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THE IMPACT OF MONEY SUPPLY M1 ON BALANCE EXCHANGE RATE OF THE IRAQI DINAR

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ABSTRACT. The Economic literature demonstrates that established nations' monetary policies may significantly impact almost all economic indices in emerging markets. First, the purpose of this article is to evaluate the possible effects of fiscal and monetary policy on Iraq's balance of payments. Second, the paper examines how these exchange rates are priced during an expansionary monetary policy phase to understand better how unconventional instruments impact them. The analysis indicates that the Iraqi economy became burdensome with the various economic problems represented by high inflation rates, high volume of external indebtedness, and deterioration of the exchange rate of the Iraqi dinar and others. The results also reveal the mismanagement of the ruling regime, whose decisions focused on strengthening the fragile pillars of its rule. The decisions made were political before they were economical and targeted the regime's interests before they were aimed at the interests of the economy.

Keywords: Money Supply, Interest Rates, Monetary Policy, Foreign Exchange

Introduction

Even though oil's proportion of the world's energy supply is steadily declining, oil remains the world's most important primary energy source, according to the International Energy Agency (IEA, 2019). even though oil's share of the world's total direct energy supply (TPES) declined from 44 percent to 32 percent between 1971 and 2017, oil remained the dominant fuel, accounting for 32 percent of world TPES in 2017, followed by coal at 27 percent and natural gas at 22 percent. Despite the rapid growth of biofuels and electricity, oil consumption remained dominant in the transportation sector, accounting for more than one-third of overall final consumption (TFC). In the Organization for Economic Cooperation and Development (OECD) countries, oil consumption accounted for 93 percent of total final consumption (TFC). Despite the shifts in the global energy system, oil prices have been continuously rising, and they serve as a benchmark for the cost of other energy sources such as natural gas and coal, among others. Because of swings in oil prices, the volatility of national economies of nations that rely heavily on oil imports has increased in recent years. The volatility of exchange rates is closely correlated with the volatility of oil prices, which has been a significant study issue in energy economics for some time.

Iraq has gone through situations that no other developing or even advanced country has gone through in contemporary history, and this is unprecedented. The commencement of the study era began as early as September 2005 and continued until a protracted eight-year conflict erupted, destroying both the green and the dry environment. The Iraqi economy suffered as a result of the competition. High rates of inflation, large amounts of foreign debt, degradation of the exchange rate between the Iraqi dinar, and other factors are among the many economic challenges that have arisen in recent years. As soon as the war ended, Iraq was thrust into a devastating international conflict that would last until the country's economic infrastructure was destroyed. The battle was followed by a comprehensive economic blockade that effectively cut Iraq off from the rest of the world, including financial, scientific, and cultural fronts. These conditions in Qatar exacerbated most of the economic problems that the Iraqi economy had already been experiencing during the 2005s. We consider the mismanagement of the ruling regime, which made decisions aimed at strengthening the fragile pillars of its rule rather than focusing on the economy as a whole.

It should be noted that the decisions taken were political first before they were economic ones. Therefore, they were primarily concerned with the regime's interests rather than the economy's. In this regard, the problem of the exchange rate of the Iraqi dinar about other currencies is one of the most significant. In particular, the US dollar, since it symbolizes the world's principal currency first and because the official price is established in dollars second, is noteworthy. According to official state data, the Iraqi economy has been subjected to a significant infusion of foreign currency, particularly during the 1990s, with the monetary mass in the Iraqi economy reaching (540,000) million dinars in 2020. however, unofficial estimates place the financial group in the country in 1996 at approximately (5) trillion dinars. Therefore, it has resulted in a worsening in the balance of the Iraqi dinar concerning the United States dollar.

