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Abstract

The changes, so-called (globalization), occurred in the international economical variables have led to liberating external trade and taking off support of the agricultural exportations, the thing that laid its negative economical impact over the Arab countries' economies, represented by the reduction of their external agricultural trade's relative significance in proportion to their general national income, therefore, the direct foreign investment has become inevitable for the said countries' economies, being the most important external funding source not to mention its role in bringing modern agricultural technologies, providing work opportunities for those in the agrarian sector, increasing the present production capacity, finding new agricultural production potentials, improving their quality and reducing their cost to the extent they become competitive with their foreign rivals. This kind of investment is now considered an essential engine for the success of the agricultural exportation process and for limiting the agricultural importations that became a burden on the general budgets of Arab economies. Hence, our study adopted a hypothesis that direct foreign investment companies are contributing with variable roles in developing the external agricultural trade in a number of Arab countries for the period of 1995-2017, and to substantiate the research's hypothesis, a number of these countries were chosen including Egypt, Jordan, Morocco and Tunisia. In these countries, data of time sequences were adopted in estimating the phenomenon under study as it reflects the changes occurred in their external agricultural trade during the research period, and a number of conclusions were reached among which the most important was that the direct foreign investment is one of the most important means which contribute positively to the increase of the value of agricultural exports in the majority of the sample countries. The most important recommendation was to adopt wise agricultural policies in the developing countries of the study sample that lead to securing suitable environment and circumstances for investment, to draw more foreign direct investment companies to their agricultural sectors.

Keywords: foreign direct investment, external agricultural trade, Arab countries

Introduction

Foreign direct investment is of a high economic importance being one of the most important sources of external funding to achieve agricultural development, let alone it is one of the channels through which agricultural technologies and managerial and technical expertise are acquired, it has many positive effects such as creating work opportunities in the field of agriculture, increasing production capacity, finding new production potentials, improving the quality of agricultural products and reducing their costs to the extent they become capable of competing their foreign rivals in the national and international markets. This is clear in the practices of successful countries in the field of external agricultural trade, as this investment is considered an essential engine for the success of the agricultural export and import, and its importance is ascribed to establishing reciprocal relationships with the domestic investment since the foreign one comes with modern agricultural technology as well as expertise in management and agricultural marketing, not to mention its relation with international markets. Therefore, the existence of a strong trading sector that works on bringing more foreign investments flow would be rendered into an increase in exports, limitation of agricultural imports and attraction of new agricultural investments.

Problem of the Research

The problem of the research lies in the nature of the agrarian sector in the Arab countries which is characterized by its incapability of producing sufficient amounts of food to meet the domestic consumption need, the thing that kept the agricultural production bellow the average growth of population and this made these countries resort to adopting agricultural policies that would take off their support of agriculture and this put these countries in competitive position with their advanced rivals which surpass them in aspects of production and productivity. This caused undesirable economic effects in the agrarian performance, one of which is the external agricultural trade of these countries, from this point the role of the foreign direct investment companies reveals itself in realizing the best opportunities for the agricultural investment in the way that leads to increasing their exports and decreasing their imports; the historical experiences mention that many countries which used foreign funding in their agrarian sectors managed to reach advanced stages in the field of their external agricultural trade.

Importance of the Research

Many Arab countries compete to attract more foreign direct investment flow to their agrarian sectors due to the important role those companies play in bridging the gap of (Saving- Investing) in them, as well as making available a large amount of foreign currencies and improving the conditions of payments budgets of the host countries through enhancing the conditions of their agricultural trade balance by means of reducing imports and increasing agricultural exports.

Hypothesis of the Research

The research stands on a hypothesis that foreign direct investment companies engaged in the agrarian sector in the Arab countries contribute with variable roles to developing these countries' external agricultural trade.

Aim of the Research

Foreign direct investment is characterized by many merits, represented in the fields of agricultural technologies
and in integrating with the international markets, hence, the research aims at studying the role of foreign direct investment companies in developing the external agricultural trade in several Arab countries for the period 1995-2017.

Materials and Methods

Research method and the standard methodology used in analysis:

The methodology adopted by the research is connecting between two directions; the first is descriptive which depends on theoretical studies which tackled this subject, and the second is quantitative which depends on standard procedures of economy, then to explain the results of the quantitative direction in estimating and analyzing the impact of the foreign direct investment on the external agricultural trade in a number of Arab countries including Egypt, Jordan, Morocco and Tunisia. The reason for choosing these countries are:

1. Being agricultural countries.
2. Their external agricultural trades constitute large portions of their overall external trades.
3. They are located in different geographic regions.
4. Abundance of the required data about the sample countries and this enables us perform the practical side in this study.
5. They went far in attracting foreign direct investment companies in their agrarian sectors.

