Fluctuations in the exchange rate and its impact on the volume of exports and imports (Iraq is a case study for the period 2003-2016)

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Abstract: The exchange rate plays an important role in influencing various aspects of the economic structure. The importance of this role reflects a set of basic economic indicators, exports and imports and their impact on the development of the balance of payments, which is used to assess the success and safety of any economic system. Growth and inflation are the main objectives of the exchange rate policy, while most developing countries seek to reduce inflation and improve the balance of payment status as the main objective of exchange rate management policy.

INTRODUCTION: There are many theories that dealt with the issue of the exchange rate and how to determine it? and the factors affecting it. Iraq has passed through the past decade's unique circumstances not exposed to any developing country or even advanced throughout recent history, where the Iraqi economy came out of the high rates of inflation and instability of the exchange rate of the dinar, especially after the year (2003). The change of the political system in Iraq, such conditions that have passed the country led to the aggravation of most of the economic problems already plaguing the Iraqi economy as well as the conditions of Iraq and the nature of its economy.

Research problem: - The problem of research is to identify the effects of exchange rate fluctuations on the volume of exports and imports

Research hypothesis: - The research stems from the hypothesis that the exchange rate is of great importance in conducting the international exchange process through the reduction or rise of domestic prices as well as its role in rebalancing the balance of payments.

The objective of the research: - The research aims to shed light on the concept and functions of the exchange rate as well as factors affecting it and then to know the magnitude of the impact of exchange rate changes on import and export in Iraq

The importance of research: - The importance of research comes from the importance of the exchange rate and its fundamental role in addressing the imbalance in the balance of payments and rebalance of the scale as a fundamental variable and important in economic policy.

Structure of the research: The research divides into three topics are:

The first topic: the concept and functions of the exchange rate.

The second topic: exchange rate theories.

The third topic: Analysis of the exchange rate relationship in Iraqi exports and imports and the conclusion of the research in the most important conclusions and recommendations.

The first topic: Concept, and functions of the exchange rate

First, the concept of exchange rate Money is used in international economic transactions for the same consideration as for domestic transactions. However, the use of money in foreign exchange rates is very important in multilateral international economic relations and the exchange rate. "This is the price of one currency for another or the exchange rate between two currencies for instance (1) it can also be defined as the process by which the local currency exchanges by foreign currencies (2). This process called (foreign exchange) or (external financing). The exchange rate appeared when trade, exchange, investment and the transfer of capital between countries is done, which called for the emergence of an international currency other than the local currency. This requires a common relationship between these two currencies. Therefore, the price of a Foreign exchange rate of the currency rate is denominated in a currency in the form of another country. (3)

Moreover, the exchange rate is the rate at which the local currency has exchanged for foreign currency, i.e. the rate at which the local currency was converted into foreign currency to facilitate the international trade exchange. The local currency is equivalent to one unit of a foreign currency or the number of units of foreign currency equivalent to one unit of local currency (4). The exchange rate can determine the price of a domestic commodity in foreign currency and vice versa, as well as the costs involved in the production of this commodity. The first way is that the foreign currency is the commodity and the unit measured in local currency. This method called the direct method (5). The exchange rate recognized as the mirror that reflects the state's trade centre with the outside world through the relationship

between exports and imports, as exchange rates are a tool to link the local economy to the global economy. The export of goods to a foreign country increases the supply of foreign currency in the national market. In other words, imports increase the demand for foreign currencies and increase the supply of the national currency in world markets, while exports increase the National religion and increase the offer of foreign currency in the national market (6).

Second: the importance of the exchange rate: The exchange rate is one of the most important prices that exert a significant impact on all economic variables. This is through which domestic goods and services are evaluated by investors and foreign traders. It reflects the equation of all financial, monetary, and real assets among countries. Its stability reflects the economic stability of the country (7).

The exchange rate characterized as a link between the value of goods and assets in domestic markets and those in foreign (global) markets. Direct investment in domestic or external assets and the exchange rate plays a role in allocating domestic resources (8).

