

The Impact of Some Monetary policy Tools on the Net Flow of Foreign direct investment in Iraq for the Period 2003 - 2019

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Abstract:

This paper has tried to study the impact of some monetary policy tools on the net flows of foreign direct investment in Iraq from the period 2003 to 2019, so it required us to address the different definitions of monetary policy and its objectives and tools used in influencing economic activity in general and then addressing for a descriptive analysis of the impact of some and the most important of these tools on the development of foreign direct investment flows, followed by a standard study in which we relied on the multiple linear regression model, which included a set of variables, which were represented in, money supply, exchange rate, interest rate and, inflation rate, and Through which it was concluded that there is a statistically significant negative relationship between Wide Money Supply with The Net Foreign direct investment, and that means the effectiveness of the tools in influencing The Net Foreign direct investment. Additionally, The Interest rate (R), which is among the instruments of monetary policy, is insignificant. This explains that there are other factors affecting FDI in addition to monetary policies.

Keywords: Monetary policy , Foreign direct investment , Interest rate , Exchange rate , Wide Money Supply .



مجلة الإدارة والاقتصاد

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1. introduction

Foreign direct investment is one of the modern topics in economics, and it is considered a means of low-cost development compared to external loans, its importance emerged at the beginning of the second half of the year The twentieth century accompanied the emergence of economic globalization, which was characterized by the opening of markets, the removal of various restrictions and, barriers, and the increase in international trade. Foreign direct investment played an important role in developing countries. The production capabilities of its host countries, through its use of the advanced technological level in production methods, creating employment opportunities, and, increasing exports, so most countries seek to attract more appreciate it because of its positive effects, and this is through legislation, infrastructure, and reduction or cancellation customs barriers and facilitating administrative obstacles, and that monetary policy is one of the main pillars Economic policies, through which the state works to attract this investment through the tools and the various mechanisms of monetary policy, just as countries with their various economic doctrines seek to make tools monetary policy works efficiently and effectively, in line with the state's economic policies; to achieve the goals, the desired goal, and Iraq is one of these countries that seek to achieve economic development and increase output The total through increased investment, whether local or foreign.

The main research question is: What are the impacts of the effectiveness of the monetary policy on foreign direct investment in Iraq? while the objectives of the study will focus on two main points: first, to identify the performance of monetary policy on net foreign direct investment, and second, the extent of the impact of monetary policy on attracting foreign direct investment to Iraq. The study will attempt to test three basic hypotheses to reach the actual results of the research, and they are first, there is a positive relationship with statistical significance between money supply and foreign direct investment, and secondly, there is a negative relationship with statistical significance between interest rate and foreign direct investment, and thirdly, there is a negative relationship Statistically significant between the exchange rate and foreign direct investment

1. Literature review

Many researchers touched on this subject through studies, whether analytical or econometrical, due to the importance of monetary policies in attracting foreign direct investment. On this basis, we address some of these studies.

Attia Muhammed Alawneh. (2015), The study aims to clarify the impact of quantitative fiscal and monetary policy on domestic and foreign direct investment in Jordan during the period (2000-2011). This study chose the independent variables of monetary policy tools, which include (rediscount rate, mandatory reserve, and open market process), The data was analyzed using the regression method Simple/Multiple Linear.

Al-Khawaja's study: (1995): The study tested the quantitative effect of the determinants of private investment in Egypt by using multiple regression analysis during the period (1992 - 1974), and the study found that there is a direct relationship between the exchange rate and investment. he

explained that the real exchange rates during the study period tended to decline, which led to a decrease in the relative prices for imports and the rise in the relative prices of exports, the results also indicated that there is a positive direct relationship between the granted credit. The private sector and the high rates of private investment. Given economic stability and uncertainty, it came with an impact negative impact on the volume of investment, as it was proven that there is a clear inverse relationship between high inflation rates and the level of investment, also, the burden of foreign debts has hurt private investment.

Study of (Andres and Loza) (2004): Empirical analysis of macroeconomic factors was used in Argentina by a time series using co-integration analysis from (1970 to 2000) and the results showed that the change in total output GDP and credit to the private sector has a positive effect on the growth of direct investment, and on the contrary, both come from instability in the exchange rate, external debt, inflation, and trade liberalization with a negative impact on the volume of investments.