To describe the standard samples used in estimation, several standard samples were adopted for this purpose including the values of agricultural exports Y1 and the values of agricultural imports Y2 in the said countries, as being the dependant variables. Whereas a number of variables such as foreign direct investment X1, foreign exchange rate X2, deficit in the general budget of the country X3, inflation average X4 and economic stability X5 being the independent variables in the standard samples used in estimation. The value of the mentioned variables were calculated throughout the period of the study in US Dollars depending on fixed prices to eliminate the inflation effects occurring in the value of their local currencies. For the purpose of estimation and analysis, standard samples were used for different cases of multiple linear declination depending on the least square method (OLS) as it gives the best unbiased linear estimations which usually coincides with the concepts of the economic theory.

The research included three topics of which the first was dedicated for the study of the theoretical frame of foreign direct investment, the second tackled the referential review and the contemporary studies of the foreign direct investment role in external agricultural trade and the third focused on the statistical estimation and the economical interpretation of the impact of foreign direct investment in the agricultural external trade in the countries of the study sample for the period 1995-2017.

The first topic: The theoretical frame of the foreign direct investment

Concepts and Theories of foreign direct investment

Foreign direct investment is defined as the transference of foreign capitals to external investment directly to operate in industrial, transformational, constructional or agricultural units (Hameed, 2005).

Theories of foreign direct investment:

There are many theories that explain the motivations for foreign direct investment, among which the most important are:

1. Theory of international movements of capitals: This theory is based upon the assumption of total competition and it construes the foreign direct investment as the movements of the capital through differences of the interest's rates among countries; direct investment is the transference of capital from the countries with low rates of interest to countries of high rates of returns. This opinion rises from a notion that when implementing investment decisions, companies are balancing between the expected marginal return of the capital and its marginal cost; if the expected marginal returns from abroad was higher than the domestic one, assuming that the marginal cost was the same, then there is a higher motivation to invest abroad rather than locally (Salih, 2008, 27).

2. Theory of markets incompleteness: This theory construes foreign direct investment on the basis of market incompleteness due to incompleteness of competition or of information, foreign direct investment was studied in light of that from a fixed angel that tackles the motives of industrial undertakings, and from a mobile angel which focuses on aspects of product's life cycle. Regarding the motives of the industrial undertakings, the main motivation which encourages companies to resort to foreign investments abroad is that these companies enjoy monopolization advantages like possessing advanced technology, the ability to diversify products and the availability of capitals compared to national companies in the host countries, so that these advantages be a compensation to the risk they face when investing abroad.

3. The theory of internal use of monopolization advantages: This theory appeared as a result to market and information incompleteness as these aspects obstruct the establishment of enough international trade regarding the intangible assets or the incorporeal advantages possessed by the investing company abroad, hence, when the multi- nationality companies (that usually have these advantages) internationalize their operations internally, i.e. performing all their productive and marketing activities within the company or between the headquarters and the branches in the countries where the investment takes place instead of performing them directly in the markets, this enables them to overcome the restrictions imposed by different governments on the markets which could affect the freedom of trading and investing, on the one hand, and on the other, they guarantee putting restrictions on the entering of new competitors to the markets and prevent the leakage of new innovations to the countries in which the investment takes place through other channels to the longest possible period (Salih, 2008, 25).

4. Theory of location: This theory focuses on the motivations that makes the multi- nationality companies...
invest abroad, represented by the location features of the host countries of the investment.

The factors of location influence the company's decision of investing in some country, on the one hand, and its decision to choose, whether to choose this country to invest in on to export to, on the other hand. These factors include aspects related to production costs, marketing and management as well as the rest of factors related to the market.

**Forms of foreign direct investment**

Forms of foreign direct investment are defined according to the percentage of the project's ownership by the foreign investor; partial or absolute, and from this sense foreign direct investment is divided into three main types:

**Type one: mutual investment:**

A project which two parties (entities) or more, from two different countries, own or share permanently, and sharing here does not only mean the allotment of capital, in fact it extends to administration, experience, patents of innovations and commercial relationships…etc. (Abu Qahf, 2001).

