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Measuring The Impact of Trade Policy on Foreign Direct Investment into Iraq for The Period 2004-2020

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ABSTRACT: This research measured the relationship between the Iraqi trade and foreign direct investment flows into Iraq. The descriptive and the standard approaches were used to analyzie the financial data during the period (2004-2020). The results showed that there is a two-way relationship between exports and the foreign direct investment, depending on the method of least squares OLS. The study also found that the fourth independent variable (trade balance) was the only variable in the model that was not significant and not statistically acceptable. The study recommends the Iraqi government to legislate some investiment laws to active investiment in the country. It also indicates the necessary to get benefit from the experiences of others in promoting investiments.

KEYWORDS: Foreign direct investment, Iraq, policy, trade.

1. INTRODUCTION

The process of attracting foreign direct investment to Iraq is one of the priorities of development plans, as demonstrated by the structural reforms adopted by the Iraqi government. Because of the advantages that the development plans provide for Iraq in the field of providing capital, in light of the low level of public revenues for Iraq. Likely, it has been noted that foreign direct investment flows have witnessed a remarkable development in recent years after the reforms and the Iraq openness to economic and trade. Moreover, the agreements concluded between Iraq and the European Union Countries for free trade have contributed to expanding the pace of development and raising the level of income flows. Therefore, it becomes a reciprocal effect between foreign trade and foreign investment flows. In this research, the researchers try to study the impact of trade policy in attracting foreign direct investment, with a review of the most important legalized proposals in the field of investment and trade. Based on the foregoing, the research problem can be formulated in a question as follow:

2. RESEARCH PROBLEM

The research problem is represented in the following question: To what extent does Iraqi trade affect the flows of foreign direct investment into Iraq? The study has the following variables: foreign direct investment is a dependent variable, and Iraqi trade is an independent variable.

3. RESEARCH SIGNIFICANCE

The importance of the research is the possibility of reaching the direction of the reciprocal relationship between foreign direct investment flows into Iraq and the value of Iraqi foreign trade. Accordingly, it is possible to design a vision for the decision-maker in Iraq.

4. RESEARCH HYPOTHESIS

There is a direct, statistically significant relationship between the value of Iraqi foreign trade, the source of foreign direct investment flows (as a dependent variable), and the foreign direct investment inflows into Iraq (as an independent variable).

The relationship between trade policy and foreign direct investment

Trade policy is defined as a set of measures and actions taken by the government with the aim of changing the structure and pattern of its exports and imports in order to better allocate resources and increase economic growth [1]. On the other hand, foreign direct investment is defined from an economic point of view as the productive employment of capital by directing savings towards uses that lead to the production of goods or services that satisfy the economic needs of society and increase its welfare [2]. Furthermore, it is also viewed as a long-term agreement between two investment parties, one is national and the other is foreign. The foreign party may be a public or private sector; the foreign party's participation takes several forms, whether it is financing, expertise, joint work, technology or providing marketing information [3].

Trade policies can stimulate foreign direct investment in multiple ways. The imposition of high tariffs may be sufficient to induce foreign direct investment to serve the domestic market instead of exports, and thus disrupt trade protection measures. Foreign direct investment, for example, agreements on free trade zones, customs unions and North American Free Trade Agreement (NAFTA) [4].

Exports are the new driving force for economic growth in the 21st century, primarily in the manufacturing and services sector, because foreign investment is directed to the productive sector, in which the marginal return is higher compared to other productive sectors. There is a clear and important role for international competition, especially for commodities destined for export. With the flow of foreign investment towards the productive sectors, the product destined for export becomes distinct in terms of competitive quality at the international level [5]. In fact, the difference in export tendencies among foreign investment companies is due to the difference in the general policies of the host country, due to the different laws and procedures used to protect the local product on the one hand, and the orientations and objectives of the industrialization strategy and the export policy of the country from the other hand. Such a difference stems from the structure of the national economy and its ability to adapt to developments on the other hand. Moreover, the investment climate of the host country and what is available to prepare in light of economic, political, social and environmental constraints stimulate and encourage investment.