Al-Shamli study, (2008): The study dealt with identifying the strengths and, weaknesses in the internal investment environment and its challenges in attracting investments and stressed that the success of increasing investment flows to Egypt depends on the internal environment and policies. The study also addressed the determinants of foreign investment by setting the necessary incentives and providing a working environment.

Ouattara study (2008): The study relied on the co-integration model and error correction in determining the effect of both inflation, taxes, and, external indebtedness on foreign investments in Senegal, the results came to confirm that there is an impact negative for those variables, as it confirmed that external instability and the phenomenon of uncertainty negatively and significantly affect the decision investment

Juthathip and Archanun (2008): The study formulated the private investment model according to the neoclassical theory of investment through several equations using regression analysis using the method (OLS) period (1960 - 2005), and confirmed that the availability of bank credit is one of the governing elements for increasing investment and indicated to the existence of a positive relationship between the exchange rate and investment, justifying this as reflecting the nature of export and the growth of the economy in Thailand, as well as the negative impact of the high- interest rate on investment.

Isika Babaita, Abd al-Rahim Abd al-Rashid, and Yusuf (2011): The research tries to estimate the impact of the monetary and fiscal policies on the levels of economic activities and economic growth in Nigeria, and the study is founded on the econometrical analysis that there was no statistically significant effect for any of the following variables, such as current government spending. Capital spending and tax revenue on economic activity is a specific problem, as well as the lack of a statistically significant effect of currency supply on economic growth in Nigeria. The study showed that capital spending and tax revenue do not have any significant statistical impact on economic activity, and so, it has no effect on economic growth.

Zulkifl Abdul Karim's (2010) study examines the impact of the monetary policy on institutional investments in Malaysia, and the research used a neo-classical dynamic framework, in the delayed distributed autoregressive pattern (ARDL). The impact of monetary policy tools on institutional investments is not homogeneous and there are varying results according to the size of investment institutions, and therefore small institutions that faced financial restrictions respond faster to the monetary adjustment compared to the large-sized firms that may slow in their response to these financial restrictions.

3, Foreign direct investments (FDIs)

There are several definitions of foreign direct investment, and these definitions have varied aspects according to the source of its definition. Investment can be defined as It is "the change in the balance of capital during a specified period" and therefore, unlike capital, it represents a flow rather than an existing balance At a specific point in time, this means that it must be measured during a certain period (World Investment Report, IMF, 2009)

According to the definition of the international monetary fund, foreign direct investment is defined as "those cash flows that through it, by foreign companies seek to own shares of the capital of national companies in other countries, not less than 10% of those shares so that they can influence the management and decision-making of these national companies" (Duv, 2006). While the organization for economic Co-operation and Development (OECD, 2008) defined it as "that type of investment that aims to create a lasting interest." Between a resident national institution in an economy (the direct investor) and another non-resident institution (the foreign investment institution). direct), and permanent interest means the existence of a long-term relationship between the direct investor and the foreign direct investment institution, by influencing decision-making, and this definition is consistent with what is stated in the Manual on the Current Balance of Payments of the International Monetary Fund. (IMF, 2009). Foreign direct investment is also defined by the United Nations Conference on Trade and Development (UNCTAD, 2007) "as an investment that involves a long-term relationship that reflects the permanent interests of a foreign investor who is managing a project outside the borders of the state and reflects the permanent benefit and control of the foreign investor or the parent company in a foreign branch located in a host country other than that which they belong to.