Tir Pestra sees that mutual investment involves productive or marketing operations that take place in a foreign country and one of its investing parties is an international company which practices sufficient right in the project's management or the production process without taking full control of it (international finance corporation, 1997).

**Type Two: Investments completely owned by foreign investor:**

This type of investments take place when the foreign investor or the multi-nationality company establishes a branch for production or marketing or any other type of activity of production or service in the host country.

Regarding foreign investor in particular, the fully owned investment are considered of the more favored forms of the foreign direct investment, whereas the host countries hesitate a lot to accept these investments and this is attributed to the fear of economic dependency and what follows of effects on the national and the international levels. Nevertheless, many statistics indicate that some host countries grant multi-nationality companies the right to gain full ownership of their branches to attract more foreign investments to them. (Farouk, 2010).

**Type three: Multi-nationality companies:**

This type of investment involves the control of the mother company over a large number of projects of different nationalities, thus, a large group is formed which possesses human and financial resources and at the same time follows a common strategy. The size also occupies a significant importance in distinguishing the multi-nationality groups; the companies with annual selling of less than one hundred million dollars are excluded. Another important factor in this limitation is the nature of external activities of the group; companies which only export are excluded from the scope of multi-nationality groups even if they own foreign branches for selling (Abdullah, 2005).

**Influences of direct foreign investment in the economies of the host countries**

The favoring of different host countries of direct investment than the rest of foreign investments' types is due to the advantages that can be attained from this type represented by moving the wheels of the economic growth, in return it is not flawless and we are going to tackle the advantages and disadvantages of this type of investment as follows:

**Advantages:**

- Reducing the imports and increasing the export-oriented production will increase the foreign capitals' flow and consequently improving the trading balance and, consequently, the payments balance.
- Foreign direct investment contributes to moving forward the economic development process by way of bringing financial and non-financial assets represented by the capital, technology and organizational skills by the multi-nationality companies.
- Foreign direct investment contributes to the improvement of domestic investment through the flow of foreign capitals and this leads to increase of the benefits of these investments, and this increases the savings.
- Satisfying the needs of the market with products, and opening local and foreign markets as a result to the marketing of new products.
- Enhancing the performance efficiency by way of direct relationship between multi-nationality companies and local companies, as it can be a backdoor relation represented by increasing the production capacity, or a front relationship represented by the function of marketing.
- Foreign direct investment develops the competitive spirit among the local companies; it becomes necessary for these companies to focus on achieving continuity as well as expansion and development of its facilities.
- Reducing unemployment through the establishment of new projects provided by multi-nationality companies.
- Raising the level of economic development through the provision by foreign direct investment of cash and kind capital, which has a positive impact on the economy and trade of the host country through the implementation of medium and long-term development programs (Faudhil, 2004).

**Disadvantages of foreign direct investment to the host country:**

- A foreign investor may dominate some industries in the host countries, for example: in France, foreign direct investment companies dominated 75% of the computer sector and information processing rate, and in Belgium the same happened to 78% of the electrical engineering sector.
- Intensive use of advanced technology by foreign direct investment companies increases unemployment in the host country.
Different customs and beliefs between the investor and the host country may negatively affect the national culture, through the promotion of bad consumer goods.

The foreign investor threatens the sovereignty of the state through the pressures it exerts on the government of the host country, especially if the investor works in the strategic sectors.

The use by foreign direct investor of twisted methods for tax evasion and foreign currency exchange.

Foreign direct investment can be a factor in the transfer of domestic financial resources abroad as well as the exit of money in the form of profits and returns in the long term, i.e. when the investment reaches maturity.

Granting tax exemptions to foreign companies may result in a reduction of the resources available to local institutions (Atiyya, 2001).

The second Topic:

Literature review and contemporary studies of the role of foreign direct investment in the external agricultural trade in some Arab host countries.

The subject of the effects and changes resulted from foreign direct investment in the external trade of the host countries is one of the subjects that raised much controversy and doubts about its seriousness and success in achieving the goals of external trade. The literature on this kind of investment indicates the existence of three main directions in this subject; the first asserts the importance of this investment, its merits and advantages due to its positive influence in external trade, raising the level of exports increase and imports decrease. In the second direction, those who oppose this type of investment asserts that it is sort of a one side match in which the winner is mostly the foreign direct investment companies as this type of investment deepens the deficit in payments balances of the host countries, deforms the patterns of domestic production and consumption and increase the imports. Supporters of the third direction choose the state of concurrence between the opposing and the supporting viewpoints and this state is adopted by some countries which encourage the attraction of this investment to participate in refreshing their external trade. From hereafter we decided to shed light on the most important studies that tackled this subject according to their historical sequence in a way which makes it possible to depend on them in the analysis and discussion of the research's problem.

