http://journals.uokerbala.edu.iq/index.php/ijas/index
Iraqi Journal for Administrative Sciences
المجلة العراقية للعلوم الإدارية

Impact of Iraq's Dinar Exchange Rate Fluctuation on Iraq's Trade Balance for The Period 2005–2023

Nabard Abdallah Sharif [1] Aryan Omar Mohammed [2] Hardi Gharib Ahmed [3]

أثر تقلبات سعر صرف الدينار العراقي على الميزان التجاري العراقي للفترة من 2005 إلى 2023

نه به رد عبدالله شريف*[1]، ئاريان عمر محمد[2]، هه ردى غريب أحمد[3]

1.Department of Accounting, Darbandikhan Technical Institute (DATI), Sulaimani Polytechnic University, Iraq- Sulaimani City. Email: nabard.abdallah@spu.edu.iq **Corresponding Author***
2. Department of International Commerce, College of Commerce, University of Sulaimani, Iraq- Sulaimani City. Email: aryan.omar@univsul.edu.iq
3.Department of Banking and Finance Science, College of Commerce, University of Sulaimani, Iraq - Sulaimani City. Email: Hardi.ahmed@univsul.edu.iq

1. قسم المحاسبة، المعهد التقني دربنديخان، جامعة السليمانية التقنية، العراق- مدينة السليمانية. **المؤلف المراسل***
2. قسم التجارة الدولية، كلية التجارة، جامعة السليمانية، العراق- مدينة السليمانية.
3. قسم العلوم المالية والمصرفية، كلية التجارة، جامعة السليمانية، العراق- مدينة السليمانية.

Article information

Article history: DD/MM/YY
Received: 19/08/2025
Accepted : 2/11/2025
Available online: 07/12/2025

Keywords: *Iraq dinar exchange rate, Trade balance impact, Exchange rate fluctuation, Import-export dynamics*

تاريخ الاستلام:2025/08/19
تاريخ قبول النشر: 2025/11/2
تاريخ النشر: 2025/12/07

الكلمات المفتاحية: سعر صرف الدينار العراقي، تأثير الميزان التجاري، تقلبات أسعار الصرف، ديناميكيات الاستيراد والتصدير.

Abstract

The research investigates the relationship between fluctuations in the Iraqi dinar exchange rate and the trade balance of Iraq from 2005 to 2023. The research aims to answer whether changes in the value of the dinar against the US dollar have affected Iraq's import and export performance. The research uses different quantitative econometric techniques (Unit Root Tests, Correlation Analysis, Granger Causality Analysis, Johansen Co-integration Analysis and the Autoregressive Distributed Lag (ARDL) model). Data is collected through annual data from reliable sources, namely the Central Bank of Iraq, the World Bank and Macrotrends. The research finds substantial long-run relationship between fluctuations in the exchange rate and the trade balance. An appreciation of the dinar could lead to a worsening of the trade balance and depreciation may lead to a short-term improvement of the trade balance which is a reflection of oil export dependency and the extent of limited diversification of the non-oil economy. It demonstrates the significance of conducting stable exchange rate reform and diversification of exports to improve trade performance. The research has important implications for policymakers who aim to mitigate the adverse effects of fluctuation of exchange rate policies on Iraq's external sector and overall economic stability.

DOI: https://doi.org/10.71207/ijas.v21i86.4175

Citation: Sharif, Nabard Abdallah, Mohammed, Aryan Omar, Ahmed, Hardi Gharib. (2025). Impact of Iraq's Dinar Exchange Rate Fluctuation on Iraq's Trade Balance for The Period 2005–2023, *Iraqi Journal for Administrative Sciences*, 21. (86), 181-190.

الاقتباس: شريف، نه به رد عبدالله، محمد، ئاريان عمر، أحمد، هه ردى غريب. (2025). أثر تقلبات سعر صرف الدينار العراقي على الميزان التجاري العراقي للفترة من 2005 إلى 2023، المجلة العراقية للعلوم الإدارية، 21 (86)، 181-190.

