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The Impact of Export Goods and Services on Iraq's Gross Domestic Product From 1972 to 2022

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Abstract: This study aims to investigate and analyze the effects of exports of goods and services on GDP and the relationship between exports of goods and services and GDP from 1972 to 2022 in Iraq using annual data from the World Bank database. This study suggests having a positive impact of exports of goods and services on GDP and intended to have a long-run relationship between exports of goods and services and GDP. According to the results of the Least Squares Model which show that exports of goods and services have a positive impact on GDP. According to the results of the Johansen Cointegration Test with VAR model, there is a long-term relationship between exports of goods and services and GDP in the Iraqi economy from 1972 to 2022.

Keywords: Exports of Goods and Services; GDP; Least Squares Model; Johansen Cointegration Test; Iraq

1. Introduction

1.1. Background of the Study

“How to realize a rapid and stable economic development process” is one of the most extensive issues in the economics literature. Ensuring economic growth is essential for nations. Due to their small foreign exchange reserves, developing nations find it

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challenging to access the global financial markets for financing. Exports are crucial to a country's economic process because they provide the limited foreign exchange resources needed to finance crucial imports like energy, investment products, and intermediate goods (Aktaş, 2009; Hussein & Mohammud, 2022). For several decades, policymakers and researchers had a great interest in the relationship between export and economic growth. But in this case, economic growth instead of exports is seen as the source of development in production. At the same time, growth in GDP increases the growth of the domestic market, and thus economies of scale have an impact on production.

According to the Absolute Supremacy theory, all nations benefit from unrestricted trade. Adam Smith argues that nations participate in international trade because it is more lucrative than a closed economy. The same school continues with David Ricardo, who bases international trade on comparative advantage rather than absolute advantage. Ricardo contends that in order to engage in international trade, a nation need not possess a clear advantage. The level of supremacy is what matters (Takim, 2010).

Many developing nations are concentrating on international trade strategies that boost the volume of exports to new markets. The goal of the nations is to have continued economic growth with all the resources available to raise revenue for all income or domestic production in general to achieve economic prosperity (Abdullah & Husain, 2022). Economic growth can have effects such as increasing production, allowing firms to specialize, and taking advantage of economies of scale and scope (Nain & Ahmad, 2010).

In today's world, exports are an initiative carried out by developed and developing countries, small and large economies, and all enterprises (small, medium, and large scale). Then to all these, enterprises prefer to export in order to satisfy themselves, provide prestige, gain fame, and benefit from the incentives given (Oktav et al., 1990). In addition to all these, it should not be forgotten that there are some obstacles for businesses to export. Some of these are not having enough information about the legal regulations, the culture of the country, the language problem, and the difficulties in communicating with customers (Altıntaş & Özdemir, 2006).

However, the fact that the domestic market is a larger place will encourage competition in the domestic market, and bolder investments in R&D will lead to more production and innovation (Lancaster, 1980). Developments in the production of local companies will increase competition in the local export sector and cause

growth in exports. In order for Growth-Oriented Exports to be valid, there must be a natural relationship between total output/income to export (Destan, 2022, p. 8).

In this study, we need to answer the following questions, “What is the relationship between exports of goods and services and GDP?” And what impact did the export of goods and services have on Iraq’s GDP? from 1972 to 2022, Perhaps the main goal of this study is to find answers to these questions. Consequently, this study seeks to test these hypotheses that exports of goods and services have a positive impact on GDP and suggests that there is a long-run relationship between exports of goods and services and GDP in Iraq. For our findings and any treatment in this study. To achieve this objective, statistical and conventional tests are used to evaluate the relationships between exports of Goods and Services and GDP. The study is structured as follows. Section one, Briefly Overview of Exports of Goods and Services and GDP Also this section shows the data and briefly shows the situation of exports of goods and services and GDP in Iraq. Section two provides a brief assessment of the literature on exports of goods and services and GDP. Section three describes the data and contracts with the methodological points used in the observed observation. Section four shows the empirical results. Finally, it shows the conclusion.

1.2. Exports and GDP in Iraq

According to World Bank data, the largest exporting countries in 2021 were China with \$3.55 trillion, followed by the USA with \$2.54 trillion, Germany with \$2 trillion, Japan with \$911.09 billion, and the Netherlands with \$840.46 billion. In 2021, Export of good and services in the world was \$27.98 trillion and Exports of goods and services accounted for 28.9% share of GDP.

