

The Role of the Current Account Balance in the Inflation Rate in Iraq in the Corona Pandemic: By using Co-Integration Methodology

Ahmed Hadi Salman	Faculty members / College of Administration and Economics - Mustansiriyah University adr.ahmadhidi@uomustansiriyah.edu.iq
Ahmed Hafedh Hameed Altaie,b	Faculty members / College of Administration and Economics - Mustansiriyah University dr_ahmed_al@uomustansiriyah.edu.iq
Ahmed Ayad Ibrahim	Faculty members / College of Administration and Economics - Mustansiriyah University mahmadayad1980@uomustansiriyah.edu.iq

ABSTRACT

The Corona pandemic affected the Iraqi economy severely, leading to a serious deterioration in macroeconomic indicators, and the collapse of oil prices weakened the only financial resource in Iraq. Which deepened the imbalances in the structure of the public budget; the output and the (CURRT). Research importance: The dominance of oil exports makes the (CURRT) more vulnerable to damage in the Corona pandemic. Research problem: the rentier economy suffers from weak diversification of the structure of the (CURRT), which makes external shocks more effective in the local economic environment such as the Corona pandemic. Research hypothesis: The Corona pandemic causes more damage to the rentier economy, which leads to the disruption of economic activities. Research aims and methodology: Adopting Co-Integration technique to identify the effect of (CURRT) on (INF) in Iraq for the period (2005-2020), Research variables: (CURRT) to GDP ratio, official (EXCH), (INF). The research concluded that there is a co-integration relationship between the research variables and some causal relationships. The research recommended diversifying domestic production and then exports to strengthen the (CURRT) in the face of the Corona pandemic.

Keywords:	Current Account Balance to GDP Ratio, Macroeconomic Indicators, Johansen Co-Integration Test, Engle-Granger Test.
------------------	---

Introduction

The oil-producing countries suffer from a weak production structure and, consequently, the structure of exports, which is detrimental to (CURRT) structure. The weakness of (CURRT) accelerates the transmission of the impact of external shocks to the inside of the economy. The Corona pandemic disrupted all macroeconomic indicators and was negatively reflected in the energy market, especially the

oil markets, which affected Iraq greatly as a result of the Corona pandemic.

research importance: The dominance of oil exports makes (CURRT) more vulnerable to damage in the Corona pandemic. Research problem: the rentier economy suffers from weak diversification of the structure of the (CURRT), which makes external shocks more effective in the local economic environment such as the Corona pandemic. Research

hypothesis: The Corona pandemic causes more damage to the rentier economy, which leads to the disruption of economic activities. Research aims and methodology: Adopting the joint integration technique to identify the effect of the (CURRT) on (INF) in Iraq for the period (2005-2020), Research variables: current account* balance to GDP ratio, official (EXCH), (INF).

Theoretical Side

The current account affects all macroeconomic variables, and thus the quality of macroeconomic policies, as well as the effect on (EXCH) and its system. which it's affects the rate of (INF) and domestic production. (Schmidt-Hebbel, Klaus, 2010). (INF) is affected by several internal and external factors, as well as economic policies and production flexibility. The trade openness also affects the prevailing inflation level and the prices of locally produced and imported goods and services. (Rawahneh (2011)). Economic openness also affects the resulting growth in the long run. (Chude and Chude, 2015). Economic openness affects (INF), which may cause an external imbalance in the balance of payments and an imbalance between supply and aggregate demand. (Mohammad and Mohammad, 2017). Economic openness leads to an increase in international trade, so countries must have good competitiveness and flexibility in the production apparatus. Otherwise, a (CURRT) deficit will occur, which leads to an increase in (INF) and government debt. (Anggi and Hasdi, (2018)). According to the international financial economics approach, (CURRT) is affected in economic activities and growth rate, (INF), CPI, and (EXCH). (Madura, 2008). (CURRT) can be affected by (INF), (EXCH), GDP growth, and foreign direct investment. (Gossé and Serranito, 2014; Sadiku et al., 2015; Barnes et al., 2010; Kayikçi, 2012; Chen et al., 2012).

* - (CURRT)= current account, (INF)= inflation rate, (EXCH)= exchange rate.

