Managing exchange risk and the impact of the pandemic crisis on Algerian and Tunisia currencies

Gérer le risque de change et l'impact de la crise pandémique sur les devises algérienne et tunisienne

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Abstract:

This study aims to address the problem of managing foreign exchange risks and currency price fluctuations resulting from being affected by various crises, noting how to manage these risks in Algeria and Tunisia considering the pandemic coronavirus crisis and trying to find possible solutions to avoid this. And among the results of this study, there are that the techniques used to cover the risk of exchange rates prevent the formation of drainage situations, where they work to guard against risk before it appears, and to deal with it while it is reached and protected from it, which is why it is very important to choose the best technique for good management of fluctuations in the exchange rate of the country, try to increase the volume of international exchanges currencies.

Keywords: Exchange rate, risk of exchange rate, manage the risk, pandemic covid19,techniques.

JEL Classification codes: F31 , O55 .

Résumé:

Cette étude vise àrésoudre le problème de la gestion des risques de change et des fluctuations des prix des devises résultant de diverses crises, en notant comment gérer ces risques en Algérie et en Tunisie compte tenu de la crise pandémique du coronavirus et en essayant de trouver des solutions possibles pour éviter cela.Et parmi les résultats de cette étude, il y a que les techniques utilisées pour couvrir le risque de taux de change empêchent la formation de situations de drainage, où elles travaillent à se prémunir contre les risques avant qu'il n'apparaisse, et à y faire face pendant qu'il est atteint et protégé contre celui-ci, c'est pourquoi il est trèsimportant de choisir la meilleure technique pour une bonne gestion des fluctuations du taux de change du pays et essayer d'augmenter le volume des devises des bourses internationales.

Mots-clés: Taux de change, risque de taux de change, gérer le risque, pandémie covid19, techniques.

JEL Classification codes : F31 , O55 .

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1. Introduction:

The researchers and economists have placed a great importance to the exchange rate and its comprehensive concept, where there are many theories and concepts that aim to develop and crystallize its true concept, and contribute in turn to the diagnosis of reality and the establishment of new theories and explain the various changes of the economy and economic crises, in order to try to understand the phenomenon characterized by the interlocking of the most important factors affecting the exchange rate, by analysing the fundamental difference between internal payments made by the country's currency and international payments involving units of multiple currencies. This shows a relationship between the different currencies, which are later called exchange rates, which is the price of a country's currency denominated in the currency of another country.

The steady increase in international transactions has required a smooth and rigorous settlement of currency transfers. However, the imbalance between demand and the supply of currencies in the international arena has caused fluctuations in the exchange rates of these currencies. The direct correlation of the exchange rate with the economic stability of countries has led central banks to monitor the exchange market and take the necessary measures to protect the interests of countries, and in this regard the role of these banks in determining exchange rates indirectly by raising interest rates to stimulate demand for the country's currency, which pushes the currency to rise compared to other currencies.

In this regard, financial markets, including the foreign exchange market, have undergone drastic changes in recent decades and increased unexpected volatility in those markets, which has contributed to the increased exposure of investors (individuals and companies) to many non-traditional risks, one of which is unexpected fluctuations in exchange rates, which in turn lead to fluctuations in the current value of expected cash flows in the future, which negatively affects the value of the enterprise, which poses a challenge to these companies in seeking to meet exchange rate risks and to look for ways to ensure In neutralizing and reducing it, which is the important and major issue in the field of international finance, which has received prominent attention from theorists and researchers in this field. Financial innovations over the last 30 years have led to revolutionary changes in the international financial system, where derivatives markets have grown and made it possible for companies to hedge against various types of risk, including exchange rate risk, in order to

reduce the potential losses of exchange rate fluctuations in foreign currency receipts and cash payments, especially in light of the proliferation of the Corona Coved19 phenomenon.

This article proposes to present how to manage the exchange rate risks, and the impact of the pandemic on Algeria and Tunisia currencies, and seeks to provide answers to thefollowing problem:**What are the good ways to manage exchange rate risk and how the coronavirus pandemic affected the currency of Algeria and Tunisia?** The answers to this problem will be conveyed based on Exploratory research and through a distributed work plan into different themes. First, we present the exchange risk exposure by going through the reasons for the occurrence of exchange rate risk and the types of exposure to exchange rate risk, after that we define the different techniques to manage the currency risks, Then we will have a look the Effect of Covid-19 on the major Currencies and finally how to manage the risk of exchange rate in Algeria and Tunisia countries during the period of COVID 19, with supporting figures and statistics and exposing some solutions.

2. Exchange Risk Exposure:

2.1. The concept of exchange rate risk:

The risk is the pivotal factor affecting financial behaviour , and it has been defined as exposure to a loss or damage resulting from the possibility of some unwanted events(Weston, Fred J,Scott Besley,and Eugene F. Brigham, 1996, p. 182), and the exchange rate risk represents the degree of volatility In the exchange rate of a specific currency relative to other currencies or to the reference currency(Alan.C, Shapiro, 2003, p. 543). Commodity prices, exchange rates, and interest rates, and market forces play a major role in determining these factors. Exchange rate fluctuations may be a source of additional risk or that these risks are reduced, depending on the size of these fluctuations and their trends, as they are known to be a case of uncertainty about the price at which It is possible to exchange the local currency in terms of foreign currency in the future, This means that in the case of foreign currency purchases, the price at which the expected foreign cash flows are converted into the local currency is uncertain (Sharpe , William.F and Alexander , Gordon.j, 1990, p. 779).

2.2. Reasons for the occurrence of exchange rate risk:

Among the reasons that lead to the deterioration in the exchange rates of a country's currency, we find:

1_Inflation: There is a close relationship between the prevailing exchange rate and local prices, as it has been observed that declining exchange rates are associated with high inflation. Inflation drives individuals to demand foreign currencies, and to keep them in order to distinguish stability, as: If the rate of inflation in a country rises and was stable in another country, then this affects the exchange rate, and what leads to this situation of continuous deficit in the balance Payments, thus increasing government borrowing, and creating inflationary pressures on the national economy.

2_The stock market: it employs the financial surpluses and official reserves of countries, as the interaction of supply and demand for financial assets affects exchange rates in favor of industrialized countries, and this demand for securities is limited to hard currencies whose value results in an increase in the supply of securities.

That followed its value downward. These fluctuations in supply and demand lead to the fluctuation of the exchange rate of currencies, but when the interest rate of these securities changes, the opposite happens, as the prices of the securities whose interest rate increases and vice versa.