The Iraqi oil sector has undergone significant changes due to various factors such as revolutions, conflicts, wars, instability, and uncertainty. For instance, the sector was affected by the Iran-Iraq war from 1980 to 1988, the Iraqi invasion of Kuwait in 1990, and the subsequent Gulf War. The sector also faced challenges such as restrictions and underinvestment caused by UN sanctions, the 2003 war, and regional destabilization caused by the Islamic State terrorist group, Conflict between Iraqi army and ISIS (Bamber et al., 2023).

In Iraq and Iran war from 1980 to 1988 decrease the export of oil that situation had the negative impact on rate of exports in Iraq. Iraqi oil exports declined as a result of the Second Gulf War to 0.034 million barrels in 1991 compared to 1.5960 million

barrels per day in 1990. As a result, the ratio of Iraqi oil exports to the world's crude oil exports declined from 6% in 1990 to 0.12% in 1991. And from 1991 to 1996, Iraq was forced to stop its oil exports due to the economic sanctions imposed on it. By the United Nations Security Council, which led to a decrease in the ratio of Iraqi oil exports to global demand for crude oil, which caused Iraq to lose huge revenues. In 1996, Iraq was allowed to export oil within certain limits in order to obtain food and medicine according to the oil-for-food program, for the purpose of importing basic goods for the needs of civil society only. The economic sanctions have greatly affected the Iraqi oil industry, as it is true Major devastation in the oil industry due to the lack of equipment and excessive well production without maintaining sufficient well pressure, which in turn led to a deterioration in production and the stoppage of many wells in the north and south of the country in a way that was impossible to repair at that time (Al Zubaidi & Abd, 2019).

In the Saddam Hussein regime before 2003, Iraq had low exports due to a lack of political economy for foreign countries and a close economic system. But after the fall of Saddam Hussein's regime, the Iraqi economy grew in all sectors, especially in international trade. After 2003, Iraq adopted an open policy with foreign countries to strengthen international trade and encourage foreign investment.

As for Iraq's export capacity, it is still low, not only due to the lack of production capacity, but also due to the exposure of the pipeline network transporting crude oil to terrorist attacks. The terrorist attacks on oil installations throughout Iraq from 2004 to 2008. The percentage of Iraqi oil exports since the fall of the regime in 2004 until 2006 amounted to about 3.4% of global exports, compared to OPEC exports, it is about 6%. Thus, we note that Iraqi oil has occupied a large area in securing oil supplies to meet the global demand for crude oil, as oil exports to Iraq increased after 2007 due to the increasing global demand. On oil, reaching 1.890 million barrels per day in 2010, the ratio of Iraqi exports of crude oil to OPEC exports ranged between 5-9% in the same period, and the high percentage was in 2009 when it reached 9% (Al Zubaidi & Abd, 2019).

The export of goods and services has had a direct impact on Iraq's GDP, as per annual data from 1972 to 2022. This is because any changes to the export rate of goods and services directly affect the GDP rate. Iraq is a member of OPEC, and it heavily depends on oil exports for its public budget as it is a country rich in natural resources, especially oil. In Iraq, Exports accounted for 56.3% in 2004, 44.4% in 2011, and in 2021 is 37.7% of GDP a huge amount for the Iraqi economy. The oil and gas sector also accounts for a large portion of exports in Iraq and the export of

oil has been the largest share of public budget and GDP, in 2021 production of oil was 4.47 million barrels per day had fifth rank in world for crude oil production.

The price of crude oil has a significant impact on Iraq's exports. In 2001, when oil prices decreased, there was a decrease in exports. Similarly, in the early months of 2020, the COVID-19 pandemic caused a reduction in exports, leading to a decrease in the demand for oil, which resulted in a drop in oil prices worldwide. This, in turn, caused a decrease in GDP for the year.