Result and Discussion

The trade balance suffers from the dominance of oil exports, and a significant decline in other exports of goods and services. (CURRT) of output ratio include both positive and negative values. The highest positive value was in 2008 (21.61%) due to the repercussions of the financial crisis in the Iraqi economy, and the lowest positive value was in 2016 (1.3%) due to the crisis in oil prices and the attacks of terrorist organizations. The highest negative value was in 2015 (-1.66%) due to the global oil price crisis and its negative impact on the export capacity of Iraq. And the lowest negative value was 2005 (-6.68%) at the beginning of the Iraqi economy to export of crude oil globally.

Corona pandemic caused this ratio to deteriorate in 2019, and 2020. reaching (6.7%), (-3.72%). It reached its climax in 2020, and this deterioration is the result of the decline in oil exports, which led to weak financial resources and weak government ability to pay its obligations and cover its debts.

Figure 2 indicates the response of (CURRT) to changes in the oil market, and then oil exports, as oil constitutes more than 60% of the output in Iraq. This led to the dependence of the Iraqi economy on a single source to finance production activities. Hence, the local economy was affected and its dependence on the fluctuations of the oil market, and the fiscal policy is more responsive to the changes that occur in the oil market, which determines the government's ability to finance the public budget and pay its debt.

Semi-annual data were used, and the test results were the presence of a co-integration between (CURRT), (EXCH), and (INF) in Iraq during the research period. Calculated values exceeded the tabular values of the test Unrestricted Cointegration Rank Test (Trace) and Unrestricted Cointegration Rank Test (Maximum Eigenvalue). This means that the (CURRT) and (EXCH) can adjust the deviations in the target (INF) for monetary policy and that all economic activities have a positive impact on reducing the inflationary pressures caused by the Corona pandemic.

Granger Causality Tests was following:

There is a causal relationship between: (EXCH) to (INF), (INF) to (EXCH), (CURRT) to (INF), (INF) to (CURRT).

There is no causal relationship between: (CURRT) to (EXCH), (EXCH) to (CURRT).

This means that the (CURRT) plays a positive role in reducing the inflationary pressures caused by the Corona pandemic, which led to a decrease in income and real output, and a rise in poverty and unemployment in the Iraqi economy.

Conclusions

1- The current account was subjected to a significant decline in Iraq due to the repercussions of the Corona pandemic, which led to a decline in commercial activities, weak incomes, and a decline in most macroeconomic indicators.

2- The fluctuation of a current account in favor of the turmoil in the oil market, which caused the rentiers of the Iraqi economy, and the heavy dependence on oil revenues to finance economic activities.

3- There is a co-integration relationship between the current account in the balance of payments, (EXCH), and inflation rate in the Iraqi economy, which pushes the decision makers to enhance the production capacity and to compete in global markets to support local production, and then improve the capacity of the local economy and its productive activities.

4- The existence of a causal relationship heading from the current account to the inflation rate, which means that the current account plays an important role in determining the inflation rate in Iraq due to the Corona pandemic, and most productive activities and commercial transactions have been affected.

Recommendations

1- Economic diversification enhances the structure of output, strengthens economic relations, supports production links, and thus enhances the current account in addressing crises and confronting the Corona pandemic.

2- Reducing dependence on oil revenues and giving a greater role to taxes to reduce the fiscal deficit, and employing oil revenues in

investment activities, and then the overall supply.

3- Decision makers sought to reduce the turbulence in the current account to exercise its positive effect in reducing inflationary pressures, improving the rate of trade exchange, improving the value of the currency locally, and increasing the competitiveness of local industries.