Encouraging exports leads to benefiting from investment opportunities in the most productive economic sectors. Similarly, this encouragement can lead to strengthening specialization and increasing productivity on the one hand, and to opening new markets for national products on the other hand. It therefore leads to revitalizing local consumption, because the higher consumer incomes, the more demand for foreign goods becomes which activating the producers and trying to keep pace with foreign producers. Through the growth of the export sector, incentives for new, protected and foreign investments appear, and opportunities are provided to expand the scope of existing industries [6]. It can be said that whenever the trade policy is liberal and flexible, working to remove quantitative restrictions, and tending towards low rates of customs tariffs, the trade policy is thus, stimulating the development of exports and encouraging investment for export, and vice versa in the case of restricted trade policy (trade protection policy). Likely, foreign investments into the capital formation of the host country compensate for the lack of savings, as well as contributes to addressing the structural imbalance of the country's economy [7].

5. METHODS

With regard to the research methodology, it can be presented in the form of the following elements:

6. RESEARCH DESIGN

The researchers depended on both the descriptive and the standard approaches. The descriptive approach is used to analyze the theoretical relationships between the research variables in the context of trade and investment theories. Besides, the standard method is based on the method of least squares (OLS). Furthermore, the research used the inductive method; it applied the most important source countries of foreign direct investment flows to Iraq, and Iraqi exports to these countries.

7. RESEARCH LIMITS

Topics are delimited to the applied analysis of the Iraqi visible exports whereas the time limits, represented in the period (2004-2020).

Measuring the impact of trade policy on foreign direct investment (The applied study)

First, Description of the model: The standard model is represented by the following functional relationship:

So: $Y = f(X1, X2, X3, X4)$

Y: The dependent variable represents foreign direct investment (FDI) in Iraq for the period (2004 -2020)

X1: The first independent variable; it expresses the impact of the value of the total exports of Iraq on the foreign direct investment. Therefore, the exports play a positive and effective role in FDI. Likely, the availability of a strong export sector attracts more investment flows, as export revenues finance the national development plan which includes service projects that support investment, as well as infrastructure projects which are an important pillar for encouraging and attracting foreign direct investment.

X2 stands for the the second independent variable and refers to the impact of the value of the Iraqi total imports on the (dependent variable) FDI. Imports have an important positive impact on economic activity in general and in investment in particular. Similarly, the foreign direct investment has the same positive response due to the materials, equipment and supplies, spare parts and technology that these imports bring for local and foreign investors.

X3 is the third independent variable. It represents the economic openness of Iraq that occurred after the change of the political system in 2003. This openness has important and effective positive effects for both economic and investment activity in the national economy as it is a catalyst for production, consumption, investment, growth and foreign trade movements. Therefore, this openness leads to generating a dynamic movement in the national economy; it stimulates investment activity to expand projects and attracts foreign direct investment due to the reduction of restrictions imposed on trade in general and on foreign investors in particular.

X4 is the fourth independent variable; it explains the effect of the trade balance on the (dependent variable) FDI. The deficit or surplus in this balance reflects a clear picture of the nature of the country’s economic activity; the level of effectiveness aggregate demand affecting foreign direct investment, and then the impact of this variable varies (X4). Depending on the state of deficit or surplus in the trade balance is a positive indicator that gives attractive indications for foreign direct investment. However, the effect is negative on the variable adopted when the trade balance deficit occurs.

Second, Estimating the Standard Model: The standard model will be estimated in four formulas: the linear formula, the logarithmic formula, the semi-logarithmic formula for (X) and the semi-logarithmic formula for (Y) depending on the data on the model variables for the period (2004-2020). The researchers applied the method of ordinary least squares (OLS), which its estimates are described as efficient and unbiased according to the BLUE property. They are the best unbiased linear estimates according to the Eviews program due to its most important statistical and standard indicators represented by the significance of the estimated parameters (T-test), the significance of the standard model (F-test), the intrinsicity of the model (the coefficient of determination) R2 and the corrected coefficient of determination Ř). In addition to the Variation Inflation Factor (VIF) test for the polylinear problem, the tests of standard problems represented by the Durbin-Watson (D-W) test for the autocorrelation problem, and the T.R Spearman rank correlation coefficient test for the heterogeneity problem were applied, as follows:

Third, The Standard Model Test: This stage is concerned with conducting economic, statistical and standard tests for the models that have been estimated and which are presented in Table 1. The researchers inferred from these tests that the second formula, which is the double logarithmic formula, has obtained the best economic, statistical and standard indicators, and thus it is the formula to be used for the analysis stage according to the following tests:

1 - Economic tests: The second estimated formula (double logarithmic) as shown in Table 1 is the best formula from an economic point of view. Since the signals and values of the independent variables parameters of trade policy are consistent with the nature of the effects that these variables have on the value of the dependent variable (FDI). On the contrary, the estimates of the other formulas were affected from the lack of mismatching with the theoretical side of the study; they also violate the nature of the economic effects performed by the independent variables of trade policy in the dependent variable that represents foreign direct investment.

2-Statistical tests: The double logarithmic formula has emerged in Table 1; it has the best statistical indicators. In terms of the significance of the estimated parameters, the (t) test has shown that the parameters of the double logarithmic formula were the most significant and statistically acceptable than the rest of the estimated formulas. Likely, the (F) test related to the significance of the estimated model as a whole indicated that all the estimated models were significant and statistically acceptable. With regard to testing the intrinsicity of the model depending on the value of the coefficient of determination and the corrected coefficient of determination, the double logarithmic formula was the most important too in terms of the value of this coefficient which amounted (R2 = 0.71, Ř2= 0.70) respectively. This indicates that about (70%) of the changes that occur in foreign direct investment (the dependent variable) is caused by the trade policy variables included in the model (the double logarithmic formula), whereas the remaining percentage (30%) is due to other factors that were not included in the standard model. Therefore, their impact was considered among the effects of the random variable of the model.

3-Standard tests: It is the test of standard problems represented by autocorrelation, multi-linearity and heterogeneity. With the exception of the second model (the double logarithmic formula), which successfully passed all the standard tests, the rest of the models suffered from some standard problems.

The first and fourth models were not heterogenious because the (t*) value of the Spearman rank correlation coefficient test respectively amounted (2.784, 2.511). It rejected the homogeneity of variance hypothesis, and accepted the alternative hypothesis at the level of significance (5%). It thus, confirms the heterogeneity of the error term variance.

Table 1. Measuring the impact of trade policy in Iraq on foreign direct investment

	Regression Equations	*F*	*Determination Factor*	*D-W*	*VIF*	*T.R Spearman*
1	$Y = 77.59 - 1.548 X_1 + 0.548 X_2 - 39.46 X_3 + 10.83 X_4$ tc = 1.247 -3.326 0.273 1.096 -2.845 P = 0.126 0.003 0.502 0.188 0.035	16.68 P = 0.000	R^2 =0.474 $\check{R}^2$ =0.462	2.237	8.564 1.607 2.152 5.678	t *=2.784 P = 0.046
2	$Ln Y = - 21.83 + 0.198 LnX_1 + 0.018 LnX_2 + 0.332 LnX_3 - 25.04 Ln X_4$ tc = - 2.515 4.542 2.987 5.428 - 0.669 P= 0.053 0.000 0.028 0.000 0.423	25.67 P = 0.000	R^2 =0.707 $\check{R}^2$ =0.696	2.201	6.142 2.054 3.813 7.105	t *=0.607 P = 0.295
3	$Y = 11.84 + 0.528 LnX_1 + 2.546 LnX_2 - 7.493 Ln X_3 + 27.94 Ln X_4$ tc = 0.875 1.08 0.932 -1.139 0.872 P = 0.332 0263 0.278 0.164 0.661	11.83 P = 0.000	R^2 =0.231 $\check{R}^2$ =0.217	0.462	10.08 9.545 6.379 15.62	t *=0.983 P = 0.228
4	$Ln Y = -1.795 + 48.81 X_1 + 87.96 X_2 - 0.854 X_3 + 6.412 X_4$ tc = -3.659 0.664 2.439 -0.124 1.984 P = 0.025 0.257 0.045 0.572 0.091	13.04 P = 0.000	R^2 =0.575 $\check{R}^2$ =0.568	3.482	9.651 22.67 9.249 11.54	t *=2.511 P = 0.036