1. Literature review

The multiple exchange rate system rapidly extended throughout the developing world between the 1980s and the 2000s. Using the theoretical framework provided in the introduction, different models and approaches on the empirical side have been used to investigate the longrun and short-run link between parallel and official exchange rates. Other models employed include OLS regression, the error correction model, and the Granger causality tests. There is a wide variety of empirical findings due to methodological variances between countries. Most studies have found a long-term correlation between the two currency rates. However, the causation between them in the short term differs. Others found that the free market rate was directly linked to official rates, while others concluded that the free market rate was directly related to market rates. Baliamoune-Lutz (2010) found a long-term correlation between the black market and official exchange rates in Morocco between January 1974 and December 1992 in their study of the parallel exchange rate causation. According to the study's VEC model estimation based on monthly data, the black rate Granger caused the official exchange rate. According to this, black market players might predict changes in the legitimate market, proving that efficiency is a real possibility in this economy. Research by Baliamoune-Lutz and Lutz (2008) found that Tunisia's black market exchange rate influenced its official rate in the near term and that this rate eventually adjusted to its long-term equilibrium. It was determined that the illegal market had Granger-caused the legitimate need, but only in the period before the structural breach was discovered.

On the contrary, in Nigeria, Ashworth et al. (1999) showed that the official rate was only Granger-caused in 1980–1993 when structural interruptions were considered. According to Apergis (2000), there were three sorts of causality orientations between the official and

black-market prices in Armenia for each sub-period between 1993 and 1997. As of November 1993, there was a Granger-cause link between the black market and the official currency rate, although there was a bidirectional causality relationship between them from November 1994 to January 1997. Agénor (1991) examined a parallel foreign currency market monetary model in 12 developing nations as one of the cross-country studies. According to quarterly econometric studies, changes in official exchange rates and monetary disequilibria were shown to be the primary factors influencing parallel exchange rates. Agénor and Taylor (1993) used the statistical theory of cointegration and Granger causality tests to evaluate the causal link between official and similar currency rates in 19 developing nations. The approach was used to 13 years of monthly data and showed no consistent causation trend among the nations studied. From 1970 to 1998, Kula et al. (2014) conducted a cross-country analysis that revealed a proportionate long-run link between black and official market currency rates in 13 MENA countries. The portfolio balancing model's hypotheses were also confirmed. However, the short-term trends between nations remain distinct. Additionally, a sample of 12 nations from around the world was examined by Noorbakhsh and Shahrokhi (1993) to determine if black market rates were responsible for official rate changes in seven of those countries, but not in

On the other side, the literature on the link between exchange rate volatility and foreign direct investment (FDI) is inadequate and somewhat inconclusive in its conclusions. While there have been a lot of studies investigating the impact of exchange rate volatility on aggregate investment, the findings are inconclusive on a theoretical level, and empirical results are mixed. As a general rule, the research demonstrates that investment negatively affects exchange rate volatility and appreciation of the native currency. However, industry and firm-specific characteristics are also crucial drivers (Kyereboah-Coleman and Agyire-Tettey 2008). The empirical and theoretical research on the link between exchange rate volatility and foreign direct investment (FDI) may be split into two categories: (1) studies that produced adverse outcomes and (2) studies that produced a mixture of results. The studies that fall into the first category, demonstrating a negative relationship between exchange rate volatility and foreign direct investment (FDI), include those by Durairaj and Nirmala (2012), Al-Abri and Baghestani (2015), Sharifi-Renani and Mirfatah (2012), Susan Pozo (2012), and Al-Abri and Baghestani (2015). (2001). For example, Durairaj and Nirmala (2012) explored the link between currency rate volatility and foreign direct investment (FDI) by using India as a case study. They utilized quarterly data from 1996 to 2010 to compile their findings. Their analysis of the short- and long-run connection between these variables was conducted using the Autoregressive Distributed Lag (ARDL) limits approach. They also looked at the elements that influence investors' decisions to make investments in the first place. According to the data, exchange rate volatility and foreign direct investment have an inverse connection, and a stable and flexible exchange system is more conducive to recruiting FDI in India, the researchers concluded.

