

The effect of using risk management techniques in the face of fluctuations in exchange rates

Mohanad Akram Rafeeq¹, Hala Tariq Muhammad²

اثر استخدام تقنيات ادارة المخاطر في مواجهة تقلبات اسعار الصرف
akrammuhand@gmail.com م.م. مهند اكرم رفيع / مديرية تربية بغداد – الكرخ الأولى
halaalubady@gmail.com م.م. حلا طارق محمد / مديرية تربية بغداد – الكرخ الأولى.

Abstract

Since the seventies, all countries of the world have suffered from the effects of sharp fluctuations in the exchange rate of the valuation currencies at the international level, and most of the major countries have adopted a floating exchange rate system under which the exchange rates are characterized by their continuous fluctuations and the consequent effects - negative of course - very important for International institutions have activity, whether it is related to financial or commercial activity alike, which happened in the second half of the seventies of the last century for many industrial enterprises with international activity, which necessitated the necessity of facing exchange rate risks by discovering several techniques to prevent or avoid such risks. The researcher reached a set of conclusions and the following recommendations:

1. The fluctuations in the exchange rate have a decisive effect on the finances of the institution with external relations in its field of activity.
2. The exchange risk management process should be recorded within the general strategy of the institution and the most appropriate technology should be chosen in line with the environment in which it operates.
3. The risk management of foreign exchange fluctuations for international economic institutions is of the utmost importance, especially in light of the current economic situation characterized by sharp monetary fluctuations.
4. The developments that developing countries are going through in the field of foreign trade and investment give rise to the urgent need to implement an exchange rate risk management strategy.

Key words: risk techniques, exchange rate, financial volatility, financial risk.

Introduction

The central mechanism of the racial exchange rate in the international financial economy, and this importance comes from the complexity of financing problems at the internal and external level, especially for the country on the path to growth, which is characterized by the blockade of the possibilities of self-financing resources in particular and internal finance in general, the exchange rate mechanism is the pole element of modern financial thought due to the importance it acquires

¹Assistant Teacher. / Baghdad Education Directorate - First Karkh.akrammuhand@gmail.com

²Assistant Teacher. / Baghdad Education Directorate - Al-Karkh First. Halaalubady@gmail.com

in adjusting and settling the balance of payments for the country on the path to growth, which is characterized by chronic structural deficits according to macroeconomic policies in the field of development. Where the movement of foreign capital is seen as a key driver in the investment finance process as well as consumption of the family and enterprise sector, the established exchange rate systems, such as floating and fixed exchange rates, have become unable to effectively balance the balance of payments to developing countries. In view of the unbalanced and equal economic and social development policies, the weight of internal and external indebtedness is known as increasing, and international financial and monetary organizations propose to reduce the size of this indebtedness and accordingly control the mechanics of exchange rates to find successful solutions to the development process, where the research section into three chapters, addressed the first chapter what exchange rates and contained two researches, the first research concept of exchange rates while the second research factors affecting the exchange rate may address the second chapter techniques of exchange rate risk and contained The first research is the importance of managing exchange rate risk and the second research is the risk management systems in the exchange rate, but the third chapter came with the title of exchange rate determinants and methods of forecasting and has been divided into two researches, the first discussed exchange rate and inflation, while the second research exchange rate and interest rate.

Research problem

That with the collapse of the Bretton Woods system in 1971 and the adoption of the floating exchange rate system of most countries all over the world violent fluctuations in the exchange rate of international level currencies. Exchange prices In which the exchange rate is characterized by its constant fluctuations and its consequences, of course, negative effects are very important for international agencies, whether related to financial or commercial activities, and this is the second occurrence. In the first half of the seventies, many industrial organizations with international activities had to face price risks. The exchange has discovered many techniques to prevent or avoid such risks. It is known for its precautionary strategy that includes the US dollar and the currencies of the Group of Seven countries to maintain a narrow range of exchange rate fluctuations, but it resists the attacks that the market is witnessing in front of traders and investors. This has led to the efforts of the responsible departments in these institutions to face foreign exchange risks, because of its decisive impact. On the foundation and foreign treasury. exchange.

Research importance

Most of the third world countries experienced fundamental changes in various fields under the pressure of bad economic conditions, which prompted them to submit to the international monetary institutions, which played a role. integrate them into the developing international economic system. The liberalization of foreign trade, the exchange system and the general prices imposed on it... is in line with international economic conditions bearing in mind that an increasing number of developing countries are witnessing the transformation of their exchange rate system into a flexible one. The current level fixes the price of the national currency, which leads to an increase in fluctuations in the price of the national currency, which increases the risks of exposure of traders to these risks in the physical, currency and financial markets.

research aims

The research aims to:

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- Recognize the impact of risk techniques on exchange rate fluctuations.