Source: prepared by the researcher according to the (Eviews) program and by applying the data of the model presented in Appendix, 1)

Fourth, Standard Model Analysis: Because the double logarithmic formula is the one that has the best indicators and has passed all the tests successfully, the analysis phase will focus on this economically, statistically and standardized acceptable formula. From the estimated formula of the model presented in Table 1. It is clear that the value of the y-

section was significant at the level of (5%), statistically acceptable and with a minus value (-21.83). It indicates that in the absence of the influence of independent variables of trade policy, the direction of the FDI will be negatively opposite to the Iraqi economy. This clearly shows the importance of trade policy in attracting foreign direct investment. As for the first independent variable (X1), which represents exports, it had a positive effect on the dependent variable (FDI) by (0.198). It shows that when the value of exports increases by one unit, this leads to a direct increase in foreign direct investment by approximately (20%). This strongly matches with the role that the Iraqi economy attaches to exports, especially oil, which accounts for more than (95%) of the state's general budget revenues.

The same is the case with the second independent variable (X2), which expresses imports. The parameter's sign value of X2 showed its positive impact on the dependent variable (FDI), but by a modest amount of (0.018). It indicates that when the value of the Iraqi imports increases by one unit, it leads to an increase in foreign direct investment by approximately (2%).

Regarding the third independent variable (X3), which represents the level of openness of the Iraqi economy; this variable had an important impact on the development of the levels of foreign direct investment entering the Iraqi economy. Its value reached about (0.332). Therefore, when the restrictions imposed on foreign trade decline and the level of economic openness of Iraq develops, they lead to a rise in the levels of foreign direct investment by approximately one third (33%).

It is found that the fourth independent variable (X4) was the only variable in the model that was not significant and not statistically acceptable. It is a clear indication that foreign direct investment in Iraq is not affected by the state of the trade balance and is not concerned with it. Because the deficit or surplus in this balance reflects the state of foreign trade Iraq and does not reflect the level of investment activity.

8. CONCLUSIONS AND RECOMMENDATIONS

8.1 CONCLUSIONS

1- Foreign direct investment played a key role in developing the structure of foreign trade in Iraq. This was reflected in the balance of payments through the possibility of this foreign direct investment reaching the Iraqi market in terms of raising the export capacity and conquering new global markets, and then creating a surplus or reducing deficit in the trade balance. However, trade policy tools are still weak in attracting foreign direct investment.

2. When constructing the standard model, it was found that all exports, imports, and economic openness had weak signifiant effects on the dependent variable (foreign direct investment) due to its success in statistical and standard tests. However, the trade balance showed a lack of significant and non-acceptability from a statistical point of view.

9. RECOMMENDATIONS

The most important recommendations that can be extracted from the results of the research can be presented in the form of the following points:

1. The necessity for the Iraqi government to legislate some laws which support the investment law and activate the investment law and its amendments, such as anti-dumping laws, protecting the national product and others, and providing appropriate protection for the products of investment projects from competing with similar imported products.
2. Adopting an effective policy to promote investment by a specialized party that issues legislation and announcements, communicates with the world, holds seminars inside and outside Iraq to present investment opportunities, and concludes bilateral and multilateral agreements for investment.
3. It is necessary to get benefit from the experiences of some countries in promoting investments, whether in cooperation with international bodies that have a role in this field, such as the Multilateral Investment Guarantee Agency of the World Bank, or the establishment of an office to promote and provide investment services. This requires the need to create a comprehensive database on investment opportunities.

Appendic 1. The evolution of trade policy indicators in Iraq for the period 2004 - 2020 (million dollars/%) [8].