المستخلص

يبحث البحث في العلاقة بين التقلبات في سعر صرف الدينار العراقي والميزان التجاري للعراق من عام 2005 إلى عام 2023. ويهدف البحث إلى الإجابة عما إذا كانت التغيرات في قيمة الدينار مقابل الدولار الأمريكي قد أثرت على أداء العراق في الاستيراد والتصدير. ويستخدم البحث تقنيات اقتصادية قياسية كمية مختلفة (اختبارات جذر الوحدة، وتحليل الارتباط، وتحليل السببية غرانجر، وتحليل التكامل المشترك جوهانسن ونموذج الانحدار الذاتي ذو التأخر الموزع (ARDL)). ويتم جمع البيانات من خلال البيانات السنوية من مصادر موثوقة، وهي البنك المركزي العراقي والبنك الدولي وماكروترندز. ويجد البحث علاقة طويلة الأجل كبيرة بين التقلبات في سعر الصرف والميزان التجاري. ويمكن أن يؤدي ارتفاع قيمة الدينار إلى تدهور الميزان التجاري وقد يؤدي انخفاضه إلى تحسن قصير الأجل في الميزان التجاري وهو انعكاس للاعتماد على صادرات النفط ومدى التنويع المحدود للاقتصاد غير النفطي. يُظهر هذا البحث أهمية إصلاح سعر الصرف وتنويع الصادرات لتحسين أداء التجارة. وللبحث آثار مهمة على صانعي السياسات الذين يسعون إلى التخفيف من الآثار السلبية لتقلبات سياسات سعر الصرف على القطاع الخارجي للعراق والاستقرار الاقتصادي العام.

Introduction

In the developing world, the decision about the exchange rate regime is highly debated and considered to be the most controversial part of macroeconomic policy Aghion et al. (2009).

Furthermore, variations in exchange rates significantly affect several sectors and overall economic statistics, particularly the international commerce sector.

The impact of the exchange rate (ER) on the trade balance (TB) and the comprehensive balance of payments is significant and influential. It plays a crucial function. When the domestic currency strengthens in relation to international currencies, it results in trade balance imbalances owing to the impact of the exchange rate on a nation's exports and imports. An increase in the value of the native currency has a beneficial impact on the nation's imports, as it leads to a fall in the assessment of such imports, citizens of the domestic nation, thanks to the elevated exchange rate of their monetary unit Khouiled et al. (2023). In addition. Devaluation of the domestic currency will enhance exports and raise the cost of imports Smitha, N. (2023). In order for every nation to possess a positive balance of trade, it is crucial to pay close attention to a significant aspect, such as the exchange rate Osei-Gyebi (2021).

Concerning the Republic of Iraq, it is currently experiencing political and economic instability Riyadh et al. (2020). Iraq also has more dependence on imported products than on exported products. Commodity prices depend heavily on the valuation level of currency (i.e., Iraqi dinar vis-a-vis US dollar) and therefore will fluctuate, depending on the variations in market forces. As Latif Majee (2023). points out, these fluctuations can increase or decrease the value of commodities and may even stabilize.

Overall, data on exporting and importing activities can facilitate the development of policies meant to improve an economy and strengthen international trading relationships in light of the ongoing global economic changes that have occurred since October 2023. Therefore, one of the highest priorities in the Republic of Iraq is building stronger economic partnerships through international trade. Given the current instability of the Iraqi economy and the heavy reliance on oil exports to support the government financial budget, which continues to create a long-term structural crisis, Iraq is looking to international trade to supplement domestic demand for goods and services. Furthermore, maintaining a trade equilibrium is an important way of gauging the size of world commerce, as well as a major consideration in developing a country’s balance-of-payments structure. Therefore, the degree of difference between the dollar value of exported commodities and the dollar value of imported commodities reflects a significant portion of the overall trade activity within the structural framework of the Iraqi economy.

The government of Iraq changed its economic policies following the political upheaval in Iraq in 2003 and shifted the primary focus of the Economic Policy to significantly increasing international trade. This reform was facilitated by several new Legislation which forms part of the Legal Framework for Iraq, which includes Central Bank Law (No. 56/2004); Banking Law (No. 94/2004); Investment Law (No. 13/2006). The Iraqi dinar is

exchanged through two types of exchange rates, one set by the government (official rate) and the market rate based on supply and demand Abed (2023).

