (2)

Philips-Perron Test

, Variable		Level			First difference		
		Phillps-Pe	rron Statistics	Result	Phillps-Perron Statistics		Result
		t-statistics	probability		t-statistics	probability	
Ft	With	2.662345-	0.0931	none	7.338718-	0.0000	stationary
	intercept						
	With	2.558487-	0.3002	none	7.523657-	0.0000	stationary
	intercept						
	&trend						
	Without	1.500270-	0.1227	none	7.482231-	0.0000	stationary
	any						
Xt	With	1.641600-	0.4488	none	4.053360-	0.0043	stationary
	intercept						
	With	1.866500	0.6448	none	3.840014-	0.0297	stationary
	intercept						
	&trend						
	Without	0.105594-	0.6385	none	4.135929-	0.0004	stationary
	any						

- The results shown in table (1) and table (2) indicate that all the variables were not stable at level I (0), but they were stable at the first difference, I (1), and the results of both the Dicky-Fuller and Phillips-Perron tests were very close. Accordingly, the ARDL methodology can be used to estimate the relationship between the two variables because this methodology requires that the data be stable at the level or first difference only.

The Estimation Results

Using the (EVIEWS 11) program and the (ARDL) methodology, the impact of foreign direct investments on merchandise exports was estimated, and the results were as follows:

Table (3) *ARDL Long Run Form and Bounds Test* Dependent Variable: D(X) Case 2: Restricted Constant and No Trend Sample: 1994 2022 Included observations: 25

Conditional Error Correction Regression

Variable	Coefficient	Std. Error	t-Statistic	Prob.		
С	0.329933	0.124703	2.645750	0.0217		
X(-1)	-0.374999	0.173365	-2.163060	0.0354		
F(-1)	0.031778	0.014765	2.152193	0.0324		
D(X(-1))	0.669657	0.258785	2.587692	0.0212		
D(F(-1))	-0.472723	0.123856	-3.816705	0.0017		

As it is clear from the above results (table 3), the value of the estimated correction coefficient (Λ 1) was negative (-0.374999), which is the first condition for the existence of a long-term relationship between the two variables, and the probability value was (0.0354), which is less than (0.05), and this means that the parameter have statistical significance at 5% level, that indicates the existence of a long-term co-integration relationship between the flows of FDI and the export (x) as a dependent variable, with a correction degree of (-0.373999), that means the correction factor for the short-term exports rate from the equilibrium level is about 37% annually, so the correction period to the equilibrium level in the long term is around three years.

Accordingly, we can derive the long-term equation from the above results as follows:

Case 2: Restricted Constant and No Trend Variable Coefficient Std. Error Prob. t-Statistic FDI1 0.084741 0.0306 0.038340 2.210212 С 0.879823 0.336754 2.612657 0.0010

Table (4) Levels Equation (long run equation)

As indicated in the above table (table 4), the slope was positive and around (0.08), statically significant at the level of 5%, that means the existence of long term relationship between exports and the flows of FDI. This has been proven statistically when examining the limits (F bound test) (table 5), which is the sufficient test. It was found that the calculated value of (F) was (11.2), which is much more than the value of the upper limit scheduled at any confidence level.

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Table (5) F-Bounds Test	Null Hypothesis: No levels relationship			
Test Statistic	Value	Signif.	I(0)	l(1)
F-statistic	11.200177	10%	3.02	3.51
k	1	5%	3.62	4.16
		2.5%	4.18	4.79
		1%	4.94	5.58

In order to make sure that the equation is free from autocorrelation and heteroscedasticity, the residuals were tested by Breusch-Godfrey Serial Correlation LM Test for autocorrelation, and the results were as follows:

Table (6) Breusch-Godfrey Seric Null hypothesis: No se	al Correlation LM Tes erial correlation at up	t: o to 2 lags	
F-statistic	0.026049	Prob. F(2,20)	0.9743
Obs*R-squared	0.070151	Prob. Chi-Square(2)	0.9655

The result shown in table (6) confirms the significance of the (F) value. Accordingly, we accept the null hypothesis, which says that there is no autocorrelation. Moreover, heteroscedasticity was also tested applying Heteroscedasticity Test: Breusch-Pagan-Godfrey.

Table (7) *Heteroscedasticity Test: Breusch-Pagan-Godfrey* Null hypothesis: Homoscedasticity

F-statistic	2.416244	Prob. F(4,22)	0.1793
Obs*R-squared	8.241104	Prob. Chi-Square(4)	0.1831
Scaled explained SS	22.87855	Prob. Chi-Square(4)	0.1261

This result indicated in table (7) also confirms the significance of the (F) value. Accordingly, we accept the null hypothesis, which says that the variance of the residuals is homogeneous.

Although, it's proven statistically a significant long run relationship between FDI flows and Jordanian commodity exports, but the relation seems too weak, the estimation coefficient was (0.084), that is increasing FDI flows lead to an increase in Jordanian merchandise exports by a rate not exceeding 8%. This means that FDI are not a major determinant of merchandise exports, but rather there are other factors that have a greater impact on exports.

