



Analytical reading of the impact of the exchange rate of the dollar and euro on foreign trade (case of Algeria 2005-2016)

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الملخص :

يعتبر سعر الصرف عنصر مهم في اقتصاديات الدول لما له من تأثير كبير على مستوى النشاط الاقتصادي من جوانب عديدة. إذ تبين لنا من خلال الدراسة. تأثيره الكبير على التجارة الخارجية. هذا المتغير الاقتصادي الهام، يتحدد في سوق الصرف تبعاً لتقلبات عاملي العرض والطلب المحدثين من قبل فاعلي السوق. ومن بين النتائج التي توصلنا إليها هي واردات الجزائرية تتأثر بسعر صرف الدولار الأمريكي وذلك راجع ان الجزائر تستورد باليورو، وتصدر بالدولار، فبمجرد انخفاض الدولار مقارنة بالأورو، تضيق الجزائر الفرق الناتج عن هذا الانخفاض.

الكلمات المفتاحية:

تبادل معدل، التجارة الخارجية، الصادرات، الواردات .

Abstract:

The exchange rate is an important element in the economies of nations because of its significant impact on the level of economic activity in many respects. Through the study, we found out that it had a great impact on foreign trade. This important economic variable, determined in the exchange market according to the fluctuations of the supply and demand factors updated by the market players.

Among our findings are Algerian imports influenced by US dollar exchange rate, which is due to the fact that Algeria is imported in euros and exported in dollars, as soon as the dollar declines compared to the euro, Algeria misses the difference resulting from the decline.

Key words:

Exchange rate, foreign trade, exports ,imports.

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1. INTRODUCTION

Changes in the exchange rate affect many macroeconomic variables, where the depreciation of the exchange rate leads to the effects of economic activity, through the rise in the prices of foreign goods "imports" for domestic goods, which leads to the reluctance of the decimating Local yen for foreign goods, leading to increased international competitiveness of domestic goods, high export volume and reduced imports, all resulting in improved trade deficits,

Among other things, the decline in local currency exchange rates can be accompanied by deflationary effects on the gross domestic product (GDP), through a decline in the purchase of export and import prices, which occurs in developing countries such as Algeria, most of the imports of developing countries are The expression of a necessary and indispensable supply of alcohol, as well as of the material that has entered into domestic industrialization and has no place for it, so the high prices of these imports lead To lower the public power of the national and to make the country affect inflation, as a result of the high price of imports, which is already evident in the study of exchange-rate effects, as it affects macroeconomic changes in The national economy, price levels and the volume of foreign trade.

Based on this, we subtract the following questions: In the light of the changes in the exchange rate, what effect does the exchange rate of the dollar and euro have on the Algerian foreign trade?

In light of this, the problem of the study is crystallized in the following sub-questions:

What are the interpreted theories of the exchange rate? How has the Algerian exchange rate evolved? What has been the impact of the change in the exchange rate of dollars and euros on exports and imports?

Hypotheses

To answer this problem and sub-questions, we assume the following hypothesis:



1. The interpreted theories of exchange rate changes vary according to its regulations and the various factors influencing it.
2. The exchange rate has continued to deteriorate, especially with the significant reduction of the Algerian dinar in 1994, and from 2001 to 2016 a constant fluctuation.
3. There is a direct correlation between the exchange rate, exports, exchange rate and imports.

Importance of the study

This study assumes the importance of:

- Statement of the economic effects of exchange rate on foreign trade.
- The exchange rate has a broad impact on the macroeconomic balance through its direct and indirect relationship with macroeconomic indicators, mainly the rate of inflation, growth rate and balance of payments.
- Lack of studies dealing with the impact of exchange rate on foreign trade.

Objectives of the study

Each study has reasons to reach goals and the objectives of this study are summarized as:

- provide a theoretical framework on the currency exchange rate and the most specific theories he has flashed the foreign trade policy.
- highlight the relationship between exchange rate and foreign trade.
- know the impact of the exchange rate of the dollar and euro on foreign trade (exports and imports)

Study Method:

A descriptive approach to knowledge of the theoretical basis in exchange rate as well as foreign trade and analysis to know the relationship between exchange rate and foreign trade by relying on a set of statistics and analyzing them in graphic formats and commenting on them.



I. Literature on exchange rate:

-models that examined the impact of exchange rate changes on foreign trade.

1. The CLACK model in 1977, which indicated that the decline in exports coincides with the export invoice, including the high domestic exchange rate, as intermediate inputs into the production process will increase the cost of inputs.
2. The HOPER and Kohlhagen model in 1978, where the latter found the effect of an interpreter of a bilateral relationship of exchange rate variables on both the import demand function and the supply function of exports in the sense that the change results in the changing prices of traded goods and in the opposite direction that it enters the production cost.
3. Model Cushmen 1983-1988 found that the loss of the source as a result of the relative volatility of the exchange rate is comparatively lower versus the foreign currency appreciation of the exchange rate (imported currency)
4. The HOPER and Kohlhagen model in 1978 is considered one of the most important early studies and models that have been prepared for subsequent studies and established, which have been woven by studies, theoretical and subsequent applied models and different samples of composition, time and geography that examined the impact of the exchange rate risk on foreign trade, The latter's movements, although explained by foreign trade flows, have a negative impact on trade flows such as Justuce Studies "1985-1987", Akhtar et Hilton "1984", Blenger et al "1992."