Learn about exchange rate risk techniques.

search limits

Objective limits: the impact of risk techniques on exchange rate fluctuations.

Time limits: The research was conducted in the 2021 academic year.

Spatial boundaries: Iraq - Baghdad.

Chapter 1: What are exchange rates

The first topic: the concept of exchange rates

After the development of the nature of economic life with which international relations have evolved, which include trade and capital movement, this requires exchange of currencies between countries or the selection of a particular currency that is acceptable to mutual countries.

The exchange rate is therefore seen as swapping a number of units of local currency for one unit of foreign currency, thus linking the local economy to the world economy through the relationship between exports and imports (Tahir Al-Atrash:2007:96), and the exchange rate can be defined as the exchange rate of swapping a number of local monetary units for a number of foreign monetary units. Also, the mirror through which the state's commercial center is reflected with the outside world, so the exchange rate is seen from two angles, the first is the number of local monetary units exchanged for one unit of foreign exchange, and the second is that the exchange rate is the number of foreign currency units that pay for one unit of the local currency, Therefore, the exchange rate is a link between an open economy and other world economies through knowledge of international costs and prices, so the exchange rate achieves the internal balance of price stability and achieves economic growth and external balance of payments balance, as well as the importance of the role of the exchange rate in linking the local economy to the world economy through the three markets, which are the asset market, the commodity market, the production factor market, and at the macro and partial level. Where the exchange rate connects the prices of domestic goods and their prices in the world market and determines the real exchange market the number of units of foreign goods required to buy one unit of domestic goods as the exchange rate seeks to achieve the overall objectives of internal and external balance and since the main objective of the exchange rate is limited to stabilization to exchange the country's currency against foreign currencies, which is the desired goal, but it may be difficult to achieve to submit the exchange rate to many determinants, as is any commodity in a fully competitive market determined through the interaction of supply and demand forces.

There are many definitions of the exchange rate, including:

- The exchange rate is defined as the ratio on which foreign exchange is exchanged for national currency
- Or is what national monetary units pay for a unit or a certain number of foreign exchange units.

- The exchange rate defines the main tool with a direct impact on the relationship between domestic and external prices and is often the most effective tool when exports are required to be encouraged and imports provided
- Is the number of monetary units that change one unit of the local currency to another foreign and in this way embodies the tool of linking the local economy with the rest of the economies.
- It is an important way to influence the allocation of resources between economic sectors and on the profitability of export industries and the cost of imported resources.
- It is a tool linking commodity prices in the domestic economy with their prices in the global market and the local price of the commodity linked through the exchange rate.
- The exchange rate can be defined as the number of units of a particular currency to be paid for one unit of another currency, and in fact there are two methods of currency pricing:
 - Direct pricing: The number of units of foreign currency to be paid for one unit of the national currency, and currently few countries use direct pricing and the most important countries that use this method are Great Britain, and in the financial position in London, the pound is measured
 - Indirect pricing: It is the number of units of the national currency to be paid for one unit of foreign currency, and most countries in the world use this method of pricing including Iraq, in Iraq the U.S. dollar is measured by a number of units of dinar

The second topic: factors affecting the exchange rate

It is known that the exchange rate is often unstable, rising or decreasing due to several factors, including monetary factors, financial and commercial factors, etc., and each exerts its direct and indirect impact on the state of the national economy through the imbalance that will occur in the balance of payments directly related to exchange rates, which makes the state often intervene to exercise its role in the stability of exchange rates, so the most important factors affecting the exchange rates will be addressed by agencies. :-

- 1- Monetary factors: - The exchange rate is influenced by monetary factors represented by inflation, interest rates, cash supply and others directly or indirectly, which leads either to the rise or fall of the exchange rate, depending on its impact, and these factors will be addressed by agencies:
 - a. Inflation rates: - The rise in inflation in a particular country means the depreciation of the local currency, which is offset by higher prices of goods and services compared to other countries, which makes the imbalance in the balance of payments where imports will be greater than exports because domestic goods are high prices while foreign goods have low prices and increased demand for foreign goods will increase demand for foreign currency and increase the supply of domestic currency in other countries Therefore, the depreciation of the local currency compared to the foreign currency, so higher prices in a particular country than in the other require monetary measures to get things back to normal, and the opposite is in the case of lower prices than other countries.
 - b. Interest rate: - There is a close correlation between the interest rate and the currency rate, so if the interest rate rises, this is a reason for the strength of the currency. On the contrary, if real interest rates rise, this will be an attraction for foreign capital, which in turn will lead to a rise in the exchange rate in foreign exchange markets, but if the opposite happens and there is a

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rise in interest rates in other countries, it will be an incentive to transfer capital to those countries to earn profits and this increases the demand for the currencies of the country concerned, thus showing that interest rates have an indirect impact on exchange rates. The low interest rate leads to a high demand for capital for investment, which leads to increased demand for the local currency and thus an improvement in the strength of the local currency towards other currencies.