Since there is a weak long-term relationship between FDI flows and Jordanian commodity exports, this indicates that the investment environment and legislative amendments drawn up by the Jordanian authorities during the last period had little role in increasing and growing export-oriented FDI projects, as Jordanian exports were growing in isolation from the growth of FDI, and it seems that it was affected by other factors outside the model's framework more than it was affected by FDI, and this was evident through the intercept in the estimated long-

term equation, which enjoyed high statistical significance. Moreover, it can be said that FDI was directed to the domestic market more than the foreign market. We realize that the Jordanian market is a small and narrow. Thus, it does not stimulate the establishment of large investment projects that benefit from economies of scale and contribute to increasing economic growth rates.

FDI in Jordan appear to have been linked more to the instability of the region than to the investment environment drawn up by the Jordanian authorities, as Jordan was a safe haven for the capital of those countries because of its relative stability, strategic position proximity to those countries.

Jordan's proximity to the countries of conflict and its association with them in free trade agreements should have been a catalyst for the establishment of major investment projects in Jordan aimed at exporting to those countries and benefiting from the advantages of the bilateral and multiple agreements it signed with Jordan, especially since these countries enjoy large markets and urgently need all kinds of goods and services before and after the post-war reconstruction period.

Conclusion and Recommendations

Conclusion

- The aim of the study was to shed light on the relationship between foreign direct investment inflows and Jordanian merchandise exports, using the cointegration approach to test autoregressive time-distributed (ARDL) for the time period (1994-2022).
- Based on the econometric analysis, it was proven that there is a weak long-term relationship between foreign direct investments inflows and Jordanian merchandise exports, as the strategy of attracting foreign investments was separate to some extent from the strategy of developing exports. Accordingly, foreign direct investment flows contribute little to improving the performance of Jordanian exports.
- The low level of foreign direct investment in general in Jordan is due to the lack of an appropriate and sufficient investment environment that helps attract foreign investment.
- Jordanian merchandise exports were relatively stable over the years of study and did not undergo any significant development, while foreign investments fluctuated from year to year in light of the changes surrounding the region, which were directed to the local market rather than to be exported abroad.
- The absence of large foreign direct investments directed to export, coinciding with the weakness of domestic capital directed to investment and its inability to carry out major projects, keep the structure of Jordanian merchandise exports weak and limited to goods with low value added.
- The policy of liberalizing foreign trade and opening new markets for Jordanian products to eliminate the narrowness of the domestic market, did not stimulate and attract large foreign direct investments destined for export as it should in the context of the conditions of globalization and competition in international markets.
- FDI in Jordan appear to have been linked more to the instability of the region than to the investment environment drawn up by the Jordanian policymakers, as Jordan was a safe haven for the capital of those countries because of its relative stability, strategic position proximity to those countries.

- Despite the weakness of the relationship between foreign direct investments and merchandise exports, the empirical findings of the study were consistent with most of the previous studies, proving the existence of a positive and significant relationship between foreign direct investments and export performance. However, this relationship needs to be strengthened and redirected by the Jordanian policymakers for improving exports performance.
- It is plausible that this study makes a distinct contribution to the economic literature in a modern scientific approach based on autoregressive time-distributed methodology, which is characterized by the accuracy of its results and its ability to estimate long and short-term relationships depending on error correction coefficient. Therefore, this study may serve as a link in the series of previous studies to give a clearer picture of the relationship between FDI and export performance, especially the empirical studies in this field is still few. The findings of the study may give valuable insights to policymakers in Jordan for planning FDI policies in a way that could improve export performance, which in turn may lead to faster growth of the country. It's expected that this type of study serves all economies of small developing countries that seek to attract FDI and benefit from its advantages,
- The most important limitation faced the study was lack of data related to the volume of foreign direct investments for the time period preceding 1994, longer period data make the study more exhaustive and gives more accurate results.

Recommendations

In light of the study's findings and to strengthen the relationship between foreign

- direct investments and Jordanian exports, the study recommends the following:
- Reconsidering investment promotion laws for the purpose of creating an appropriate investment environment to attract large and export-oriented foreign direct investment to enhance the volume of Jordanian exports, in order to mitigate the large deficit in the trade balance, and to take advantage from the benefits of large-scale production.
- Promoting direct foreign investments based on the exploitation of economic resources and local raw materials available in Jordan to carry out manufacturing operations on them and not to export them in the raw form, in order to achieve higher added value and increase the volume of exports.
- Promoting large investment projects aimed at export in order to benefit from the advantages of the bilateral and multi free trade agreements with which Jordan is linked with the countries of the world, particularly with the Arab countries.
- Future studies should be conducted to examine the relationship between FDI and exports at the sectoral level according to available data, as well as studying the effect of FDI on the level of import substitution and on the competitiveness of Jordanian products.

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