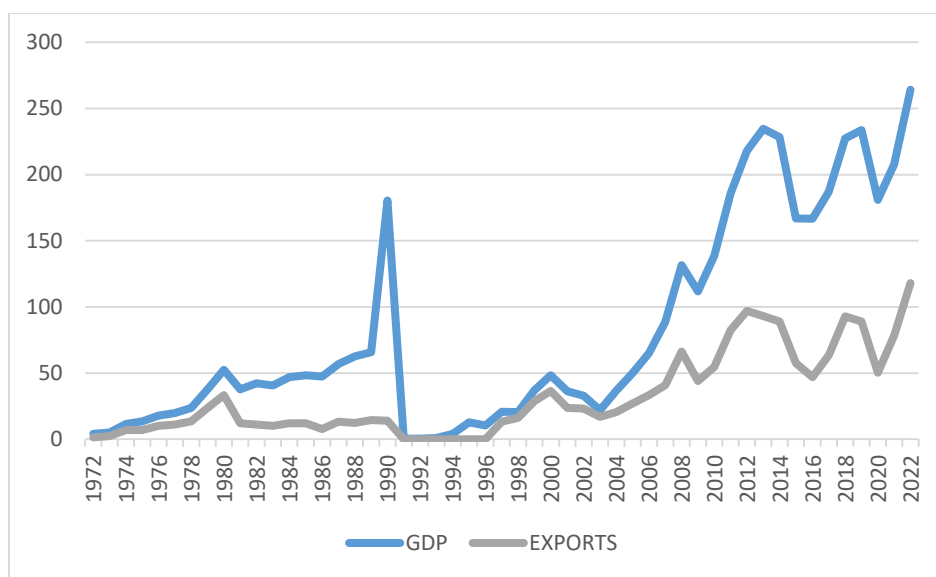


Figure 1. Export and GDP in Iraq from 1972-2022 by Billion-Dollar

Resource: World Bank database

In 2011, world exports were \$22.58 trillion, while Iraq's share of world exports in the same year was \$82.51 billion. After the rise of ISIS terrorists in 2014, Iraq had low exports, and many companies stopped production, especially foreign companies, until the terrorist threat subsided, and remained low. Until 2017, this situation continued in Iraq and exports remained low. In this situation, the level of gross domestic product declined due to the decline in imports during the reign of ISIS terrorists. During the era of ISIS terrorists, most manufacturing companies in Iraq stopped working, especially foreign companies, because, after the appearance of ISIS terrorists, most foreign workers, and owners of foreign companies went to their countries. As a result, production in Iraq fell, leading to lower export levels. GDP also recorded low levels during the ISIS terrorist era due to low exports. This shows that exports account for a large portion of GDP.

After 2017, due to increased security stability and ending ISIS terrorists in Iraq, that an increase the exports compare to the ISIS terrorists during, an increase in exports in 2018 compared to 2017. As a result, there was a boost in the GDP. Exports and GDP experienced growth up until 2019. According to the World Bank database, exports of goods and services were \$50.19 billion in 2020. We are focused on 2020. According to the Economic Complexity Index (ECI), the latest exports are led by crude oil at about (77.4 percent), gold (at percent 13.6), refined oil at 7.28 percent, petroleum coke at 0.73 percent, and coal tar oil at 0.18 percent. And other exports like vegetables and animal products, raw vinegar, tropical fruits, passenger and cargo ships, other transportation, other food, art, and antiques, etc., all have about one percent.

The most common destinations for crude oil exports in Iraq are China (37.5%), India (29.3%), Turkey (about 15 percent), South Korea (6.85 %), and the United States (6.25%) and many other countries benefit with its exports Iraqi oil such as Spain, Italy, Serbia, Germany, Greece, etc. According to these data, crude oil is the largest exporter in Iraq, and the largest country for crude oil exports in Iraq is China with 37.5% in 2020 (OEC, 2020).

Iraq exported \$7.32 billion in services in It was individual travels (\$3.59 billion), other business services (\$1.66 billion), construction services (\$898 million), transport (\$645 million), and governance services (\$327 million).

2. Literature Review

Exports are considered to work as an engine of economic growth (Heitger, 1987). Vernon (1966) focused on the reverse causality channel, in which spontaneous growth of the domestic economy leads to improved competitiveness and eventually leads to export expansion.

