

Trade openness and its impact on the structure of the Iraqi trade balance an analytical study for the period (2013-2023)

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Abstract: International trade is a fundamental pillar of the global economy, and greatly affects the growth and development of countries. Due to this importance, many researchers have become increasingly interested in studying its variables and their effects on the balance of payments in particular and economic stability in particular. One of the important topics for international trade is the relationship between trade openness and the structure of the trade balance of countries, especially developing countries such as Iraq. The research is an attempt to study the impact of trade openness on the structure of the Iraqi trade balance during the period from 2013 to 2023, in detail using the analytical aspect of the data and stating the relationship between the different variables to reach an answer to a basic question of the research, which focuses on knowing what is the nature of the relationship between trade openness and the structure of the trade balance in Iraq? Does increasing trade openness lead to improving the trade balance or vice versa? What are the other factors that affect this relationship? The research reviewed the theoretical concepts related to trade openness and the trade balance, analyzed data specific to Iraq, presented the results of the analysis and made the necessary recommendations.

Keywords: Trade openness, trade balance.

Introduction: Trade openness is one of the main factors that affect the national economy of countries, as it reflects the ability of this country to deal with the global economy by opening its markets to foreign products and services, and in return providing its products abroad, relying on the structure of the balance of payments that represents the balance between exports and imports, and mainly includes the current account, which includes the trade balance, in addition to other accounts such as the capital account and transfers.

It is worth noting that trade openness in Iraq is a vital issue in light of its geographical and economic position in the region, especially after the changes that the Iraqi economy went through after 2003 and its move towards trade liberalization. Given the effects of trade openness on the structure of Iraq's trade balance, it has become an important topic that must be addressed, due to its direct effects on the country's imports and

exports of goods and services, including changes in the industrial structure and the energy sector, which is the main sector dominating the Iraqi economy. One of the results of trade openness is increased reliance on imported goods, which may lead to an imbalance in the balance of payments, if this is not accompanied by an increase in Iraqi exports on the other hand, this openness may provide Iraq with new opportunities for foreign investment And increasing economic diversity, which can contribute to reducing the trade deficit in the long term if these opportunities are managed properly.

In this research, we will discuss the impact of trade openness on the structure of the Iraqi trade balance by analyzing how it affects exports and imports, in addition to its impact on the trade deficit, and analyzing some indicators of trade openness in Iraq.

Section one: Research methodology

Importance of the research

The importance of the research is evident from the trade openness of modern economies since the nineties of the last century, and its pivotal role in enhancing the economic growth of countries, including Iraq, the subject of the research, as the research addresses the impact of foreign trade liberalization processes on the status of the Iraqi trade balance.

Research problem

The Iraqi economy suffers from multiple challenges, including fluctuating oil prices and recurring trade deficits. These challenges raise questions about the role of trade openness in strengthening the Iraqi economy or exacerbating its problems. What is the nature of the relationship between trade openness and the structure of the trade balance in Iraq? Does increasing trade openness lead to improving the trade balance or vice versa? What are the other factors that affect this relationship?

Research Hypothesis

There is an indirect relationship between trade openness and the structure of the trade balance through its impact on economic growth due to the freedom of import and export, which is reflected positively if the flexibility of production is high and vice versa.

Research Structure

In order to reach the research objectives and verify its hypothesis, the research was divided into three sections. The first dealt with the research methodology, the second included the theoretical aspect of the research variables, while the third section dealt with the relationship between trade openness and the Iraqi balance of payments through analyzing the structure of the trade balance and analyzing some indicators of trade openness.

Section Tow: Trade Openness Concept and Indicators

First: The Concept of Trade Openness

Various countries use trade openness as one of the economic policy measures. If the trade policy is neutral with respect to commercial activities, it is called an open trade policy. A good trade policy has the ability to measure the differences between neutrality and internal orientation or export promotion. If the country is highly export-oriented, it can be inferred that it will not be neutral towards all its domestic industries because this country may have incentives to produce export-oriented goods. (PADHYAY, P. P., 2014, 2), and views differed in defining trade openness (Rasheed, M. K., & Sakban, R. H., 2023, 176), as the Arab Planning Institute defines trade openness as the policy that leads to abandoning discriminatory policies against exports