However foreign direct investment is defined also as a group of Emerging flows as a result of the transfer of investment capital to independent countries to maximize profits and achieve the desired benefits in partnership with local capital to set up various projects in those areas countries, where investors are given the flexibility of management and leadership in the investing companies, as they are invested Capital by foreign investors, meaning that the investors invested their capital money in another country or country other than the home country (Ramdan et al., 2020)

4- The stability of monetary policy is one of the determinants of foreign direct investment

Monetary policy is one of the most important macroeconomic policies that affect economic activity in general. Economic theory also indicates that the

stability of monetary policy variables has an important role in attracting more inflows International finance, the most important of which is foreign direct investment, where the degree of stability of monetary policy variables is used as one of the means to express the level of the economic environment, monetary policy affects the management of international financial flows from Through several "corridors" called channels of transmission of monetary policy, the most important of these channels are: the real interest rate, the rate of Lending, inflation rate, number of months of imports covered by international reserves, external debt to output ratio GDP, in addition to expectations and information channel, so the control of inflation rates, the balance deficit payments, and increasing economic growth rates contribute to increasing financial flows from foreign direct investments, as well the country's credit rating by international institutions helps to attract more foreign direct investment flows the ratio of international reserves to imports also affects incoming flows, as an increase in this ratio reflects the stability of conditions also, the interest rate is one of the important determinants in the investment decision, in addition to the stability of exchange rates It is considered a necessary determinant as a function of monetary and economic stability.

5. Determinants of foreign direct investment in economic theory

The increasing importance of foreign direct investment has led most countries to seek to attract the largest amount of these important investments Which prompted many to try to explain the behavior of foreign direct investment and its determinants, and policymakers were interested in determining the factors influential, the most important of which are incentives and facilities, but it is wrong to consider that the multiplicity and diversity of incentives necessarily leads to an increase in the volume of foreign investments, but it depends on other factors (Gaber, M. A., and Gawad, 2013)

They are the factors affecting the flows of foreign direct investment, which are divided into (internal) attraction factors in the countries of the host and the expulsion (external) of the international environment (Feng yin and Mingqueye, 2014).

Among the most important internal determinants (attractive factors): are the availability of basic environmental and informational resources, the size of the market The absorptive capacity of the host country, economic freedom and the degree of openness to the outside world, the degree of political stability and Ease of procedures, stability of legislation, return on investment.

External determinants: Their importance has increased with the increasing trend of national economies to become more integrated into the global economy Especially with the increase of bilateral and multilateral international agreements together within the framework of the WTO, and global liquidity is also affected which is measured by the ratio of average real interest rates, a role in managing foreign direct investment flows (Arabatliy, 2011) as The real growth rate in the countries exporting foreign direct investment plays a role in increasing investment to the countries hosting it This rate creates opportunities for expansion in emerging and developing international markets (Addison, 2003).

6. Features of monetary policy in Iraq after 2003

The most important monetary policy tools in Iraq after 2003 are as follows:

- A- Legal reserve requirements:** To achieve monetary policy through regulations, the central bank of Iraq requires banks covered by banking law No. (94) of 2004 to maintain cash reserves in the form of cash holdings or deposits with the central bank of Iraq
- B- Open market operations:** The central bank of Iraq enters into these operations as a seller and buyer of banknotes and financial papers, the most prominent of which are the foreign currency auction, the treasury bills auction, the existing facilities, and the facilities of the lender of last resort.
- C- Bank rate:** This rate is considered appropriate by the central bank of Iraq to maintain the stability of interest rates, and its monetary policy will try hard to achieve stability by maintaining bank liquidity at levels commensurate with the bank rate

Table (1) The evolution of the money supply and its components during the period 2003- to 2019 (ID million)

year	Currency in circulation	Semi Money	Wide money supply (M2)
2003	4,630.322	2,323.63	6,953.95
2004	7,163.406	4,335.20	11,498.61
2005	9,113.060	5,546.51	14,659.57
2006	10,968.036	10,082.15	21,050.19
2007	14,232.475	12,688.30	26920.771
2008	18,492.502	16,369.43	34861.927
2009	21,775.679	23,579.61	45355.289
2010	24,342.192	35,946.98	60289.168
2011	28,287.361	43,779.94	72067.3058
2012	30,593.647	44,742.48	75336.128
2013	34,995.453	52,684.85	87680.307
2014	36,071.593	54,656.55	90728.14
2015	34,855.256	47,583.46	82438.712
2016	32,357.677	47,020.07	80377.744
2017	40,344.000	52,513.80	92,857.10
2018	40,498.000	54,892.60	95390.7
2019	47,639.000	55,802.10	103,441.10

Source: Central Bank of Iraq, published reports, various issues (2003-2019).