3_The interest rate: as raising it leads to attracting short-term international capital that is looking for room for employment in countries with a high rate, these funds must be exchanged into the currencies of these countries before they are employed in the market and thus the supply of foreign currencies in these countries increases and rises with them the value of the country's currency, hence the existence of variation in interest rates affecting exchange rates.

4_Currency depreciation: it is the deterioration of the currency's value as a result of the conditions of supply and demand for other currencies, as the currency loses its purchasing value with the high price level and its exchange rate is low compared to other currencies.

2.3. Types of exposure to exchange rate risk :

1_Exposure to risk of transactions:

Scientific research indicates that exchange rate movements are an important source of uncertainty facing companies that affect their value and profitability through changes in the prices and quantities of both the company's inputs and outputs as daily fluctuations in exchange rates create risks that continue for a short term for the company operating in the international field(Jorion, 1990, p. 331), and that most of these Companies have contractual agreements to buy and sell goods in the near future at specific prices and

different currencies. The risk of transactions is defined as the effect of unexpected changes in the nominal exchange rate on the cash flows accompanying the financial assets and liabilities(Pantzalis,Christor,Betty J. Simkins and Paul Laux, 2001, p. 796).Thus, the risk of transactions measures the changes in the value of the existing financial liabilities incurred before the change in exchange rates, but it was not worth settling until after the change in those prices, This risk deals with changes in cash flows that arise from liabilities Existing money. Companies operating in the international field, specifically those that export or import goods and services, should receive or pay for these products, and the payments and receipts are in foreign currency, and because the exchange rates are variable in value from one minute to the next, all of these payments and proceeds in foreign currency are subject to exposure to exchange risks Foreign currency, and that this exposure to exchange risk is called exposure to transaction risk .

2_Operating exposure:

The operational risk of exchange rates is more important to the financial position of the company than the effects of transaction risk, as it does not resemble the risk of deals that are easily identified (directly through deal contracts), as operational risk depends on assessing the impact of changes in the exchange rate on the deal that was not agreed upon. After, to determine this risk it is necessary to measure the change in expected future cash flows in response to changes in the exchange rate, and as long as the prices are not set or specified in the future deal, the operational risk depends on the real rate exchange.) It is defined as the effect of unforeseen changes in exchange rates on cash flows to the company's real assets and liabilities and its competitive position.

3_Exposure risk of the transfer:

Foreign currency exchange is one of the most difficult controversial issues facing companies operating in the international field, as a result of the globalization of business and fluctuations in foreign exchange and global stock markets, companies with important operations outside the borders cannot prepare unified lists unless they express their accounts and accounts Its branches are in the same currency, usually the single currency is the currency of the parent company .2004، احمد حامد ، محمد عصام الدين وحجاج ،زايد) (231 صفحة, Transfer risk is sometimes called an accounting risk and it measures the potential changes in ownership of owners, which arise from the need to convert financial statements in foreign currency for

foreign branches into a single currency to unify accounts, and thus the ability to prepare consolidated financial statements at the global level. It has the values of assets, liabilities, expenses and profits in foreign currency when converted at specific exchange rates into the local currency on a specific future date.

3. Currency risk management techniques:

The technologies intended here are the sum of the procedures and measures that the corporation uses to reduce or avoid the risk of exchange by reducing the amount of debt issued in foreign currencies or affecting payment terms or other measures. In this regard, there are two groups of technologies to prevent the risk of exchange, the first being internal techniques because the institution is trying to control these risks and manage them at their level and with their internal or private capabilities without the need to enter external markets or seek the help of external parties, and if you cannot overcome Those risks are resorting to the use of Group Two technologies, which are considered external, as they call for 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 in the future, or when the institution enters the market in order to sign future contracts from In order to buy or sell exchange options , the organization can also resort to cross-currency loans or so-called SWAPS, or resort to insurance companies ... etc.

3.1. The concept of risk management:

The risk management define as a systematic process for identifying and evaluating exposure to net losses facing companies or individuals and to choose and implement appropriate technologies to face these risks, they are activities designed to minimize the negative impact(cost) of uncertainty(risk).Taking into account the possible losses, it also describes the process of identifying and evaluating the risks and selecting the appropriate tools and implementing them according to the type of risk (Stulz, 1996, p. 13).

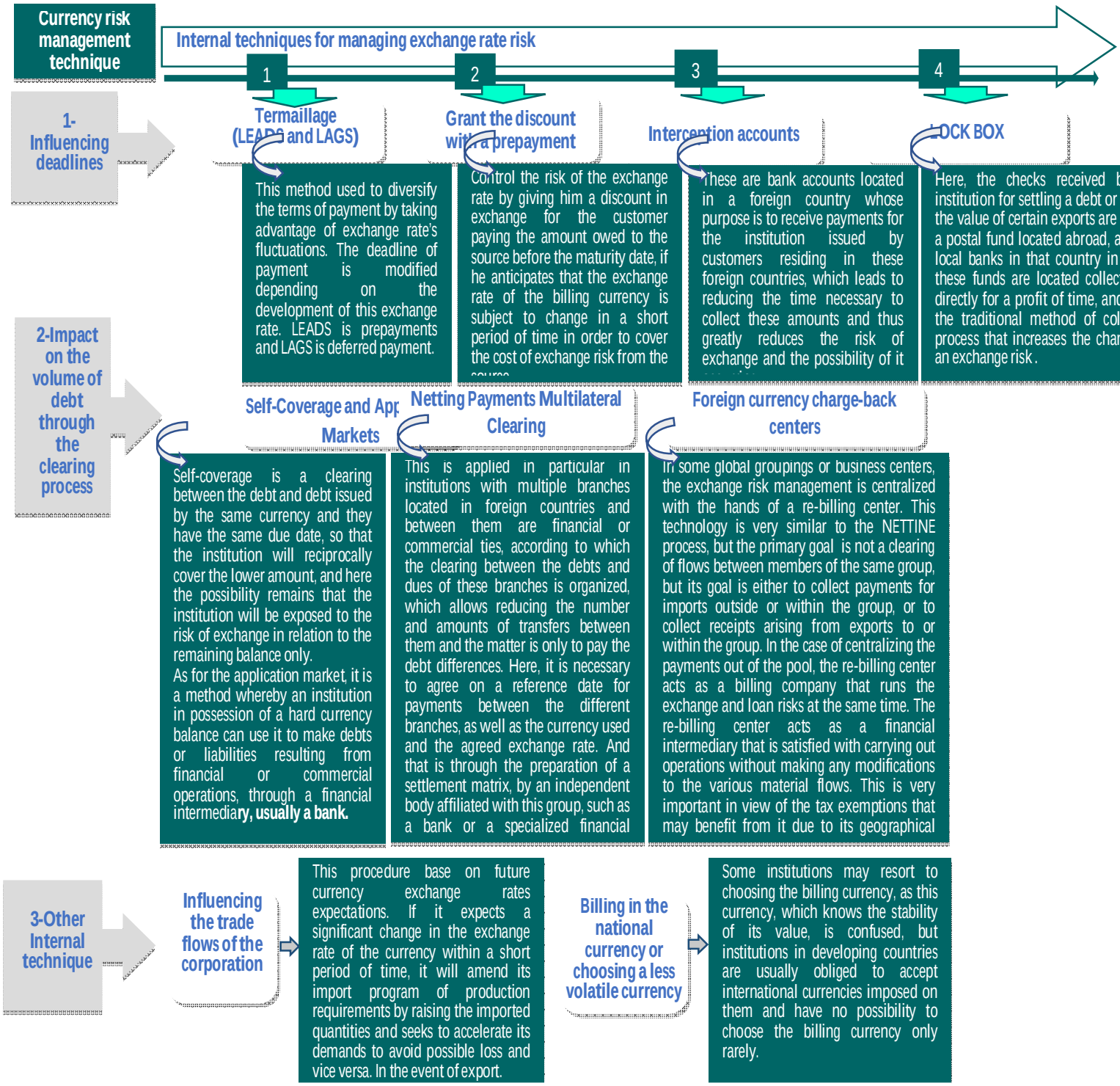
A key issue in risk management is the one that relates to Modcillian's classic theoryMiller & Modigliani states that "risk management is not related to the value of the enterprise" , Stakeholders can do this through diversified portfolios well diversified(Allayannis.G and Weston J.p, 2001, p. 241). In contrast, many recent theories have referred to hedging as a risk management tool and a strategy for increasing the value of an enterprise.