and adopting neutral policies between import and export and reducing the value of high customs tariffs in addition to converting quantitative restrictions into customs tariffs and moving towards a unified customs tariff system. (Abdulrahman Khder Aga, A., & Hussein, J. S., 2023, 341) believes that trade openness refers to the process of reducing restrictions imposed on economic activity, which usually involves reducing customs tariffs and/or removing non-tariff barriers to trade. Trade openness is defined, according to (Ibrahim, N. A. S., 2022, 51.) as "the policy that leads to the abolition of discriminatory policies against exports, the adoption of neutral policies between exports and imports, the reduction of the value of high customs tariffs, in addition to converting quantitative restrictions into customs tariffs and moving towards a unified system of customs tariffs, and ensuring them."

Trade openness is the process of easing restrictions imposed on trade between countries, including reducing customs tariffs, removing non-tariff barriers, simplifying customs procedures, and liberalizing the movement of capital. In other words, it is making trade between countries easier and more fluid.

Second. Objectives of trade openness

There are a set of goals that any country seeks to achieve through the policy of trade openness, including:

- Removing customs restrictions, which leads to increased trade exchange between countries of the world, and leads to linking societies and countries to each other, in addition to expanding the scope of international markets, increasing income, and improving the level of welfare for various countries of the world, especially developing countries. (Al-Khatib, 2024, 781)

- Optimal use of economic resources, as well as stimulating global demand. (Al-Jubouri, and Ismail, 2018, 249)

- Working to raise the level of trade exchanges to reach financial surpluses for countries exporting goods and services, in addition to liberalizing trade in developing countries. (Al-Mawla, et al., 2021, 181)

- Increasing production by raising production efficiency in various sectors of the economy with the aim of achieving self-sufficiency in products, in addition to reducing imports and working to cover the requirements of the local market for goods at different prices, which leads to achieving independence in global trade. (Al-Khatib, 2024, 781)

- Increasing income and improving the standard of living for different countries of the world, especially developing countries. (Al-Jubouri, and Ismail, 2018,

249)

- Stimulating global demand with the correct exploitation of economic resources. (Al-Mawla et al., 2021, 181)
- Thirdly. Justifications and disadvantages of trade openness

-Justifications of trade openness

- That outward-oriented policies provide opportunities for economies to use external capital for development purposes. (Tahir, M., Haji, 2014, 130.)
- There is a strong and important link between trade and economic growth. Given this importance, both developed and developing countries have begun to focus on increasing their output (Raghutla, C, 2020, 1)
- Foreign advanced technologies and investment goods stimulate manufacturing activities in the local economy and thus increase the contribution of the manufacturing sector to GDP. (Tahir, M., Haji, 2014, 130.)
- Trade openness increases easy export and import opportunities while creating jobs. (Raghutla, C, 2020, 1)
- Increased trade openness leads to higher growth rates in poorer countries, and in fact provides evidence that increased trade openness leads to increased regional inequality.) González, Rivas, M., 2007,552)

- disadvantages of trade openness

- Trade openness contributes to In a vicious cycle of trade deficit, balance of payments, financial instability, debt and recession. Eleje, E. O., Eze, et,al , 2013, 4))
- Openness to trade is usually associated with greater fluctuations in output, so the more exposed a country is to trade openness, the more likely it is to be exposed to shocks coming from abroad. (Cavallo, E. A., et.al , 2008, 106)

Fourth: Trade openness indicators Trade openness indicators

can be classified basically into three categories: Trade performance (or outcome measures), trade policy (or incidence measures), and the basic variables of trade openness. The disagreement among economists is not limited to indicators of trade openness, but also concerns the impact of trade openness on economic growth and development.