The impact of an unstable currency is detrimental to a country's long-term growth potential. Therefore, having an appropriate foreign exchange framework is vital for achieving a well-balanced economy. As noted by Saqib (2018), the ability to restore imbalance through the right foreign exchange framework plays a crucial role in creating a strong economy as recommended by the economic analysis.

In developing this research, we will also use a hypothesis. This hypothesis states the fluctuation of the conversion rate of the Iraqi Dinar will correlate in the opposite direction as the trade balance of Iraq has fluctuated for the years 2005 through 2023. Therefore, if the conversion rate of the Dinar continues to fluctuate it will hinder Iraq's trade balance and create a dramatic increase in its trade deficits.

Literature review

Salal et al. (2004) performed a number of analyses in order to understand the effect of exchange rate changes on Iraq's balance of payments during the period from 2004 to 2020. They found that Iraq's trade surplus was primarily a result of its export activity, along with various fluctuations in global oil prices. Furthermore, Salal et al.'s research provided recommendations on how to best protect the stability of the Iraqi dinar by controlling inflation and maintaining sufficient reserves of both the foreign currency and domestic currency.

Similarly, a study done by Qasim Hasan in (2016) on Iraqi dinar compared its value against other currencies and what was attributed to such variations were various elements that play a significant role in these changes. The study's focus was on the theoretical framework of values, trends, and outcomes over a time period from 1995 through 2015. The study said that the prices of consumers and the availability of liquid assets had an effect on exchange rates and used both a statistical method as well as descriptive methods. During this time frame, the Iraqi economy became more susceptible to fluctuations in exchange rates, which caused increased costs of imported goods and impacted how consumers distributed their money. However, between 2008 through 2015, the rate of inflation gradually decreased.

Moreover, based on their findings, Ismael et al. (n.d.) investigated how fluctuations in foreign exchange rates could affect major economic factors such as macroeconomic and trade balances in developing countries like Iraq, which has a large population, especially when imports are constantly rising. The regulations pertaining to exchange rates enable countries to protect themselves from sudden shocks and therefore enhance economic development and systemically affect the balance of trade. Therefore, economic policymakers must be aware of the aforementioned impact of exchange rates on trade. In Iraq, it was established that changes in exchange rate do not have a major impact on Iraq's trade balance because the rigidity of both exports and imports influence the trade balance. While the autoregressive distributed lag (ARDL) method is excellent to evaluate long-run

relationships via error correction, ARDL also illustrates short-run positive relationships and complementary dynamics.

decreasing values of the Iraqi dinar were associated with increases/decreases in an indicator such as the value of exports, as measured by the dollar value of exported goods to different countries around the world. In general terms, it is recommended that Iraq's central bank revise its approach to selling the Iraqi dinar and allow minor traders to engage in foreign currency exchange operations in order to stabilize the value of the dinar and reduce the difference between the two rates at which the same currency can be converted. The increase in imports to Iraq is thought to be largely due to decreased production in Iraq, resulting in a net negative balance for non-oil traded items. Most of Iraq's exports go to countries within the Americas; however, Asia is also a major recipient of the majority of its exports. Ultimately, the volume of trade occurring internationally will ultimately impact the value of the currency of a given economy Abed (2023).

Latif Majee (2023) conducted a thorough investigation into the impact of currency rates on the development of the Iraqi economy in 2023. The results demonstrated a distinct positive correlation of the relationship between the Gross Domestic Product (GDP), GNP and Inflation rate and the effective management of currency to facilitate economic growth. Results also highlight the existing relationship between currency exchange rates and the Gross Domestic Product from 2004-2022 showing the need to develop a Monetary Policy Framework that includes Exchange Rate Management.

Inflation of the Iraqi dinar and its impact on Iraq's trade balance is the specific focus of this research between 2005 and 2023, which is an area not addressed in previous research that looked at exchange rate fluctuation, along with their overall impact on Iraq's economy (Salal et al., 2004; Qasim Hasan, 2016; Ismael et al., n.d.; Abed, 2023; Latif Majee, 2023). It extends the analysis into the more recent period. It applies the **ARDL model to examine the short- and long-term relationship, which aids in displaying the impact of inflation change on the trade performance of Iraq in a better way.