In 2008 Al-Jailany, in his study about foreign investments and their effects on the economy of Sudan, stated that these investments contribute to bridging the gap of internal saving, covering the deficit in payments balance, increasing of exports and solving the unemployment issue through provision of employment opportunities in the agrarian sector, with these investments the number of projects executed by foreign direct investment companies increased form five agricultural projects in the year 2000 to 68 projects in the year 2007 the thing that made Sudan one of the countries participating in solving the world food problem.

In the year 2011, Al Abd published a research on the effect of foreign direct investment over the external trade in the Arab western countries in which he made clear that the international economic field has witnessed remarkable changes such as opening many markets, removing different kinds of restrictions from the way of external trade movement and the increase in the size of economic exchange including the values of foreign direct investment that became one of the main features of the economical performance and its globalization, the thing which largely participated in the growth of the level of agricultural exports increase in many Arab countries hosts of this type of investment.

In the year 2011, Quaidry stated, in her study on the role of foreign direct investment and economic development in Algeria, that most countries of the world started dealing with foreign direct investment companies for what they achieve of financial returns to the host countries; many of these countries have become in need for these foreign direct investments due to the decrease of local financial resources as a result of the lack of domestic savings, decrease of agricultural production levels and the increase of its imports, as this investment works on providing renewed resources of hard currencies, increases the contribution of the agricultural sector in the overall national income and facilitates the acquisition of modern technologies by the host country.

In 2013, Shahinaz stated in his study on foreign direct investments and their role in economic development (a study case of Algeria), that most Arab countries are competing to attract more companies of foreign direct investment considering their role in achieving targeted levels of growth through providing maximum possible amount of employment opportunities to mitigate the widespread problem of unemployment in the Arab countries and providing foreign currencies through the establishment of agricultural projects or productive projects of cash crops producible for exportation or to replace the incomes.

In a study at the year 2014, on the impact of joining the world trade organization on the flow of foreign direct investment, Shihab indicated that encouraging this type of investment enhances the conveyance of modern technology to the agrarian sector in the Arab countries, provides new opportunities for employment and stimulates the growth of the local economy. Furnishing suitable circumstances to attract this investment will change the status of agriculture in the Arab countries to the extent that enables these countries achieve self sustainment then to increase their agricultural exports, the researcher also elucidated that the increase of these investments flow to the Arab countries has contributed to changing their agricultural status from importing countries of the agricultural products to exporting countries of the same products.

In 2014, Oloyede elucidated, in his study on the impact of foreign direct investment on the development of the agrarian sector for the period 1981-2012, that Nigeria is qualified to benefit from the merits of foreign direct investment which concentrated in its agrarian sector; this investment participated in the development of its agricultural economy and consolidated the role of the agrarian sector in its overall national income. Nigeria was largely dependent on crude oil exports but now its agrarian sector became a means of attracting foreign cash and participate heavily in financing the state's budget by means of its exports of agricultural products.

In 2016, Chaudhary stated in his research, on the impact of foreign direct investment on the development of the agrarian sector, that India since 1991 started adopting
multiple reformation policies which worked on setting programs for developing the agrarian sector, and one of their most important concerns was to exploit the maximum possible number of foreign direct investments in its agrarian sector in order to raise the level of living of those working in this sector. The researcher stated that scientific studies which tackled the role of this type of investment in the agrarian sector have proved its participation in the provisioning of a large number of employment opportunities and in merging the agrarian sector of the host country with the international market, not to mention its role in increasing production and exports, this investment contributed to the execution of the green revolution in India in which its agricultural income level of growth increased to 11% till it became an exporter of many agricultural products – like rice- to most countries of the world.

In the year 2017, Khalifa and Mahmoud stated, in their research on the foreign direct investment and its effect on the economic development, that the signification of this investment rises in fields of big importance such as the increase of capital formation in light of Egypt's dependence on foreign debts with unfair conditions, reducing its dependence on external aids, and in the provision of hard currency which is the most important channel of bringing modern technology to the agrarian sector not to mention its positive effect on agricultural exports.