1. Trade intensity ratio

The trade intensity ratio is the ratio of trade volume to GDP. The trade intensity ratio (or dependence on international trade) has been used as an indicator of trade openness in many studies on the subject of trade openness and its impact on growth and development. However, many do not believe that the simple trade

share can be used as a strong proxy for measuring trade openness. Using measures of countries' trade policies instead of (or as a substitute for) the trade share in the regression does not solve the problem; countries that adopt free market trade policies may also adopt free market domestic, monetary, and fiscal policies. (Akayleh, F. A. 2014, 143

2. Economic exposure index

This index is measured by finding the ratio of total exports and imports to GDP, and represents the value of foreign trade from GDP, Economic exposure = The economic exposure index shows the volume of imports and exports divided by the gross domestic product of that country. This index may be affected by many internal and external factors, including the ability of the productive sectors to produce goods and services, including imported materials, and the country's needs for those imported goods and services. This index also depends on the country's ability to achieve a large or somewhat low GDP and other external and internal matters. (Rasheed, M. K., & Sakban, R. H. 2023 , 176)

$$\text{Economic expoure} = \frac{\text{export} + \text{emport}}{\text{GDP}} * 100$$

3. Export growth rate

Export performance was represented as export growth multiplied by the share of exports in GDP, or as export growth, or as the ratio of exports to output, or as the increasing export-to-output ratio .(Akayleh, F. A. 2014, 143-150)

$$X_t - X_{t-1} / \text{GDP}$$

4. Socialist economic system (as defined by Kornai (1992)

The Sachs and Warner aggregate index considers the disincentive effect of tariff and non-tariff barriers and the opportunity costs of black-market activities on trade transactions. For Sachs and Warner, the presence of a black-market premium on exchange transactions can have the same effects as a formal tax. (Fenira, M.,2015, 472)

5. Import substitution

Import substitution can be defined as the process of reducing imports and replacing them with domestic production. There are two measures of import substitution; the outcome measure, which is an indicator that measures the magnitude of import substitution, and the incidence measures, which we will discuss later. A measure of import substitution can

be derived as the ratio of domestically produced goods to domestic supply. To obtain the value of domestically produced goods, we subtract the total imported goods from the total supply. If we denote import substitution by IS, and the supply Total domestic by Sd, exports by X, import penetration by MP, and imports by M, then: (Akayleh, F. A. 2014, 143-150)

$$IS = (Sd - M)/Sd \\ = 1 - (M/Sd)$$

Where

$$Sd = GDP - X + M \\ IS = 1 - MP$$

6. Collected tariff ratio

Observed data on taxes on international trade such as export duties and import duties (collected tariffs) are more useful than other artificial indicators of trade barriers such as the Sachs-Warner openness index and the dollar trade distortion index because they are derived from observed data and allow for intermediate cases where countries are neither fully open nor fully closed, whereas many other artificial indicators classify economies as either open or closed economies. The tariff rate collected by CTR, the tariff revenue collected by TR, and the total imports by M, then at time t we have: (Akayleh, F. A. 2014, 143-150)

$$CTR_t = TR_t/M_t$$

7. Imports to GDP ratio

This indicator is an indicator of the extent to which a country depends on domestic demand for goods and services abroad, and this indicator can be calculated as follows (Rasheed, M. K., & Sakban, R. H. 2023, 176)

$$Import\ ratio: GDP = \frac{the\ value\ of\ import}{the\ value\ of\ GDP} * 100$$

8. Sachs and Warner Index (1995)

One of the oldest and most influential legal measures of trade openness is the Sachs and Warner Index (1995). It is a binary indicator that classifies a country as closed if it meets at least one of five criteria related to tariff rates, non-tariff trade barriers, socialist governance in trade relations, and the difference between black market and official exchange rates. When used in growth regressions, the indicator mostly

Development has also documented earlier that: If trade openness is implemented inappropriately in countries that are not prepared or able to adapt or that face

indicates a positive relationship between Openness and trade. (Gräbner, C., et.al, 2021 , 93)

9. Exports to GDP ratio

Many countries derive a large percentage of their national income from the production of a single primary export commodity or a small number of commodities, as increasing the percentage of exports to GDP to (60%) or more is an indicator of economic openness, and can be calculated according to the following equation: (Al-Sawa'i, 2006, p. 59) Exports ratio: GDP = 100% of GDP * 100 Moreover, it is known that Iraq depends heavily on exports. (Rasheed, M. K., & Sakban, R. H. 2023, 176)