Exchange rate: There is an inverse relationship between the relative profitability of investment returns in the host countries for foreign direct investment and exchange rates. Lowering exchange rates leads to increased profitability for investors, so devaluation is considered an attractive factor for foreign direct investment, while exchange rate fluctuations affect the volume of foreign direct investment. Investment flows, as the unusually high volatility of the exchange rate in the host country, do not encourage investors to invest in this country, because the instability of the exchange rate increases the uncertainty of the economic prospects of the host country.

Interest rate: Positive interest rates have a role in increasing saving and investment and vice versa True because negative interest rates lead to a rise in the exchange rate by transferring a large percentage of savings into foreign currency deposits, and negative interest rates lead to the flight of local capital.

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year	Foreign direct investment/ Net Inflow FDI	Wide Money Supply (M2) Billion ID M	Exchange Rate ID for 1 \$ EX	Interest Rate % R	Inflation Rate% INF	Dummy Var. D
2003	4.561717175	6,953.95	1896	16	33.6	1
2004	0.819047736	11,498.61	1453	13.25	27	1
2005	1.03153064	14,659.57	1469	14.10	36.9	1
2006	0.587963056	21,050.19	1467	16.75	54.2	1
2007	1.093912892	26920.771	1255	17.55	30.8	1
2008	1.409951741	34861.927	1193	17.4	2.7	1
2009	1.431429891	45355.289	1170	14.8	2.8	0
2010	1.00796494	60289.168	1170	12.3	2.4	0
2011	1.120863398	72067.3058	1170	11.4	5.6	0
2012	1.559615273	75336.128	1166	11.2	6.1	0
2013	-0.99527921	87680.307	1166	10.8	1.9	0
2014	-4.455211245	90728.14	1188	10.67	2.2	1
2015	-4.541592226	82438.712	1190	10.78	1.4	1
2016	-3.754985923	80377.744	1190	10	1.2	1
2017	-2.63968585	92,857.10	1258	12	0.2	1
2018	-2.301341881	95390.7	1209	12	0.4	0
2019	-1.382701433	103,441.10	1196	12	-0.2	0

Table (2) The main variables of the monetary policy and foreign direct investment/Iraq – dinar

Source: Central Bank of Iraq, published reports, various issues (2003-2019).

7. Results of the Linear Regression. Discussion Upon Results:

7.1. Study Hypotheses

according to the previous literature review and economic theory, the study tried the following hypotheses:

Hypotheses:

H1: There is a negative relationship between Wide Money Supply (M2) and the net foreign direct investment

H2: There is a negative relationship between The Interest rate and the net foreign direct investment

H3: There is a positive relationship between Exchange Rate and the net foreign direct investment

H4: There is a negative relationship between Dummy Variable and the net foreign direct investment

7.2, Results of the Linear Regression

our model will depend on the multi-linear regression method by using the (E-Views12) program to examine the impact of the independent variables on the net flow of the foreign direct investment, where the form below was constructed:

$$\text{Net FDI} = f(, M, R, EX, INF, D) \dots\dots\dots(1)$$

Based on the results of the researcher, we can write the multiple regression equation as follows:

$$\text{Net flow FDI} = b_0 + b_1M + b_2R + b_3EX + b_4 D \dots\dots\dots (2)$$

thereby: **b1, b2, b3, and b4**, are considered partial regression parameters for independent variables, which through their signals, we can identify the direction of the relationship between the independent variable and the dependent variable.

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FDI: the net foreign direct investment in Iraq in Billion dinars value during the year t.

M Wide Money Supply (M2) Billion Iraqi dinars during the year t.

R: The Interest rate by the central bank of Iraq during the year t.

EX: Exchange Rate of Iraqi dinars to USA dollars during the year t.

