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Investigating the Impact of Exchange Rates on Inflation

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Abstract
Inflation is one of the most important issues in developing countries. Because every year, with the inflation rate that occurs, people's livelihoods change. One of the public factors that has a great impact on inflation is the exchange rate. This article examines the impact of the exchange rate on inflation in the country. For this research, the library method has been selected, which was done during two months by using various sources and authoritative scientific books. First, we examined the exchange rate and inflation rate in countries, especially developing countries, and then we examined the impact of this factor on the inflation rate. Among the exchange rate policies applied in Iran in the period under review is the policy of unification and stabilization of the exchange rate. Although exchange rate policies can affect non-oil exports, this effect does not determine the importance of non-oil exports. Exchange rate change by itself does not have a chance to succeed in balancing the foreign sector of the economy and developing non-oil exports, so it is necessary to use foreign exchange policies to support and encourage non-oil exports, other macroeconomic policies and change the structure of production The country should also be considered.
Keywords: Inflation, Exchange Rate, Economy, Dollar.

❖ Preface

The exchange rate as a measure of the value of a country's national currency against the currencies of other countries reflects the economic situation of that country in comparison with the economic conditions of other countries. The exchange rate is a mirror of one country's economy compared to other countries in the international economic environment (Halafi et al., 2004). Over the past few decades, economists and policymakers have often studied extensively the performance of real exchange rates in developing countries, and often believe that inappropriate exchange rate policies by some countries have exacerbated the debt crisis. International, the imbalance of the trade balance, the failure of reform and adjustment policies to solve the problems of the economy. There is a consensus among economists that stabilizing the exchange rate at an inappropriate level and deviating from the equilibrium path leads to a significant reduction in national welfare through an adverse effect on economic performance (Kandil, 2000). One of the major issues in economics is the effect of various currency fluctuations on the price index and inflation at the macro level. As domestic prices try to adjust the exchange rate, the question of whether exchange rate fluctuations in our country is inflationary or not is raised. Abnormal exchange rate fluctuations cause a relative decrease in purchasing power compared to international balances. It is possible that there is a causal link between the exchange rate and inflation. That is, with the rise of the exchange rate and the price of imported goods, inflation is created and this inflation itself causes the exchange rate to rise again. Therefore, due to the fear of the exchange rate affecting inflation, there is a general tendency to keep this rate constant. In fact, the importance of the exchange rate because of its relative nature is as a price. That is, the exchange rate is the relative price of foreign currency to domestic currency, and therefore its increase causes cheaper imported goods and higher prices of imported goods and vice versa (Tavakoli et al., 2015).

Inflation, which is a constant increase in the general level of prices or a continuous decrease in the purchasing power of money, is one of the most acute economic problems. In the 1970s, with the emergence of severe inflationary pressures, price stabilization became the main focus of economic policies for economists. Subsequently, a large amount of economic literature was devoted to the nature and causes of inflation and the appropriate economic policy to treat inflation. Also, the efforts of developing countries over the past decades to achieve higher growth rates have generally been accompanied by high inflation rates. On the other hand, the effect of currency fluctuations on it at the macro level became one of the most common topics. The exchange rate is one of the most important factors determining the price of raw materials, intermediate goods, capital equipment and final goods, and due to the high dependence of production and consumption on imports, it seems to be effective in forming inflationary pressures (Piraee and kouroshPasandideh., 2002). After the revolution, all variables are correlated in the equilibrium equations of trade and prices. Also, any increase in domestic production is anti-inflationary, but reducing the external value of inflation money (BahmaniOskooei, 1993).

In the 7th decade, inflation became one of the most acute economic problems of different countries, so that the efforts of countries to achieve higher growth rates were generally accompanied by inflation. In addition to the exchange rate variable, especially since the impact of fluctuations on inflation became a common economic topic, it has increasingly emerged as a key and important factor in economic policy (Piraee and KouroshPasandideh, 2002).