Years	Esp orts	Expo rts to GDP %	Oil expo rts	The share of oil in total export s% ,	Non -oil exp orts	Contribu tion of other merchan dise exports %	Exp ort Cov erag e Rati o (%)	Imports	Impor ts to GDP (%)	Import coverag e percent age(%)	Trade openness %	Trad e bala nce
2004	178 10	48.61	1770 0	99.4	110	0.6	8.36	21302	58.14	12.03	106.8	(349 2)
2005	236 97	47.34	2362 7	99.7	70	0.3	10.0 7	23532	47.01	9.95	94.2	165
2006	305 29	46.85	2806 0	91.9	246 9	8.1	13.8 7	22009	33.78	7.84	80,6	8520
2007	395	44.50	3771	95.4	181	4.6	20.2	19556	22.02	5.18	66.5	1997

	29		2		7		1					3
2008	63726	48.41	62226	97.6	1500	2.4	18.20	35012	26.60	5.62	75.2	28714
2009	39430	35.42	38294	97.1	1136	2.9	9.49	41512	37.29	10.84	69.2	(2082)
2010	51764	36.24	51569	99.6	195	0.4	8.483	43915	30.74	8.51	66.1	7849
2011	79681	41.67	79462	99.7	219	0.3	16.66	47803	35.04	6.02	66.2	31878
2012	94209	43.20	93915	99.7	294	0.3	15.96	59006	27.06	6.28	82.8	35203
2013	89768	38.25	89429	99.6	339	0.4	15.12	59349	25.29	6.636	66.8	30419
2014	83981	36.75	83778	99.7	203	0.3	15.79	53177	23.27	6.34	66.1	30804
2015	51338	30.77	51.147	99.6	191	0.4	10.81	47467	28.84	9.280	59.7	3871
2016	41298	24.78	41208	99.8	90	0.2	12.07	34208	20.53	8.30	45.7	709
2017	57559	30.69	57267	99.5	292	0.5	15.20	37866	20.19	6.61	50.2	19693
2018	86360	37.65	86100	99.7	260	0.3	18.88	45736	20.10	5.31	61.7	40624
2019	81585	36.67	81007	99.29	578	0.7	14.03	58138	26.13	7.17	63.2	23447
2020	46811	34.14	46491	99.3	320	0.7	9.72	48155	35.12	10.35	28.9	(1339)
Compound Growth Rate 2004-2020	5.85		2.61		6.48			4.91				(37.04)
Average Duration 2004-2020	57592	38.93	53993	98.62	593	1.3	13.70	41043	30.42	7.78	62.2	16173

REFERENCES

[1] Abdul Reda, N. J., & Hassan, B. K. (2015). The policies of liberalizing foreign trade and its repercussions on the Iraqi economy. Al-Ghadeer Printing and Publishing Company.

[2] Al-Daraji, S. G. H. & Al-Moussawi, H. A. H. (2021). Total investment between development effects and ways of benefiting in Iraq for the period (1990-2017). Center For Basra & Arab Gulf Studies, 45, (September), 115

[3] Abdul-Mir, N. A. (2021). The reality of industrial investment in the province of Basra and its future prospects: a study in industrial geography (Unpublished PhD thesis). University of Basra.

[4] Mohammed, S. (2012). The importance of high international investment agreements in attracting foreign direct investment. The New Economy Journal, 5.

[5] Qasim. S. A. Q., & Hussain, F. H. (2021). Measuring the impact of foreign direct investment in the development of Jordanian exports. Journal of Administration and Economics,10 (37), 91-120.

[6] Mounir, K. & Reem, T. (2017). The mutual impact of foreign direct investment and international trade: A standard study of the case of Algeria (199-2014), Journal of Human Sciences, 8(2),390-408.

[7] Al-Jourani, A. F. A. (2013). The role of scientific capabilities in attracting foreign direct investment - Malaysia as a model. Journal of Economic Sciences, 8(32), 56

[8] Central Bank of Iraq. Department of Statistics and Research, Department of Balance of Payments and Foreign Trade.