INF. inflation rate in Iraq during the year t

7.3. The Unit Root Test

Despite the many tests for the unit root, and although the most common ones (Fuller Dickey Augmented), we will rely also on The Phillips-Perron test (PP), since the PP test is based on the assumption that The time series is generated through the moving Integrated Autoregressive process., while the (ADF) test is based on a less general assumption that the time series is generated through an Autoregressive process (AR). Accordingly, is considered a PP test (more accurate and more suitable for small samples)

table (3) Analysis of unit root test

Variables	Augmented Dickey-Fuller test			
	Level		First Difference	
	Intercept	Trend	Intercept	Trend
FDI	0.3648 (-1.8264)	0.4279 (-2.3001)	0.0053 (-3.7543)	0.0336 (-3.6440)
M	0.7669 (-0.9446)	0.3054 (-2.5471)	0.5023 (-1.5483)	0.7920 (-1.572)
INF	0.3603 (-1.8358)	0.1984 (-2.812)	0.0084 (-3.5955)	0.0421 (-3.5516)
EX	0.0289 (-3.133)	0.1038 (-3.1496)	0.0001 (-4.8645)	0.0023 (-4.6081)
R	0.4304 (-1.6923)	0.2754 (-2.6147)	0.0083 (-3.5984)	0.0533 (-3.4523)
Dummy	0.1317 (-2.4552)	0.3530 (-2.446)	0.0450 (-2.9547)	0.1684 (-2.904)
Variables	Phillips-Perron test			
	Level		First Difference	
	Intercept	Trend	Intercept	Trend
FDI	0.0485 (-2.9188)	0.2874 (-2.5872)	0.0054 (-3.7472)	0.0336 (-3.6442)
M	0.8332 (-0.7237)	0.8324 (-1.4633)	0.0066 (-3.6776)	0.0332 (-3.6485)
INF	0.3894 (-1.7754)	0.5294 (-2.1125)	0.0059 (-3.7159)	0.0309 (-3.6784)
EX	0.0000 (-7.014)	0.0000 (-5.9071)	0.0001 (-4.8645)	0.0023 (-4.6081)
R	0.2786 (-2.018)	0.6173 (-1.9499)	0.0080 (-3.6137)	0.0522 (-3.4612)
Dummy	0.3620 (-1.8324)	0.6259 (-1.9337)	0.0014 (-4.1817)	0.0090 (-4.1423)

Source: Author's Compilation Using Eviews 12

The unit root test result using the Augmented Dickey-Fuller (ADF) and Phillips-Perron test approach was presented in Table 3 above. The result shows that the following variables: FDI, M, INF, EX, R, and Dummy were stationary after the first difference, and the series became stationary at a 5% level of significance.

7.4. Analysis of Co-Integration Test

Johansen-Jouselus Co-Integration Test, which shows the existence of a single vector of co-integration, Table (4) shows the results of the effect test with a significant level of 5%, where the value of trace statistic is greater than the value of critical value except inflation rate, (and therefore we reject the null hypothesis) $H_0: r = 0$: (with no co-integration relationship We accept the alternative hypothesis. ($H_1: r = 1$) (Secondly, the results of the maximum value test show that Max-Eigen values are greater than critical value except for inflation and confirmed cases at a significant level of %5, (and therefore, we reject the null hypothesis ($H_0: r = 0$) and accept the hypothesis Alternative ($H_1: r = 1$) which confirms the result of the impact test, and accordingly we conclude that there is a long-term relationship between poverty and GDP growth, unemployment rate, inflation and confirmed cases.

Table-4-Johannsen Co-Integration Test

Variables	Unrestricted Co-integration Rank Test (Trace)			
	Eigenvalue	Trace Statistic	Critical Value 0.05	Prob.
FDI	0.503595	144.5539	103.8473	0.0000
M	0.375835	99.03025	76.97277	0.0004
INF	0.346007	68.39306	54.07904	0.0016
EX	0.274636	40.79022	35.19275	0.0112
R	0.173432	19.91988	20.26184	0.0557
Dummy	0.109513	7.539134	9.164546	0.1007
Variables	Unrestricted Co-integration Rank Test (Maximum Eigenvalue)			
	Eigenvalue	Max-Eigen Statistic	Critical Value 0.05	Prob.
FDI	0.503595	45.52366	40.95680	0.0143
M	0.375835	30.63718	34.80587	0.1448
INF	0.346007	27.60284	28.58808	0.0664
EX	0.274636	20.87034	22.29962	0.0781
R	0.173432	12.38075	15.89210	0.1649
Dummy	0.109513	7.539134	9.164546	0.1007

