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Economic Indicators And Exchange Rate Regimes: A Study Of MENA Region And India

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Abstract
Purpose *– The study examines the correlation between economic indicators and exchange rate regimes in the Middle East and North Africa (MENA) region and India, focusing on how economic factors influence currency fluctuations and their policy implications.*
Methodology *– The study utilizes a secondary data research approach, analyzing publicly accessible data from reliable sources such as the World Bank, International Monetary Fund (IMF), and national statistics agencies. Descriptive and statistical methodologies were employed to explore the relationships between economic indicators, such as inflation, GDP growth, and interest rates, and their impact on exchange rate regimes in the MENA region and India.*
Findings *– The findings confirm that key economic indicators like inflation, GDP growth, and interest rates play a significant role in influencing currency exchange rates in both the MENA region and India. Furthermore, the study suggests that flexible exchange rate regimes provide better adaptability to external economic shocks compared to fixed regimes, thus offering insights into economic policy development.*
Research Limitations *– The study focuses on the MENA region and India, potentially limiting the generalizability of findings to other regions. Additionally, external factors, such as geopolitical events or unforeseen global market fluctuations, may require ongoing study as they affect exchange rate stability.*
Practical Implications *– The results can guide policymakers in the MENA region and India to formulate targeted policies aimed at controlling inflation, fostering GDP growth, and managing interest rates. This will contribute to more stable exchange rates and improved economic resilience against global market fluctuations.*
Originality/Value *– This study provides a comparative analysis of how different economic indicators impact exchange rate regimes in the MENA region and India, offering valuable insights for economists, policymakers, and researchers looking to optimize economic stability and currency management in similar regions.*
Keywords: *Exchange rate regimes, Economic indicators, Inflation, GDP growth, Interest rates, MENA region, India, Currency fluctuations, Monetary policy, Economic stability.*

1. INTRODUCTION

The MENA region has experienced significant increases in domestic interest rates due to budget deficits, debt servicing, and money demand. This has exacerbated financial challenges, especially in Lebanon and Jordan. Inflation rates have been impacted by both endogenous and exogenous shocks, such as oil price hikes [1]. The GDP of the MENA countries is driven exogenously by the GDP and business cycles of Saudi Arabia, buffeted by recessions, fiscal imbalances, and trade deficits in these countries [2]. Interest rates, inflation rates, and the GDP of India would be major cues hinting at the economic health of a country. The monetary policy course set by the Reserve Bank of India will fix interest rates, which in turn help decide the cost to which consumers and businesses abate money. Inflation refers to the general increase in the price of commodities and services in an economy during a certain period, hence causing a decrease in the purchasing power of money [3]. Higher-inflation economies almost always have a higher interest rate, as the central bank comes in to dampen price increases [4]. Economic stability and growth may be better achieved if policymakers have a firm grasp of the interconnections.

The MENA region and India have different kinds of exchange rate regimes that suit their respective economic policies and goals. On the other hand, countries in the MENA region, which include Egypt, Jordan, Lebanon, Morocco, and Tunisia, are mostly inclined to adopt fixed or pegged exchange rate regimes, providing stable relationships blending domestic currency with foreign currency or basket of currencies. In sharp contrast to these, countries, including Iran and Yemen in the MENA region, adopted more flexible exchange rate frameworks in the form of managed floats [5]. On the other hand, India operates under a managed floating exchange rate system, wherein the central bank engages in foreign exchange market interventions to stabilize the currency without a predetermined exchange rate path [6]. This regime in India provides a certain level of flexibility to react to market dynamics while ensuring stability through central bank actions.

The selection of an exchange rate regime is shaped by a range of factors such as economic conditions, trade patterns, capital movements, and policy aims. Nations in both the MENA region and India have customized their exchange rate frameworks to align with their unique situations and objectives, striking a balance between stability requirements and adaptability to address external shocks and evolving economic environments. The decision-making process for policymakers in the MENA region regarding the choice of an exchange rate regime is complex and influenced by a multitude of factors [7]. The regime would be best chosen according to the economic conditions, lineup inflation rate, future growth prospects, and external imbalances. Trade dynamics should also play a vital role in promoting competitiveness because trade influences the configuration of trade relationships and the balance between exports and imports [8]. Capital flow management is one of the parts of effective capital control decisions by considering the degree of mobility of capital and foreign investments. Capital flow management is guided by various policy objectives—like price stability and economic growth concerns for external balance—that guide policymakers' choices of exchange rate regimes and make these consistent with their overall goals. Finally, susceptibility to external shocks, the development of financial markets, institutional capabilities, and past experiences under different regimes interact with each other to shape decision-making in the selection of an exchange rate regime within the MENA region [9].

Countries in the MENA region contemplating a shift to more flexible exchange rate regimes encounter challenges such as transition risks, policy coordination for macroeconomic stability, the need for market confidence, and managing inflation alongside exchange rate adjustments. These include the improvement of competitiveness, augmentation of the autonomous space for central banks' policies, improvement of shock-absorbing capacity concerning quantity and market efficiency, and promotion of economic diversification and several structural reforms necessary to attain long-term growth and competitiveness. Hence, upon outstanding issues of challenges mitigated by opportunities, a successful transition of the MENA countries to flexible exchange rate regimes will enable the pursuit of economic stability and growth in the region [10].