❖ Statement of the Problem

Inflation is one of the most important issues in developing countries. Because every year, with the inflation rate that occurs, people's livelihoods change. One of the public factors that has a great impact on inflation is the exchange

rate. The exchange rate, in which the dollar plays a role in our country, is very colorful in determining the country's annual inflation. What is the impact of this factor on inflation and how can inflation be controlled by controlling the exchange rate is a topic that we will address in this article.

- **Importance of Subject**

The study of exchange rate behavior in the Iranian economy with a volatile history is of considerable importance. In other words, whenever the role of this variable in the government budget deficit, monetary base growth, liquidity, inflation, trade balance is considered, it is observed that any change in the exchange rate significantly affects other economic variables because on the one hand government revenues. From the place of oil export, it plays a major role in the country's economy, and on the other hand, the country's dependence on imports leads to the fact that the range of effects of this variable is much more than a limited short-term effect (Arshadi, 2004).

- **Research Method**

To conduct this research, which examines the effect of exchange rates on inflation in the country, the library method has been selected, which was done during two months by using various sources and authoritative scientific books. First, we examined the exchange rate and inflation rate in countries, especially developing countries, and then we examined the impact of this factor on the inflation rate.

- **Results**

Any monetary expansion policy in order to cover the budget deficit, such as increasing the money supply, intensifies the increase in the exchange rate, and thus intensifies the inflation rate and reduces production (Dargahi, 1999). An important part of real exchange rate fluctuations in developed countries is due to nominal exchange rate fluctuations, while in developing countries, the decrease in exchange rates in the absence of appropriate macroeconomic policies is followed by the inflation rate (Khatai, 1996). New theoretical discussions and subsequent empirical studies indicate that exchange rate fluctuations have shown different effects. In other words, the effects and consequences of exchange rate depreciation on important macroeconomic indicators, such as national production and price, are different from exchange rate increases.

Therefore, an important question can be examined the different effects of exchange rate fluctuations on important economic indicators (Tavakoli et al., 2015).

Adopting appropriate exchange rate policies in developing countries has always been controversial. Discussions are based on the extent of exchange rate fluctuations in the face of internal and external shocks. Exchange rate fluctuations are likely to play a major role in economic performance. Therefore, in order to study the effect of exchange rate fluctuations on the growth of production and demand in the country, judging the optimal amount of these fluctuations is inevitable. As the value of the country's currency depreciates, the prices of foreign goods become more expensive than those of domestic goods, and international competition improves. The end result can be an improvement in economic activity. In other words, due to the devaluation of the domestic currency, expenditures shift from foreign goods to domestic goods. Of course, the success of the devaluation in stimulating the foreign trade balance depends to a large extent on the shifting of demand in the right direction and the capacity of the economy to meet excess demand through the supply of more goods (Dorn Bush, 1988).

One of the most important issues in developing countries after World War II has been the issue of economic growth. Economic growth is one of the main goals in economic policy and decision making. Among the economic variables, the variable that is most directly and closely related to the external sector of the economy and can provide the ground for economic growth more than any other variable is exchange rate fluctuations. On the other hand, it has always been believed that exchange rate fluctuations are effective in changing prices through the prices of imported goods. In other words, an increase in the exchange rate will increase the price of imported goods and consequently inflation in domestic prices (Tavakoli et al., 2015). In explaining the causes of inflation in Iran, a range of factors have been proposed by economists and economic institutions, which include problems related to economic structures and foundations and how to implement monetary, fiscal and exchange rate policies. However, considering inflation as a chronic problem indicates that all of these factors contribute to and reinforce each other's effects, and in some cases serially create each other. Based on this, we can find many researches in Iran and the world, each of which has looked at the issue of inflation. Today, due to profound changes in exchange rate systems, the exchange rate variable is more than ever a key and important factor in economic policy and the impact of its fluctuations on inflation has become a common economic topic. On the other hand, due to the strong dependence of Iran's economy on foreign exchange and foreign exchange earnings over the past years, which has led to foreign exchange policies can be used for several purposes (Yazdani and ZareGheshlaghi, 2015). Some countries, which had chosen a fixed exchange rate system to reduce investment risk and thus gain the necessary credit and stability to attract foreign capital, gradually moved to a floating exchange rate system. This gradual movement was accompanied by reforms aimed at achieving growth and inflation (Ostvar, 2013).