The empirical estimation of the study indicated that exports have a positive and significant effect on economic growth (Alam, 2011; Dritsaki, 2013; Szkorupová, 2014; Trost & Bojnec, 2016). According to Abdullah, Husain, (2022) that export had a positive impact on economic growth from 2004 to 2019 in Iraq. Using historical data from the years 1986 to 2011, conducted research in Nigeria to assess the impacts of oil export on economic growth. They checked the outcomes of such a link and the direction of the established association using the Ordinary Least Square (OLS) and Granger causality estimation approaches. According to the study's findings, Nigeria's oil exports and economic expansion are positively correlated (Ugochukwu

& Chinyere, 2013). Different results to determine whether there is a long-run causal link between export and economic growth (Mehrara & Firouzjaee, 2011; Ehinomen & Oguntona, 2012; Shawa & Shen, 2013; Nguyen, 2016; Mahadika et al., 2017).

On the other hand, according to several studies in different country had no cointegration relationship between exports and GDP (El-Sakka & Al-Mutairi, 2000; Bakari & Mabrouki, 2016). Then, Faridi (2012) investigated the contribution of agricultural exports to economic growth in Pakistan from 1972 to 2008. He used the Johansen techniques test for multiple cointegrations and discovered that agriculture export turnover has a significant negative influence on the economic growth rate. According to Kartikasari (2017), export had a negative influence on economic growth in the Riau Islands of Indonesia from 2009 to 2016. Siaw et al. (2018) investigated Agricultural exports and economic growth: A disaggregated study for Ghana and discovered that pineapple and banana exports had a negative impact on economic growth. Noula, Gustave and Munchunga (2013) investigated the impact of agricultural exports on economic growth in Cameroon between 1975 and 2009 using the Cobb Douglas production function, the Engle-Granger two-step approach, and the Vector Correction Model (VECM), and discovered that cocoa export had a negative and insignificant impact on economic growth. However, coffee and banana exports have a beneficial link and are important to the country's economic success.

3. Methodology

3.1. Data

This research goal is to examine and analyze the impact of Exports of goods and services on the gross domestic product and show the relationship between (Exports of goods and services) and the gross domestic product. Dependent on yearly data from 1972 to 2022 in Iraq's economy. The main source for collecting the data is the world bank database. The suggested model includes two basic variables: export of goods and services and gross domestic product.

To examine the impact and relationships between the two variables, the investigation is done through the following steps:

- The stationarity test of the time series export of goods and services and gross domestic product, The Augmented Dickey-Fuller (ADF) and Phillips Perron (PP) Unit Root Tests are utilized to test the stationarity data.

- The OLS model for examines variables. Another step of analysis has been carried out to explore the structural stability and diagnostic tests.
- Then to investigate a long-run relationship between the variables under consideration, the Johansen test for cointegration within the VAR modeling approach was adopted.

3.2. Model Description

The chosen model considers its ability to estimate all parameters and thus test the hypotheses listed above. The hypothesized model adopts the following formula:

$$\text{GDP} = f(\text{EX})$$

(1)

When EX refers to exports of goods and services, GDP is the gross domestic product. The impact and relationship between the two variables can be modeled on the following linear model (Nguyen, 2016). The effect and relationship between the two variables can be modeled on the following linear model:

$$\text{GDP} = \alpha + \beta \text{EX} + \mu t$$

(2)

Where μt refers to the random variable, α and β to the regression parameters. and EX is the independent variable and the GDP is the dependent variable.

4. Empirical Results

For the long-run relationship between two variables and determine the impact of the independent variable on the dependent variable in the first step stationary the data by unite root test perhaps some data not stable. Then use the ordinary least square model for the impact the EX is the independent variable on the real GDP is the dependent variable. Further structural stability analysis and diagnostic tests were conducted. And use the Johnson cointegration with VAR model for the relationship between variables.

4.1. Unite Root Test

Unite root test is very important for stationary data. In the study, ADF and PP unite root tests are used. The results of both tests according to their level values and the first difference taken are shown below. The ADF test is one of the most famous tests of unit root tests. The ADF test (1984) uses T statistics and performs the analysis on the μ term error. The ADF tests under the assumption of White Noise Errors (Maddalla & Lahiri, 1992, pp. 578-583). The logic of the PP unit root test, which is a unit root test, is not much different from the ADF logic. The results of the PP unit root test support the results of the ADF unit root test. However, according to the results of the PP unit root test shown in Table 1.