Methodology and Data Collection

The aim of this paper is to test a hypothesis using a quantitative research method to determine the significance of fluctuations in the exchange rate of the Iraqi dinar and the balance of trade in Iraq for the period 2005-2023. Various econometric techniques are applied in the study. These include unit root tests, pair-wise correlation test, test of Johansen co-integration, and the ARDL framework (Autoregressive Distributed Lag) approach to bounds tests. Data gathering can be defined as a process of searching for information and organizing it in a particular way. To determine the ER, we take the mean of the yearly exchange rate of IQD/USD for a certain year. The concept of trade balance (TB) in Iraq is the net average value of exportation and importation throughout a year. The control variable in this case was the Gross Domestic Product (GDP), which is a yearly figure that reflects the aggregate of products and the tertiary sector that are generated in Iraq during that year. The third control variable, which is the rate of inflation, is determined every month by the oil output of Iraq. The sources used for this research

include reliable webpages of the Central Bank of Iraq, the World Bank, and the International Monetary Fund for the data from the years 2005 to 2023.

Methodological Steps:

Studying Hypothesis: In conducting the research, the study employs the following tests: The Augmented Dickey-Fuller (ADF) method for time series testing, the correlation test that measures the relationship and intensity of the relationship, the Granger causality that tests for causality between variables, and the Johansen co-integration test that shows the long-run error correction terms. Last but not least, the research also estimates the impact of exchange rate volatility and trade balance using an ARDL model. We use these tests to choose the coefficients of variables and their significance in an experiment.

The present study formulated the following equations in order to achieve its objectives:

$$\Delta TB_t = \alpha + \sum_{i=1}^{p} \beta i \ \Delta TB_{t-i} + \sum_{j=0}^{p} \gamma j \ \Delta EXR_{t-j} + \sum_{k=0}^{r} \delta_k \ \Delta GDP_{t-k} + \sum_{l=0}^{s} \theta_l \ \Delta INF_{t-l} + \epsilon_t$$

Where:

- ΔTB_t Is the change in the trade balance at time t.
- ΔEXR_{t-j}Represents changes in the exchange rate at various lags (up to q).
- ΔGDP_{t-k}Represents changes in the Gross Domestic Product at various lags (up to r).
- ΔINF_{t-l}Represents changes in the inflation rate at various lags (up to s).
- $a, \beta_i, \gamma_j, \delta_k, \theta_l$ Are coefficients to be estimated.
- ϵ_tIs the error term.

Table (1) Result of the Stationary test for all variables

test of Augmented Dickey-Fuller (ADF) at first difference		
Variables	**Adj. t-test**	**Prob.**
D_ER	-3.672295	0.0161**
D_EX	-5.093396	0.0011***
D_IM	-4.102950	0.0284**
D_TOB	-6.392609	0.0001***
***, **, *Correlation is significant at 1%, 5%, and 10% levels.		
D with variables indicates the first difference L with variables indicates log form		

Source: Developed by the author based on statistical results using EViews software.

The ADF test indicates that all variables are stationary. ER, EX, IM, and TOB are stationary at the 1% and 5% levels of significance. The following procedure is to recognize the correlation between variables:

Table (2) The result of the Correlation test for all variables

Variable	TOB	IM	EX	ER
TOB	1.000000	-0.108053	0.819719	0.239415
IM	-0.108053	1.000000	0.480839	-0.665862
EX	0.819719	0.480839	1.000000	-0.172472
ER	0.239415	-0.665862	-0.172472	1.000000

Source: Developed by the author based on statistical results using EViews software.

As can be observed from the result, there is a positive relationship between ER and EX (0.819719 and 0.239415), respectively. However, the correlation between TOB and IM is negative (-0.108053), which indicates a negative relationship between them. Also, the relationship between IM and ER is negative (-0.665862), respectively. Furthermore, there exists a positive correlation between IM and EX (0.480839). The next test is the causality test for all variables. The outcomes of this test are presented in Table 3.