Among previous studie:

1. The study of Briaty Hussain thesis introduction to the doctorate under the title "Drainage systems and their impact and the extent of their impact on the economics of countries study case of Algeria Economic Sciences Department of the University of El-Chlef specialization international economy 2016-2017, where addressed the following problem: What is the effect of the dinar On Algeria's inflation and economic growth, and what drainage



system is appropriate to improve Algeria's overall economic performance under the current economic transformations? The analysis and standard study demonstrated the impact of the dinar exchange rate regime on inflation, allowing Algeria's adoption of the managed float system and a cautious monetary policy to reduce and control inflation; and a weak impact of the dinar exchange rate regime on economic growth, so that Algeria registered Weak and almost equal economic growth rates in all the exchange rate regimes that followed.

2. Study by Si Mohamed Kamal, PhD thesis entitled "Quantitative assessment of the impact of the euro and the dollar on foreign trade in Algeria" Department of Economic Sciences, University of Tlemcen specialization of finance and institutions, dealing with the following problem: What are the quantitative effects of both the dollar and the euro on Foreign trade in Algeria? The findings of the study show that the inverse relationship between the dollar and oil during the last decade has led to an increase in the value of exports despite the decline of the dollar to the euro, which contributed to a policy of anti-public spending, which led to a high cost of imports and the decline of the dollar against the euro Raise the import bill because the latter is the currency of 50% of imports from the euro zone.

2. Interpreted theories of the exchange rate

Many economic theories have tried to interpret exchange rate differences between different countries and the most important of these theories.

First: purchasing power parity Theory (Gustave Cassel)

"The modern treatment of this theory is due to the Swedish economist, Professor Gustave Cassel, when he issued his book entitled" Money and foreign exchange rates "after 1914, where the latter tried to find a new basis for evaluating the price of each currency for the other, other than the gold basis, and he came up with a theory. Purchasing power parity based on the idea that the price of parity between two currencies



is determined when the purchasing power of each country's currency is offset in its domestic market with its purchasing power in the market of another state, after converting it to the latter currency according to the exchange rate that achieves this tie and the theory two images : Absolute image and relative image."¹

"The equation of purchasing power theory is written in the following form:

$$R2 = R.N \frac{pa.n}{pb.n} \cdot \frac{(pa.n+1)}{(pb.n+1)} \cdot (R.n + 1) .$$

"Where: R2: New exchange rate after adjustment, R.N exchange rate in the first time period, R.N + 1: Exchange rate in the second time period, pa.n: the level of domestic prices in the first time period²."

The relationship between the exchange rate and the relative price level can be expressed by using PPP theory as follows: Figure 1

Second: The theory of equal interest rates (John Minard Keynes)

"This theory goes back to economist John Minard Keynes 1923 the principle of equivalent interest rates based on the arbitrage behavior between financial investments is not between commodities as the theory of purchasing power parity assumes, it is based on the relationships between the real-time exchange markets and the markets of the term³"

The equivalent of interest rates is written as follows: $\frac{CT-CC}{CC} = iD - iE$

CT: Exchange rate CC: Exchange rate real-time cash ID: nominal external interest rate IE: nominal internal interest rate.

"This theory allows the national currency markets to be linked to the exchange markets⁴".

Figure 2 represents the line is equivalent to the interest rate.

Third: Stock theory

The Economist " nurks " spoke about the relationship between the exchange rate and the balance of payments by saying that the exchange rate is that which affects over a period of time or a number



of years until the balance of payments is balanced and the exchange rate of the local currency is determined according to the balance of payments situation because its different paragraphs Are the main sources of the country's demand for foreign currencies "5," the exchange rate of the national currency is determined by the offer of foreign currencies, foreign money is required according to the conventional balance of payments theory in order to acquire goods and services from abroad. The foreign currency offer is determined by the balance-of-payments status of the country's export earnings and the net flow of non-bank capital.⁶

Fourth: Market efficiency theory

Delkaoui has defined the efficient market as a market that is in constant equilibrium so that the prices of the securities in it are exactly equal to their real value, and move in a random way without the possibility of control.⁷ Efficient markets mean that the information is available to all economic dealers whether new or old, and that all market dealers have the same opportunities and privileges so that this information (economic, political... etc. (effect on the term or urgent exchange rate, the cost of information in the efficient market is weak and the exchange rate changes are random and thus the market is characterized by stability. However, there is a debate about the efficiency of the current markets only the Giddey et Duffy tests in 1975 and 1976 showed the efficiency Markets, while the 1986 Hunt and Donald Mc study in 1989 revealed a relatively inefficient exchange market, while most dealers are likely to be the result of a relative efficiency in exchange markets⁸ and are mathematically expressed as follows:

$$\frac{e_{t+1}^a - e_t}{e_t} = \frac{e_a - e_t}{e_t} = i - i^*$$

e_{t+1}^a Expected exchange rate at t for t+1, e_a Exchange rate term,
 i Local interest rate, i^* Foreign interest rate

In case of market efficiency $e^a = e_{t+1}^a$



Fifth: The theory of the amount of money:

"The quantum theory boils down to the fact that the increase in the amount of money leads to higher domestic prices leading to a change in the international exchange coefficient then a shortage of exports and therefore an unfavorable balance of arithmetic. The amount of money factor affects the external value of the currency. "9
"Represented by the following equation:"

$$M.V = P.T$$

Where: M represents the amount of money, V: represents the speed of money circulation, P: the general level of prices, T: the amount of exchanges (volume)¹⁰

Sixth: Productivity Theory

"The objective of this theory is that in order to achieve economic balance and monetary stability of the state, the exchange rate must be in the same direction as the production forces of this state, as the size and efficiency of the production apparatus, the significant impact in determining the exchange rate of the local currency, and the consequent increase in the level of productivity Lower cost and increase of products and increase the competitiveness of the State to export and thus increase the level of demand for the currency of the State and its appreciation against foreign currencies, and the opposite occurs in the case of low level of productivity, which ultimately leads to devaluation of the currency."¹¹

3. Implications of exchange rate evolution on foreign trade

4. Changes in the exchange rate of the Algerian dinar on the foreign trade system have had multiple repercussions and we can explain them as follows:

5. A. Evolution of the Algerian exchange rate

6. The exchange system has identified several successive developments, shifting from the fixed exchange rate system to the floating float system, and from January 1996 onwards it has become a real exchange rate system. Among the measures agreed between Algeria and the IMF is the establishment of an exchange



market between banks, which has the right to deal with each other in foreign currency in accordance with resolution 95/08 of 23/12/1995.

7. "The exchange rate of the Algerian dinar against the hard currencies has been defined by many discounts, especially against the US dollar, as the currency of most of the Algerian exports and the scrutiny of petroleum products, where the Algerian economy relies heavily on oil and gas, and the hydro carbon sector represents About 98% of Algeria's exports"¹², Algeria's oil imports amounted to about 34 billion dollars in 2015, compared to 61 billion in 2012.
8. Algeria's foreign reserves, excluding gold, were at its lowest level in 2015, while in 2010 it amounted to 156.6 billion dollars. Moreover, as trade with Europe accounts for more than 50% of Algeria's foreign trade, the worsening economic and financial situation in Europe, including the depreciation of the euro, will have negative effects on Algeria's trade balance and precautions due to declining demand for Algerian exports Oil and gas prices fell. All of this may put more pressure on the Algerian dinar.

This is illustrated by the following figure: Figure 3.

From the figure 3: We note the devaluation of the Algerian dinar against the euro and all this is due to the protectionist policy pursued by Algeria in order to balance the gains of the dollar's exports and the excess costs in the import operations to increase the interaction with the European Union countries and try to document The relationship in the framework of the partnership and thus the export of euros against the dollar this is a gain for the Algerian economy and here it is worth mentioning the oil deals of Algeria, which exceeds 98% of the various exports denominated in the US dollar and 60% of imports of various commodities denominated in Euro-European.

Figure 4 illustrates the decline in the dinar against the dollar, which is the decline in world oil prices and Algeria, like other countries, whose revenues are mainly based on dollar-denominated oil revenues, where there is an inverse correlation between oil prices and the value of the



dollar, when the value of the dollar goes down Oil and vice versa, and of course the currency of Algeria is linked to the US dollar, and the rise of the dollar lowers oil prices for several reasons, including that with the rise of the dollar lower production costs, enabling companies to drill for oil in rival places of the "OPEC", especially in Britain, Norway and Russia As well as the intensification of competition among oil-producing states, Brazil has increased the supply of demand.

B. Exchange Reserve

"From the year 2000, the reserves of the country's hard currency have become more and more pronounced over the years, where it has doubled to 11.23 billion dollars due to improved oil prices and increased demand in world markets, and the emergence of developing countries heading to the ranks of developed countries such as Turkey, India, Brazil and the repercussions The spread of the phenomenon of globalization, with an average oil price in 2000 of \$50.28 per barrel while estimated at \$94.12 per barrel in 1998. This continuous improvement in oil prices is accompanied by a rise in the reserves of hard currency, which exceeded the threshold of \$100 billion in 2007, which witnessed a jump in quality as a result of the rise of the oil price, which reached the limit of \$95.74 per barrel, and carried in 2008 several paradoxes of the emergence of financial crisis caused by the consequences of the mortgage The impact of the speculative factor, where oil prices were known as an average level of \$97.99 per barrel and whose effects on precautions were reversed to 10.143 billion, while the highest value of reserves in 2012 was 22.182 billion with another maximum value of the oil price by \$94.112 per barrel, this development contributed to achieve a kind of economic and financial balance of the country and to eliminate the consequences of indebtedness and pressure of the International Monetary Fund on the country's policy, to reach the highest value in 2014 in the range of 198 billion dollars to be exposed to serious erosion in 2015 and 2016 to reach \$117 billion as a result of the decline of the oil price of approximately \$50.¹³



This is illustrated by the following figure: figure 5
In Figure 5 We note that the curve is starting to decline with the fourth triple for the year 2013 and this is due to two factors:

"First, oil prices fell between 120 and \$130 dollars per barrel to between \$23 and \$45 a barrel".

"Second: double the cost and profit ratios of basic financial services, whether US Treasury bonds or European tourism bonds, including German bonds".