Table 1. Unite Root Test Results Using ADF and PP Tests

Order of integration	Variables	ADF	PP
		Prob*	Prob*
Level	GDP	0.3523	0.3523
1 st Difference	GDP	0.0000 *	0.0000 *
Level	EX	0.7505	0.5543
1 st Difference	EX	0.0000 *	0.0000 *

Sources: Created by the author dependent on results of Eviews10

The research used unite root test by using ADF and PP tests. The results for the export of goods and services are also equal to 0.7505 according to the ADF test and equal to 0.5543 in the PP test. That is not stationary at the level.

That both variables according to both tests are significant at 5% which means they are stationary at first difference.

4.2. Estimation Model

If all variables show the same difference while being stationary, the Least Squares model can be utilized. In this scenario, both the export and GDP variables are stationary at the first difference. Then For our model to be reliable, the results of the model must pass several descriptive tests. For example, in this section, we will use the heteroskedasticity tests: Breusch-Pagan-Godfrey, Harvey, and White.

Table 2. Results of Estimation Model

The Least Squares model				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
Exports	1.592284	0.295835	5.382332	0.0000
C	1.490518	4.206090	0.354372	0.7246
Heteroskedasticity Tests				
Examination	Statistical value		p-value	
Breusch-Pagan-Godfrey	1.355219		0.2501	
Harvey	1.692528		0.1995	
White	0.670069		0.5165	

R-squared = 0.376376, Adjusted R-squared = 0.363384, F-statistic = 28.96950, Durbin-Watson stat = 2.864828, Prob(F-statistic) = 0.000002.

Sources: Created by the author dependent on results of Eviews10

From 1972 to 2022 the effects of exports of goods and services on GDP were estimated using this model. The results are shown in Table 2. F-statistic=0.000002 is significant and less than 5 percent, which supports the null hypothesis and rejects the alternative. Also, Prob. to EXPORTS is 0.0000 is significant at 5% that exports of goods and services had a positive impact on the GDP of the Iraqi economy from 1972 to 2022. And the adjusted R2 coefficient value (0.376376 = R-squared) gives explanatory power to the model. Also, Durbin Watson results = 2.864828 is close to about 2 which removed the problem of autocorrelation.

Table 2 shows that the Lagrange multiplier LM < and its values are not significant and greater than 5%, which implies that the model does not suffer from the problem of heteroskedasticity.

Structural stability tests, the “CUSUM” test were used to determine whether the coefficients in the model offered stability. Figure 2 show the “CUSUM” test graphs of the model.

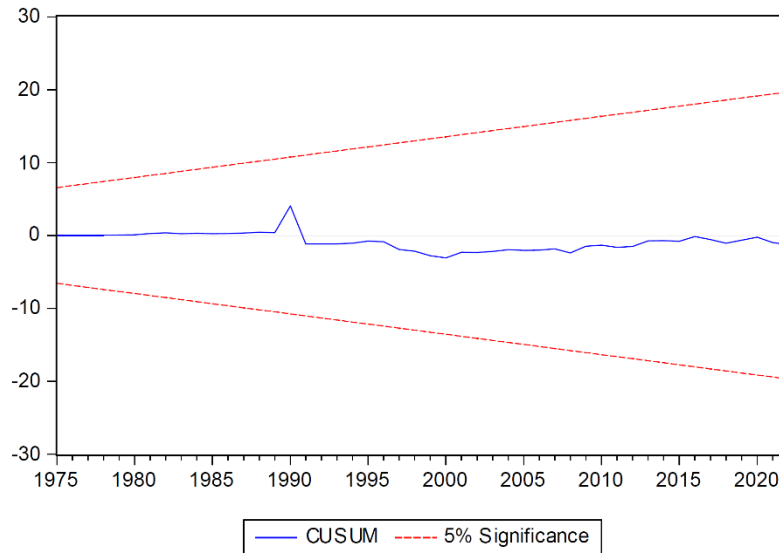


Figure 2. Cusum 5% significance

When Figure 2 is inspected, it is clear that the residuals in the model remain within the bands with 5% significance. At the same time, it states that the predicted coefficients in the model provide measures of stability and that the model has no structural breakdown.

4.3. The Johansen Cointegration Test

If our time series variables are stationary at the same level, we can use The Johansen Cointegration Test with VAR model to show a relationship. On this basis, we use the Johansen cointegration test to show the relationship between exports of goods and services and GDP shown in Table 3.