Table (3) Results of Granger causality

Null Hypothesis:	Obs	F-Statistic	Prob.	Decision
IM does not Granger-cause TOB	17	1.95158	0.1846	Accept
TOB does not Granger-cause IM		0.06907	0.9336	Accept
EX does not Granger-cause TOB	17	1.95158	0.1846	Accept
TOB does not Granger-cause EX		7.46063	0.0078***	Reject
ER does not Granger-cause TOB	17	4.13792	0.0430**	Reject
TOB does not Granger-cause ER		0.33154	0.7242	Accept
EX does not Granger-cause IM	17	0.06907	0.9336	Accept
IM does not Granger-cause EX		7.46063	0.0078***	Reject
ER does not Granger-cause IM	17	6.53101	0.0121***	Reject
IM does not Granger-cause ER		1.71756	0.2208	Accept
ER does not Granger-cause EX	17	5.67611	0.0184***	Reject
EX does not Granger-cause ER		1.48526	0.2653	Accept
***, **, and * are significant at 1%, 5%, and 10% levels.				

Source: Developed by the author based on statistical results using EViews software.

According to the results of Table 3, the P-value (0.1846) is not significant, so the null hypothesis is accepted and we ascertain that IM doesn't Granger-cause TOB. The P-value (0.9336) is also not significant, so our null hypothesis is accepted and we conclude that TOB doesn't Granger-cause IM. So, IM does not affect TOB.

P-value (0.1846) is not significant, so we accept the null hypothesis and conclude that EX does not Granger-cause TOB. But the converse is not true, as the p-value (0.0078***) is significant. So, we reject the null hypothesis and we conclude that TOB Granger Cause EX. So, TOB affects EX; the p-value (0.0430**) is significant. So, we reject the null hypothesis and we ascertain that ER Granger Cause TOB, P-value (0.0078***), is significant; we the null hypothesis is reject and we ascertain that IM Granger Cause EX, P-value (0.0121***), is significant; we the null hypothesis is reject and we ascertain that ER Granger Cause IM and P-value (0.0184***) are also significant; we reject the null hypothesis and we conclude that ER Granger Cause EX. The next test is the co-integration test by the Johanson method for all variables in order to reveal the long-term relationship between them, as shown in Table 4.

Table (4) Results of Co-integration analysis

Hypothesized Number of Cointegrating Equations	Eigen value	Trace Statistic	Critical Value at 5%	p-value
None *	0.728394	26.62891	15.49471	0.0007***
At most 1 *	0.231261	4.471061	3.841466	0.0345**

* ***, **, and * are significant at 1%, 5%, and 10% levels.

Source: Developed by the author based on statistical results using EViews software.

As can be seen in Table 4, co-integrating based on the trace statistic between variables at the level of 5% significance (p-value = 0.0007 and 0.0345 <trace>). It means the variables are related to each other. This is the condition of preceding the time series regression model, which must have at least one co-integrating relationship. The ARDL model has been used to estimate the coefficients in the short-term and long-term of the regression model. The result has been shown in the table (5).

Table (5) ARDL Estimation Results

Variable	Coefficient	St. Error	t-Statistic	Prob.
TOB (-1)	0.818088	0.296290	2.761108	0.0281**
TOB (-2)	-0.772020	0.249222	-3.097724	0.0174**
ER	1.09E+08	51282619	2.128311	0.0708*
ER (-1)	1.48E+08	74013107	1.995042	0.0862*
ER (-2)	-4.76E+08	90120524	-5.277322	0.0012***
ER (-3)	-58260291	71399165	-0.815980	0.4414
ER (-4)	99091418	58264930	1.700704	0.1328
C	2.23E+11	8.85E+10	2.520619	0.0398
* ***, **, and * are significant at 1%, 5%, and 10% levels.				
Cointeq = TOB - (-186553348.0741*ER + 233785223051.3478)				
Long Run estimation				
Variable	Coefficient	St. Error	t.Statistic	Prob.
ER	-186553348.074106	124029323.790685	-1.504107	0.1763
C	233785223051.34775	144892744078.42841	1.613505	0.1507

Source: Developed by the author based on statistical results using EViews software.

From this result, the findings show that in the short term, the positive coefficients of TOB (-1) (0.818) with a p-value of 0.0281 are significant at the 5% level, and their positive sign indicates a significant influence of TOB. The coefficient of TOB (-2) (-0.772) with a p-value of 0.0174 is significant at the 5% level, and the coefficient of ER (-2) (-4.76) with a p-value of 0.00127 is significant at the 1% level and has an adverse impact. Over an extended period, the ER coefficient (-186553348) is not significant at any level.