Amano and Van Norden (1998) studied the link between the accurate domestic oil price and the actual effective exchange rates in Germany, Japan, and the United States, focusing on articles that used in-sample modeling from January 1973 to June 1993. Granger causality existed between the price of oil and the real exchange rate, with no evidence to suggest that the opposite is true. The relationship between oil prices and accurate exchange rates in the United States was investigated by Amano and Van Norden (1998) from February 1972 to January 1993. They discovered a constant relationship between oil price shocks and the real effective exchange rate in the United States during the post-Bretton Woods period. They speculated that oil prices might be the most critical source of natural exchange rate shocks in the country. Using a monthly panel of G7 nations from January 1972 to October 2005, Chen and Chen (2007) studied the long-run link between accurate oil prices and actual currency rates. Their paper demonstrates that accurate oil prices may have been the most crucial source of fundamental

exchange rate changes. They investigate the prediction power of accurate oil prices on future actual exchange returns by employing panel predictive regression. According to Lizardo and Mollick (2010), who included oil prices in their fundamental monetary model of exchange rate determination, they looked at the influence of oil price shocks in affecting the value of the United States dollar versus key currencies from the 1970s to 2008. They discovered that the price of oil had a substantial impact on the movement of the US dollar. The dynamic link between oil prices and exchange rates in developing economies was explored by Basher et al. (2012) using a structural vector autoregressive model for the period from January 1988 to December 2008, and they found that the association was positive. Aloui et al. (2013) examined the conditional dependence structure between crude oil prices and US dollar exchange rates using a copula-Generalized Auto-regressive Conditionally to 2011, Heteroscedasticity (GACH) model. They found that exchange rates respond to oil price movements and that a positive oil price shock results in an immediate drop in the trade-weighted exchange rates (GARCH). They discovered statistically significant and symmetric dependency for virtually all oil price-exchange rate pairings under consideration. Furthermore, an increase in the price of oil was connected with a decrease in the value of the US dollar.

From February 1998 through August 2012, Volkov and Yuhn (2016) expressly evaluated the impact of oil price shocks on exchange rate fluctuations in five major oilexporting nations: Russia, Brazil, Mexico, Canada, and Norway. The countries studied were Russia, Brazil, Mexico, Canada, and Norway. The findings revealed an important link between the volatility of currency rates and oil price shocks in Russia, Brazil, and Mexico, but only a minor association in Norway and Canada. They also demonstrated that an increase in oil prices leads to an appreciation of the local currency (i.e., a decrease in the value of the dollar exchange rate) in all nations, assuming that all other factors remain constant. According to Chen et al. (2016), they evaluated the effects of oil price shocks on the bilateral exchange rates of the US dollar versus currencies in 16 OECD nations between August 1992 and December 2011. In addition, they looked at the period between August 1992 and December 2011. Evidence suggests that oil price shocks affect the dollar exchange rate. According to the research, people react differently when oil prices rise or fall because of supply or demand. Short-term fluctuations in oil prices can account for around 10-20 percent of long-term changes in exchange rates. Using a Markov-switching model, Basher et al. (2016) evaluated the influence of oil shocks on actual exchange rates for nine oil-exporting and importing nations from January 2014 to February 2014. According to their findings, oil shocks in at least one state in each country had a statistically significant influence on exchange rates, giving more robust evidence of the impact of oil shocks on actual exchange rates.

Using Wavelet coherence studies, Yang et al. (2017) investigated the effect of crude oil prices on the exchange rates of ten oil importing and exporting nations from January 1999 to December 2014, focusing on the period from January 1999 to December 2014. They discovered that the price of crude oil was a vital determinant of the exchange rate between oil-exporting nations and oil-importing countries when comparing the two groups of countries. Furthermore, a negative association between the crude oil price and the exchange rates for oil-exporting nations has also been proven. However, the relationship between the crude oil price and the exchange rates for oil-importing countries is still unknown. Kim et al. (2019) used a Markov regime-switching model to explore the influence of oil prices on the regime shift behavior of the Korean currency rates versus the US dollar from January 1991 to March 2019. In addition, they looked at the period from January 1991 to March 2019. Specifically, they observed that oil prices had a significant impact on Korean exchange rates under the system with high volatility, but this was not true in the regime with low volatility. There is a substantial amount of work on out-of-sample exchange rate modeling using commodity prices, which includes oil prices, among other things. A review of the literature on out-of-sample exchange rate