Table 3. Results of The Johansen Cointegration Test

Unrestricted Cointegration Rank Test (Trace)				
Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
None *	0.577330	72.87750	15.49471	0.0000
At most 1 *	0.481657	31.54165	3.841466	0.0000
Unrestricted Cointegration Rank Test (Maximum Eigenvalue)				
Hypothesized No. of CE(s)	Eigenvalue	Max-Eigen Statistic	0.05 Critical Value	Prob.**
None *	0.577330	41.33585	14.26460	0.0000
At most 1 *	0.481657	31.54165	3.841466	0.0000

Sources: Created by the author dependent on results of Eviews10

The findings of the Johansen consistency test from the first stage show that all tests are significant at 5% and Trace Statistic is larger than Eigenvalue and Critical Value. Moreover, in Part II Statistic Max-Eigen is higher than Eigenvalue and Critical Value, when all probes are significant at 5%. They accept the null hypothesis and reject the alternative hypothesis in light of these findings. It shows a long-run relationship between exports of goods and services and GDP for Iraq from 1972 to 2022.

5. Conclusion

In this study, we investigated and analyzed the relationship between the export of goods and services and GDP and the impact of the export of goods and services on GDP. Johansen Cointegration Test with VAR model results show that the export of goods and services and GDP are Cointegrated and long-term relationship. According to the Least Squares Model, exports of goods and services have a positive impact on GDP. Exports of goods and services account for a large proportion of Iraq's GDP, accounting for 44.4% of GDP in 2011. The oil and gas sector also accounts for a large share of exports. For example, in 2020, according to the Economic Complexity Index, Iraq's crude oil exports were the highest, at 77.4 percent. Hence, the government and policy-makers in Iraq should focus on increasing the export of goods and services, as well as improving oil and gas production to boost the GDP.

During the process increasing the export of goods and services is a significant factor in achieving a high GDP. And when increasing the oil and gas price and production that increased the export revenue because of the large rate of export achieved in the oil and gas sector. As a result, the government of these nations should implement an intriguing strategy in regard to trade promotion for export, productivity, investments, and technology transfer. Improving the quality of exports on the global market would assist to increase the economy's competitiveness. alternative for any emergency situation in the oil and gas sector, Iraq policymakers should improve the research for issuing other sources for export and for achieving GDP. because oil and gas production are limited and should be protected oil and gas production for Generations to come.

References

- *** (2020). Iraq (IRQ) Exports, Imports, and Trade Partners. *The Observatory of Economic Complexity*. Retrieved from <https://oec.world/en/profile/country/irq/>.
- Abdullah, R. T. & Husain, A. J. (2022). The Effect of Export on Economic Growth in Iraq for the period of (2004-2019). *Journal of Kurdistan for Strategic Studies*, 22(7), 175-171.
- Aktaş, C. (2009). Türkiye'nin ihracat ithalat ve ekonomik büyüme arasındaki nedensellik analizi/Causality Analysis Between Turkey's Export Import and Economic Growth. *Kocaeli Üniversitesi Sosyal Bilimler Dergisi*, 2(18), 35-47.
- Al Zubaidi, R. S. & Abd Al Kadhem, Z. S. (2019). Oil production and exports in Iraq for the period (1990-2016). *Al Kut Journal of Economics and Administrative Sciences*, 1(34).
- Alam, H. M. (2011). An econometric analysis of export-led growth hypothesis: Reflections from Pakistan. *Interdisciplinary Journal of Contemporary Research in Business*, 2(12), 329-341.
- Altıntaş, M. H. & Özdemir, E. (2006). İhracat işletmelerinin uluslararasılaşması: Türkiye'de faaliyet gösteren KOBİ'lere yönelik bir araştırma/Internationalization of export businesses: A research on SMEs operating in Turkey. *Sosyal Bilimler Dergisi*, 6(1), 183-204.
- Bakari, S. & Mabrouki, M. (2016). The Relationship among exports, imports and economic growth in Turkey, MPRA Paper 76044. *Munich Personal RePEc Archive*. University Library of Munich, Germany.
- Bamber, D., Saleh, F., & Panditharathna, R. (2023). The Iraqi oil industry: history and overview. *European Journal of Political Science Studies*, 6(1), 39-50.
- Destan, E. (2022). Türkiye'de iller ve sektörler açısından ihracat ve ekonomik büyüme ilişkisi/Relationship between exports and economic growth in terms of provinces and sectors in Turkey. Pamukkale Üniversitesi Sosyal Bilimler Enstitüsü.
- Dritsaki, C. (2013). Causal nexus between economic growth, exports and government debt: The case of Greece. *Procedia Economics and Finance*, 5, 251-259.
- Ehinomen, C. & Daniel, O. O. (2012). Export and economic growth Nexus in Nigeria. *Management Science and Engineering*, 6(4), 132-141.
- El-Sakka, M. I. & Al-Mutairi, N. H. (2000). Exports and economic growth: The Arab experience. *The Pakistan Development Review*, 39(2), 153-169.
- Faridi, M. Z. (2012). Contribution of agricultural exports to economic growth in Pakistan. *Pakistan Journal of Commerce and Social Science*, 6(1), 133-146.
- Heitger, B. (1987). Import protection and export performance: Their impact on economic growth. *Weltwirtschaftliches Archiv*, 123(2), 249-261.
- Hussein, A. W. & Mohammad, H. S. (2022). The Impact of Tax Revenue on Economic Growth in Turkey from 2010 to 2020. *Journal of Danubian Studies and Research*, 12(1), 100-109.