Algeria preferred a cautious and secure recruitment of part of the reserve, to diversify the recruitment, including the purchase of shares and contributions to companies, as the Gulf countries have done, and there was considerable controversy over the possibility of establishing a sovereign investment fund, where the public authorities considered it to be a high risk" .

"The exchange reserves tend to be low, with oil prices expected to remain low, with less than two years of imports guaranteed, at a time when Algeria is struggling with foreign direct investment and also from the decline in Sonatrach's profits. These are all factors that weaken the reserve, which is a guarantee in the area of foreign trade and therefore, the possibilities of reviewing the level and degree of risk risque PAYS especially with the decline in the level of solvency solvabilite the institutions"¹⁴ .

C. Evolution of foreign Trade:

"The aim of the exchange rate devaluation of the national currency was mainly to remedy the imbalance in some economic indicators and policies, including improving the trade balance and balance of payments position, reducing the import bill and making local goods more competitive in terms of price, as well as treating the risk of inflation "The collapse of purchasing power, the size of indebtedness and the provision of liquidity to the general budget of the State, especially in the construction of management expenses "¹⁵ .

1. The evolution of trade during 2005-2016:

By studying the analysis and evolution of the foreign exchange of Algeria, we will try to find out the changes that have taken place in



the overall results of Algeria's foreign trade, namely the development of exports and imports and their relationship with the underlying variables.

Of the economy as well as the commodity structure of exports and imports, as well as the geographical distribution of trade exchanges and the knowledge of the main trading partners of Algeria during the period 2005-2016.

Section 1: Evolution of the trade balance from 2005 to 2016

Table 1 represents: The evolution of the trade balance from 2005 to 2016.

Figure 6 represents the development of Algerian exports from 2005 to 2016.

To know the years 2014, 2015 and the end of July 2016 the following amounts: 429.2 billion, 034.17-and 932.11 billion, the deficit for the first time since the 1990s due to the decline in the country's income from hard currency due to the decline in oil price levels significantly while the pace of imports remained High in the range of \$60 billion despite the actions and measures that disappeared the Algerian Government through import licences related to certain commodities such as cement, iron and automobiles, as well as administrative interdiction of certain luxury goods from importation, and the risk of deficit in the Algerian trade balance for several considerations Among them, the industrial base in Algeria is still far from the global economic challenges and the new global trade perspective on services, information trade, communications technologies and financial transactions, which are considered to be lagging behind, "leading the Algerian state to take action To modify this decline, which reduces the Algerian dinar, and the cancellation of consumer loans to reduce the import bill.

Figure 7 represents the evolution of foreign trade from 2004 to 2016.

Section 2: Geographical distribution of exports and imports

This distribution represents Algeria's main partners in terms of foreign trade transactions as well as its most important suppliers of various commodities:



In terms of economic zones:

With regard to distribution by economic zones during 2016, the attached tables will clearly show that most of our external exchanges are still polarized by our traditional partners

In fact, the ECO countries are the important party in dealing with 60, 94% of Algeria's imports and 79, 58 percent of exports¹⁶.

Table 2 represents the geographical distribution of Algeria's imports and exports from 2005 to 2016.

Through the table we conclude that:

1/European Union

"The countries of the European Union always remain the main partners of Algeria, respectively: 47, 47% of imports and 57, 95% of exports".

"In comparison with 2015, existing imports from EU countries recorded a decrease of 12, 97% from US \$25, 48 billion in 2015 to US \$22, 18% in 2016, and in contrast, Algeria's exports to these countries declined by US \$6.5%, or 22, 15%.

"Within this economic zone we note that Italy covers more than 16, 55% of foreign sales, followed by Spain by 12, 33%, and France, 11, 50%".

"For the two main financiers, France ranks first among the EU countries at 10, 15%, followed by Italy and Spain by 9, 93% and 7, 69% of total imports from Algeria during 2016"¹⁷.

2/The ECO countries (outside the EU)

Rank second with a share of 13.47% in terms of Algeria's imports from these countries, and 21.64% of Algeria's exports to these countries."

"Compared to 2015, we should point to the increase in exports with these countries (outside the EU, where they have passed from 5.29 billion US dollars in 2015 to US \$6.25 billion in 2016, equivalent to 18.21% relative value. Algeria's imports from these countries registered a decrease of 14.5%. "

"We also note that Algeria's most important trade with the region is with the United States of America, followed by Turkey by 5.01% and



4.14% of imports from these countries, and 11.17% 4.27% for exports towards the same countries."

3/Other areas

"Trade between Algeria and other regions remains low. The total volume of trade exchanges with other European countries (outside the EU and OECD) shows a decline in market shares of approximately 21.6% compared to 2015, From US\$1.26 billion in 2015 to US \$989 billion in 2016. "

4/Countries of "Asia" show a slight decrease of approximately 2.17%, from 14.26 billion US dollars to 13.95 billion US dollars during the same period. The volume of trade with the Maghreb countries (UMA) has declined by nearly 7.4% compared to 2015, from 2.23 billion US dollars in 2015 to 2.06 billion in 2016.