In 2017, Areegah, in his study on the development of foreign direct investment and the international challenges, stated that the international challenge faced Ethiopia was the decline of agricultural products' prices, but Ethiopia brought companies of this type of investment from China, India and Holland, and he asserted that Ethiopia worked on building compounds specialized in fulfilling the requirements of the foreign investors in the field of provision of agricultural resources in order to increase the amounts of crops to satisfy the need of domestic consumption and to increase its agricultural exports.

The Third topic: The statistic estimation and the economic construing of the foreign direct investment impact on agricultural external trade in the sample countries for the period 1995-2017.

Econometrics is a major tool that contributes to the evaluation of the components of economic theory by giving them numerical estimates that bring them closer to reality to be more logical and acceptable. This science attempts to combine economic theory with mathematical methods and statistical procedures to obtain quantitative estimates that can be used in economic decision-making and prediction, and to study the structural changes that occur in the structure of a country's economy. In our study of the role of foreign direct investment in agricultural foreign trade in some Arab countries for the period 1995-2017, most of the previous economic studies and economic logic indicate that the following variables are the most influential variables in the standard models used in the estimation and as follows:

First: Dependant variables

The values of agricultural exports and imports in the research sample countries (US $ million) were adopted as the dependant variables in the standard models used in the estimation.

Second: Independent variables

The following economic variables were relied upon as the independent variables that affect agricultural exports and imports and as follows:
1. Foreign Direct Investment in Agriculture ... US $ million
2. Foreign exchange rate ... (percentage)
3. State budget deficit ... (US $ million)
4. Inflation rate (%)
5. Economic stability ... an imaginary variable

Results and Discussion

First: Results of the quantitative analysis of the impact of foreign direct investment on agricultural exports in the countries of the study sample during the period 1995-2017.

| Table 1 |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Function type | X5 | X4 | X3 | X2 | X1 | Xi | States/Tests |
| Half logarithmic left | 0.019 | 0.006 | 0.024 | 0.312 | 0.001 | Bi | First: Egypt R² = 94.2% F = 55.01 D-W = 1.38 |
| | 0.22 | 0.01 | 1.26 | 10.78 | 0.87 | t* | |
| Half logarithmic left | 0.130- | 0.009 | 0.037 | 0.407 | 0.001 | Bi | Second: Jordan R² = 95.2% F = 67.86 D-W = 2.43 |
| | 1.17- | 0.04 | 2.62 | 7.17 | 3.39 | t* | |
| Half logarithmic left | 0.009 | 0.025 | 0.009 | 0.045 | 0.003 | Bi | Third: Morocco R² = 65.8% F = 6.55 D-W = 1.74 |
| | 0.15 | 1.93 | 2.88 | 2.47 | 2.22 | t* | |
| Half logarithmic left | 0.194- | 0.131- | 0.112- | 0.432 | 0.003 | Bi | Tunisia: R² = 55% F = 4.15 D-W = 1.17 |
| | 0.62- | 1.30- | 0.81- | 0.67 | 3.07 | t* | |