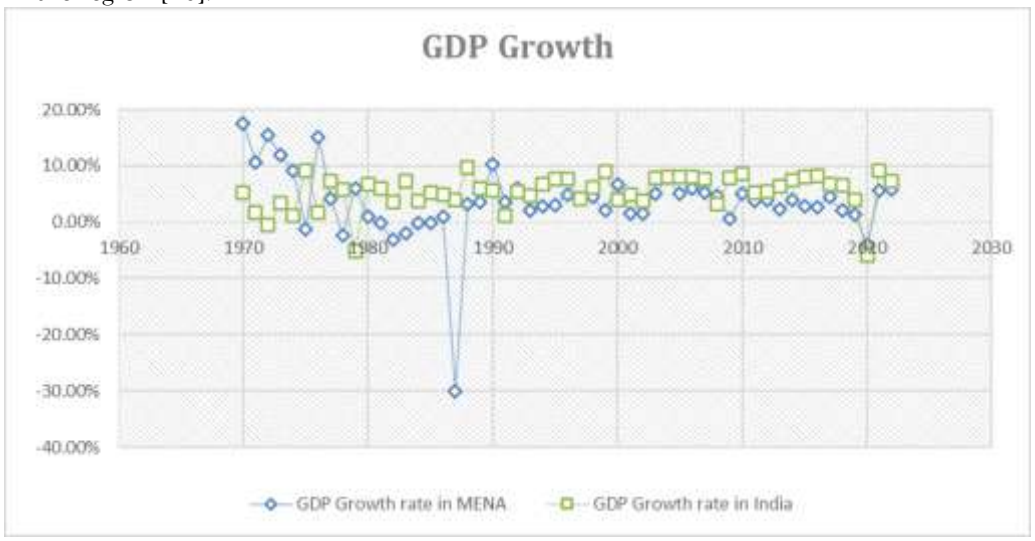

Figure 1: GDP Growth Rate
Source: Self-prepared by author

The volatility in the exchange rate of India is determined by a myriad of macroeconomic variables: economic growth, trade volume, inflation, interest rate differential, and foreign exchange reserves. Economic growth would impart strength to the currency, while its trade volume would affect its demand. Its purchasing power would be influenced by inflation, interest rate differentials would attract foreign investment, and lastly, foreign exchange reserves would ensure the stability of the market. It is on these basics that the exchange rate volatility in India rests, which explains the intricate link between the variables of the economy and changes in currencies [11]. Exchange rate volatility has an immense effect on the economy of India. Volatility decreases volumes of trade by increasing risks which hence scare away traders. An increase in volatility hampers economic growth due to increased uncertainty, and it within itself makes investment and economic activity very weak. Private investment is lower due to the high volatility associated with risk [12]. First, the volatility in the import prices leads to inflation. Second, the interest rate and foreign exchange reserves get affected, and policymakers try to alter the rates to maintain the stability of their currencies, which may further lead to broader implications on the economy [13]. Effective exchange rate management is crucial for maintaining economic stability in India.

Figure 2: Inflation Rate
Source: Self-prepared by author

- **Review related to key macroeconomic indicators such as interest rates, inflation rates, and GDP on the exchange rate management systems**

Şen, et. al., (2020) [14] revealed that Brazil, India, and Turkey exhibit a persistent positive correlation between inflation and nominal interest rates, as well as an interconnected link between interest rates and exchange rates. MENA nations should contemplate adopting more adaptable exchange rate regimes, bolstering policy foundations, and using capital controls as a supplementary measure to good policies to mitigate speculative assaults and crises, while simultaneously preserving real exchange rate viability [15]. During the COVID-19 pandemic, inflation had a detrimental effect on foreign direct investment in nations in the Middle East and North Africa (MENA), while the exchange rate and GDP per capita had a favorable effect on foreign direct investment [16]. Empirical evidence suggests that MENA nations with flexible currency rates that are considered credible tend to have lower levels of inflation. On the other hand, there is no substantial association between proclaimed fixed exchange rates and reduced inflation [17].

According to Misra, et. al., (2018) [18], the volatility of the Indian currency rate is primarily influenced by variables like "GDP, inflation, interest rates, current account deficit, foreign institutional investment, foreign exchange reserves, and oil and gold prices." According to Mohanty, et. al., (2014) [19], the presence of a stable exchange rate system in India has a limited effect on inflation since the Reserve Bank of India implements an offsetting sterilization program to counteract the rise of money supply. In India, there is no correlation between interest rates and exchange rate fluctuations, and the interventions made by central banks to maintain the exchange rate do not affect interest rate movements [20]. The link between inflation and GDP rates in India and exchange rate volatility is negative. Similarly, the correlation between interest rates and exchange rate volatility is also negative, but significant. On the other hand, Foreign Direct Investment has a positive relationship with exchange rate volatility, although that is not

statistically significant [21]. Sut, et. al., (2019) [22] discovered that the inflation rate has a greater effect on GDP growth than the foreign exchange rate. In India, the money supply has a positive effect on GDP growth, and there exists an equilibrium connection over the long term between GDP, money supply, exchange rate, and inflation [23].