"Trade with Arab countries (outside the Arab Maghreb Union) has been slightly lower than in 2015, with these countries having a trade volume of 2.49 billion US dollars to 2.31 billion US dollars, a decrease of 6.87%."

"Finally, trade with the countries of America registered a slight increase of 0.67% compared to 2015, from 4.5 billion US dollars in 2015 to US \$4.53 billion in 2016."

"With regard to distribution by economic zones during 2016, the attached tables clearly show that most of our external exchanges always remain polarized by our traditional partners"¹⁸.

4.The effect of the exchange rate of the euro and the dollar on foreign trade

"Algerian trade is closely linked to the most important currencies of the international monetary system, the United States dollar, which is caught by all of Algeria's oil revenues as well as the euro and the currency of the European Union, Algeria's most important trading partner"¹⁹.

"The Algerian export sector is almost entirely dependent on the hydrocarbon sector, which was pricing in US dollars. In 2004, the value of exports of fuel in US dollars was 31302 million, while in the same year it amounted to 25229 million, whereas in 2006 the value of



Exports from the hydrocarbon sector in the US dollar worth 53429 million against 40766 million euros and what can be noted is the devaluation of the oil export when it is converted from the dollar to the euro because of the decline in the dollar against the euro" .

Algeria has also been able to benefit from the rise in oil prices worldwide and has been able to create huge financial reserves in 2006 worth \$77 billion dollars to jump in 2007 to \$110 billion dollars then 147 billion dollars in 2009 and these precautions represent the support of the Algerian economy and a means of strengthening Financial stability and support for higher capacity to deal with external shocks, maintain the Algerian dinar exchange rate and cover the emergency balance of payments deficit.

The dollar is the base currency for the formation of international reserves, which are highly correlated with exchange rate fluctuations, and despite the dollar's known successive declines against the euro, Algeria set a euro reserve of 51% and 49% in US dollars, in order to ensure a wider margin of movement after it was Algeria's reserve is mainly formed by the dollar.

1- Exchange rate relationship with exports

Figure 8 represents the evolution of the volume of exports and the exchange rate of the Algerian Dinar 2000 2014 (unit \$1 million)

In Figure 8, we note that the rise in Algerian exports is mainly linked to oil revenues. Any change or decline related to oil prices has a direct impact on the trade balance and thus on the national economy, and Algeria should reconsider export development outside hydrocarbons This is based on sectors other than hydrocarbons (tourism, agriculture, industries, etc.). Renewable energies (solar, wind.....) .

2- exchange rate relationship with imports:

Figure 9 represents the evolution of the volume of imports and the exchange rate Algerian Dinar 2000 2014 (unit \$1 million)

Through Figure 9 We note that the higher the exchange rate, the higher the imports and all that rise as a result of the economic conditions in which the country is going.



1.Table: The evolution of the trade balance from 2005 to 2016.

Value in million dollars	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Exports abroad fuels	1099	1158	1332	1937	1066	1536	2062	2062	2165	2582	1969	1781
Exports of fuels	43937	53456	58831	77361	44128	55527	71427	69804	63752	60304	32699	27102
Total exports	45036	54613	60163	79298	45194	57053	73489	71866	65917	62886	34668	28883
Imports	20048	21456	27631	39479	39294	40473	47247	50376	54852	58580	51702	46727
Trade Balance	24988	33157	32532	39819	5900	16580	26242	21490	11065	4306	17034-	17844-

Source : <http://www.andi.dz/index.php/ar/statistique>

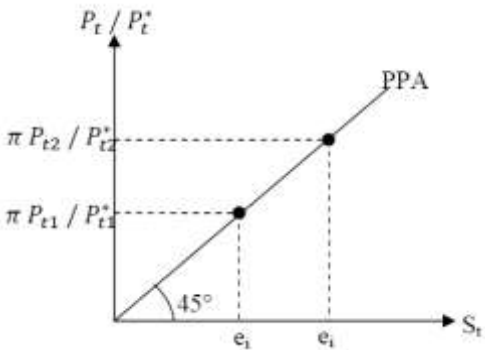
2.Table: represents the geographical distribution of Algeria's imports and exports from 2005 to 2016.

Economic zones	Imports in million US dollars			Exports in million US dollars		
	year		Evolution %	year		Evolution %
	2014	2016		2015	2016	
EU countries	25 485	179 22	-12.97	22 976	16 739	-27.15
OECD countries	7 363	6 295	-14,50	5 288	6 251	18.21
Other European countries	1 225	909	- 25.80	37	80	116.22
South American countries	2 822	2 857	1.24	1 683	1 678	-0.30
Asia	11 850	11 618	-1.96	2 409	2 331	-3.24
Oceania	—	—	—	71	—	—
Arab countries	1 918	1 934	0.83	572	385	-32.69
Maghreb countries	680	697	2.50	1 550	1 368	-11.74
African	359	238	-33.70	82	51	-37.80

countries						
Total	51 702	46 727	9.62	34668	28883	-16.69

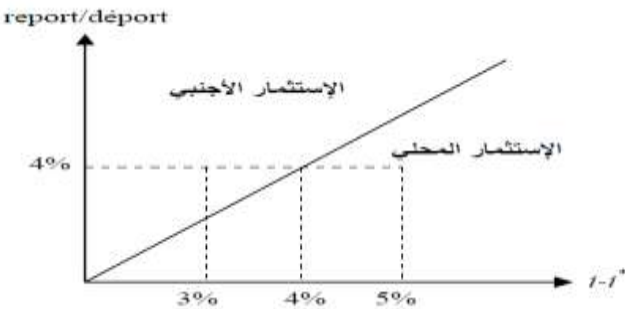
Source: <http://www.andi.dz/index.php/ar/statistique>, consulted on :
25/01/2018.