$$Export\ ratio: GDP = \frac{the\ value\ of\ export}{the\ value\ of\ GDP} *$$

Fifth // The relationship between trade openness and the trade balance

As we mentioned, the trade balance is the difference between exports and imports of goods and services, and takes the form of a surplus if exports exceed imports or a deficit when imports are greater than exports, and the trade balance is one of the main components of the balance of payments and a key indicator of the health of the country, and its fluctuations are a source of great concern, especially for developing countries that face a chronic trade deficit. (Keho, Y., 2021, 1), The impact of the trend towards open trade policy on per capita income growth is one of the most controversial issues as there is a tendency to improve imports more than exports, which leads to a trade deficit and thus contributes to lower economic growth in the future. (Parikh, A., & Stirbu, C., 2004, 1.) Some studies have shown that in the period 1972-1997, trade liberalization worsened the trade balance of developing countries and caused both imports and exports to grow faster, but import growth was faster than export growth for a group of 22 developing countries. Some have suggested that trade liberalization promotes growth in most cases, but growth itself has a negative impact on the trade balance and adverse terms of trade. UNCTAD (1999) studied the impact of trade liberalization on the trade balance of 15 developing countries during the period 1970-1995 and found a significant negative relationship.) Allaro, H. B., 2012, 75. The United Nations Conference on Trade and

unfavorable conditions, it may contribute to a vicious circle of trade deficits. The balance of payments,

financial instability, debt and recession. (Eleje, E. O., et.al, 2013, 1)

The third section:

Analysis of the relationship between trade openness and trade deficit in Iraq

The issue of the relationship between trade openness and trade deficit in Iraq is one of the complex and controversial economic issues, as some believe that increasing trade openness inevitably leads to an increase in the trade deficit, while others believe that the matter is not that simple and that the factors affecting the trade deficit are multiple and intertwined.

First // The Iraqi trade balance

The Iraqi trade balance depends heavily on oil revenues, which makes the economy vulnerable to fluctuations in global oil prices, and the ratio of foreign exchange reserves to GDP has witnessed significant fluctuations during the period, indicating the need for more sustainable economic policies to enhance economic stability. The Iraqi government must take measures to diversify sources of income and reduce dependence on oil, in addition to strengthening financial and monetary management to achieve economic stability in the long term

Table (1) Imports, exports and trade balance position

years	Exports (million \$) 1	Imports (million \$) 2	Trade balance 2-1
2013	89,767.9	50,446.9	39,321.00
2014	38,780.8	45,200.1	(6,419.30)
2015	51,327.7	40,808.5	10,519.20
2016	34,208.3	29,077.0	5,131.30
2017	57,559.1	32,185.6	25,373.50
2018	86,359.9	38,875.7	47,484.20
2019	81,585.2	49,417.6	32,167.60
2020	46,829.0	40,927.3	5,901.70
2021	73,083.8	34,721.1	38,362.70
2022	118,044.8	46,914.8	71,130.00
2023	115951.7	67251.2	48,700.50

Source: Prepared based on:

- Central Bank of Iraq, Directorate of Statistics and Research, Annual Statistical Bulletins (2014-2023)

- Central Bank of Iraq, Directorate of Statistics and Research, Iraqi Economic Report (2014-2023)

- Ministry of Planning, Directorate of Statistics and Research, Statistical Group, various years.

According to Table (1), exports fluctuated significantly during the study period, as they rose significantly in some years and decreased in other years. The highest level of exports was recorded in 2022, when it reached more than 118 billion dollars, while the lowest level was recorded in 2016, at about 34 billion dinars. The

fluctuation in the volume of exports is due to several factors, including fluctuations in oil prices, changes in fiscal and monetary policy, and geopolitical events that clearly affected the Iraqi economy. Imports also witnessed fluctuations, as they rose significantly in some years and decreased in other years. The highest level of imports was recorded in 2023, when it reached more than 67 billion dollars, while the lowest level was recorded in 2016, at about 29 billion dinars. As for the Iraqi trade balance, it did not record a net deficit except in 2014, at about 4 billion dollars, due to the decline in oil exports and their prices, while other years recorded varying trade surpluses. The highest in 2022, at about \$ 71 billion.