- Kartikasari, D. (2017). The effect of export, import and investment to economic growth of Riau Islands Indonesia. *International Journal of Economics and Financial Issues*, 7(4), 663-667.
- Lancaster, K. (1980). Intra-industry trade under perfect monopolistic competition. *Journal of international Economics*, 10(2), 151-175.
- Maddala, G. S. & Lahiri, K. (1992). *Introduction to econometrics*. New York: Macmillan.
- Mahadika, I. N., Kalayci, S., & Altun, N. (2017). Relationship between GDP, foreign direct investment and export volume: Evidence from Indonesia. *International Journal of Trade, Economics and Finance*, 8(1), 51-54.
- Mehrara, M. & Firouzjaee, B. A. (2011). Granger causality relationship between export growth and GDP growth in developing countries: panel cointegration approach. *International Journal of Humanities and Social Science*, 1(16), 223-231.
- Nain, M. Z. & Ahmad, W. (2010). Export-Led Growth Hypothesis in India: Some Further Evidences. *IUP Journal of Monetary Economics*, 8(3), 69-82.
- Nguyen, T. H. (2016). Impact of export on economic growth in vietnam: empirical research and recommendations. *International Business and Management*, 13(3), 45-52.
- Noula, G. A., Gustave, L. S., & Munchunga, D. G. (2013). Impact of Agricultural Export on Economic Growth in Cameroon: Case of Banana, Coffee, and Cocoa. *International Journal of Business and Management Review*, 1, 44-71.
- Oktav, M., Kavas, A., Önce, G., & Tanyeri, M. (1990). *Orta ve Küçük İşletmelerde İhracata Yönelik Pazarlama Sorunları ve Çözüm Önerileri/Export Marketing Problems and Solutions for Medium and Small Enterprises*. Ankara: TOBB Yayınları.
- Shawa, M. J. & Shen, Y. (2013). Causality relationship between foreign direct investment, GDP growth and export for Tanzania. *International Journal of Economics and Finance*, 5(9), 13-19.
- Siaw, A., Jiang, Y., Pickson, R. B., & Dunya, R. (2018). Agricultural exports and economic growth: A disaggregated analysis for Ghana. *Theoretical Economics Letters*, 8(11), 2251-2270.
- Szkorpová, Z. (2014). A causal relationship between foreign direct investment, economic growth and export for Slovakia. *Procedia economics and finance*, 15, 123-128.
- Takim, A. (2010). Türkiye’de GSYİH ile ihracat arasındaki ilişki: granger nedensellik testi/The relationship between GDP and exports in Turkey: Granger causality test. *Atatürk Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, 14(2), 315-330.
- Trost, M. & Bojnec, S. (2016). Export-led growth: The case of the Slovenian and Estonian economies. *Post-Communist Economies*, 28(3), 373-383.
- Ugochukwu, U. S. & Chinyere, U. P. (2013). The impact of export trading on economic growth in Nigeria. *International Journal of Economics, Business and Finance*, 1(10), 327-341.
- Vernon R (1966). International investment and international trade in the product cycle. *Quarter Journal of Economics*, 80, 290-307.