- **Review related to the government policies and interventions that were influenced by macroeconomic indicators.**

According to Tarek, et. al., (2017) [24] Inadequate governance results in increased MENA public debt and reduced GDP growth. Neaime, et. al., (2017) [25] discovered that unsustainable external debt and exchange rate policies existed in Egypt and Jordan, whereas sustainable fiscal and exchange rate policies existed in Tunisia and Morocco. The primary causes of the macroeconomic volatility in the MENA region include trade shocks, shocks to domestic productivity, shocks to government expenditure, and shocks to global interest [26]. Monetary policy in MENA nations has a limited influence on economic development, but it does have a favourable impact on the expansion of money supply and exchange rates [27]. According to Jabbouri, et. al., (2016) [28] In MENA developing economies, dividend policy is inversely correlated with leverage, growth, free cash flow, and the status of the economy, and favorably correlated with size, current profit, and liquidity. Better national governance systems encourage enterprises to take on riskier endeavors because they tend to have lower levels of government interference and more effective resource allocation [29]. Al-Tal, et. al., (2021) [30] established that political stability and effective governance favorably impact the MENA region's energy usage.

The monetary indicators in India show a considerable influence and relevance on GDP, Public Debt, and Inflation. Over time, foreign assistance, governmental spending, and foreign direct investment have a favorable effect on economic growth in India, whereas the exchange rate and human capital development hurt the country's economy [31]. Traditional macroeconomic connections have limited applicability in Indian contexts, and the government's involvement in economic planning is dependent on institutional changes and the country's economic structure [32]. India has always relied on the central government to administer regulations, subsidies, tariffs, and quotas as well as macroeconomic direction [33]. India has used "scheduled intervention" to manipulate the exchange rate without hurting foreign currency reserves in addition to monetary policy, fiscal contraction, and tighter liquidity [34]. The White Revolution, the Green Revolution, and the LPG policy changes were significant reforms that altered India's economic growth trajectory [35].

According to Nayyar, et. al., (2020) [36], OFDI flows from India are largely influenced by domestic macroeconomic circumstances, government policies, and the growth of the financial sector. These factors especially affect international trade and investment. The performance of the Indian stock market is greatly influenced by macroeconomic factors such as GDP, FER, CD, and COP. GDP and FER account for fluctuations in the Sensex, while FER, CD, and COP contribute to variations in the NSE Nifty [37]. Garg, et. al., (2023) [38] discovered that in India, there is a mutually beneficial link between inflation and currency depreciation, which affects important indicators including "GDP growth, trade balances, foreign exchange reserves, and interest rates."

Apart from the introduction, the rest of the paper is structured as follows: section 2 presents the objectives of the study, section 3 Hypothesis of the study, section 4 summarizes the research methods for the study, section 5 discusses the results and findings, section 6 explains the discussion, and Section 7 shows the conclusions, implications, limitations, and recommendations for Further Studies. Finally, references are presented.

2. Objective of the study

- To analyze the impact of economic indicators such as inflation, GDP growth, and interest rates on currency exchange rates in the MENA region and India.
- To analyze the relationship between interest rate movements and currency exchange rates in the MENA region and India.
- To offer policy recommendations to enhance economic stability and optimize exchange rate regimes in the MENA region and India.

3. Hypothesis of the study

H1a: There is a significant impact of economic indicators such as inflation, GDP growth, and interest rates on currency exchange rates in the MENA region and India.
H0a: There is no significant impact of economic indicators such as inflation, GDP growth, and interest rates on currency exchange rates in the MENA region and India.
H2b: There is a significant relationship between interest rate movements and currency exchange rates in the MENA region and India.
H0b: There is no significant relationship between interest rate movements and currency exchange rates in the MENA region and India.

4. METHODS & MATERIAL

The study utilizes a secondary data research approach to examine the correlation between economic indicators and exchange rate regimes in the MENA region and India. The study uses descriptive and statistical methodologies to examine publicly accessible data from reputable sources such as the World Bank, International Monetary Fund (IMF), and national statistics agencies and others. The key economic variables being examined are the rates of GDP growth, inflation, and interest rates. Descriptive analysis entails describing and evaluating patterns in economic indicators during the research duration, while statistical techniques like regression analysis will be used to investigate the influence of these indicators on the stability of exchange rates and economic performance. This analytical approach guarantees a thorough investigation of the factors influencing exchange rate policy and economic results in the MENA region and India.

5. RESULT

H1: There is a significant impact of economic indicators such as inflation, GDP growth, and interest rates on currency exchange rates in the MENA region and India.

The present study provides evidence for the assumption that economic variables such as inflation, GDP growth rate, and interest rates are major contributors in the alterations applied to currency exchange rates both in the MENA region and in India. For instance, the inflation rate of Egypt suggests that the increases of higher inflation rates reduce purchasing power-that is devaluation. The impact of inflation in India was negative though statistically insignificant. These are contrary views in the present economic theories that argue inflation reduces the valuation of a currency by rendering it less attractive to foreign investors.

Figure 3: Stacked line chart depicting the trends in inflation across countries
Source: Self-Prepared by author

Therefore, high GDP growth in India and the MENA region would boost investor confidence, raising currency values. An area of interest in a currency exchange rate is the issue of interest rates. As quotes in the study read, "interest rates impact currency exchange rates, and high interest rates attract foreign investment and, by extension, currency strength. The relationship is important to determine how the implementation of monetary policy in India impacts exchange rates compared to the MENA region. Altered interest rates by central banks can make currency values change dramatically because investors are looking for higher returns.