Table (6) Summary of Results for All Checking Problems

Ramsey RESET	Breusch-Godfrey Serial Correlation LM	Multicollinearity VIF	Jarque-Bera
0.005698	1.674884	8.096439	0.954956
0.9423	0.2775		

Source: Developed by the author based on statistical results using EViews software.

The RESET and Correlation LM test results shown in the table come from estimating the cubic model and adding the squares and cubes of the predictions. The F-values are 0.005698 and 1.674884, and the p-values are 0.9423 and 0.2775. The p-values are greater than 0.05, which is the level of significance. So, the data show that the cubic model is good enough, and the multicollinearity test VIF shows that the model has collinearity because the highest value, 8.096439, is less than 10. The Jarque-Bera statistic of 0.954956 indicates that the sample does not significantly differ from normality. At a 5% significance level, the null hypothesis is accepted.

Conclusion

Based on the findings of this research, it can be posited that the exchange rate of the Iraqi dinar is directly correlated to the trade balance of the country under analysis for the years between 2005 and 2023. The re-estimation of the ARDL model shows the short-term impacts with a strongly negative sign, while in the long-term, it means the effect of the exchange rate is not significant. When the authors conducted co-integration tests, they revealed that the exchange rate of Iraq, along with the trade balance and several other parameters of the Iraqi economy, is relatively stable, which, in turn, supports the above conclusion about Iraq's regulated foreign trade. However, considering the fact that the outcomes of the Granger causality tests conducted speak in favor of the null hypothesis, it is possible to conclude that exchange rate policy must be managed in order to prevent a negative effect on the balance of trade. Therefore, the effective formation of regulations, mechanisms, and implementation of economic tools will make the future more secure, and the stability of currency necessary to create a favorable trading environment is also highlighted, which is in context with the fact that Iraq's economy is in the process of recovery.

Acknowledgments: The authors express their gratitude to all who provided scientific advice.
Funding: No funding was provided for this research.
Author Contribution: All authors contributed to the preparation and review of this research.
Generative AI and AI-Assisted Techniques in the Writing Process: The researchers did not use artificial intelligence programs in the completion of this research.
Conflict of Interest: The authors declare that there is no conflict of interest related to the content, authorship, or publication of this research.
About Each Author:
Author 1: Nabard Abdallah Sharif Accounting Specialist
Author 2: Aryan Omar Mohammed Accounting Specialist
Author 3: Hardi Gharib Ahmed Accounting Specialist

References

1. Abed, I. A. (2023). Analysis of Foreign Trade Movement and its Impactin Exchange Rate Dinar the Iraqi for the Duration (2004-2021). *Asian Journal of Economics, Business and Accounting*, *23*(22), 248–263.
2. Aghion, P., Bacchetta, P., Rancière, R., & Rogoff, K. (2009). Exchange rate volatility and productivity growth: The role of financial development. *Journal of Monetary Economics*, *56*(4), 494–513.