The results of various tests show that there is a long-term relationship between inflation and exchange rates. That is, the exchange rate cannot be changed without changing the general level of prices. Of course, short-term deviations are possible, but the long-term tendency is to balance them.In 1991, the price index of imported goods reached the highest level and the reason was the increase in imports of goods due to very low currency fluctuations. However, the increase in imports and inflation rate increased in terms of wholesale price and retail price indices, which has a greater effect on wholesale goods.1999 is the most stable year in terms of inflation rate stability according to various price indices. Due to profound changes in exchange rate systems, the exchange rate variable has increasingly emerged as a key and influential factor in economic policies and the effect of its fluctuations on inflation has become a common economic topic (Piraei and KouroshPasandideh, 2002). .

Financial constraints in developing countries play a major role in the nature and nature of the short-term effects of currency devaluation and monetary shocks on output, price levels, and value reserves (Royas, 1987). There is a strong correlation between financial and monetary shocks, budget deficit and inflation rate compared to the effects of exchange rate shocks (Rogers & Wang, 1995). Fluctuations in exchange rates lead to changes in the volume of imports and exports. These changes in the trade balance have a great impact on the volume of domestic production, budget deficit and liquidity, as well as domestic prices. On the other hand, any fluctuation and uncertainty of the exchange rate is effective on the cost price of domestic products and in this regard can aggravate the inflationary conditions in the country (Mokhtarshahi, 2008).

Estimation of the pattern of simultaneous equations shows that the free market exchange rate has a positive effect on inflation and its intensity was higher than inflation with the wholesale price index due to the high degree of dependence on the exchange rate. GDP at constant prices has had a negative effect on inflation. The growth of liquidity in each period depends to a large extent on the liquidity of the previous period. The official exchange rate has a positive effect on the growth of the free market currency. Also, the growth of free market exchange rate has a negative relationship or current balance of the previous period and the reason for its negative is the existence of an inverse relationship between currency supply (foreign exchange earnings and free market exchange rate growth). In addition, inflation from imported goods has a positive effect on the exchange rate, but domestic inflation has only affected the growth of the exchange rate in the years when its value is high (Piraei and KouroshPasandideh, 2002).

Foreign exchange policies, depending on the type of foreign exchange regime, affect macroeconomic variables, including inflation, through various channels. The existing literature confirms that there is a strong relationship between a fixed exchange rate and a low inflation rate. This is due to the fact that, on the one hand, the fixed exchange rate system creates the discipline and coordination required by economic policies to prevent inflation, and on the other hand, in this system, there is more confidence in maintaining the value of the domestic currency against There are foreign currencies; Therefore, economic decisions will be made with more security (Ostvar, 2013).

Practical studies of developing countries show that the use of devaluation policies has had different effects on the balance of payments in developing countries. The policy of devaluation of money can correct the deficit of the balance of payments when the foreign exchange market is relatively stable and monetary and fiscal policies are subsequently determined and are not in a state of expansion (Tavakoli et al., 2015). Economic policymakers often use the devaluation policy as a tool to increase a country's net exports. It should be noted that this theory will be applied in an economy with full liquidity and non-stickiness because in such an environment economic agents immediately change their buying behaviors to adapt to exchange rate changes, but in a real world because exchange rate changes To conform to the behavioral patterns of economic agents, it takes time, based on the phenomenon of the j-curve or the theory of short-term trade balance adjustments, to state that an increase in the real exchange rate (devaluation policy) decreases in the long run after a short period. It will lead to the improvement of a country's trade balance (Memarian and JalaliNaeini, 2010). It is also stated in the literature on exchange rate and inflation regimes that a fixed (nailed) exchange rate regime provides a lower and more stable inflation rate as a nominal anchor for monetary policy. This can be explained in two ways: First, fixed exchange rates reduce the costs of irregular monetary and fiscal policies, such as excessive money growth, by making an absolute commitment to the exchange rate. Second, a valid nail exchange rate reduces the inflationary effect of monetary expansion by creating high demand for money (Ghosh et al, 1995).