forecasting is provided by Rossi (2013), who also has a section on commodity prices, which includes more references. For example, Ferraro et al. (2015) and Chen and Rogoff (2003) looked at whether oil prices impacted exchange rates, respectively. According to Ferraro et al. (2015), the dependability and stability of the out-of-sample link between oil prices and the Canadian/US dollar exchange rates were investigated. They discovered the existence of a short-term association at the daily frequencies, particularly when utilizing contemporaneous oil prices, but found minimal evidence of a relationship at the monthly and quarterly frequency levels. Chinese researchers Chen and Rogoff (2003) analyzed the actual exchange rate behavior of three nations (Australia, Canada, and New Zealand), all of which primary export commodities, including oil, at a large proportion of their total exports. They discovered that the pricing of their goods in US dollars had a significant and steady impact on their accurate exchange rates, notably in Australia and New Zealand, which is consistent with predictions made by traditional theoretical models of exchange rates.

As shown above, oil prices have a statistically significant impact on exchange rates. In addition, several research studies appear to have a granger-causality relationship between oil prices and currency rates. The amount to which oil prices influence exchange rates, on the other hand, varies depending on the nations being studied, the periods being studied, and the analytic methodologies used. Although the subjects, periods, and research methodologies used in different studies differ, oil prices have a considerable impact on exchange rates in most studies and play a crucial part in the setting of exchange rates. The following are how this study varies from the prior studies. For starters, earlier research on exchange rate fluctuations that relied on MRSM did not consider trade balances as a factor affecting exchange rate changes. Therefore, the trade balances are included in the explanatory variables for this analysis. Using trade balances in addition to interest rates, the consumer price index (CPI) and the industrial production index (IPI) as influencing factors on exchange rates in Korea and Japan, we extended Kim et al. (2019) to examine the impact of oil prices on exchange rates against the US dollar, by taking into account the effects of oil prices on exchange rates against the US dollar in Korea and Japan.

First and foremost, most of the earlier evaluations focused on a small number of wealthy nations such as the United States and the United Kingdom or oil-exporting countries such as Brazil, Canada, Mexico, Norway, and Russia. The exchange rate markets of Korea and Japan were included in Basher et al. (2012) and Yang et al. (2017), but there were no studies that looked at the exchange rate markets of Korea and Japan in depth. However, even though both Korea and Japan import 100 percent of their oil requirements, the impact of oil prices on foreign exchange markets is projected to differ in each nation due to variances in industrial structures and underlying economic conditions. According to the International Energy Agency (2019), crude oil accounts for 37.1 percent of total primary energy consumption in Japan and 54.2 percent in Korea in 2017. As a percentage of Japan's total energy consumption, 46 percent of oil products were consumed by the transportation sector, and 27 percent as energy and nonenergy raw materials in the petrochemical industry.

In contrast, the remaining 16 percent were destroyed by the residential, commercial, and public sectors. Korean oil products were used in the transportation sector to 36%. In comparison, 52 percent were used as energy and non-energy raw materials in the petrochemical industry to 57%. The remaining 5.7 percent were used in the residential, commercial, and public services to 7%. When it comes to oil demand, Korea has a far more significant percentage of the need for industrial products than Japan, according to the International Energy Agency. Furthermore, due to the variations in the oil supply and demand structures of these two nations, the influence of changes in oil prices on changes in exchange rates is predicted to be distinct. Therefore, this investigation makes a comparison between the impact of oil prices on the exchange rates in each primary foreign currency market.