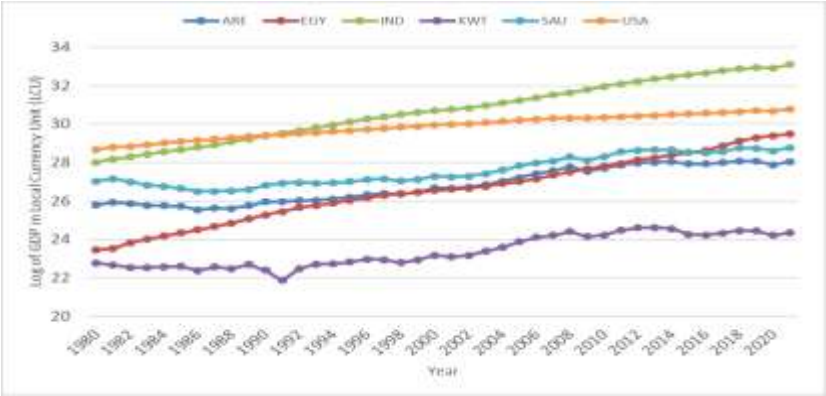

Figure 4: Line chart depicting trends in the Gross Domestic Product in Local Currency Unit (LCU) across countries

Source: Self-Prepared by author

The regional context further underlines volatility in places like India and Egypt. The study observes that "Inflation in India has been the most volatile" and "Inflation in Egypt has also been volatile". Such volatility could create deep effects in terms of currency stability even on the exchange rates in those regions, which highlights the need to keep an eye on economic indicators. Based on the available evidence in the document, economic indicators like inflation, GDP growth rates, and interest rates have more substantial impacts on currency exchange rates in the MENA region and India. Such relationships mark how these factors interact in a manner relevant to currency values, therefore grounding the hypothesis for the content.

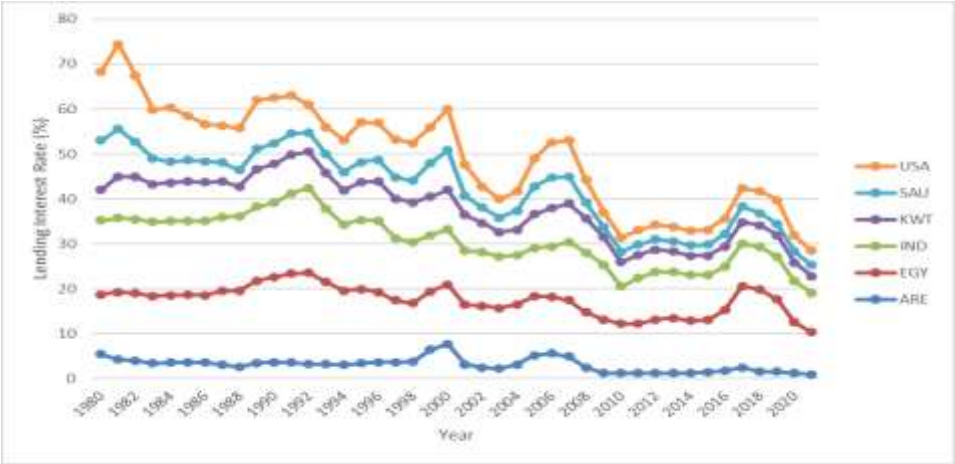

Figure 5: Line chart depicting trends in the lending interest rates across countries

Source: Self-Prepared by author

H2: There is a significant relationship between interest rate movements and currency exchange rates in the MENA region and India.

The study further supports the hypothesis that interest rate movements show significant bilateral correlations with currency exchange rates. Countries with high interest rates will likely experience currency appreciations because foreign investors call for increased returns on investments. This can well be seen in India, as higher interest rates correlated with currency strengthening for excess interest rates. The other type of arbitrage, however, raises the value of currencies in interest rate high countries because investors borrow in low-interest-rate country currencies to invest in higher-yielding currencies. Most the analyses show that indeed movements of interest rates and other economic indicators influence the stability value of currencies in the MENA region and India. The findings go well along the theoretical framework relating macroeconomic variables to volatile rates in the exchange rate, hence furnishing empirical evidence that such factors make it heavily impacted. Indeed, when raising interest rates, a central bank normally attracts foreign investment due to the search for higher returns on investment. That capital inflow would usually result in the appreciation of the currency, which points to the direct relationship

with the direction of the movement in interest rate changes and the associated changes in rates of exchange for the currencies involved. The second describes "carry trades", in which investors borrow in a low-interest currency and invest in a high-interest currency. Such practice greatly affects the exchange rate since it makes the value of the high-yielding currency appreciate because of the demand..

- **Egypt**

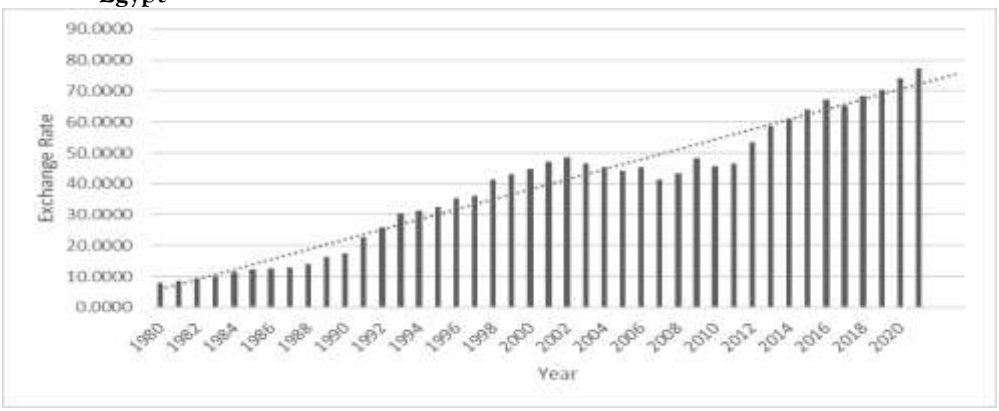

Figure 6: Trends in the value of EGP concerning USD (1980-2021)