The effects of a floating exchange rate system on inflation depend in part on monetary policy. Because these policies will play an important role in changing the exchange rate. Developing countries often seek to eliminate and adjust price controls by floating the currency. However, choosing a floating exchange rate will lead to higher prices. According to studies conducted from a large sample of large countries, it was concluded that in countries with fixed exchange rate policies, there is a tendency to implement development policies. In developing countries, internal and external factors affect inflation. According to the tests performed using Iranian data, they found that a high exchange rate will lead to high prices of goods, and ultimately the choice of fiscal policy has a very important effect in combating inflation. In Iran, the main factor influencing inflation is internal factors. The exchange rate is one of these domestic factors in such a way that increasing the supply of foreign exchange and subsequently reducing its value, will increase domestic demand and ultimately increase inflation. On the other hand, appropriate exchange regimes that lead to a stronger currency, reduce inflation (Tavakoli et al., 2015).However, there is a caveat that if a country's inflation rate differs greatly from that of its major trading partners, it will often need to adjust the exchange

rate; Therefore, countries with this feature (developing and emerging countries) cannot benefit from the anti-inflationary benefits of a fixed exchange rate regime; Because the possibility of currency or financial crises due to the established regime in these countries is high; Therefore, these countries must adopt a floating exchange rate regime after financial integration; But because the central banks of these countries cannot be indifferent to the value of the domestic currency, in practice a small number of these countries are willing to follow this policy; On the one hand, because of the devaluation of the currency, the central bank will worry about imported inflation, and on the other hand, when the value of the currency increases, the competitiveness of exports will decrease. Thus, in general, in developing and emerging countries, there is a fear of exchange rate fluctuations due to the instability of the value of money, which may be detrimental to them (Ghosh et al, 2009).

Inflation is an important economic problem in developing countries such as Iran. People are well aware of the negative impact of inflation on their economic well-being and declining purchasing power, and want to curb prices and stabilize their real incomes. If the exchange rate shows sharp fluctuations, the value of exported goods and the cost of imported goods in domestic currency are severely affected, and therefore the more risky the country's foreign trade factors and the greater the share of foreign trade in GDP, fluctuations. The exchange rate will have a greater effect on reducing domestic production, increasing prices and restricting foreign trade (Dadgar and Keshavarz, 2006). Countries trying to make the exchange rate more flexible need to choose a nominal support for their monetary policy in order to stabilize inflation expectations. Possible strategies include targeting monetary accumulation growth rate or inflation targeting (Mareno, 2001). Exchange rate fluctuations yield results that are exactly the opposite of the effects of global price fluctuations. With rising domestic prices and declining exchange rates, it could be due to rising global prices. The devaluation of the domestic currency and the devaluation can increase the level of domestic prices of a small country and reduce their product level. In return, the appreciation of the domestic currency will backfire. The comparative advantage of fiscal policy is crystallized in its effect on domestic production, and monetary policy has a comparative advantage in changing the exchange rate. In the case of small countries, these results remind us that when the level of prices and inflation rates are in the interest of policymakers, monetary policy should be applied and when the amount of output is meant, fiscal policy should be applied (Farzin and Asgharpour, 2007).

In general, the country's foreign exchange system can be useful for the economy when there is a balance between economic conditions and prioritization of goals according to the limitations of selected foreign exchange resources. In most countries, in choosing the exchange rate regime, the goal of reducing inflation and stability in the level of production is very important, and among most poor and developing countries, their main priority is to achieve a higher level of production, so adopting a fixed exchange rate regime may Currency is set below the equilibrium rate. In this case, due to the cheap exchange rate, imports will flourish and domestic production and exports will weaken, as a result, the officials of these countries may tend to reduce some inflation in order to prevent the reduction of export production and generally volatility in return. Accept shocks (Rogoff, 1985). In general, it should be noted that exchange rate unification has two major expansionary monetary effects on the economy; But these effects can be sterilized. This policy can increase the monetary base and increase inflationary pressures by increasing the rial value of central bank assets. Another effect is to repay foreign currency loans at maturity, at higher rates in rial payments, and then convert them into dollars by the central bank, which can create a foreign exchange commitment reserve, increase the monetary base, and ultimately increase potential inflation. Be in the country. So far, the Central Bank has not been able to neutralize the mentioned expansion effects (Rezaei, 2013).