To conclude, the MRSMs are utilized in the approach of this investigation. Basher et al. (2012) and Kim et al. (2019) used an econometric model that did not consider regime transition in their research. Basher and colleagues (2012) investigated the influence of three oil shocks on exchange rates by categorizing oil shocks into three categories: oil demand shock, oil supply shock, and global economic shock. They found that the impact of oil demand shock was the most incredible (oil prices). However, macroeconomic variables such as interest rates, income, and the dollar level were not considered. Therefore, their research was unable to determine the direct impact of interest rates, revenue, and the price index level on the dollar's value.

On the other hand, Korean researchers (2019) investigated the impact of oil prices on exchange rates, interest rates, income, and fees. On the other hand, the trade balance was not considered as a factor influencing exchange rates, and the scope of the study was confined to Korea alone. Further research, except for Kim et al. (2019), concentrated on the direct influence of explanatory factors on exchange rates without considering the fluctuations of explanatory variables. Nevertheless, under the regime-switching model, the movements in the exchange rate may be evaluated more precisely by comparing them to the changes in the explanatory variables.

2. Research Methodology

The goal of this study is to demonstrate the link between the m1 cash supply and the exchange rate through economic measurement. As a starting point, researchers hypothesized that a large amount of money in the Iraqi economy had played a significant effect in the worsening of the balance exchange rate of the Iraqi dinar against the United States dollar. Between the offer of cash and the exchange rate, there is a negative link between them.

2.1 The Money supply

The offer of the money supply is meant to be the sum of payment methods circulating in society within a certain period, i.e., it includes all the means of payment available in trading and held by different individuals, projects and institutions. It should be noted here that the offer of cash amounts to a debt to the banking system or the entity that handles the issuance process, as it is an obligation and a right for the holder to act absolutely with the amounts in their possession. The offer of cash is divided into many types:

1- The narrow definition of money M1

This concept means that the currency is traded outside the banking system and deposit money or bank money (current deposits).

M1 = Money supply in a narrow sense

DD= Demand Deposits

C= *currency traded outside the cash banking system*

It is clear from the above that two parties determine the M1 money supply: the central bank and commercial banks.

2- (M2) Broader measure of money

It is a concept of a broader money supply than the previous M1 concept. It includes non-current deposits and current deposits and currency traded outside the banking system, i.e., it consists of the offer of cash in the narrow sense of M1 plus non-current deposits(semi-cash) such as savings deposits.

THE IMPACT OF MONEY SUPPLY M1 ON BALANCE EXCHANGE RATE OF THE IRAQI DINAR

The broad meaning of the presentation of criticism can be expressed through the following equation:

M2 = M1 + TD where:

M2: View criticism in a broad sense

TD: Time Deposits

In certain industrialized nations, offer supply has taken on a more significant connotation due to the tremendous development in the monetary and financial industries. Additionally, it covers It has also been added to the M3 money supply certain additional long-term deposits having more than two years of maturity. These deposits are held with intermediary financial institutions other than commercial banks (e.g., savings and lending banks) and have maturities of more than two years, respectively. M3 offers to include forward securities issued by lending and savings banks in the United States of America; nevertheless, most other industrialized nations have these deposits in the M2 offer.

2.2 The Overall Liquidity Of The Economy

Non-bank economic enterprises' M3 + financial assets include public securities, bonds issued by specialist investment organizations, real estate bank deposits, savings bonds, and other commercial securities.

2.3 The Exchange rate

When it comes to currency exchange rates, the exchange rate of a national currency to foreign currencies is characterized as the exchange rate. It is the price of the local currency in foreign exchange, represented in terms of the local currency. The rate at which domestic foreign exchange is traded. The rate of the business is entirely free. The value of a currency is determined by the intersection of the supply curve for that currency and the demand curve for that currency. In the same way, as it is with any other product, Several variables influence the exchange rate, which is often split into two categories:

- 2- **Money supply**: The quantitative theory of money allowed the classics to see a link between the amount of money in circulation and the overall level of prices. This connection has the same ratio and the same direction as the previous one. In the cash school, founded by Milton Friedman, the role of money in affecting the total price level has been stressed, although not in the way that the classic view shows it.
- 3- **Interest rates**: In pursuit of interest rates, foreign money and its mobility between different parts of the world's economy are always on the move. Capital will be attracted to a nation with actual interest rates more significant than those in other countries, increasing the supply of foreign currency in the country and causing its exchange rate to deteriorate.
- 4- **Inflation rates**: Rates of inflation are elements that influence the exchange rate. High inflation rates at home result in a reduction of the buying power of a country's currency in the foreign exchange market. The value of its currency has decreased, highlighting the importance of price levels in determining the currency's worth.
- 5- **Balance of payments**: The balance of payments and the economic imbalance in the balance of payments are among the most important elements influencing the dollar's value since it mirrors the country's global interactions.
- 6- **General Budget**: If the state adopts a deflationary strategy by lowering the volume of government public spending, the state budget has a significant impact on the

exchange rate movement. It decreases the amount of demand, reduces economic activity, and decreases inflation, leading to an increase in the value of the local currency's exchange rate.

Further considerations, which are no less significant in their influence on the exchange rate than economic considerations, might be described as follows:

- 1. **Political unrest and war**: Political unrest and various conflicts significantly influence the exchange rate because of their impact on the country's economic status in general, which affects the exchange rate. Affected are most economic sectors, notably the industrial and international trade sectors. As a result, the country's economy is seen to be in a crisis state, and confidence in the country's currency has been eroded due to high inflation rates.
- 2. **Rumors and news**: The consequences of rumors and news are immediate, regardless of whether they are accurate or incorrect. They function to increase or deflate the currency for a brief period, and then the value of the money quickly returns to normal when the influence of the rumor or news has faded away. The speed with which these rumors impact the exchange rate is determined by the response of market forces in response to the dealers' actions to these rumors.

3. The Results

According to official statistics from the Central Bank of Iraq, the supply of cash in Iraq in the narrow sense of M1 has increased significantly during research. It also moved from the beginning of the period in 2005 (2650.2) million dinars to (11868.2) million dinars at the end of the 2005s. The result of the outbreak of the Iraq-Iran war and increased military spending significantly at the end of the 2005s, as shown in Table 1. In addition, the volume of cash supply increased dramatically in the 1990s due to the imposition of an economic blockade on the country due to the former regime's invasion of Kuwait. As a result of the suspension of oil exports, the state financed it is public spending through deficit financing (new cash issue). As a result, the cash supply at the beginning of the decade (15,359.3) million dinars increased the following year to (24,760.2) million dinars and continued to rise to rea. Five hundred forty thousand million dinars, a figure more than 35 times more than in 1990. The balancing exchange rate of the Iraqi dinar against the US dollar was (0.360) dinars/USD in 2005, and it climbed at a pretty fair rate in the following years until it reached (1.174) dinars/USD by the end of the 2005 decade.

Table 1. The progress of the money supply in M1 and the money index (2005-2012)

| The year | Money | Money | The year | Money | Money |
|----------|------------|--------------|----------|------------|--------------|
| | supply | supply index | | supply | supply index |
| | (1 million | | | (1 million | |
| | dinars) | | | dinars) | |
| 2005 | 2650.2 | 100 | 1988 | 9848 | 372 |
| 2006 | 3645.5 | 138 | 1989 | 11868.2 | 448 |
| 2007 | 4980.7 | 188 | 1990 | 15359.3 | 580 |
| 2008 | 5527.4 | 209 | 1991 | 24760.2 | 934 |
| 2009 | 5499.9 | 208 | 1992 | 42760.2 | 1613 |
| 2010 | 5777 | 218 | 1993 | 72553.1 | 2738 |
| 2011 | 6736.6 | 254 | 1994 | 235000 | 8867 |
| 2012 | 8316.7 | 314 | 2020 | 540000 | 24526.4 |