There is no doubt that there is an important and close correlation between the exchange rate and the balance of payments (9). These transactions with the outside world require the recognition of the amount of foreign currency per unit of local (national) currency. The importance of the exchange rate lies through the many functions of the exchange rate, namely:

- 1- Standard function: It represents the link between international prices on the one hand and local prices on the other. Domestic producers rely on the exchange rate to measure and compare domestic prices with world market prices
- 2. Development function: The exchange rate used in the development of certain exports to certain regions. It also works to dispense with industrial branches and replace them with imports whose prices are lower than domestic prices. The exchange rate also affects the commodity and geographical composition of the foreign trade of countries (10).
- 3. Distributive function: The exchange rate exercises a distributional function at the level of the international economy as it links to foreign trade through the process of trade exchange between countries, where it is through prices and thus conclude, that an exchange rate is a tool linking the local economy with the global economy. It shows the purchasing power of the local currency abroad and even within the economy, and also the importance of the exchange rate is that it has a standard function and development and distribution.

The second topic/exchange rate theories

The economic thought has made several attempts to explain the factors behind the determination of the exchange rate at a certain level, including the reasons for the exchange rate to the real factors, including attributed to monetary factors and some of the link between the two, and we will try to identify the following two highlights came to clarify the elements of the initial level of the exchange rate.

First, purchasing power parity:

The first to present this theory is the Swedish economist (G. Gassel) in the 1920s. This theory is still widely accepted by economists in explaining exchange rate movements, especially in periods of economic turmoil accompanied by the emergence of hyperinflation. To explain the failure of the countries of the world to return to currency parities after the World War and the failed return to the gold rule system in that period (11).

The idea of theory

This theory is based on the idea that there is a relationship between the level of domestic prices and currency exchange rates, so that the exchange rate movement reflects the change in local prices relative to world prices (or for the prices of another country), for example, if the Syrian pound has the purchasing power to buy a set of goods, and the Iraqi dinar has the purchasing power to buy twice the amount of these goods it means that the value of the Iraqi dinar, i.e., the exchange rate = 2 lira (12).

Theory Evaluation:

Despite the acceptance of this theory, especially in its interpretation of the failure to return to the system of the gold base based on equivalents that do not reflect the change in price levels in different countries after the war, but it has been subject to many criticisms, including:

- 1 This view is closer to the axiom because it is a mathematical expression of the law of the single price, which ensures the realization of every single price for all goods if all barriers to markets are removed (12).
- 2 This theory did not explain the factors determining the level of the exchange rate in the base year, but take it as a given as it passed with us.
- 3 This theory focuses on monetary factors in determining the exchange rate, while there are real and structural factors behind the movement of exchange rates such as the movement of capital and the development of the balance of trade and the rates of trade etc.

- 4 The change in the level of national income may affect the exchange rate without changing the prices locally or at least without the same price change, such as high volume of national income in a particular country leads to increased demand in general and demand for foreign goods in particular in other words increase imports without If accompanied by exports
- 5 Transport expenses affect the process of purchasing power parity locally and abroad, for example, if the Jordanian dinar is expressed in US dollars, because it does not buy the same volume of goods in America, it is known that there is a difference in prices between the two countries as a result of transport expenses and customs duties.
- 6- The theory neglects the impact of capital movements on the level of the exchange rate and all forms of those movements external debt, or financial aid on exchange rates such as the impact of supply and demand on different currencies
- 7. The theory states that the change in the exchange rate is caused only by the change in the purchasing power of money, and neglect other factors such as the change in consumer tastes and the emergence of alternative goods that may have an impact in determining the exchange rate. Real interest may not amount to reliable exchange rate calculations, but it provided much explanation for fluctuations in exchange rates since World War I until 1944 when the International Monetary Fund was established (2).

Second, the balance of payments theory:

The exchange rate represents another aspect of the balance of payments and therefore, the state of the balance of payments, its creditor and debtor operations determines the exchange rate. The balance of payments, which is moving towards improving its creditor position towards the world, tends to increase its currency exchange rate against other currencies and vice versa in the case of deficit and there are two inputs to absorb the surplus and deficit in the balance of payments are an entrance to absorb the deficit and surplus under the fixed exchange rate and the second is Under the flexible exchange rate.