Source: Self-Prepared by author

Egypt's economic growth over the past 40 years has been dramatically unstable. Periods of a strong EGP tend to coincide with periods of strong economic growth, and those periods aligned with periods of weak economic growth are periods of a weak EGP. Egypt's inflation has been volatile also. In fact, a sharp inflation rise is often paired with a weak EGP because it increases the rate at which money's value is being reduced. Interest rates in Egypt have also fluctuated. High interest rates attract foreign investments, which then generates an effective EGP. Political events have also greatly affected the currency rate. For example, the effect of the Egyptian revolution in 2011 resulted in chaos and fear, and thus impaired the EGP even more.

- ***India***

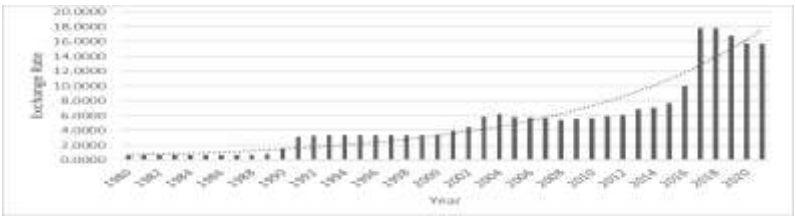

Figure 7: Trends in value of INR concerning USD (1980-2021)

Source: Self-Prepared by author

From Figure 7 value of the INR has declined against the USD over 41 years. In other words, it took more INR to obtain one USD over time. Rates of depreciation have not been uniform. Gaps of relative stability are punctuated by periods of rapid depreciation. For instance, the INR dropped significantly in the late 1990s and early 2000s and declined again in about 2011. The INR reached its lowest point against the USD in 2013. In 2013, it took approximately 62 INR to buy one USD. Since 2013, the INR has slightly strengthened against the USD. However, it is still worth less than it was in 1980. It is interesting to note that the daily fluctuations from numerous factors do are effective, which the graph has not depicted, but the graph gives a general idea of the trend over several decades. Economic growth for the nation has been steady, though not without the difficulties in between. The INR has typically been stronger when the country witnessed periods of robust growth. On the other hand, weaker growth has coincided with a weakened INR. Inflation in India also fluctuated. High inflation tends to make the INR weaker because it reduces the strength of the currency to 'purchase'. Therefore, the central bank in India can determine interest rates affecting the exchange rate. For higher rates, it might attract more foreign investment, thereby making the INR stronger. Wider international economic and political events can also influence the currency exchange rate. For instance, an international economic slowdown or even times of strained geopolitical relations can debilitate the INR.'

- ***Kuwait***

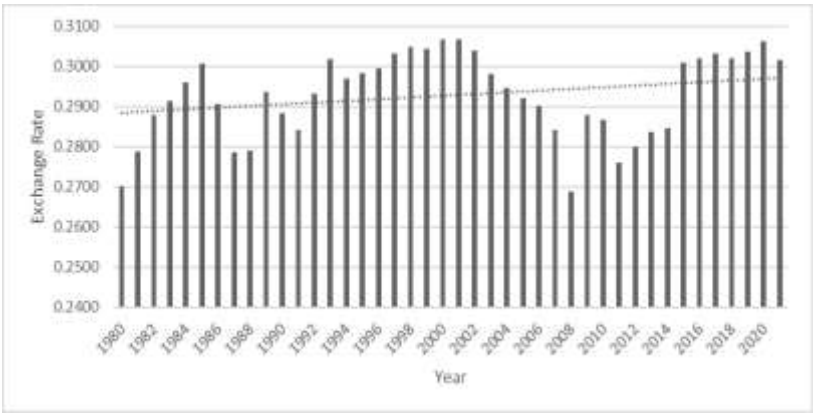

Figure 8: Trends in value of KWD with respect to USD (1980-2021)

Source: Self-Prepared by author

From figure 8 the value of KWD increased against USD for last 40 years. So, it requires more KWDs to buy one USD today than in the year 1980. The depreciation rate has not been constant. Sometimes, the exchange rate remained stable over periods of years, then increased at a faster rate. For example, KWD really depreciated both in the early 1990s and late 2010s. The year 2016 was the lowest ever that was reached by KWD measured against USD. Then, it would take around 27 KWD to purchase one USD. From 2016, the KWD appreciated marginally compared to the USD. It is still worth less today than it was in 1980. Kuwait's economic growth has been an unstable affair over the last 40 years. Periods of strong economic growth tend to coincide with a stronger KWD, while periods of weak growth have tended to coincide with a weaker KWD.' The inflation situation in Kuwait has been unstable as well. High inflation can prove deleterious for the KWD as it eats into the purchasing power of that currency. Kuwait's interest rates have also witnessed fluctuations in the past. High interest rates tend to attract foreign investment, which can usher in a strong KWD.' The political scenario too can affect the exchange rate to a great extent. For example, the 2011 Kuwait revolution led to an uncertain and unstable situation by which KWD declined.'