Source: Author's Compilation Using E-views 12

7.5 -Estimating Model Coefficient:

-Estimating the short-run coefficient

For the short-run analysis, the impact of inflation, wide money supply, interest rate, and exchange rate on Foreign direct investment can be illustrated in table (5). All independent variables significantly affect Foreign direct investment in the short run. There are no unmatched expected signs on the coefficients. Although economic theory emphasizes a positive relationship between wide money supply and foreign direct investment, the estimated model indicates a negative relationship in the long run, also in the short term, and this is consistent with economic theory, where if the wide money supply changes by one unit, Foreign direct investment decreases by (-9.93E-05) in the short run while in the long run, the responses are (-9.26E-05)

As for the other variables, such as inflation, their effect was negative, and this is consistent with the economic theory and what was stated in the basic research hypotheses. Also, the variable of the exchange rate, and the interest rate impacts were positive, as stated in the economic theory, and this was expected in the research hypothesis,

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To obtain the short-run ARDL model, the Error Correction Model (ECM) is necessary because it measures the speed of adjustment from the short-term imbalance to the long-term equilibrium. If the parameter is negative and significant, this indicates that there is a long-run equilibrium relationship. It is clear from the results that the value of the error correction coefficient is (-0.096913), with a significance of 1%, which confirms the existence of the long-term equilibrium relationship between the independent variables and the dependent variable.

7.5.1-Estimating long-run coefficient

In the case of co-integration between the variables, the next stage involves estimating long-run coefficients. The results in the long-term showed the existence of an inverse relationship between the wide money supply and foreign direct investment in the long term, like what came in the short term, as for other variables, the indication was not identical to the economic theory, but that was expected for the situation of Iraq were has been in the long war and long period of the economic interaction.

7.5.2--Estimating long-run coefficient

table (5) Estimation of (M, INF, EX, R, and Dummy) impact on FDI using the ARDL approach

Variables	Coefficient	Std. Error	t-Statistic	Probability
Constant	0.444174	0.850869	0.522023	0.6036
FDI	0.852394	0.047088	18.10231	0.0000
M	-5.84E-05	3.09E-05	-1.892804	0.0634
INF	-0.017029	0.007409	-2.298497	0.0252
EX	-0.000251	0.000575	-0.437220	0.6636
R	0.713156	0.162106	4.399310	0.0000
Dummy	-0.606078	0.183286	-3.306740	0.0016
Short run impact				
Variables	Coefficient	Std. Error	t-Statistic	Probability
M	-9.93E-05	2.64E-05	-3.761863	0.0005
INF	-0.041654	0.019424	-2.144450	0.0381
EX	0.004207	0.002848	1.477010	0.1475
R	0.321436	0.187738	1.712155	0.0946
Dummy	-0.192899	0.205559	-0.938411	0.3537
Long run impact				
Variables	Coefficient	Std. Error	t-Statistic	Probability
M	-9.26E-05	1.92E-05	-4.834391	0.0000
INF	-0.043573	0.012452	-3.499158	0.0010
EX	0.004800	0.001632	2.940740	0.0049
R	0.229637	0.103344	2.222060	0.0307
Dummy	-0.275641	0.109317	-2.521484	0.0149
FDI	0.779809	0.076447	10.20061	0.0000
Equilibrium point	-0.096913	0.029584	-3.275907	0.0019
R-squared	0.981901			
Adjusted R-squared	0.979405			
F-statistic	393.3269			
Prob(F-statistic)	0.000000			

Source: Author's Compilation Using Eviews 12

7.6 -Diagnostic test results

The Ramsey test, Breusch-Godfrey, ARCH test, and VIF test are displayed in table 6 above. The Ramsey test shows adequate stability of the model with

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marginal or limited omitted variables. The test is statistically significant. The Breusch-Godfrey test shows no serial autocorrelation with statistically significant probabilities. The ARCH test for heteroscedasticity shows that in fact, the model variables are homoscedastic with insignificant probabilities. The VIF test shows no multi-collinearity among the independent variables in a multiple regression model.