Second // GDP indicators

Table (2) aims to display the development of trade openness indicators in Iraq during the period from 2013 to 2023. These indicators provide a clear picture of the size and trends of Iraqi foreign trade, and contribute to a deeper understanding of the Iraqi economy and its trade relations with the outside world. According to Table (2), the rate of export growth witnessed significant fluctuations during the period, as it recorded sharp declines in some years, and noticeable increases

in other years. This fluctuation reflects the impact of Iraqi exports on global economic factors and oil price fluctuations. The highest growth rate of exports was in 2017, at more than 40%, while the lowest growth rate was recorded in 2014, at more than -131%, which coincides with the outbreak of the Corona pandemic and its negative impact on the global economy. Exports as a percentage of GDP witnessed a general increase during the period, the highest of which was in 2022, at about 118 billion dinars, while the lowest was recorded in 2016, at more than 118, indicating the increasing importance of exports in the Iraqi economy. However, this percentage remains lower than many oil-exporting countries, indicating the heavy dependence of the Iraqi economy on oil revenues. The import growth rate also recorded significant fluctuations, but in general it was less volatile than the export growth rate. This reflects the increase in local demand for imported goods and services, which are often linked to reconstruction and development projects. Imports as a percentage of GDP witnessed a significant increase during the period, indicating an increased reliance on imports to meet the needs of the Iraqi economy. This reflects the weakness of local production in many sectors, and Iraq's dependence on imports of consumer goods and means of production.

Table (2) Some indicators of trade openness in Iraq for the period (2013-2023)

years	GDP	Exports (million\$)	Exports\ GDP %	Imports (million \$)	Imports\ GDP %	Export growth rate%
2013	218,002.47	89,767.9	41.18	50,446.9	23.14	-
2014	234,637.67	38,780.8	16.53	45,200.1	19.26	(131.48)
2015	228,415.65	51,327.7	22.47	40,808.5	17.87	24.44
2016	166,743.55	34,208.3	20.52	29,077.0	17.44	(50.04)
2017	187,217.66	57,559.1	30.74	32,185.6	17.19	40.57
2018	227,367.46	86,359.9	37.99	38,875.7	17.10	33.35
2019	233,636.09	81,585.2	34.92	49,417.6	21.15	(5.85)
2020	180,898.79	46,829.0	25.89	40,927.3	22.62	(74.22)
2021	209,691.94	73,083.8	34.85	34,721.1	16.56	35.92
2022	286,640.34	118,044.8	41.18	46,914.8	16.37	38.09
2023	250,842.78	115951.7	46.22	67251.2	26.81	(1.81)

Source: Prepared based on:

- Central Bank of Iraq, Directorate of Statistics and Research, Annual Statistical Bulletins (2014-2023)

- Central Bank of Iraq, Directorate of Statistics and Research, Iraqi Economic Report (2014-2023)

- Ministry of Planning, Directorate of Statistics and Research, Statistical Group, various years.

This fluctuation indicates that there are multiple economic factors that affect this relationship, and these factors may change from one year to another, and the higher this ratio is, the more capable the country is of covering its imports and dealing with external economic shocks, and there is no clear direct relationship between the value of exports and the percentage of reserves, and the reason for the fluctuation is due to oil prices, as when the country relies heavily on oil exports, fluctuations in its global prices will directly affect the value of exports.

CONCLUSIONS

By analyzing the development of trade openness, based on the trade-to-GDP ratio index to measure the degree of openness, the development of both exports and imports, and analyzing the impact of trade openness on the structure of the trade balance. It is clear that trade openness has had a positive impact on the growth of exports and imports, and had the greatest impact on imports, which led to a deterioration in the trade balance. It requested to take on the task of finding the best ways to integrate into the international market.

REFERENCES

Al-Khatib, Rabah Jamil. (2024). There are many goals that trade openness seeks to achieve, which are: (Measuring and analyzing the impact of trade openness on economic growth in Algeria for the period (1990-2022), *Journal of Business Economics for Applied Research*, Volume 6, Issue 1, p. 781.

Al-Mawla, Subhi Abdul Ghafour, and others. (2021). The impact of trade openness on the balance of payments in Iraq: An applied study using the ARDL model for the period (2004-2019) *Journal of Business Economics for Applied Research*, 2021, Volume 1, Issue 2, p. 181.

Iraq for the period (2003-2016) using the (ARDL) model, *Tikrit Journal of Administrative and Economic Sciences*, 2018, Volume 14, Issue 43, p. 249.