- c. The offer of cash: - The offer of cash has a reverse relationship with the exchange rate as the high offer of cash represented by the currency traded and bank deposits leads to a decrease in exchange rates where the work of inflation as the rise in the amount offered of cash leads to a decrease in the value of the local currency and thus the rise of its exchange rate, although there are some economists do not go to this view. However, a large number of economists dealing in the foreign exchange market, including the American Macklup, view the importance of the amount of money factor and its impact on exchange rates according to quantitative theory, which shows that the basis under which the exchange rate is determined between currencies is the amount of money available in the particular country.

2- Financial factors: - Fiscal policy has its instruments through which it can influence the exchange rates and the amount of money offered and even the state of economic activity of the country and one of the most important financial factors affecting exchange rates are:

- A- Public expenditures: - Public expenditures are the second pillar with the revenues that make up the general budget of the country, which should not exceed public revenues to prevent a budget deficit. If public expenditures exceed revenues, it leads to a budget deficit, which must be addressed in one of two ways: the new monetary issue, which will increase the country's monetary supply, thereby reducing the value of the local currency, rising prices, increasing imports, reducing exports and causing imbalance in the trade balance as a result of lower prices in other countries. Thus, the decrease in the local currency exchange rate, the second way to finance the deficit is borrowing from the public, which leads to a decrease in the amount of money offered and higher interest rates, which attracts foreign capital to the interior, i.e. an increase in the demand for the local currency, and thus a higher exchange rate, an increase in the value of the currency and an increase in the supply of exchange The foreigner.
- B- General revenues (taxes): - Tax policy affects exchange rates through the ratio of exemptions provided to capital investments, which encourage investment and make foreign capital flow inward, which increases the demand for the local currency and therefore the rise of its exchange rate, but there is a difference between developing and advanced countries in tax policy developed countries tax the income of residents even if the source of income from abroad, but the domestic income does not impose a tax on it While developing countries do not tax the income of their citizens in all countries of the world, but they tax income generated by foreign investment profits, this difference is called "the opposite flow of capital", under which capital flows from developing to developed countries, which increases the demand for the currencies of developed countries and therefore the tax policy has an impact on exchange rates by increasing demand for local currencies or reducing demand for them.
- C- The government budget deficit: - The budget deficit is one of the problems facing economic stability and the most common, especially in developing countries, where the budget deficit affects the exchange rate up or down. In the case of an increase in the exchange rate, this means a decrease in the value of the currency and vice versa in the case of a lower exchange rate means The increase in the value of the local currency, and as it has been shown previously that

the increase in government expenditures is greater than revenues will lead to a deficit in the general budget and this deficit that is financed in one of the two methods, namely the new cash issue or borrowing from the public. The exchange rate, which also decreases, and therefore a policy must be followed based on reducing the budget deficit in a manner that allows the capabilities and potential of the national economy to grow, since the continuing deficit reflects negative effects on the national economy.

3- Real factors: - Monetary and financial factors also have an impact on the exchange rate and how through them are addressed imbalances that occur as a writer of an expansionary or deflationary policy such as the new monetary issue, revenues and taxes, and there are other factors affecting the exchange rate, which are called real factors, many of which are the following:

- A-** National product (productivity): - The national product, consisting of the productivity of all the country's economic sectors, affects the exchange rate, or decreases, depending on the nature of the exchange rate, whether fixed or flexible, as the increase in productivity will be accompanied by an increase in exports, which is also accompanied by an increase in demand for work and an increase in the wages of workers, and the export of surplus will lead to a rise in the general level of prices, but increasing prices and wages while the exchange rate remains constant will lead to inflationary pressures, but if the exchange rate is flexible, this will lead to a rise in the general level of prices. The currency is rising, and inflation will be lower in the case of the fixed exchange rate than in the flexible to lower prices of imported goods.
- B-** The level of employment: - The high level of unemployment calls for protection from the industries received by the country and unemployment may be the result of strict monetary measures aimed at addressing inflation in prices and wages, thus the impact of unemployment cannot be avoided, even if it is temporary, if monetary tightening has occurred in a country dominated by the floating exchange rate will lead to a rise in the exchange rate of this country and thus there will be negative effects of monetary contraction in order to protect competing industries The real exchange rate will rise as a result of the decline in total demand, which in turn will encourage foreign investment within the country due to high interest rates. Thus, protection has led to a rise in the foreign exchange rate against the local currency, thus weakening domestic industries competing for international industries and imports becoming more attractive, which in turn is a major imbalance in the country's commercial advantages.
- C-** Commercial factors: - One of the most important commercial factors affecting the exchange rate is the current account, as the demand for foreign currency is by residents within the country for the purpose of importing foreign goods, but the demand for the local currency is by foreigners wishing to buy local goods, which represent exports in the current account, in the case of increased imports on exports, i.e. increased demand for foreign exchange more than supply and thus leads to a decrease in the value of the local currency and an increase in the exports of the country concerned. This is what has been referred to (asset theory) which the owners believe that the exchange rate is determined by the changes that occur to the balance of payments, if the balance of payments is positive, this means a higher foreign exchange offer on demand and therefore a higher currency value. The opposite is that if the balance of payments is negative, it means that foreign exchange demand is higher than supply and therefore the currency value of the country is reduced, so the current account has a clear impact on the exchange rate, rising or falling through the balance of payments situation if it is in surplus or deficit.

Chapter 2: Exchange Rate Risk Techniques

The first topic: The importance of managing exchange rate risk

Perhaps one of the most prominent concerns about managing or managing exchange rate risk is:

- The integration of third world countries into the international economic system (the phenomenon of internationalization or economic globalization) within the framework of comprehensive economic reforms and work in an international economic environment based on monetary mechanisms especially and invokes market law in all fields, which requires attention to exchange rate issues and related risks.
- The emergence of new patterns of international trade and investment flows mainly related to the emergence of new traders in the international arena such as southeast Asia and China, and the associated increased volatility in exchange markets due to the large number of transactions.
- The many financial and cash flows to meet the requirements of trade and investment in emerging countries will generate the urgent need for a new strategy to manage exchange rate risk.
- Exchange rate fluctuations can affect not only the financial position of the international organization, but may extend to the economic development of the country concerned.
- A reflection of the effects of exchange rate fluctuations on the various functions of the international enterprise (from planning, supply, production, marketing, financing, treasury...) and the resulting trend to speculation.
- Improved competitiveness (in the field of price especially) for enterprises is linked to the extent to which the risk of exchange rate is controlled and managed effectively and efficiently, considering that this risk is an important and specific factor for cost prices, especially in third world countries, which are based in the inputs of their production operations on imported raw and intermediate materials.

The high cost of administrative or central procedures and arrangements to prevent exchange risks is the mistaken belief that central banks and governments can control exchange rates.

Thus, foreign exchange risk management has become of great importance at the moment, especially for the institutions of developing countries, which have experienced shifts in their economic system towards a free system, despite the increasing complexity of this process at the same time, which calls for managing exchange rate fluctuations very carefully and cautiously and effectively at the same time, all through the selection of tools or techniques used in this regard, which are many, in line with the situation of developing countries, and The most important of these techniques can be below.

Techniques for hedging exchange rate risk:

The techniques intended here are the sum of the procedures and measures used by the institution in order to reduce or avoid the risk of disbursement by reducing the volume of debts written in foreign currencies or affecting payment terms or other measures. In this regard, there are two groups of techniques to prevent the risk of exchange, the first is internal techniques because the institution is trying to control and manage these risks at its level and with its internal or private capabilities without the need to enter foreign markets or seek the help of external parties, and if it is not able to bypass These risks resort to the use of the techniques of the second group, which are

considered external, as they require resorting to markets or dealers from outside the institution itself, such as the institution's dealings with banking institutions in order to buy or sell currencies on credit, or when the institution enters the market in order to sign forward contracts from In order to buy or sell OPTIONS DE CHANGE exchange options, and within this perspective, the institution can also resort to cross-loan operations in the currency or the so-called SWAPS, or resort to insurance companies ... etc.

First: Internal techniques for managing exchange rate risk: these techniques are:

A- Impact on maturities: The period during which dues can be collected or debts or obligations between economic clients at the international level can be collected. In this area, we distinguish the following actions:

1- Operation Le Termillage:

The so-called Termillage (LEADS and LAGS) measure is to diversify payment timers in order to take advantage of the positive development of exchange rates, where the maturities or dates of collection of rights (source) or payment of obligations (imported) are adjusted as much as possible, depending on exchange rate changes.

LEADS is a pre-payment while LAGS is deferred payments and this process is not really a technique to cover the risk of exchange, but the way the organization tries to take advantage of exchange rate fluctuations.

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