Fig.1. represents the relationship between relative prices and the exchange rate.



Source : web site : <http://dspace.univ-tlemcen.dzf>, P23, consulted
on :01/02/2018

Fig.2. represents the line is equivalent to the interest rate.



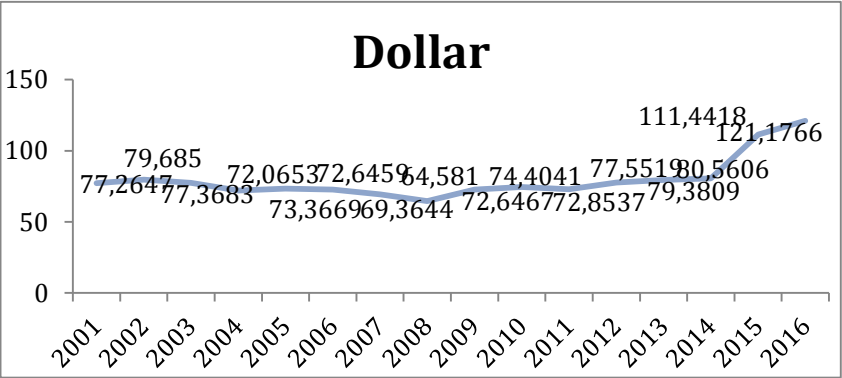
Source : web site : <http://dspace.univ-tlemcen.dz/bitstream/112/3153/1/Ben-kaddour-Ali.Doc.pdf>, P25,
consulted on :01/02/2018.



Fig.3. Represents the evolution of the Algerian exchange rate versus the euro from 2001 to 2016.

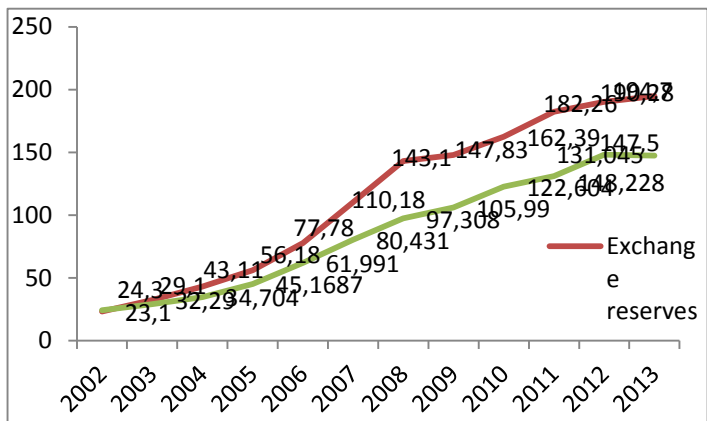
Source: prepared by the researchers based on the central bank

Fig.4. Represents the evolution of the exchange rate of the Algerian dinar against the dollar from the year 2001 2016



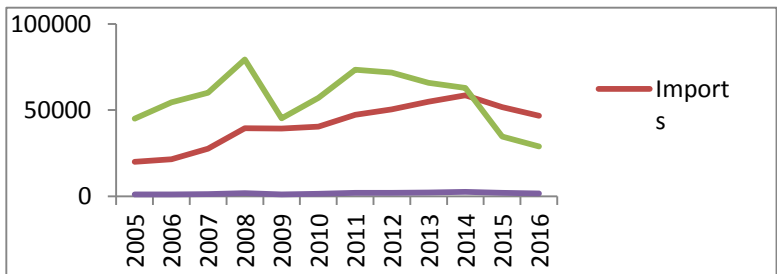
Source: prepared by the researchers based on the central bank

Fig.5. Represents the evolution of Algerian drainage reserves from 2002 to 2013

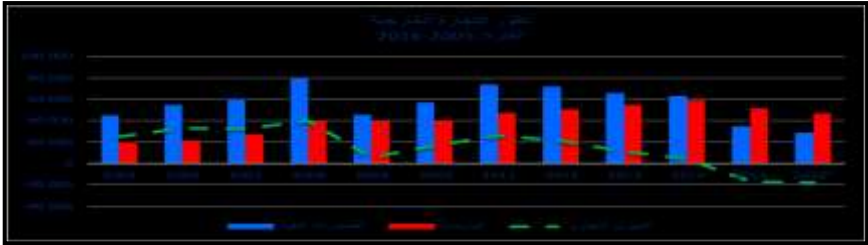


Source: prepared by the researcher based on central bank reports 2011 2012 2013

Fig.6. represents the development of Algerian exports from 2005 to 2016.