Aziz, Khalil Ismail and Al-Khazraji, Wissam Muhammad Hussein. (2023). The impact of money supply on the Iraqi trade balance for the period (2004-2022), *Tikrit*

Journal of Administrative and Economic Sciences, Volume 19, Issue 64 Part 2, p. 222.

Central Bank of Iraq, Directorate of Statistics and Research, *Annual Statistical Bulletins* (2014-2023)

Central Bank of Iraq, Directorate of Statistics and Research, *Iraqi Economic Report* (2014-2023)

Ministry of Planning, Directorate of Statistics and Research, Statistical Group, various years.

PADHYAY, P. P. (2014). An Assessment of trade openness and its impact on economic growth (Doctoral dissertation, KDI School).p2.

Allaro, H. B. (2012). The impact of trade liberalization on the Ethiopia's trade balance. *American Journal of Economics*, 2(5), 76.

Rasheed, M. K., & Sakban, R. H. (2023). ECONOMIC OPENNESS AND ITS IMPACT ON THE LABOR MARKET AND TOTAL EMPLOYMENT IN IRAQ. *World Economics and Finance Bulletin*, 23, 176

Abdulrahman Khder Aga, A., & Hussein, J. S. (2023). The impact of financial globalization on economic growth in the Kurdistan region of Iraq: an empirical investigation. *Management & Accounting Review (MAR)*, 22(3), 341.

Ibrahim, N. A. S., (2022). The Role of Trade Openness and its Implications for the Growth of the Iraqi Economy After 2003. *International Academic Journal of Economics* Vol. 9, No. 2, 2022, p. 51.

Tahir, M., Haji, D. H. N. B. P., & Ali, O. (2014). Trade openness and economic growth: A review of the literature. *Asian Social Science*, 10(9), 130.

Raghutla, C. (2020). The effect of trade openness on economic growth: Some empirical evidence from emerging market economies. *Journal of Public Affairs*, 20(3), e2081.p 1.

González Rivas, M. (2007). The effects of trade openness on regional inequality in Mexico. *The Annals of Regional Science*, 41, 545-561.552.

Eleje, E. O., Eze, O. A., & Agabi, I. I. (2013, November). Trade Openness for Developing Nations: A Charade or Desideratum for Viable Commodity Export Performance. In *3RD Annual AFRA Conference on Accounting and Finance in Developing Nations*, Royal Choice Hotel Makurdi, Nigeria (pp. 4-7).

Cavallo, E. A., De Gregorio, J., & Loayza, N. V. (2008). Output volatility and openness to trade: A reassessment [with comments]. *Economia*, 9(1), 106.

Rasheed, M. K., & Sakban, R. H. (2023). ECONOMIC OPENNESS AND ITS IMPACT ON THE LABOR MARKET AND TOTAL EMPLOYMENT IN IRAQ. *World Economics and Finance Bulletin*, 23, 176-177 .

Akayleh, F. A. (2014). Impact of trade openness on economic growth in a small, open, and developing economy: new instrumental variables for trade openness. *International Journal of Sustainable Economy*, 6(2), 143-150.

Gräbner, C., Heimberger, P., Kapeller, J., & Springholz, F. (2021). Understanding economic openness: a review of existing measures. *Review of World Economics*, 157, 87-120.p93.

Fenira, M. (2015). Trade openness and growth in developing countries: An analysis of the relationship after comparing trade indicators. *Asian Economic and Financial Review*, 5(3), 472.

Keho, Y. (2021). Determinants of trade balance in West African Economic and Monetary Union (WAEMU): Evidence from heterogeneous panel analysis. *Cogent Economics & Finance*, 9(1), 1970870.p1.

Parikh, A., & Stirbu, C. (2004). Relationship between trade liberalisation, economic growth and trade balance: an econometric investigation. *Economic Growth and Trade Balance: An Econometric Investigation*.p1.

Allaro, H. B. (2012). The impact of trade liberalization on the Ethiopia's trade balance. *American Journal of Economics*, 2(5), 75.

Eleje, E. O., Eze, O. A., & Agabi, I. I. (2013, November). Trade Openness for Developing Nations: A Charade or Desideratum for Viable Commodity Export Performance. In 3RD Annual AFRA Conference on Accounting and Finance in Developing Nations, Royal Choice Hotel Makurdi, Nigeria (pp. 4-7).P2.