- ***Saudi Arabia***

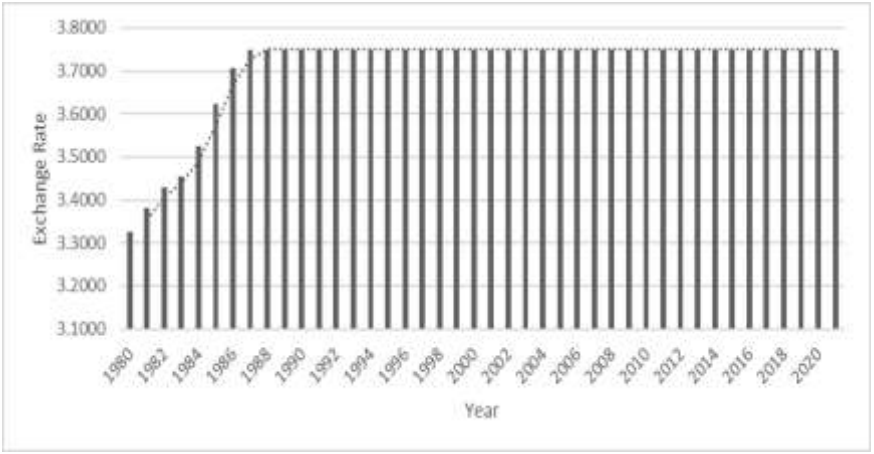

Figure 9: Trends in the value of SAR with respect to USD (1980-2021)

Source: Self-Prepared by author

The SAR has strengthened against the USD over the last 41 years. That is to say, it has taken fewer SAR to buy one USD over time. However, the rate of appreciation has not been uniform. Alternating with periods of relative stability have been periods when the SAR appreciated at a much faster pace. An example is that the SAR gained a significant amount in the early 1980s. Likewise, by the late 2000s it did so again. The SAR became the strongest compared to the USD in 2014. At that time, it took about 3.75 SAR to obtain one USD. Since 2014, the SAR, however, has depreciated a little against the USD. The currency is still more valuable than it was in 1980. Saudi Arabia is the country that records the largest

production and export of oil. Oil prices have, on average, been extremely high over the last four decades. This has generated revenue for the Saudi government, which has been backing the SAR. The SAR is pegged to the USD within a narrow band. This helps preserve the exchange rate and prevents sharp fluctuations. Saudi Arabia has "intervened in the foreign exchange market in the past to support the SAR".

- ***United Arab Emirates***

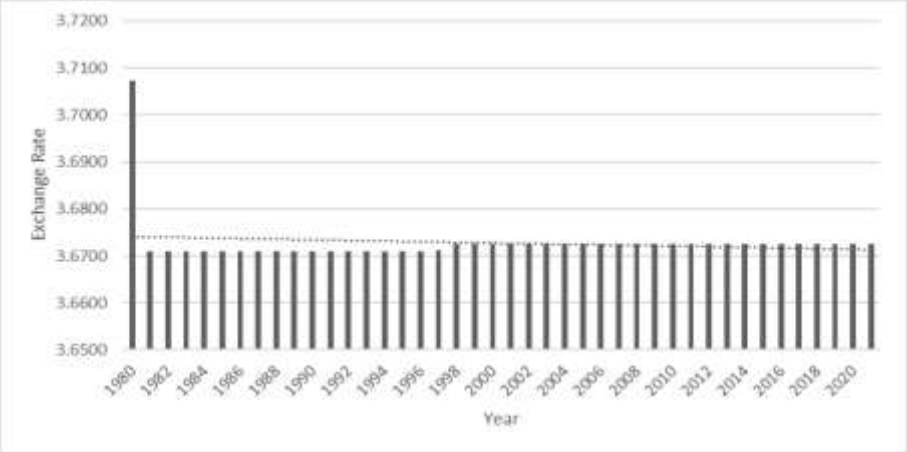

Figure 10: Trends in the value of AED with respect to USD (1980-2021)

Source: Self-Prepared by author

From figure 10, the AED has remained within a narrow range against the USD during the last 41 years. This means that the same amount of AED is required to purchase one USD during the reviewed period. While there have been minor changes in some instances, they occurred in the direction of an overall tendency toward relative stability. For example, the AED strengthened a little during the early 2000s and a little weakened in late 2010s. Since 2001, the AED remained at its weakest point relative to the USD. Then, 3.68 AED could buy just one USD. Since then, AED began to appreciate a little against the USD. Nonetheless, it still remains a bit less precious as it did more than three decades ago. The UAE has a strong and diversified economy, relying less on exporting oil compared to many countries in the region, and that made the AED less sensitive to external shock. "The AED is pegged to a basket of currencies, including the USD. This helps to keep the exchange rate within a narrow band". Sometimes the government of the UAE has had to intervene in the foreign exchange market in defence of the AED. An example policy created by interest rates existing between countries will lead to major fluctuations in currency exchange rates-to the study of the MENA region and India, at least. Also, the paper draws attention to the fact that "higher rates can attract foreign investment, potentially strengthening the currency". This fact further justifies that the interest rate policies are something which plays a significant role in currency valuation. In the case of India and in the MENA region, decisions taken by central banks regarding interest rates can have an instant and a pronounced effect in their respective currencies and, hence, this relationship is also quite significant. The empirical study cited in the report further makes this argument valid that there exists a great correlation between interest rates and currency exchange rates. The results showed fluctuations in currency values reflecting the movements in interest rates. Thus, the hypothesis is valid. From the evidence provided in the document, there is a strong link between the movement of interest rates and currency exchange rates in the MENA region and India. The interplay above demonstrates how, as a result of fluctuations in interest rates, the values for currencies can be impacted directly and, therefore the hypothesis is reasoned in what has been availed.