The risk management is of great importance in maximizing the value of the enterprise as it leads to the following:

- The risk management helps to stabilize cash flows, stable cash flow reduces fluctuations in expected returns and then increases the value of the enterprise, and stable cash flows reduce credit risk and exposure to bankruptcy or risk of insufficient returns to cover contracted debt payments.
- In addition to facilitating planning long-term investments with low financing costs, risk management also helps companies focus on their business risks "Irregular risks" .

3.2. Internal techniques for managing exchange rate risk: These techniques are as follow

Figure 01 : Internal techniques for managing exchange rate risk



Source: Prepared by the student based on different references(04 صفحة ،2014 ،آيت بارة م و محمد صاري)**,**(97 صفحة ،2001 ،صادق)**and**(10 صفحة ،2009 ،الحق)

3.2. External techniques to cover exchange risks :

When the institution's actions fail to avoid the risk of exchange, it can resort to other coverage techniques, whether by resorting to the market or dealing with financial institutions specializing in this field. These technologies are called external technologies, and we distinguish two groups of mechanisms from which we can explain the following:

• The set of technologies that revolve around the final fixing of the exchange rate at the time of the emergence of this risk, such as forward exchange, forward currency or forward contracts. However, its main downside lies in the failure of the institution used by it to benefit from any positive development in the future exchange rate.

• The set of technologies that protect the corporation from the risk of exchange with the possibility of benefiting from any positive development of the exchange rate, and is mainly represented in the use of options of various types, OPTIONS.

Figure 02 : External techniques to cover exchange risks

Source: Prepared by the student based on different references(04 صفحة ،2014 ،آيت بارة م و محمد صاري)**,**(97 صفحة ،2001 ،صادق)**and**(10 صفحة ،2009 ،الحق)

4. The Effect of Covid-19 on the major Currencies:

The COVID-19 crisis has shaken financial markets across all instruments: stocks, bonds, CFDs, futures and ETFs. All markets have been very volatile and according to several online brokers many investors took advantage of this period of high volatility to enter the currency market.A currency and a pair of currencies, such as the euro against the US dollar or the euro against the British pound.

The Major Currency Pairs:

1-EURUSD

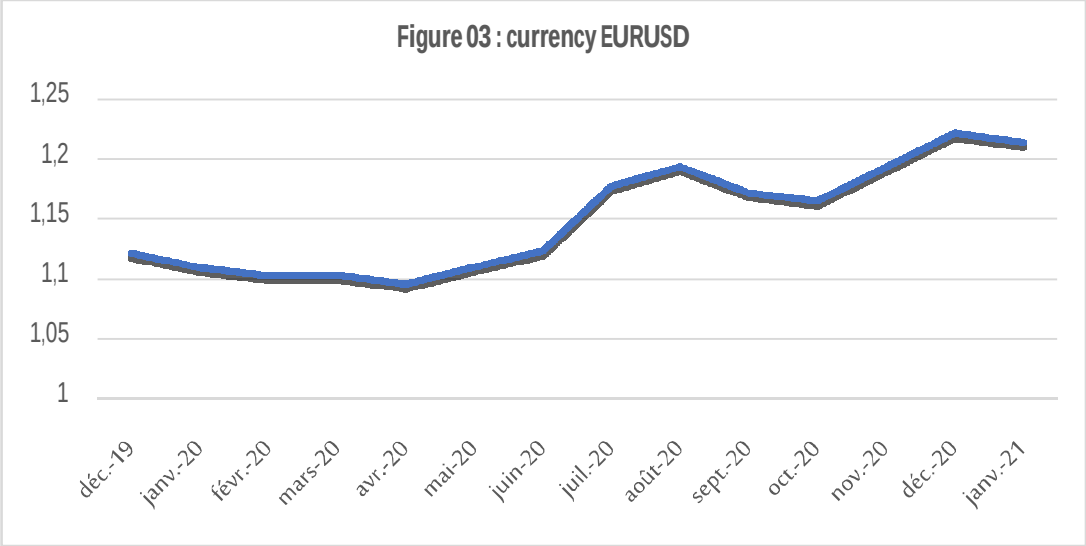
2-GBPUSD

3-USDCAD

4-USDCHF

5-USDJPY

4.1.The currency EURUSD since COVID-19 Crisis :



Source: Prepared by the student based on data in Investing.com

The monthly Chart shows the development of the euro vs the dollar during and after the peak of the Covid19 stock market crisis. At the first, the markets panicked in March when the whole of Europe was put into lockdown. Trading volumes were also higher during the period from 9th to 19th of March , when the stock markets were hit the hardest. It is clearly seen in this chart that investors were much more interested in online trading during the period of the COVID 19 crisis, which was a good time in the stock markets for investments