Also, this theory is based on considering the external value of the currency to be determined on the basis of the change in the balance of payments balances. If the balance of payments of a country achieves a surplus, then this means an increase in the demand for the national currency, which leads to an increase in its external value, and the opposite occurs when a deficit in the balance of payments occurs, which indicates an increase in the supply of the national currency, which leads to a decrease in its external value. The war p was an indication of the validity of this theory, because the value of the German mark at that time was not affected, despite the large increase in the amount of money and its turnover and the rise in the price level, the reason for this is the balance of the account balance of Germany in a way that did not allow it to increase its imports over its exports, meaning that it was not There is no credit or debit balance in the balance of payments that affects the external value of the currency

The second topic - Analysis of the exchange rate relationship in Iraqi exports and imports: Analysis of the Exchange Rate Relationship in Iraqi Exports and Imports The volume of foreign trade in Iraq, in addition to imports, recorded a decline in its growth rates in 2014 by (-8%) by (13.9) trillion dinars to reach (160) trillion dinars in 2014 compared With (173.9) trillion dinars in 2013 where exports decreased by (6.7) trillion dinars, a decrease (-6.4) to record in 2014 (97.9) trillion dinars compared with 2013 (104.7) trillion dinars due to the decline in oil prices, which reached (96.8) dollar jPer barrel in 2014 compared to its average price in 2013 which reached (102.6) dollars / b Imports on a CIF basis also recorded a decline in their amounts by approximately (7.2) trillion dinars to reach (62) trillion dinars in 2014, a decrease (-10.4%) compared to 2013 (69.2) trillion dinars, as a result of Foreign trade to GDP at current prices to (61.4%) in 2014 compared to (64.1%) in 2013, the proportion of exports of which (37.6%), either imports contributed (23.8%) of the GDP at current prices. The trade balance (exports minus imports) recorded a surplus of JD (35.9) trillion (13.8%) of GDP during 2014. This change and instability can affect and affect the exchange rate of the local currency unstable for certain reasons. The country sometimes this can be seen through the following table: -

year	Dinar exchange rate against dollar (1)	Annual exchange rate (2)%	
2003	1896	-3.12	
2004	1453	-23.36	
2005	1469	1.10	
2006	1467	-0.14	
2007	1255	-14.45	
2008	1193	-4.94	
2009	1170	-1.93	
2010	1170	0	
2011	1170	0	

Table 1 Exchange rate of the Iraqi dinar against the US dollar for the period (2003-2017)

2012	1166	-0.34
2013	1166	0
2014	1188	1.89
2015	1190	0.17
2016	1190	0
2017	1190	0

Column (1) - Central Bank of Iraq - General Directorate of Statistics and Research - various annual bulletins.

As for the volume of Iraqi imports and exports, it can be seen through table (2). As we can notice as a result of changing the pattern of consumption by individuals to improve the living situation for them as well as to change the regime in Iraq, the rise in the value of imports, which reached in (2004) to (21303.3) and the reason for This is significant in prices and as a country with a unilateral economy depends on oil in the bulk of its exports, which reflected on the increase in salaries and wages and increase employment led to increased consumption and thus increased imports of all goods, and in 2014 B) the value of imports decreased b A simple form to become (53 176.6) million due to insecurity and terrorist attacks, while in (2016,2015) the value of imports decreased significantly to be (6684.2,39045.1) million dollars Because Iraq was exposed to a double shock, which is the low oil price and the security instability that Iraq has witnessed.

year	Import	Oil export	Non - oil exports	Total
2003	9933.5	8348.8	1362.3	9711.1
2004	21302.3	17455.7	354.3	17810
2005	23532	23199.4	498	23697.4
2006	22008.8	29708.1	821.3	30529.4
2007	19555.9	37847.1	1739.9	39587
2008	35011.6	61883.7	1842.3	63726
2009	41511.5	38964.7	465.7	39430.4
2010	43915.3	51453	310.6	51763.6
2011	47802.9	79407.5	273	79680.5
2012	59005.9	93778.5	430.1	94208.6
2013	59349.4	89349.8	418.1	89767.9
2014	53176.6	83538.8	442.1	83980.9
2015	39045.1	43058.6	382.9	43441.5
2016	6684.2	8442.7	29.6	8472.3

Table (2) Total Iraqi imports for the period (2003-2016) million dollars

Source - Central Bank of Iraq - General Directorate of Statistics and Research - various annual bulletins.