6. DISCUSSION

The paper analyses the effects of the major macroeconomic determinants, which include inflation, GDP growth, and interest rates, on the exchange rate in the MENA region and India and considers the relationship between interest rate movements and the corresponding exchange rates. The results are fully supportive of the hypotheses and contribute to the overall knowledge about macroeconomic determinants influencing currency exchange rates, with important implications for policymakers and financial stability.

The first objective was to analyse how inflation, GDP growth, and interest rates are economic indicators that impact exchange rates of currency. The study reveals that inflation exerts a negative effect on exchange rates since it results in the depreciation of national currencies. This finding aligns with previous studies, such as Al-Din, W. (2024) [39], who noticed similar patterns in emerging markets. Egypt and India, for example, have seen high rates of inflation which resulted in depreciation of their respective currencies during economic turmoil [40]. Moreover, economic growth has been proven to have a positive and significant impact on currency exchange rates. High GDP growth attracts foreign investment, which boosts the appreciation of currencies. According to the Monetary Model of Exchange Rate Determination, when economic growth is high, the currency tends to appreciate because the economy becomes more attractive to foreign investors [41]. In India, strong GDP growth influenced its currency positively, marking an importance of economic stability in the establishment of an exchange rate.

Such interest rates also attract foreign capital, therefore affecting exchange rates. Higher interest rates increase the returns on investments by attracting foreign investors and creating an appreciation effect within the currency, as according to the IRP theory, the currency appreciates as expected. In countries with more rigid systems of exchange rates such as Saudi Arabia and Jordan, little interest rate-exchange rate relationship is seen primarily due to a stabilizing effect by the pegged exchange rate regime [25]. The second objective was interested in how movements in interest rates have interaction forces on exchange rates. The study confirmed the real leads to currency appreciation theories as higher interest rates lead to currency appreciation, especially in countries with flexible exchange rate regimes like India and Egypt. This supports the theory of IRP, which is that foreign investment moves to countries with higher interest rates to experience currency appreciation [42]. Instead, in less flexible systems, the global interest rate movements, particularly the latter from the U.S. Federal Reserve, play a bigger role, reflecting the broader influence of international monetary policies [43].

Some of the study results are also consistent with some earlier studies, but at the same time, reflect latest ideas, in the context of the MENA region and India. For example, Şen et al. (2020) [14] proved the persistence of the positive correlation between inflation and nominal interest rates in countries like India and Turkey, besides linking interest rates with exchange rate fluctuations. The present study supports this relationship but extends it by showing the exact intensities that happen across different variables from macroeconomics, such as the increase in inflation and GDP growth. Ghanem et al. (2012) [17] noted that MENA nations with flexible exchange rates record low levels of inflation. This study looks at a more granular view on how inflation not only impacts the exchange rate but also how its conjoint effect with GDP growth enhances currency depreciation or appreciation in relation to an economic setting. We also obtain results that are consistent with earlier studies where inflation drives far more of exchange rate movements in countries such as Egypt and India, whose economic environments are very volatile to fill a gap in literature that on combining inflation and GDP growth effects was hardly ever studied [44].

In contrast Shastri et al. (2016) [45], found no correlation between interest rate and exchange rate in India; however, interest rates were the important predictors of currency appreciation or depreciation for the present study but not the strong predictors most of the time, especially in high-interest environments. This difference could be due to the fact that the study includes recent data, shifts in global and domestic monetary policies post-2016 [46]. The existing literature extensively recognizes interaction between individual economic indicators and exchange rates. However, the present study deals with the lacuna of multi-variable interaction because earlier works isolate variables like inflation or interest rates without considering what the combined effects might contribute to with respect to changes in exchange rates. the present study puts a different scenario into perspective by showing how inflation, GDP growth, and interest rates affect currency values collectively by applying multi-regression analysis. The approach allows for better policy recommendations since the policymakers must look at how they all interact rather than focusing on isolated measures [25].

Additionally, studies like those by Al-Shakrchy et al. (2023) and Neaime et al. (2008) [47,48] highlighted the impacts of external shocks (e.g., oil prices, and global financial crises) on exchange rates. the present study draws on these studies by providing empirical evidence that shows how internal economic stability-as measured through inflation control and GDP growth-is equally important for the stable maintenance of currency stability. This is an important gap in the study literature because it supplies a more nuanced

view of how the health of internal economies affects the relationship between other externals and the exchange rate (Farzanegan et al., 2009). The conclusion would be that there are several policy measures that would foster economic stability and optimal exchange rate regimes in the MENA region as well as India. Inflationary control should top the list in countries such as Egypt and India with volatile inflationary rates and, as a result, sharp depreciations of their respective currencies. Central banks during periods of inflation should adopt tighter monetary policies to stabilize their currencies against respective higher inflation rates in the economies (Mohanty et al., 2014).