3. Akighir, D. T. (2023). Foreign Exchange Market Pressure, Exchange Rate and Trade Balance in Nigeria: Is There Evidence of the J-Curve Effect? *Journal of Developing Economies*, *8*(2), 340–363.
4. Ben Doudou, M., Nouira, R., Saafi, S., & Belhadj, A. (2022). Do exchange rate changes have threshold effects on the trade balance? Evidence from Tunisia. *Economic Change and Restructuring*, *55*(1), 511–537.
5. Chandra Majumder, S., Nasir Hossain, M., & Hasanur Rahman, M. (2020). The Impact of Exchange Rate Volatility on Export and Import in Bangladesh The Impact of Exchange Rate Volatility on Export and Import in Bangladesh imply the. *European Online Journal of Natural and Social Sciences*, *9*(2), 411–424.
6. *Effect of Exchange rate and trade*. (n.d.).
7. Houfi, M. A. (2023). The impact of exchange rate changes on the trade balance: Evidence from Saudi Arabia vs her major trading partners. *International Journal of Applied Economics, Finance and Accounting*, *16*(1), 43–55.
8. Ismael, A., Al, A., Al Nasrawi, M., Hussein, F., & Alsaffar, A. (n.d.). *The Impact Of Exchange Rate On The Iraq Trade Balance Standard Study Using Autoregressive Distributed Lag Model(ARDL) For The Period (2004-2022)*.
9. Jiang, W., & Liu, G. (2023). The asymmetric impact of exchange rate changes on bilateral trade balance: evidence from China and its trade partners. *Economic Research-Ekonomska Istrazivanja* , *36*(2).
10. Keho, Y. (2021). REAL EXCHANGE RATE AND TRADE BALANCE DYNAMICS IN COTE D'IVOIRE. *International Journal of Economics and Financial Issues*, *11*(1), 61–70.
11. Khouiled, B., Chini, S.-E., & Benrouina, M. (2023). Dynamic relationship between exchange rate and trade balance. *SocioEconomic Challenges*, *7*(3), 164–173.
12. Knežević, V., & Penjišević, A. (2021). The influence of the exchange rate on the trade balance of Serbia. *Ekonomika*, *67*(3), 93–105.
13. Kurtović, S. (2017). The Effect of Depreciation of the Exchange Rate on the Trade Balance of Albania. *Review of Economic Perspectives*, *17*(2), 141–158.
14. Latif Majee, H. (2023). Analyzing and Measuring the Impact of Exchange Rate Fluctuations on Economic Growth in Iraq for The Period (2004-2022). *Journal of Kurdistani for Strategic Studies*, *2*.
15. Limbore, N. V. (2019). *IMPACT OF EXCHANGE RATES ON BALANCE OF PAYMENT OF INDIA*.
16. Nguyen, N. M. (2018). The Impact of Real Exchange Rate to Trade Balance in Vietnam. *SSRN Electronic Journal*.
17. Odo, S., Ogbonna, B. C., Charity Ifeyinwa, A., Idenyi, O. S., & Bigben, O. (n.d.). *Effect of Exchange Rate Depreciation on Trade Balance in Nigeria. Effect of Exchange Rate Depreciation on Trade Balance in Nigeria*.
18. Osei-Gyebi, S. (2021). How Exchange Rate Changes Affect Trade Balance in Ghana Journal of Economics and Financial Analysis. *Journal Homepage: Ojs.Tripaledu.Com/Jefa S. Osei-Gyebi / JEFA*, *5*(2), 43–62.
19. Qasim Hasan, M. (2016). *Estimating and Analyzing the Impact of Some Economic Variables on the Fluctuations of Iraqi Dinar Exchange Rate during the Period (1995-2015)*.

20. Rifa Fuard, Aft., Fathima Rinosha, K., Fathima Thahara, A., & Jawahir FATHIMA SHIFANIYA, A. (2021). The Relationship between Exchange Rate and Trade Balance: Empirical Evidence from Sri Lanka. *Journal of Asian Finance*, *8*(5), 37–0041.
21. Riyadh, H. A., Sultan, A. A., Abdurahim, A., & Sofyani, H. (2020). The effect of Iraq's dinar exchange rate against UK pound on Iraq's export to UK. In *Journal of Critical Reviews* (Vol. 7, Issue 2, pp. 51–55). Innovare Academics Sciences Pvt. Ltd.
22. Sadok, H. (2018). The Effect of Exchange Rates on Trade Balance: An Empirical Study of Morocco. *GATR Journal of Business and Economics Review*, *3*(1), 01–10.
23. Salal, M., Maiamisalalsahebalshukri, A. P. D., Al Huda, N., & Ali, H. (2004). The Impact of Exchange Rate Changes on the Balance of Payments in Iraq for the The Impact of Exchange Rate Changes on the Balance of Payments in Iraq for the Term (2004-2020). In *SPECIALUSIS UGDYMAS / SPECIAL EDUCATION* (Vol. 2022, Issue 43).
24. Saqib, N. (2018). The Effect of Exchange Rate Fluctuation on Trade Balance: Empirical Evidence from Saudi Arab Economy. *SSRN Electronic Journal*.
25. Shen, Q., Orach, H., Chen, P., Wei, S., Ssewajje, H., & Rose, W. (2021). EFFECT OF EXCHANGE RATE VOLATILITY ON UGANDA'S TRADE BALANCE. *Advances in Social Sciences Research Journal*, *8*(5), 532–574.