Table-6- Diagnostic test

Diagnostic Checking	Breusch-Godfrey test (Autocorrelation)	VIF test (Multicollinearity)	ARCH test (Heteroscedasticity)	Ramsey test (Identification)	Jarque-Bera test (Normality)
	Obs*R-squared (0.0000)	Variance Inflation Factor (3.2 – 52.25)	Obs*R-squared (0.0000)	Prob of F-statistic (0.9495)	Jarque-Bera (0.1763)

Source: Author's Compilation Using Eviews 12

Second model

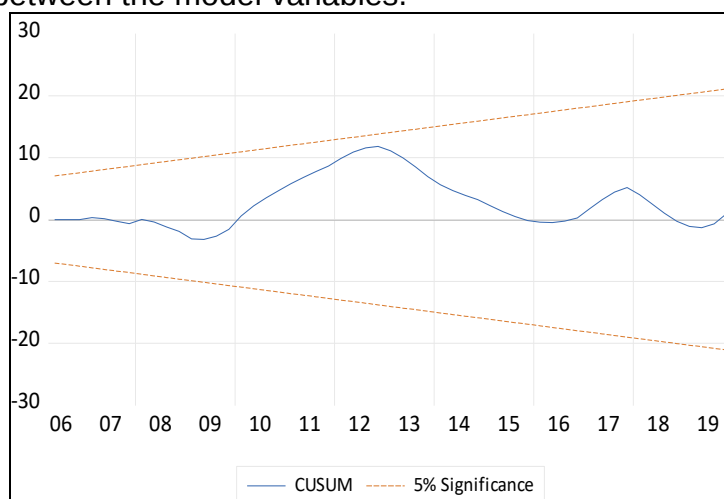
Diagnostic Checking	Breusch-Godfrey test (Autocorrelation)	VIF test (Multicollinearity)	ARCH test (Heteroscedasticity)	Ramsey test (Identification)	Jarque-Bera test (Normality)
	Obs*R-squared (0.2393)	Variance Inflation Factor (1.38 – 4.73)	Obs*R-squared (0.0174)	Prob of F-statistic (0.1261)	Jarque-Bera (0.06)

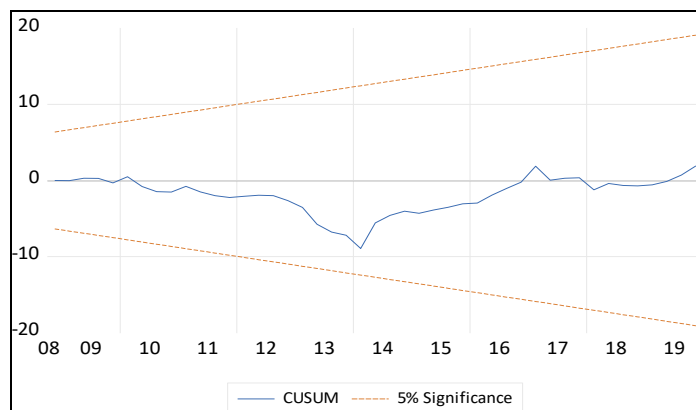
Source: Author's Compilation Using Eviews 12

8-Model Stability (CUSUM)

The UECM of the ARDL model consists of a structural stability test for the short and

The long term means that the data used in this study is free from the presence of any structural changes in it through time. To achieve this, two tests are used: the cumulative total test for the follow-up courses Cumulative Sum of Recursive Residual, and CUSUM Cumulative Sum of Square Recursive. (Pesaran, M. and Pesaran, B. ,1997). From the two figures below, the results of the CUSUM and TESTS CUSUMSQ tests the model was found to be stable, as the curve fell within 5% confidence limits The model is free from any special structural problems, whether serial correlation, error variance, or stability, the transition is to test the existence of a long-term equilibrium relationship between the model variables.