It has often been argued that if the exchange rate is kept low, not only the price of imported goods, but also domestically produced goods that are directly and indirectly affected by imports, will be less expensive. This view, which is very common, leads to the conclusion that in order to control the level of domestic prices, the exchange rate must be kept low. This argument, while seemingly convincing, is fundamentally flawed. Those who make this argument may overlook two important points:

A) The exchange rate, like the price of any other commodity, is determined by the general conditions of the economy. As a result, any attempt to keep the exchange rate low or high relative to the limits set by the general conditions of supply and demand in the economic system will be accompanied by inefficiency in the allocation of resources; Because the price is lower than the economic price of the currency, it will lead to the excess demand for the currency and its improper use and windfall earnings. A price higher than the price determined by supply and demand also leads to less desirable use of the desired product and creates additional supply. Thus, the effect of non-economic determination for the currency has wide and profound effects on the country's economy.

B) Another point is the issue of the budgetary and monetary effect of the exchange rate on the country's economy. With government budgets increasing due to rising spending and declining revenues, artificially keeping the exchange rate low has helped create a gap between government revenues and expenditures, and the revenue-expenditure gap created by increasing liquidity is itself a factor. The main inflation has been in the country. In these cases, in a situation where the budget deficit is provided from the place of creating new liquidity and increasing liquidity is the main cause of inflation, increasing the exchange rate if it leads to increasing the collection of domestic Rial resources and preventing the creation of liquidity, in fact the opposite effect Will have inflation (Yazdani and ZareGheshlaghi, 2016).

Given that the effect of the price of imported goods is rapid, the central bank can have significant success in dealing with the inflation target by continuously adjusting the exchange rate. Of course, it should be borne in mind that these continuous exchange rate fluctuations may have potential adverse effects on other areas of the country's economy. In order to avoid these possible adverse effects, they showed that Taylor's law needed to be amended in two ways. First, instead of targeting a certain rate of inflation, central banks in countries with free economies should set a long-term target for inflation in order to eliminate any temporary effects of the exchange rate. Second, in countries with free economies, instead of using a short-term formal interest rate as a policy tool, the central bank must recognize the fact that interest rate fluctuations through the simultaneous buying and selling of assets also lead to exchange rate fluctuations. Will be accompanied. Such performance strengthens the economy's response to interest rates (Mareno, 2001).

On the other hand, the existence of a currency gap causes the government to buy cheap currency from exporters, which is a kind of source of income for the government; However, this issue itself, due to the smuggling of export goods and the sale of imported currency at the official rate, will worsen the state budget situation in the long run and create money by the central bank to cover the budget deficit and consequently increase inflation (Zamanzadeh and Al-Husseini, 2012).

❖ Discussion and Conclusion

This article examines the effect of exchange rates on inflation. First, inflation and exchange rates were studied in different countries, especially in developing countries, then their impact on each other was analyzed. Among the exchange rate policies applied in Iran in the period under review is the policy of unification and stabilization of the exchange rate. Although exchange rate policies can affect non-oil exports, this effect does not determine the importance of non-oil exports. Exchange rate change by itself does not have a chance to succeed in balancing the foreign sector of the economy and developing non-oil exports, so it is necessary to use foreign exchange policies to support and encourage non-oil exports, other macroeconomic policies and change the structure of production The country should also be considered. In order to determine the optimal currency system, it is necessary to pay attention to the specific requirements and conditions of the country; Therefore, it is suggested that economic policymakers and monetary and exchange rate officials, while adopting a single-rate managed floating exchange rate system, consider the effects of the exchange rate shock on inflation. Also, the compatibility of other macroeconomic policies, especially monetary policy, with the exchange rate regime and the use of inflation targeting is necessary.

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