Source: Prepared by the researcher based on the results of the quantitative analysis of the impact of foreign direct investment on agricultural exports in the countries of the study sample during the period 1995-2017.
The results of Table 1 show the significance of the variable of foreign direct investment values (X1) in affecting agricultural export values in Jordan, Morocco and Tunisia (*). With a flexibility of 1.75, 3.52 and 3.48 units, the positive signal of this variable coincides with the results obtained from the studies made by scholars of the school of regeneration, which emphasized the positive role of this type of investment and its role in increasing the value of agricultural exports in the above-mentioned countries, through providing foreign currencies, technical and administrative expertise and technological advantages that none of the international sources of finance have been able to provide (Abu Qahf, 1991). The significance of the variable mentioned did not appear in Egypt. The results of analysis showed the significance of the variable of foreign exchange rate X2 in Egypt, Jordan and Morocco with flexibilities of 0.002, 0.007 and 0.28 units, and the positive signal of the parameter of this variable reflects the direct relationship between this variable and the adopted variable, which is explained by the fact that foreign direct investment companies have caused a reduction in the external value of the currencies of the above mentioned countries, hence, reducing the prices of their agricultural products in the external markets and, consequently, increasing the demanded amounts from them nationally and internationally and that means increasing the revenues of these countries from the foreign currencies supplied by the agricultural export channel, which is usually used for stimulating investment in the sector concerned, especially in the fields of producing crops with export prospects (Al-Fakhri, 2006). The significance of this variable did not appear in Tunisia, and the results of the estimate showed the significance of the variable of deficit values in the general budget of the state (X3) in both Jordan and Morocco, with flexibilities of 1.41 and 1.54 units. The positive signal of this variable's parameter is explained if we know that these countries' general budgets are often financed by new cash issuance due to insufficient domestic funding resources, the thing that generated an increase in the growth rate of cash liquidity and this resulted in redistribution of national incomes of the mentioned countries in a way that increases their investment expenditure in the agricultural sector through financing new agricultural projects or exploiting disabled agricultural resources to generate additional real incomes that contribute to increase agricultural exports (Ghazal, 2003). The significance of this variable did not appear in both Egypt and Tunisia, and the results of the estimate showed the significance of the inflation rate variable X4 in Morocco with a flexibility of 3.93 units. The positive signal of this variable's parameter contradicted our expectations and the concepts of economic theory, as many specialized economic studies have confirmed that the increase of inflation rate by 1% leads to a rise in the rate of savings by 0.5% unit, and also confirmed that inflationary financing usually accompanies the rapid economic growth processes like what happened in Japan during the period 1933-1935, in addition to the experience of India in its five-year plan for the period 1951-1956; these studies showed that rather high inflation rates are necessary to achieve the paths of economic development in both the developing and the developed countries, this is reflected in the high saving and investment rates in the agrarian sector, which appear as a result of the increase in productivity and the surplus, of which a large part is allocated for export purposes (Al-Qotachi, 2011). The significance of this variable did not appear in the rest of the sample countries. The results of the estimate showed absence of the economic stability variable's (X5) significance in affecting the value of agricultural exports in all the sample countries, which means that these countries are experiencing economic stability during the study period to the extent that the agricultural exports sector will not be affected by any effects of this type that limit its efficiency.

Second: Results of the quantitative analysis of the impact of foreign direct investment on agricultural imports in the countries of the study sample for the period 1995-2017.

<table>
<thead>
<tr>
<th>Function type</th>
<th>X5</th>
<th>X4</th>
<th>X3</th>
<th>X2</th>
<th>X1</th>
<th>X1</th>
<th>States/Tests</th>
</tr>
</thead>
<tbody>
<tr>
<td>Half logarithmic left</td>
<td>0.050</td>
<td>0.011</td>
<td>0.055</td>
<td>0.003</td>
<td>0.001</td>
<td>Bi</td>
<td>First: Egypt R² = 76.9% F = 11.35 D-W = 1.84</td>
</tr>
<tr>
<td></td>
<td>0.69-</td>
<td>1.36-</td>
<td>3.34</td>
<td>0.15</td>
<td>1.84</td>
<td>t*</td>
<td></td>
</tr>
<tr>
<td>Half logarithmic left</td>
<td>0.095</td>
<td>0.061</td>
<td>0.018</td>
<td>0.312</td>
<td>0.001</td>
<td>Bi</td>
<td>Second: Jordan R² = 93.1% F = 45.82 D-W = 2.49</td>
</tr>
<tr>
<td></td>
<td>0.85-</td>
<td>2.63-</td>
<td>1.27</td>
<td>5.51</td>
<td>3.54</td>
<td>t*</td>
<td></td>
</tr>
<tr>
<td>Half logarithmic left</td>
<td>0.022</td>
<td>0.045</td>
<td>0.037</td>
<td>0.031</td>
<td>0.004</td>
<td>Bi</td>
<td>Third: Morocco R² = 91.2% F = 35.08 D-W = 2.11</td>
</tr>
<tr>
<td></td>
<td>0.24-</td>
<td>1.42-</td>
<td>4.56</td>
<td>0.69-</td>
<td>0.01</td>
<td>t*</td>
<td></td>
</tr>
<tr>
<td>Half logarithmic left</td>
<td>0.133</td>
<td>0.058</td>
<td>0.121</td>
<td>0.171</td>
<td>0.001</td>
<td>Bi</td>
<td>Fourth: Tunisia R² = 53.8% F = 5.24 D-W = 0.94</td>
</tr>
<tr>
<td></td>
<td>0.67-</td>
<td>0.93-</td>
<td>1.38-</td>
<td>0.42</td>
<td>2.19</td>
<td>t*</td>
<td></td>
</tr>
</tbody>
</table>