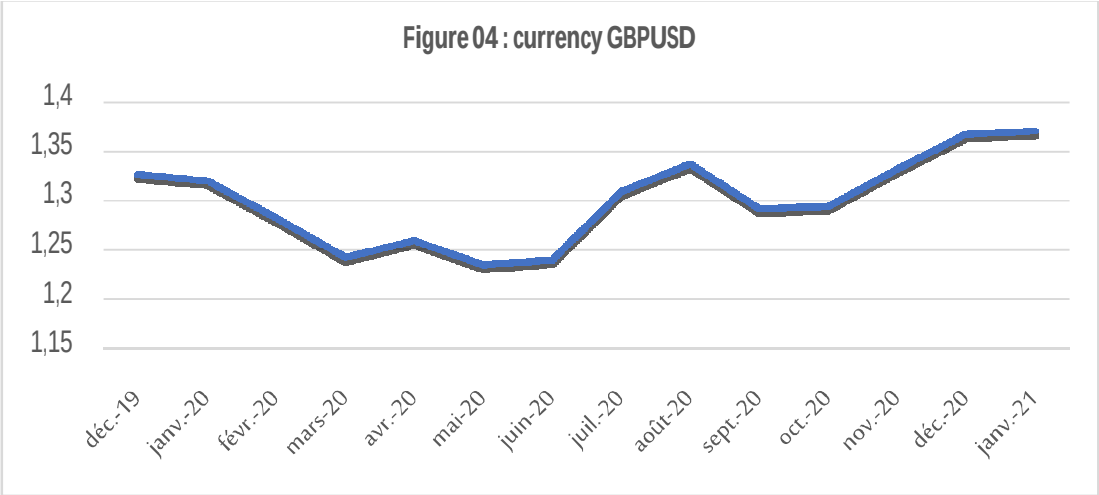
in stock Exchange. Then, we saw a period of range when the price of the currency moved in a horizontal channel.

Since European countries unconfined after around May 20, the euro dollar pair has been on the rise again. It seems that the markets have been reassured by the exceptional measures of the central banks and that the recovery plan of the European economy has pushed up the euro against the US dollar. This increase also comes at the same time as the health situation in the United States was worrying at the end of June.

4.2. The pair GBPUSD - The Free Fall from GBP to US Dollars :

If the euro has been volatile against the dollar, but the price has rebounded after the COVID crisis, the situation in the Other Channel is quite different. The British Pound appears to be setting up a long-term bearish channel as can be seen in the chart.

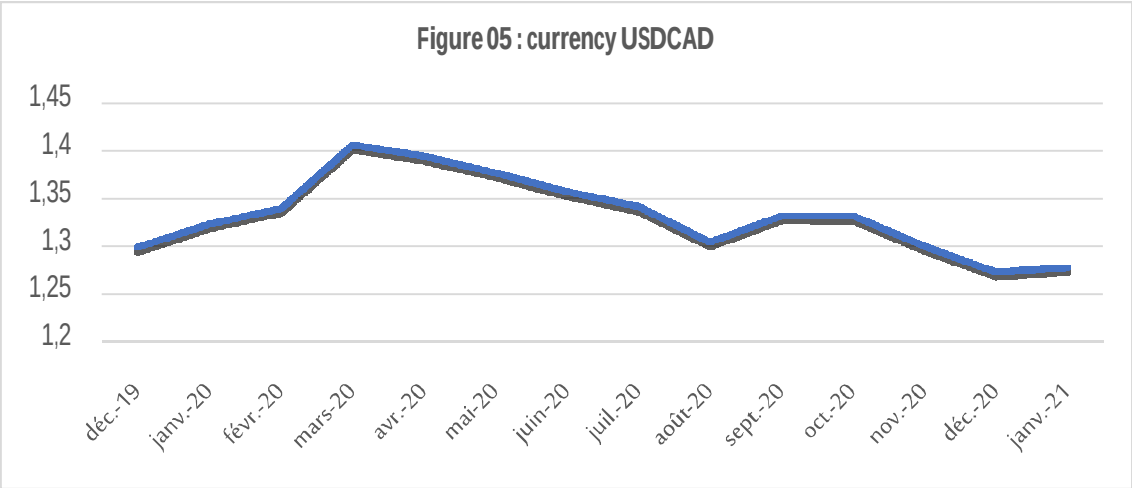
Figure 04 : currency GBPUSD



Source : Prepared by the student on the basis of data in Investing.com

4.3.The pair USDCAD - Penalized by the crisis of 2020 :

The Canadian economy is very dependent on exports and this has also been seen in the evolution of the Canadian dollar against other currencies. In the below graph we can easily see how the US dollar appreciated against the Canadian dollar during the crisis of 2020 and that the long and medium term trend is currently up for the US dollar against the Canadian dollar.



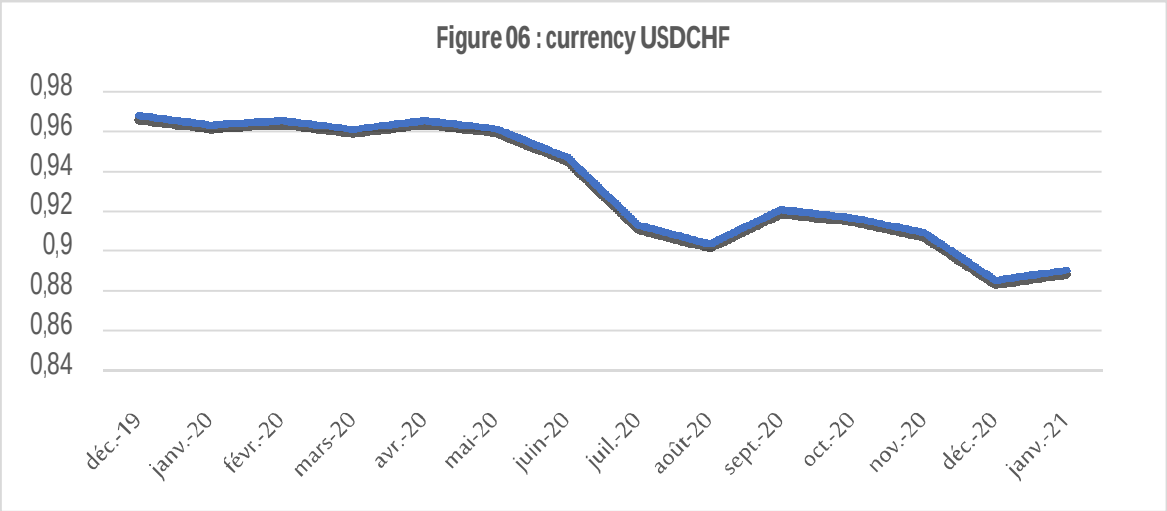
Source : Prepared by the student on the basis of data in Investing.com

The evolution of this currency was indeed depended a lot in the second quarter of 2020 on the health situation in the world, which greatly disrupted the international trade and Canadian exports.