Economic reforms coupled with diversification in key areas, such as is the case of the highly dependent economies of the MENA region on oil exports, also stimulate growth in GDP. The policies that ensure long-run stability of investment coupled with a sound currency are also important. Other key areas relate to interest rate management, especially to countries with flexible exchange regimes. Interest rates have to be balanced in such a way as not to detour foreign investment but also not to strangle domestic economic growth. Countries with pegged exchange rates will then need to maintain prudent fiscal policies and monitor global interest rate trends as the factors through which external stability will be maintained while managing currency fluctuations (Shastri et al., 2016). The study contributes to the growing literature of factors that explain currency exchange rates by adding consideration of the interplay between inflation, growth in GDP, and interest rates in the MENA region and India, with some established relationships confirmed but a key gap in the analysis filled through consideration of how these variables interact multilaterally to influence the exchange rate. Future study will extend this study to include other external factors such as oil prices and global trade dynamics for refining the model for these regions.

7. CONCLUSION

The focus of the study was to analyze core economic indicators in terms of inflation, growth in GDP, and interest rates upon currency exchange rates in the MENA region and India. Analysis of such a basis further throws light on the dynamics by which macroeconomic variables work to influence currency fluctuations and yields a better understanding of regional economic steadiness, how the countries, despite huge fiscal and monetary challenges, promote this steadiness within the economy of their respective countries. One of the more significant results of this study is that inflation assumes a fundamental role in determining the tracks of an exchange rate. The results indicate that inflationary pressure correlates with currency depreciation in the MENA region as well as in India. Countries, for example Egypt, which experienced periodic economic instability, experienced sharp currency depreciation associated with inflationary pressures. It stresses, at a broader economic level, that inflation does reduce the currency's power to purchase goods and is less appealing to foreign investors. In this regard, India had experienced inflation but less strongly with respect to the relationship as interventions were made by the central bank to stabilize its operations. This study's findings emphasize that high inflation often poses a problem for many developing economies in terms of monetary policy, hence the danger of currency devaluation in the long run if not checked on time. On the other hand, this study finds that there exists a positive and statistically significant relationship between GDP growth and currency appreciation not only in India but also in the MENA region as a whole. It tends to bring stronger economic growth that attracts foreign investments, causing a greater demand for the national currency and appreciates it. For example, sustained increases in Indian GDP over a period of years have reflected an important positive influence on the rupee, relatively making it stronger compared to other major world currencies. The same experience associated with the currency of Egypt during its expansionary cycles would show a similar pattern, but at a slower phase than in India. Such findings thereby support the Monetary Model of Determination of Exchange Rate, whereby higher economic growth leads to currency appreciation. The study means that the long-term economic growth should become the objective in these areas so they can possess a strong and stable currency.

The study went further to establish the effect of interest rates on exchange rates, at least in more flexible exchange rate regimes. Higher interest rates tended to attract more foreign investors looking for better returns and increased demand for the national currency, an eventual appreciation of its value. Indeed, both the increased interest rates in India and Egypt were followed by appreciation periods of the respective currencies. The empirical results are consistent with the IRP hypothesis since capital inflows and currency

appreciation are well-represented by higher interest rates. However, in countries like Saudi Arabia and Jordan, which have pegged or fixed exchange rate systems, this relationship does not quite converge:. These countries look more toward policy coordination and other external conditions, such as oil prices and the overall direction of global interest rates, to anchor the currency. Thus, the interest rates can significantly impact movements in the currency only when it comes to the flexibility of the exchange rate regimes. Some key policy recommendations were therefore derived from this perspective. First and foremost, the central banks need to maintain a close control over inflation. In countries like Egypt and India, volatile inflation has brought about a remarkable depreciation of their currencies. Therefore, during an inflationary phase, central banks in these regions need to maintain tighter monetary policies to keep their currencies stable and prevent them from facing severe devaluation. Economic reforms and diversification strategies are needed to improve GDP growth, especially in the oil-exporting MENA region whose economies rely significantly on oil. It will attract foreign investment with such diversified economic base to sustain, strengthen the national currency, and reduce vulnerability to shocks like the volatile price of oil. Moreover, long-run economic stability policies, which encourage foreign and domestic investment, will affect currency strength as well.

Interest rate managements constitute an area of concern. The authorities have to fix interest rates sufficiently high to attract foreign capital and yet not too high as to raise the threat of crowding out domestic economic growth. The world interest rate trends in more flexible exchange rate regimes will be watched by central banks in such countries, and appropriate steps taken on the domestic rate to strike a right balance between growth and currency stability. For countries pegged as their exchange rate regime, like Saudi Arabia and the UAE, maintaining external stability is a must. This will be attained by prudent fiscal policies and through keen observation of the global economic conditions. Managing currency fluctuations and avoiding any unnecessary volatility are factors that, though not easy to manage, are critical in checking hyperinflation, high GDP growth rates, and high interest rates. Although the study confirms the substantial effects of inflation, GDP growth, and interest rates on exchange rate regimes, it also throws much light on the intricate nature of these relationships. This means that policymakers should view things in relation to many variables rather than focusing on isolated indicators. For instance, high interest rates may attract foreign investment but at the same time kill domestic growth if not managed properly. Similarly, although inflation leads to currency depreciation, in countries with great GDP growth, its negatives may be offset by the result of the confidence generated in an economy. So, using effective management of macro variables is vitally important for maintaining stable exchange rates and sustainable long-run economic growth both by the MENA region and India.

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