8. Conclusion

In this study, we have sought to make estimates of the potential short-term foreign direct investment impact of monetary policy in Iraq. While these estimates have important limitations as they have based on distribution-neutral assumptions and crucially omit social and fiscal policy: the study finds that:

1. For the short-run analysis, the impact of inflation, wide money supply, the interest rate, and exchange rate on Foreign direct investment can be illustrated that all independent variables significantly affect the foreign direct investment in the short-run. There are no unmatched expected signs on the coefficients. Although economic theory emphasizes a positive relationship between wide money supply and foreign direct investment, the estimated model indicates a negative relationship in the long run, also in the short term, and this is consistent with economic theory, where if the wide money supply changes by one unit, Foreign direct investment decreases by $(-9.93E-05)$ in the short run while in the long run, the responses are $(-9.26E-05)$
2. There is a positive relationship between statistically significant Interest rate and net foreign direct investment, which means a weakness of the tool in influencing net foreign direct investment, because of the high rate of the interest rate that makes outflow of investment more than the inflow of investment.
3. The existence of a statistically significant negative relationship between the Inflation rate and net foreign direct investment., which means an effective monetary policy to influence net foreign direct investment in Iraq.
4. The interest rate rates and exchange rate rates did not contribute to affecting foreign direct investment (net flows). That increase in both the interest rate and the exchange rate will lead to the outflows of foreign direct investments in Iraq because their rise leads to the instability of the economic situation.
5. The ARCH test for heteroscedasticity shows that in fact, the model variables are homoscedastic with insignificant probabilities. The VIF test shows no multi-collinearity among the independent variables in a multiple regression model.
6. Weak investment environment in Iraq, as a result of the political situation, conflicts, and wars going out in Iraq at this time. which are represented by the dummy variable (D)
7. In the results of the CUSUM and TESTS CUSUMSQ tests the model was found to be stable, as the curve fell within 5% confidence limits The model is

free from any special structural problems, whether serial correlation, error variance, or stability, the transition is to test the existence of a long-term equilibrium relationship between the model variables.

Finally, this study recommends the need for monetary policy in Iraq granting macroeconomic equilibrium to encourage the net foreign direct investment and using monetary instruments more developed. growth rate of the quantity of money in circulation (M) Inflation rate (INF), Interest rate (R), and Exchange Rate.

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أثر بعض أدوات السياسة النقدية على صافي تدفق الاستثمار الأجنبي المباشر في العراق للفترة 2003-2019

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المستخلص:

حاول هذا البحث دراسة تأثير بعض أدوات السياسة النقدية على صافي تدفقات الاستثمار الأجنبي المباشر في العراق من الفترة 2003 إلى 2019 ، لذلك تطلبت منا معالجة التعاريف المختلفة للسياسة النقدية وأهدافها والأدوات المستخدمة. في التأثير على النشاط الاقتصادي بشكل عام ثم تناول التحليل الوصفي لتأثير بعض وأهم هذه الأدوات على تطور تدفقات الاستثمار الأجنبي المباشر ، تليها دراسة قياسية اعتمدنا فيها على نموذج الانحدار الخطي المتعدد ، والتي تضمنت مجموعة من المتغيرات التي تمثلت في عرض النقود وسعر الصرف وسعر الفائدة ومعدل التضخم ، ومن خلالها تم الاستنتاج بأن هناك علاقة سلبية ذات دلالة إحصائية بين عرض النقود الواسع وصافي الاستثمار الأجنبي المباشر ، وذلك يعني فاعلية الأدوات في التأثير على صافي الاستثمار الأجنبي المباشر. بالإضافة إلى ذلك ، فإن معدل الفائدة (R) ، الذي يعد من أدوات السياسة النقدية ، غير مهم. وهذا يوضح أن هناك عوامل أخرى تؤثر على الاستثمار الأجنبي المباشر بالإضافة إلى السياسات النقدية.

الكلمات الرئيسية: السياسة النقدية ، الاستثمار الأجنبي المباشر ، سعر الفائدة ، سعر الصرف ، عرض النقود على نطاق واسع