4.4.The currency USDCHF - Swiss Franc Acts as "Safe Heaven" Asset

The Swiss franc is often assimilated to a safe haven and this was already seen during the subprime crisis in 2009. During the stock market crisis of 2020, the franc appreciated sharply from February 14 until reaching a high. March 19. The US and European stimulus package rekindled investors' appetite for risk, and the franc then depreciated again against the US dollar to pre-crisis levels.

Then the price experienced a slow and gradual decline. As in the case of the other currencies already mentioned, the situation of the USDCHF rate is intimately linked to the health situation and to investors' appetite for risk. For now, at the end of June the USDCHF trend is downward.

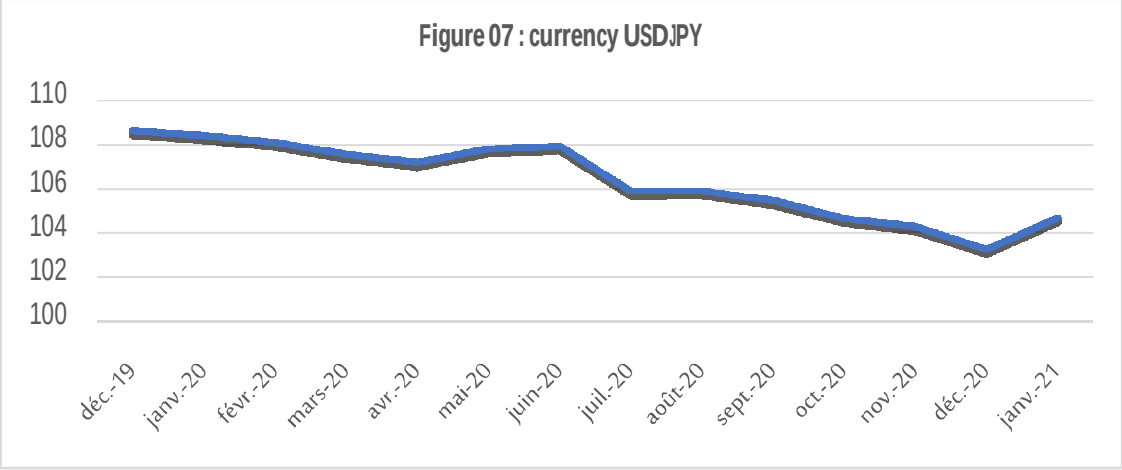


Source: Prepared by the student on the basis of data in Investing.com

4.5.The currency USD/JPY - Risk Appetite is back :

The US dollar currency pair against the Japanese yen is often associated with a greater appetite in the stock markets. This currency pair is also one of the most used for carrying trades.

The evolution of this currency pair is of course correlated with the other charts presented above: during the COVID-19 crisis the US dollar collapsed against other hard currencies, such as the Swiss franc and in this case the yen Japanese, to come back in force just after, once the stock markets were reassured by the announcements of Donald Trump and the stimulus plan of the American economy voted by the American Congress.USDJPY is currently in a range around 104.68 yen to the US dollar.



Source: Prepared by the student on the basis of data in Investing.com

5. Managing the risk of exchange rate in Algeria and Tunisia countries during the period of COVID 19 :

5.1. Managing the risk of DZD exchange rate during the period of covid19:

The exchange markets were negatively affected by the recession that has hit the Algerian economy since March, due to the outbreak of the Coronavirus, after the exchange rate of the dinar fell against the European single currency, the euro, and the U.S. dollar to the lowest level in 4 months against the euro and the U.S. dollar

Before that, the Algerian currency lost more than 4 dinars against the dollar, early Last April, with the beginning of the health crisis, with the exchange rate reaching 127.02 dinars per dollar, from 123 dinars, in early March, as well as the euro jumped from 135 Dinars during March to 137 Dinars last April, continuing a downward trajectory against foreign currencies and the decline of the country's foreign exchange revenues, with oil prices losing 60% of their value during the first quarter of last year 2020, as the dinar lost its cohesion against the dollar And the euro in in bank transactions .

The loss of the dinar for some of it's luster against foreign currencies, was due to the central bank's adoption of the policy of floating the dinar when necessary, as the dinar has already lost a large part of its value during the past year, to face the consequences of declining oil revenues and curbing the import bill.

With the end of the last year 2020, the Algerian dinar recorded a significant decline in its value which had never seen before, according to figures disclosed by the Central Bank, after the exchange rate of 1 dollar against the dinar reached 132.22 dinars in the month of December. This situation raised many questions about the free fall of the Algerian dinar value and its implications for the economy and the purchasing power of the citizens.

The economists 'readings have identified many reasons that is behind the decline in the value of Algerian dinar, especially during this year in which it witnessed an unprecedented decline in the history of the Algerian currency, which was mainly linked to the decline in the country's income from hard currency due to the collapse of the oil price , to which the Corona pandemic contributed greatly, and what caused the contraction of the global economy, as it is expected that revenues from fuel exports will reach about 23 billion dollars, compared to 33 billion dollars in 2019.

The Algerian economy is closely linked to the revenues of its oil exports, which exceed 90 percent of the state's income from hard currency, as all economic plans during the past decades have failed to diversify

the Algerian economy outside the hydrocarbon sector, despite huge financial allocations devoted to reviving the service, industrial and agricultural sectors.

This explains why the economic growth numbers in Algeria did not move upwards and remained at a low level and average growth rate despite the fact that the import of goods and services in foreign currency exceeded $ 1,000 billion between 2019 and 2020 .

The reasons behind the decline in the value of the dinar in Algeria are numerous, according to the some economists , The Central Bank (Bank of Algeria) determines the exchange rate of the dinar according to basic variables that are viewed every year, and the most important of these variables are: the balance of trade and the balance of payments, the prices and revenues of oil and reserves Exchange, the size of public expenditures, competitiveness and productivity inside and outside of the country . But at the same time, it takes into account, from time to time, changes in the prices of a basket of currencies, the most important of them are the dollar and the euro, as they are the most important currencies in our foreign trade.