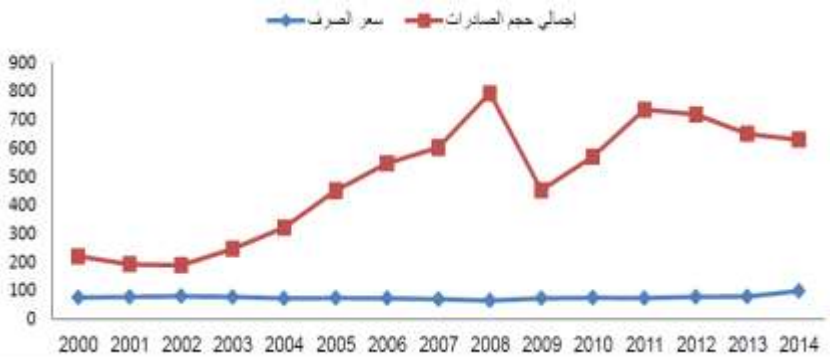


Source: of the researcher's preparation based on the table data
Fig.7. represents the evolution of foreign trade from 2004 to 2016.



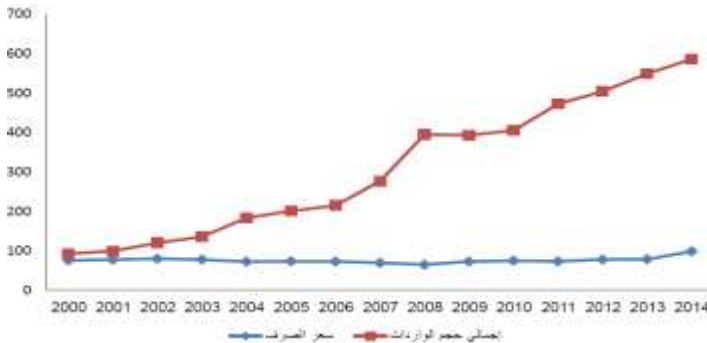
Source : <http://www.andi.dz/index.php/ar/statistique>

Fig.8.represents the evolution of the volume of exports and the exchange rate of the Algerian Dinar 2000 2014 (unit \$1 million)



Source : web site : <http://dspace.univ-biskra.dz>, P92

Fig.9. represents the evolution of the volume of imports and the exchange rate Algerian Dinar 2000 2014 (unit \$1 million)



Source : web site : <http://dspace.univ-biskra.dz>, P 101

5. CONCLUSION

The exchange rate is an important element in the development of foreign trade, which is a means of linking the economies of different countries through the expansion of exports and imports. It is an important tool in settling international payments through the forces of supply and demand in the exchange market. The latter and its mechanisms and transactions increased the efficiency of transactions. "Exports and Imports". The theories explaining the changes in the exchange rate according to its systems and the various factors influencing it, which may cause losses, have to be addressed through techniques. Knowing the exchange rate and the factors influencing it and the various systems we realized the contribution of the exchange rate in the development of foreign trade.

Finally, we conclude that Algeria's foreign trade is linked to the prices of hydrocarbons in world markets more than the exchange rate of the dinar. Algeria's exports are based almost entirely on the export of fuel. These exports are in foreign currency, which Algeria uses to finance its imports without any other alternative..

6. Bibliography List :



- Jerome Drunat and others "explanatory theories of the exchange rate: cassel in the early eighties" ; French Journal of Economics 1994 number 9, web site : <https://www.persee.fr> consulted on: 22/09/2018.
- Samir Fakhri Ne'ma, "The Interrelationship between the Exchange Rate and the Interest Rate and its Reflection on the Balance of Payments", Arabic Edition, Dar Al Yazuri Scientific Publishing and Distribution, Amman, Jordan, 2011.
- Mourad Abdelkader, A study of the impact of monetary variables on the exchange rate of the Algerian dinar against the US dollar during the period 1974-2003, Department of Economic Sciences, specialization of economic modeling, 2012/2011, web site: <https://bu.univ-ouargla.dz> , consulted on :01/02/2018.
- Sima Mohsein Allaoui, Samira fawzi chehab "The Relationship Between the Iraqi Dinar Exchange Rate and the Trade Balance for the Period 1990-2010", Journal of dinars the Ninth Edition, 2016, Iraqi University College of Management and Economics.
- Benin Baghdad, "The Impact of Exchange Rate Systems on Economic Growth, An Analytical Study of a Group of Developing Countries", Dissertation for PhD in Economic Sciences 2015-2016, web site: <http://dspace.univ-chlef.dz:8080/jspui/handle/123456789/1124> , consulted on: 22/01/2018.
- Sulaiman Moussalli, Hazem Al-Samman, "The Competence of the Damascus Stock Exchange", Damascus University Journal of Economic and Legal Sciences, Volume 29, No. 2, 2013, web site: <http://www.damascusuniversity.edu>, consulted on : 29/09/2018.
- Abdul Majid Qadi: "The Approach to Macroeconomic Policies", Second Edition, The Algerian Press Bureau, Algiers, 2005.
- Baghdad, Zian, "Changes in the Exchange Rate of the Euro and the Dollar and its Impact on Algerian Foreign Trade", Letter to the Master of Economics, International Finance, University of Oran 2011-2012, web site: <http://theses.univ-oran1.dz/document/THA3158.pdf>, consulted on : 27/01/2018.
- Mohaded Khalil Burai and Ali, Hafez Mansour, "International Economic Relations," Cairo Modern Library, 1974.
- Breyati Hussein, "Exchange regulations and their impact on the economies of countries (The Case of Algeria), PhD thesis in Economics, International Economics, Faculty of Economic, Commercial and Management Sciences, University of Chlef, 2016 2017, web site: <http://dspace.univ-chlef.dz>:, consulted on : 22/01/2018.
- Hamdi Abdel Azim, "Economic Reform in the Arab Countries between the Exchange Rate and the General Budget," Dar Zahraa Al Sharq, Cairo, 1998.