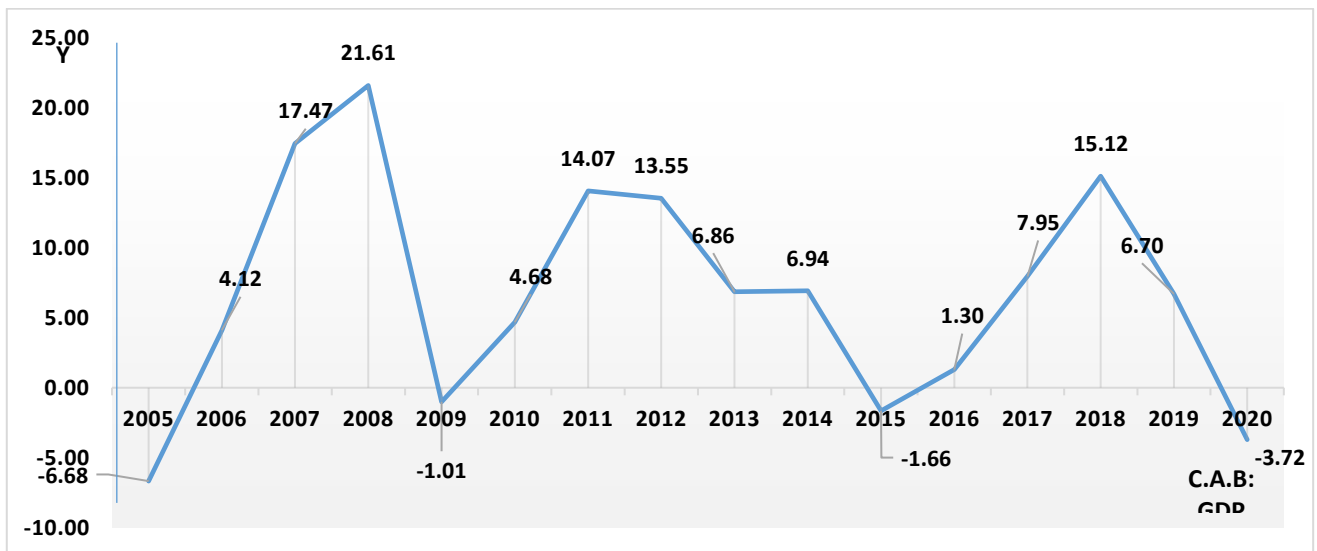
4- Interest in analyzing the status of the current account balance and linking it to (EXCH) changes and supporting national production, strengthening the management of natural resources to serve local production, strengthening the impact of economic policies in the face of the Corona pandemic and its repercussions on the individual and society, regulating the health situation and reducing the economic damage that accompanied the pandemic.

References

- 1-Anggi P. K., Hasdi A. (2018), Determinants of the current account balance in Indonesia, International Conferences on Educational, Social Sciences and Technology, pp.178-186.
- 2-Barnes, S., L., J., & R., A. (2010). Current Account Imbalances in the Southern Euro Area. IMF Working Paper (Vol. 10/139). <https://doi.org/10.5089/9781455201228.001>
- 3-Chen, R. and Others. (2012). External Imbalances in the Euro Area. IMF Working Papers (Vol. 12). <https://doi.org/10.5089/9781475524673.001>
- 4-Chude, D., Chude N. (2015), "Impact of Inflation on Economic Growth in Nigeria", International Journal of Business and Management Review, Vol. 3-5, pp. 26-34.
- 5-Gosse, J. B. and Others. (2014). Long-run determinants of current accounts in OECD countries: Lessons for intra-European imbalances. Economic Modelling, 38, 451-462.
- 6-Kayikçi, F. (2012). Determinants of the current account balance in Turkey:

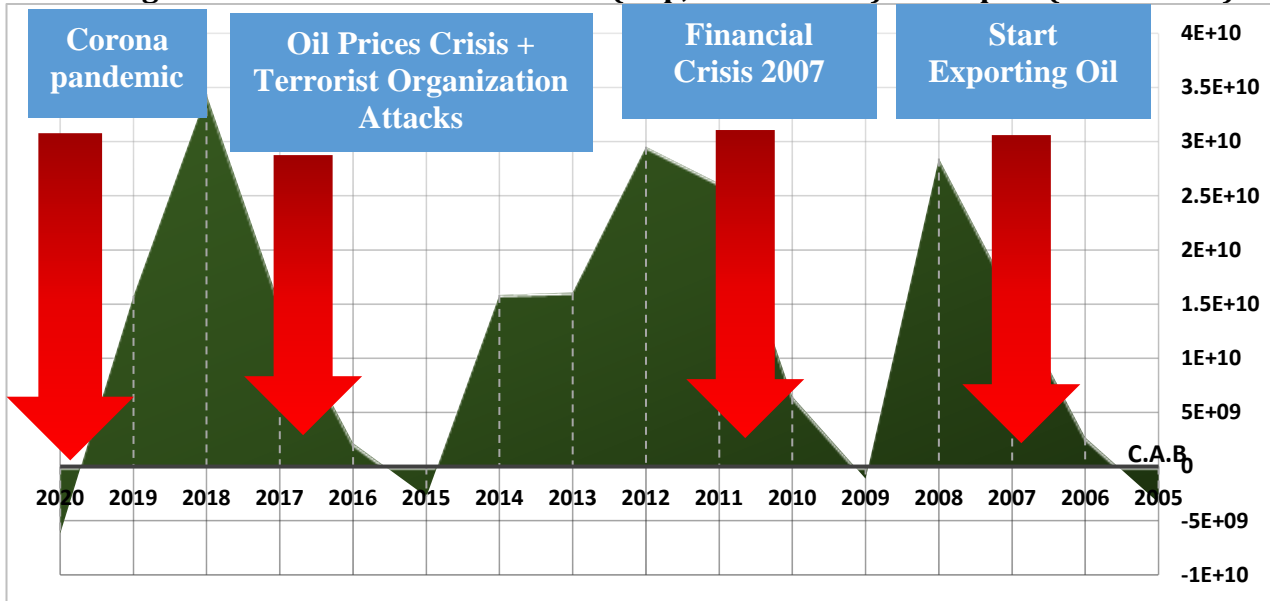
- Vector autoregression (VAR) approach. African Journal of Business Management, 6(17), 5725–5736.
7. 7-Madura, J. (2008). International Financial Management. ninth edition. Florida Atlantic University: United State of America.
 8. 8-Mohammad A. and Mohammad O. 2017, Current account balance, inflation, industry and sustainable development in Jordan, Revista Galega de Economía 26(3), pp.45-56.
 9. 9-Rasheed, M.K., (2020), The analysis of macroeconomic gaps in Iraq for the period (1990-2017) | El análisis de las brechas macroeconómicas en Iraq para el período (1990-2017), Opcion, Universidad del Zulia-Venezuela, (SpecialEdition27), spain.
 10. 10-Rasheed, M.K., Salman, A.H., Shaheed, S.A., (2020), The effect of private and public consumption on economic exposure in Iraq during the period (2004-2018) by using (ARDL) model, International Journal of Innovation, Creativity and Change, Vol:13, Iss:1, Australia.
 11. 11-Rawahneh, H. (2011) "Inflation Dynamics in Jordan, An Empirical Study: 2000-2010", Vol. 26-3.
 12. 12-Sadiku, L. and Others. (2015). The Persistence and Determinants of Current Account Deficit of FYROM: An Empirical Analysis. Procedia Economics and Finance, 33(15), 90–102.
 13. 13-Schmidt-Hebbel, Klaus, 2010, Macroeconomic Regimes, Policies, and Outcomes in the World, Estudios de Economía, vol 37 (2).

Figure1: Current account balance (% of GDP) in Iraq for (2005-2020)



Source: World Bank, Indicators, various years.

Figure2: Current account balance (Bop, current US\$) in Iraq for (2005-2020)



Source: World Bank, Indicators, various years.

Table 1: Johansen test

Test (Trace)				
	0.05	Trace		Hypothesized
Prob.**	Critical Value	Statistic	Eigenvalue	No. of CE(s)
0.0000	29.79707	64.02254	0.699375	None *
0.0004	15.49471	27.96584	0.533822	At most 1 *
0.0243	3.841466	5.070201	0.155497	At most 2 *
Test (Maximum Eigenvalue)				
	0.05	Max-Eigen		Hypothesized
Prob.**	Critical Value	Statistic	Eigenvalue	No. of CE(s)
0.0002	21.13162	36.05671	0.699375	None *
0.0017	14.26460	22.89564	0.533822	At most 1 *
0.0243	3.841466	5.070201	0.155497	At most 2 *

Source: Eviews 10.