Algeria relies on the managed floating exchange rate system in determining the exchange rate , which is subject to some of the variables previously mentioned , and since there is a deterioration in these variables, means that there is a deficit in the balance of trade and the balance of payments, a decline in oil revenues due to the collapse of prices after the Covid-19 pandemic ,the rapid erosion of exchange reserves, which is the hard core of supporting the currency and the weak productivity of the national economy. All this deterioration cannot be recovered in the short term, as the government announced in the Finance Law 2021, in coordination with the Bank of Algeria of course, for reductions in the exchange rate of the dinar estimated at 5 percent annually for a period of three years to come until 2023, in order to gain the difference in the exchange rate, especially after the decrease in income Fuel and greater support for the budget deficit, to avoid resorting to another solutions such as borrowing or quantitative easing.

According to this law, the Algerian dinar is expected to reach 156.8 per dollar in 2023. The economic situation in December 2020 was worrying, due to the decline in oil and gas prices and the absence of far-reaching reforms aimed at achieving growth with the survival of the imports of public and private companies in Algeria of raw materials and equipment in the range of 85 percent. In addition to lack of confidence, devaluation and deteriorating purchasing power , this prompted some specialists to say that this situation could lead the country to a dead end without a real recovery plan.

Also, the projects that can be launched will not be harvested until after three years for medium and small companies, and between six and seven years for large companies , so the current situation is suicidal and requires a national leap, as Algeria has witnessed the deterioration of the dinar value since the end of 2014 due to the decline in fuel prices, which prompted to deliberate reducing the value of the dinar

in order to inflate the dinar income from the hydrocarbon exports to face the growing deficit in the state budget. After the exchange rate of the dinar did not exceed 80 dinars to one dollar, it became necessary to provide for each dollar more than 100 dinars after three years, this means that budget revenues which are prepared in the national currency (dinar) will be higher if the value of the dinar decreases, and as a result, part of the budget deficit was covered.

This plan was not enough to face this continuing budget deficit for subsequent years, so another method was used, which is issuing and printing money without the process having a counterpart in the real economy. It is natural that the dinar's purchasing power continues to decline.

The Finance Bill for 2021 expects budget expenditures to reach approximately 8,113 billion dinars.While the total tax revenues (regular and oil) are estimated at 5328 billion dinars, a record budget deficit of 2784 billion dinars, equivalent to 21.75 billion dollars, compared to 18.60 billion dollars at the end of 2020.

According to economic expert Abd al-Rahman Matboul, the total deficit of the treasury will be in the range of 3,614.4 billion dinars, equivalent to $ 28.26 billion, or 17.6 percent of the gross domestic product.

These figures refer to the difficulties facing the Algerian economy, with declining in oil collection revenues, at a time when budget expenditures remain almost at the same level as previous years, which led to the erosion of the country's reserves of hard currency, which were in the range of $ 200 billion in 2014 and less than $ 57 billion in mid-2020.

Algeria resorted to printing money after that the Petroleum Stabilization Fund was exhausted to finance the budget deficit, the Central Bank resorted to this mechanism from mid-November 2017 to April 2019 when it was printed worth $ 55 billion, equivalent to 32 percent of The GDP for the year 2018.

Some experts believe that this step will have a negative impact over time, while others believe that the option of issuing and printing money has been adopted with its disadvantages on Algerians, in order to

avoid the second option of external borrowing that loses the state. Algerian sovereignty, even partially, especially with regards to its firm stances, in reference to its political stances on international issues, including Palestine and Western Sahara.

The negative repercussions of the dinar devaluation:

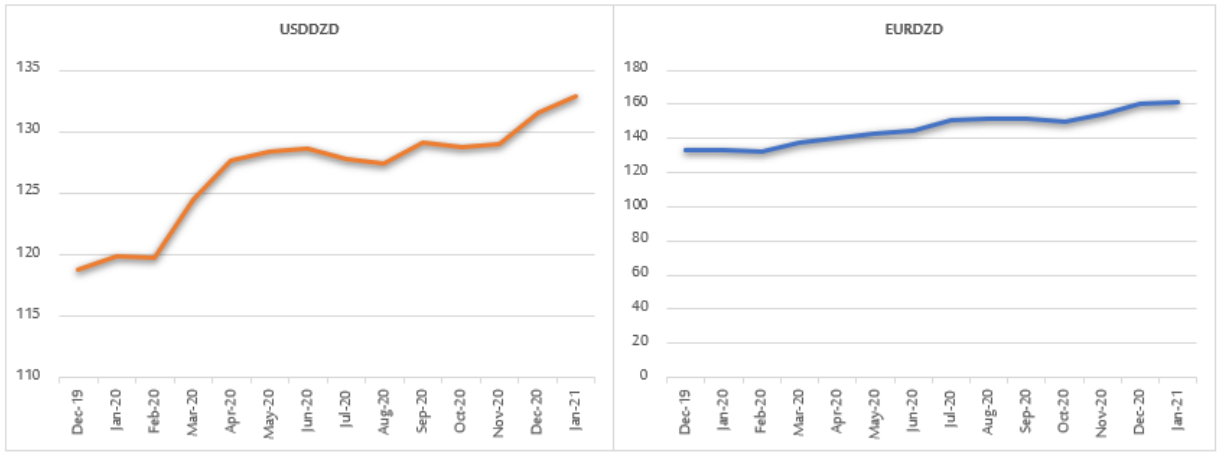
The impact of the decline in the value of the dinar and the resulting increase in inflation is felt on more than one level, the social level and the purchasing power of citizens, as well as its effects on economic performance.

The decline in the value of the dinar compared to the value of hard currencies may give more real value to the Algerian dinar due to this float, although it is partial and not a full float, but in return it will greatly harm the purchasing power of the Algerian citizen, and these reductions will affect that ability either directly through increasing the prices of imported consumer goods as finished products, or indirectly through increasing the prices of the raw materials that are used in the manufacture of many local products, which ultimately leads to an increase in their cost and thus their prices in the market.

Inflation affects families as it hits their purchasing power, after they became accustomed throughout the years that witnessed high oil prices to increasing spending that is economically unjustified, in the absence of productivity.

In addition to the inflation , the instability of the currency exchange rate and its continuous deterioration will be a factors that drives away foreign investments, for which the state is making efforts to attract by cancelling the investment rule number 51/49 , as confirmed by the experts that the foreign investor is looking for political and legal stability and the stability of the currency exchange rate, albeit relatively, because the deterioration of the currency value will affect the size of his profits when converting into a hard currency.