- Tariq Amer, Exchange Rate Systems in the Arab States: Challenges and Opportunities (28/03/2016), Union of Arab Banks - Department of Studies and Research, web site: <http://www.uabonline.org/ar/research/economic/>, consulted on: 07/09/2017.
- Saleh Bediaf, "The Performance of the Foreign Trade Mediator on the Status of Foreign Trade" (Algeria Case Study), University of Blida 2.
- B Hakim, "Reserves without a ceiling of \$ 100 billion", web site: <http://www.eco-algeria.com> , consulted on :01/01/2018.
- National Agency for Investment Development, web site: <http://www.andi.dz/index.php/ar/statistique>, consulted on : 25/01/2018.
- Web site :<http://dspace.univ-tlemcen.dzf>
- Web site:<http://dspace.univ-biskra.dz>.

Index:

¹ Samir Fakhri Ne'ma, "The Interrelationship between the Exchange Rate and the Interest Rate and its Reflection on the Balance of Payments", Arabic Edition, Dar Al Yazuri Scientific Publishing and Distribution, Amman, Jordan, 2011, pp. 20-21.

² Samir Fakhri Ne'ma, "The Interrelationship between the Exchange Rate and the Interest Rate and its Reflection on the Balance of Payments", op cit, P23.

³ Jerome Drunat and others "explanatory theories of the exchange rate: cassel in the early eighties" ; French Journal of Economics 1994 number 9, web site : <https://www.persee.fr> consulted on: 22/09/2018, P 67

⁴ Mourad Abdelkader, A study of the impact of monetary variables on the exchange rate of the Algerian dinar against the US dollar during the period 1974-2003, Department of Economic Sciences, specialization of economic modeling, 2012/2011, p11, web site: <https://bu.univ-ouargla.dz> , consulted on :01/02/2018.

⁵ Sima Mohsein Allaoui, Samira fawzi chehab "The Relationship Between the Iraqi Dinar Exchange Rate and the Trade Balance for the Period 1990-2010", Journal of dinars the Ninth Edition, 2016, Iraqi University College of Management and Economics, p. 111.

⁶ Benin Baghdad, "The Impact of Exchange Rate Systems on Economic Growth, An Analytical Study of a Group of Developing Countries", Dissertation for PhD in Economic Sciences 2015-2016, p. 24, web site: <http://dspace.univ-chlef.dz:8080/jspui/handle/123456789/1124> , consulted on: 22/01/2018.

⁷ Sulaiman Moussalli, Hazem Al-Samman, "The Competence of the Damascus Stock Exchange", Damascus University Journal of Economic and Legal Sciences, Volume 29, No. 2, 2013, P155, web site: <http://www.damascusuniversity.edu>, consulted on : 29/09/2018.



⁸ Abdul Majid Qadi: "The Approach to Macroeconomic Policies", Second Edition, The Algerian Press Bureau, Algiers, 2005, p. 123

⁹ Mohaded Khalil Burai and Ali, Hafez Mansour, "International Economic Relations," Cairo Modern Library, 1974, p60.

¹⁰ Breyati Hussein, "Exchange regulations and their impact on the economies of countries (The Case of Algeria), PhD thesis in Economics, International Economics, Faculty of Economic, Commercial and Management Sciences, University of Chlef, 2016 2017, P30, web site: <http://dspace.univ-chlef.dz>, consulted on : 22/01/2018 .

¹¹ Hamdi Abdel Azim, "Economic Reform in the Arab Countries between the Exchange Rate and the General Budget," Dar Zahraa Al Sharq, Cairo, 1998, p54.

¹² Tariq Amer, Exchange Rate Systems in the Arab States: Challenges and Opportunities (28/03/2016), Union of Arab Banks - Department of Studies and Research, web site: <http://www.uabonline.org/ar/research/economic/>, consulted on: 07/09/2017.

¹³ Saleh Bediaf, "The Performance of the Foreign Trade Mediator on the Status of Foreign Trade" (Algeria Case Study), University of Blida 2, p 301.

¹⁴ B Hakim, "Reserves without a ceiling of \$ 100 billion", web site: <http://www.eco-algeria.com> , consulted on :01/01/2018.

¹⁵ Saleh Bediaf, "The Performance of the Foreign Trade Mediator on the Status of Foreign Trade" (Algeria Case Study), op cit, P302.

¹⁶ National Agency for Investment Development, web site: <http://www.andi.dz/index.php/ar/statistique>, consulted on : 25/01/2018.

¹⁷ National Agency for Investment Development, op cit.

¹⁸ National Agency for Investment Development, op cit.

¹⁹ Baghdad, Zian, "Changes in the Exchange Rate of the Euro and the Dollar and its Impact on Algerian Foreign Trade", op cit, P132.