Source: own compilation

53

| Table 2. Official Irac | i dinar to the | USD exchange ra | te (2005-2012) |
|------------------------|----------------|-----------------|----------------|
| | | | |

| The year | Exchange | Exchange | The year | Exchange | Exchange |
|----------|----------|-----------|----------|----------|-----------|
| | rate | rate | | rate | rate |
| | Official | Al, Azizi | | Official | Al, Azizi |
| 2005 | 0.295 | 0.360 | 1988 | 0.311 | 1.174 |
| 2006 | 0.295 | 0.475 | 1989 | 0.311 | 1.174 |
| 2007 | 0.298 | 0.480 | 1990 | 0.311 | 1.623 |
| 2008 | 0.311 | 0.501 | 1991 | 0.311 | 10.243 |
| 2009 | 0.311 | 0.501 | 1992 | 0.311 | 21.232 |
| 2010 | 0.311 | 1.176 | 1993 | 0.311 | 74.422 |
| 2011 | 0.311 | 1.174 | 1994 | 0.311 | 454.011 |
| 2012 | 0.311 | 1.174 | 2020 | 0.311 | 1674.5 |

Source: own compilation

After doing a statistical and standard examination of the calculated model, the following conclusions were reached:

- 1- R-2: The independent variable M1 money supply has a 97 percent influence on the dependent variable (Exchange Price), which shows that other variables and other factors not included in the model or that can be included in the random variable have the remaining 3 percent effect.
- 2- R-3: The value of the adjusted selection factor (0.971) indicates that the independent variable M1 money supply has a 97 percent effect on the dependent variable (Exchange Price). When comparing the calculated value with the actual value at a moral level of 0.01 and 14 degrees of freedom, we observe the morality of the calculated value showing the quality of the estimated equation and the capacity to give cash as an explanation for the change in the exchange rate.
- 3- F test: When the estimated F value (499.17) is compared to the scheduling value [F (0.01, 2, 14) = 10], the result is a tie.8] It is important to note that the calculated value is more significant than the table value, reflecting the estimated model's overall morale as a whole and the fundamentality of the selection component.
- 4- Darren Watson is the fourth member of the group. A result more significant than the lowest and greatest dL, du (1.36 and 1.08, respectively) at a moral level of 5 percent and less than the (4-du) of (2.64) indicated that there was no problem of self-association in the estimated model, according to the Darbin Watson (1.49) test.

When it comes to the problem of contrast instability, there is no need to reveal whether it exists or not since time series data models do not contain varied propagation of the trumpets.

Conclusions

The strength of the influence of the M1 money supply on the parallel exchange rate of the Iraqi dinar versus the US dollar during the time under investigation is revealed by the study's findings. While the value of the Iraqi dinar dropped significantly over the research period, it did so most dramatically during the 1990s due to the implementation of an economic embargo as a result of the previous regime of the State of Kuwait's policy of isolation. As a result, the balance exchange rate is deviating from the official exchange rate of the Iraqi dinar, notably in the case of the contract above, which is causing concern. In response to the massive amount of wasteful government expenditure geared at supporting the governing regime, the monetary

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authorities have been obliged to boost the new currency issuance, which has resulted in a significant increase in the value of the Iraqi dinar. Exaggerating the official price of the Iraqi dinar because it is far from its genuine worth implies that the theory of pricing is disrupted, and the allocation of resources to their different purposes is distorted, as is the case with the US dollar. The present monetary authorities should learn from their predecessors to avoid repeating the mistakes made by their predecessors. To maintain a tight relationship between the official exchange rate of the Iraqi dinar and the balance rate, the dinar's true worth should not be inflated. When calculating the value of the dinar with other currencies, the monetary authorities must consider the present status of the Iraqi economy and the actual supply and demand for the dinar.

This paper gives highly relevant viewpoints on currency rate changes in Iraq. In Iraq, keeping steady oil prices in a stable regime aid to further stabilization of the currency rates market. Furthermore, since the Iraq foreign exchange market is resistant to the economic shock produced by oil prices, it is vital to keep economic indices consistent throughout the unstable oil price periods to stabilize Iraq exchange rates.

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THE IMPACT OF MONEY SUPPLY M1 ON BALANCE EXCHANGE RATE OF THE IRAQI DINAR

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