Figure 08 : USD and EUR VS DZD currency



	Dec-19	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21
USDDZD	118.786	119.861	119.74	124.44	127.61	128.4	128.664	127.75	127.345	129.06	128.7	129	131.56	132.9
EURDZD	133.159	132.962	132.013	137.245	139.797	142.498	144.503	150.451	151.999	151.232	149.897	153.871	160.674	161.287

Source: Prepared by the student on the basis of data in Investing.com

Some solutions to face the dinar collapse:

In front of this fragile economic situation marked by the decline in the dinar value, and with the decline in oil revenues, especially this year due to the consequences of the Corona pandemic, the experts put a number of proposals and scenarios that can contribute to the country's exit from the bottleneck, the most important of which are:

- Stopping the administrative management of the dinar exchange rate, then setting a gradual time schedule, with a fixed and final term to fully float the Algerian dinar, in parallel with reforming the support and protect systems of the fragile layers that will be damaged by this gradual flotation.

- Accelerate as far as possible, in implementing urgent and effective programs to revive and diversify the national economy so that there are other incomes for hard currency, such as exports outside of hydrocarbons and tourism, rather than being satisfied with their only current source of fuel.

-Taking care of a very important resource that has unfortunately not been well exploited so far, namely the remittances of migrants, which are an important source of hard currency in other Arab or neigh boring countries, as the increase in illegal immigration recently witnessed in Algeria has led to an increase in the number of young Algerians heading to the black market For their financial transactions in order to finance attempts to immigrate to Europe.

- Elimination of the parallel market for hard currency, which currently attracts most of these remittances, because it gives migrants a better price and therefore does not find their way to support the country's exchange reserves, these transfers, and in the event of creating appropriate conditions for them, can start from about 3 billion dollars annually and reach after a few years to 8 billion dollars Or more, given that there are about 7 million Algerian immigrants working outside the country.

5.2. Managing the risk of TND exchange rate during the period of covid19:

The exchange rate of the Tunisian dinar has withstood foreign exchange during the first months of the Corona pandemic, which saw a decline in the value of exports and the suspension of the tourism industry, considering export and tourism revenues as one of the most important foreign exchange channels in Tunisia, especially at the time when the country has suffered from fluctuations in its availability in the past two years, which negatively affected exchange rates.

The dinar gained near stability during the first months between April and May for the last year, as per some experts , it was due to the availability of foreign currency reserves, mainly from the tourism sector, the entry of some resources from loans and donations on the one hand and the turmoil in the world exchange market, and the decline of foreign currencies, especially the Us dollar on the other.

The Tunisian economic crisis has become a structural crisis and is not only linked to corona, where there is a fear that the dinar's exchange rate will decline after the crisis if the pace of economic reforms is not accelerated, although the export sectors have not accelerated the necessary rotation, including tourism and foreign direct investment.

In addition to the above, another factor for the stability of the Tunisian dinar in that period is the decline in the trade deficit as a result of the decline in the value of imports more than the decline in exports during the same period.

It can be said that the Central Bank of Tunisia was able to stabilize the exchange rate with the availability of currency reserves, which amounted to 21.7 billion Tunisian dinars equivalent to 7.5 billion dollars, this has avoided the significant decline in the level of the dinar value despite the decline in the value of exports, which reached 48.9% in April and 20.6% in the first four months of last year compared to the same period in 2019.In addition, Tunisian imports also saw an unprecedented 46.8% decline in April and 21.5% in the first four months of 2020.

The exchange rate of the Tunisian dinar has decreased compared to the major foreign currencies, excluding the dollar, in January 2021 compared to the same period last year, where the value of the euro was 3.286 dinars compared to 3.129 dinars last year, while the value of the dinar against the dollar improved to 2.730 dinars, compared to 2.817 dinars last year, this decline and the rise of the dinar against the two most important currencies in the world raises many questions.

The International Monetary Fund "IMF" has put pressure on the Central Bank of Tunisia to adjust the dinar to its true size, by refraining from interfering in the adjustment of the local currency in order to take its real monetary size, i.e. to prevent the Central Bank of Tunisia from selecting the local currency and buying the Tunisian dinar in hard currency, which does not appeal to IMF experts who see the level of the dinar exaggerated against its real value.

The Tunisian government was putting the pressure on the Central Bank of Tunisia to borrow domestically, however the central bank was trying to evade the government's efforts to borrow these huge amounts, warning of further deterioration of the dinar if Tunisia continues to borrow domestically, but the draft budget is running a deficit that requires borrowing large amounts of money in a short time. Because of the difficulty of borrowing from abroad as a result of the financial crisis in light of the Corona epidemic and the decline in tunisia's sovereign numbering, the governor of the central bank believes that the government's resortto domestic borrowing puts high pressure on liquidity, rather than directing it to pay investment and employment, calling on the government to review the budget and reduce spending instead of resorting to debt.

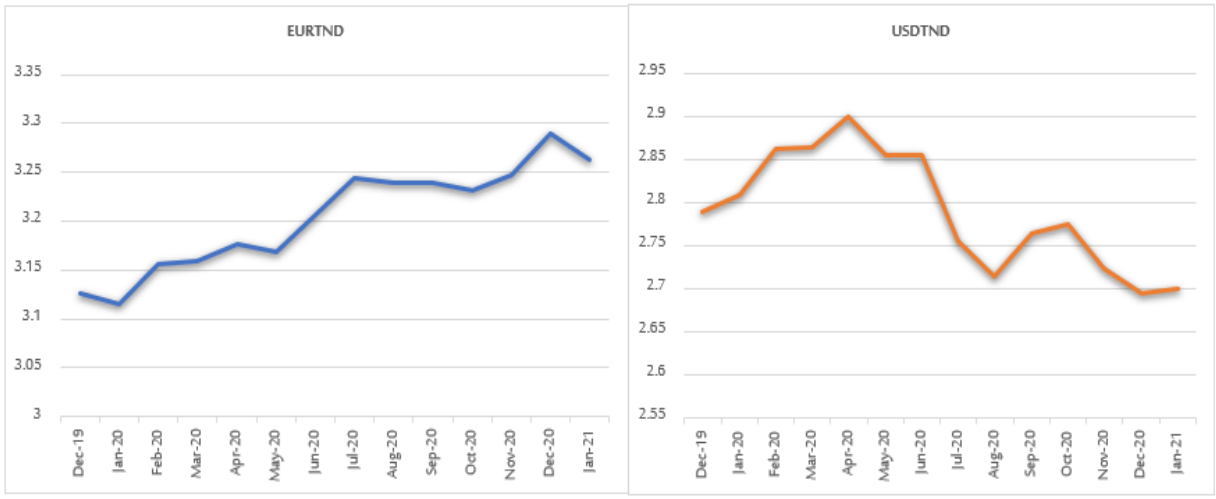
The spread of coronavirus caused the decline in the sovereign numbering of Tunisia after it crippled vital sectors of the country such as industry and tourism and difficult to borrow from abroad, as the rise of the dinar in recent years was linked to the huge loans received by Tunisia on many occasions, and the coronavirus prevented Tunisia from being able to debt in addition to the paralysis of the tourism sector, one of Tunisia's most important sources of the euro.