As for exports, we note that during the period studied, exports in 2003 amounted to (8348.8) million dollars. We also note through table (2) the apparent instability through the rise and decrease in Iraq's oil exports, but in general, the non-oil exports did not increase by more than exports. This is because of Iraq's relying on oil in the export process for the reasons mentioned above. The period from (2014) and before witnessed a significant rise in the value of oil exports due to the high oil prices, where the price of a barrel of oil in some years was approximately (140) dollars per barrel and this is evident by the value of oil exports to total exports, which formed in 2015, the value of oil exports fell from \$43,858.6 million and non-oil exports to \$382.9 million, but they remained the largest percentage of total exports. Exports, although declining, are evident in 2016 as the value of exports Oil exports (\$8442.7) million (99.65%), while non-oil exports reached (29.6) million dollars (0.35%) This is due to the significant decline in oil prices in the international market, which clearly affected the Iraqi economy as a rentier economy Its exports depend only on the oil supplier.

Clearly, the Iraqi economy being a rentier economy depends in its exports on the oil supplier only.

It is clear from the above, despite the rise in the value of the national currency against the dollar that the volume of exports witnessed a clear instability due to changes in world oil prices and the dependence of Iraq on a single resource is oil to the stability of the exchange rate with the high volume of oil exports has been reflected in the increase of imports significantly Indicating some of the reasons for the devaluation of the Iraqi dinar, mostly due to non-economic reasons as follows

- (A) The central bank financed the government's current budget deficit by issuing new cash, which led to a significant increase in the money supply.
- (B) The inability of the Central Bank to fully meet the foreign currency needs of citizens. This can be attributed to the following reasons:
- 1. Stability of demand for basic needs goods, as these needs are provided through the oil-for-food program, which was in a quantity that meets the needs of the Iraqi family for at least months to come.
- 2. At this stage, the demand for the dollar was not high as the Coalition authorities covered many of their expenditures in dollars locally, including salary disbursements as emergency aid.

Besides, several factors contributed to the improvement and stability of the exchange rate, including the issuance of the Central Bank Law No. 56 of 2004, which enabled it to achieve full independence for the Bank in formulating and implementing its monetary policy and resorting to the adoption of indirect means of monetary policy. The stability and improvement in the exchange rate of the Iraqi dinar vis-à-vis the dollar, as well as the issuance of a new Iraqi currency as an alternative to the old currency, gave the central bank the possibility to fully control the issuance process and reduce counterfeiting of the currency, which had negative effects on the value of the dinar.

Thus, there is a clearer policy of the Central Bank that allowed to enjoy good independence for the stability of the exchange rate of the Iraqi dinar and follow-up movements and make them within certain limits through foreign currency auctions adopted since 4/10 / (2004), and this auction has contributed to the achievement of the required objectives by The exchange rate dropped from JD (2000) per dollar in 2003 to JD (1172) per dollar at the end of 2008, which is one of the temporary measures used by the Central Bank in the implementation of its new monetary policy. Implementation of monetary policy and control Stability in the exchange rate of the dinar as well as it led to the disappearance of the parallel market.

Conclusions and recommendations

I. Conclusions

- 1. The appropriate exchange system for Iraq has been reached by knowing the specific factors of the exchange system under the conditions of stability. These factors differ in terms of their influence in choosing the appropriate exchange type. The second group of factors (freedom of movement of factors of production and economic integration) refers to support the stability of the exchange rate.
- 2 The Iraqi economy is a one-sided economy and depends heavily on oil in its exports and this is what we observed in the high volume of imports after the increase in prices and quantities of oil exported.
- 3 The size of the economy has an effective impact on the exchange rate where the Iraqi economy is characterized by its small size, which leads to the adoption of the fixed exchange rate.

II. Recommendations

The need to work to diversify the base of exports, especially exports where the Iraqi economy has a comparative advantage, such as industries based on the inputs of the oil sector, namely petrochemicals.

- Seeking alternative sources of income and GDP and reducing dependence on oil revenues as a source of financing for development projects.
- Work to develop the oil sector itself, and training the labor employed in it; to raise the level of productivity, and create a base for the development of local technological required.
- Diversifying the productive structure by creating new income-generating sectors, to reduce dependence on the oil sector, as well as opening new fields with higher value-added than those oil fields where production work is only one or two stages, as in oil refining operations and purified from impurities.

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