Source: Prepared by the researcher based on the results of quantitative analysis of the impact of independent variables on the values of agricultural imports in the countries of the study sample during the period 1995-2017

The results of Table 2 show the significance of the foreign direct investment variable values X1 in its positive effect on the value of agricultural imports in Egypt, Jordan and Tunisia with flexibilities of 2.42, 1.77 and 0.65 units, and the positive signal of the parameter of this variable means that foreign direct companies have worked on the increase of
imported quantities of high-yield agricultural inputs as well as the use of modern agricultural mechanization in using the land and in developing the existing agricultural industries, this reflects its impact on increasing the quantities of strategic crops produced in the host countries (Chaudhary, 2016), and this justifies the direct relationship between these two variables. The significance of the mentioned variable was not shown in Morocco, and the results of table 2 showed the significance of the foreign exchange rate variable X2 in its positive effect on the imported quantities of agricultural products with a flexibility of 0.002 units. The positive signal of the parameter of this variable means that the policies of foreign direct investment companies in Jordan reduced the value of the Jordanian currency and this has reflected its effect on the increasing quantities of imported agricultural products (Kasim, 1989). The significance of this variable did not appear in the rest of the study sample, and the results of the analysis showed the significance of the deficit variable in the state’s general budget X3 in both Egypt and Morocco with a flexibilities of 1.33 and 1.50 units. The positive signal of the parameter of this variable contradicted our expectations and the concepts of economic theory, and the reason for this is that the deficit in the general budget of both countries is often financed by public debt instruments tradable in financial markets of which the most important is the new monetary issuance which aims at stimulating investment, raising growth rates of economic sectors and increasing their effectiveness and giving them a greater role in economic life, and that justifies the direct relationship between both variables (League of Arab States, 2015). The significance of this variable did not appear in both Jordan and Tunisia, and the results of Table 2 showed the significance of the Inflation rate variable (X4) in its positive impact on agricultural imports in Jordan with a flexibility of 0.13. The positive signal of the parameter of this variable violated the concepts of economic theory, the reason is that the policies of foreign direct investment has raised inflation rates in the mentioned country in addition to their role of reducing the barriers and the customs restrictions on the entry of goods and stocks into the country, which reflected its impact on the high rise in domestic production costs, the thing that made imported agricultural commodities cheaper than their domestic counterparts, and this justifies the direct relationship between both variables (Peruch, 2001), significance of this variable did not appear in Egypt, Morocco and Tunisia. The results of Table (2) also showed that the economic stability variable (X5) is not significant in influencing the values of agricultural imports and in all countries of the study sample, the reason is that these countries have witnessed economic stability during the study period to the extent that their agricultural imports were not affected and this result corresponded to the effect of the same variable on agricultural exports.

**Recommendations**

- Adopting wise agricultural policies in the developing countries of the study sample in a way that leads to providing suitable environment and investment climate for attracting more foreign direct investment companies to their agricultural sectors.
- Adopting a policy of reducing the value of the local currency in order to encourage agricultural exports and to penetrate the international markets; this policy has a significant role in bringing maximum possible amount of foreign currencies to countries host of foreign direct investment.
- Setting a long term policy for imports and agricultural production to cover the demand, and the current and expected production and this leads to increase in he produced amounts and reduce in the agricultural imports.
- Employing foreign direct investment companies in establishing integrated industrial sectors for the inputs of agricultural production, especially improved seeds, fertilizers and agricultural mechanization in addition to reducing dependency on external sources as well as reclamation of lands to enable them of producing extra amounts that limit agricultural imports.

**Conclusions**

- Foreign direct investment is one of the most important means that contribute, with positive effects, in increasing the value of agricultural exports in most of the sample countries.
- Declination of the value of foreign direct investment incoming the countries of the study sample during the period of the study due to the unsuitability of their infrastructures and the small size of their agricultural exports at all the time of capital circulation, and the inability of the sample countries to provide suitable climate for them.
- Inability of achieving the situation of complete use of agricultural production factors in countries of the study sample and this made it difficult to establish agricultural projects of proper production volume of which most its production is allotted for export.
- Foreign direct investment companies lead to increasing the value of exports and limiting agricultural imports through their association with the companies of domestic agricultural investment, considering that the said investment increases the production of the unit area by means of using modern technology to the extent which production becomes dedicated for exportation and agricultural imports are limited.

**References**