The reasons for the dinar's fall against most hard currencies are clear with the multiple crises in the Tunisian economy and despite its recovery against the dollar does not mean a slight recovery in the economy, the reasons for the rise of the dinar against the dollar are mainly related to the economic crisis experienced by

the United States of America, whose currency continues to fall in the face of the worst health crisis in the country in decades, the dollar lost about 7% of its value last year due to the pandemic that hit the economy of the American giant and official data indicates that investors Individuals and major investment funds are betting on further dollar decline as they pumped about $10 billion into hedging contracts until January of last year .Gold prices continue to rise as the dollar falls as the US Congress tries to find solutions that will save the dollar from its crisis,the hope of seeing the exchange rate of the dinar is recovering after the tumble in 2016, 2017 and 2018 is fading in view of the parity of our currency vis-à-vis the major foreign currencies and especially the euro. The dinar has lost about 3% of its value since the beginning of the year. This depreciation has accelerated since the third quarter of 2020.

The recovery in the exchange rate observed from March 2020, during which the euro was trading at 3.1589 TND to reach its lowest level last February with a euro at 3.118 TND, lasted in fact only one year. Since then, the euro has returned to the upward trend, reaching the value of 3,258 TND on 15 September 2020.

Figure 09 : EUR and USD VS TND currency



	Dec-19	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21
EURTND	3.1262	3.1151	3.156	3.1589	3.1767	3.1687	3.2071	3.244	3.2395	3.2394	3.2317	3.2475	3.2898	3.2623
USDTND	2.7888	2.8082	2.8626	2.8642	2.8998	2.8552	2.8556	2.7545	2.7141	2.7645	2.7747	2.7226	2.6937	2.7

Source: Prepared by the student on the basis of data in Investing.com

Some solutions to face changes in the Tunisian dinar exchange rate:

The reasons for the fall of the Tunisian dinar against most hard currencies are clear with the multiple crises in the Tunisian economy, as we try to develop some proposals to face the changes taking place in the Tunisian dinar:

-Redeployment for exports and for their quality. We should open the door to agricultural exports to neighbouring countries such as Algeria and Morocco, and to the African continent.

-Financing exporting institutions, thereby reducing the central bank's interest rate, and supporting export structures abroad, especially export promotion centers.

-Export conditions must be facilitated and all taxes on direct or indirect exports lifted until mid-2021 to maximize production

-Tunisian tourism must keep pace with new international standards, which is why the state must provide about 2 billion dinars ($700 million) to restructure the sector and reduce hotel units in return for upgrading services.

-Promote the exports and investment while reducing imports. It should be noted that the main currencies used by the government for import and export are the dollar and the euro as well as the yen. In the export operation, the Tunisian exporter can opt for the euro, better rated than the dollar, in order to make more revenue. On the other hand, during import transactions, the dollar is advantageous because of its lower value than that of its European competitor. This means that while some countries rely on the reality of the money market, others also use regulatory mechanisms to narrow the gap between the national currency and the targeted currency in the national interest. However, at this level, we must be careful and being careful is not to set the bar very high and carry out a fictitious operation that risks harming the national economy. The best solution remains, of course, the contribution of foreign exchange by services and market products to export or by tourism to strengthen our national currency and avoid the perverse effects of the fluctuation of foreign currencies which may, from time to time, increase against the dinar. The value of the national currency must remain stable with a reduction in spreads with other currencies, with a greater emphasis on labour and profits from services and commercial products.

7. Conclusion:

The exchange rate occupies an important place in a country's economy due to its association with all foreign trade processes through economic exchanges and is the tool for linking the domestic economy with the world economy. Therefore, the choice of the exchange system of any country is the main determinant of dealing in the field of exchange where the exchange rate is determined according to the forces of supply and demand in the exchange market, and despite the development of fixed exchange systems to more flexible systems, the countries still find it difficult to choose the system that is best suited to them, which is in line with their economic environment, especially in light of the constant oscillations witnessed by exchange rates in recent times, making all traders in the exchange market financial institutions, economic and banks Subject to many risks that may affect its financial performance.

The exchange risk is seen as such a change that can have negative consequences for states on the one hand and institutions on the other, through the volatility of exchange rates against the reference currency, which is the currency approved for registration with the institution, which is usually the national currency. Therefore, managing the risk of foreign exchange fluctuations for economic institutions with foreign relations in particular and countries in general is of paramount importance, especially in the current economic situation, which is witnessing sharp monetary fluctuations, especially with the corona crisis.

The study of this topic has led to the following conclusions:

- The exchange rate is shown when different currencies are exchanged between them, and several forms of dealing where they are defined like any other commodity based on the forces of supply and demand.
- The exchange rate is a very sensitive economic change of the internal and external influences, especially in the face of the expansion of the cycle of foreign trade in economic development, and the development of international capital markets, so this price shows a fundamentally difference in its content and significance. On other economic terms, as the link between international economics and an important indicator of the volume of transactions in addition, the exchange rate has a broad impact on macroeconomic balance through its direct and indirect relationship with macroeconomic indicators.
- The Techniques taken to cover the risk of drainage help to avoid the formation of drainage situations and the appearance of the risk, where they work to guard against the risk before it appears, and face it while it is achieved and protected from it .

- Exchange risk management aims to rationalize financial results, which requires giving them great importance. Exchange risk management is a fairly complex process, requiring periodic and regular review of the rules of business by those charged with performing them, and the process of managing the exchange risk has become a more complex process with the growth of floating exchange rate fluctuations and increased volume of international exchanges.

By reviewing the results of this study, we try to provide some of the below recommendations and suggestions:

- The need to pay attention to the management of the country's exchange rates.
- Appropriate capital policy must be followed in such a way as to ensure the stability of the exchange rate.
- Countries should use the precautions of their disbursement in a rational and optimal manner and the rational management of this abundance as well as the optimal advantage between hard currencies, and the diversity of sources of national income.
- Private investment activity should receive a certain amount of financial and economic advantages to ensure that it is promoted by the means of the work of the prevailing laws, regulations and learnings, and the improvements that may be added to serve the investment climate.
- To control the excessive increase in imports of goods and services, the government should take appropriate measures to attract investors to invest in a country in order to encourage national production instead of dumping it with foreign goods and reduce the use of the investment, which leads to the depletion of the needs of exchange and the stability of the external currency.

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