Macrothink Institute™

**Business Management and Strategy**
ISSN 2157-6068
2023, Vol. 14, No. 2

# The Impact of Value-Added of Wholesale and Retail Trade and Hotels on Economic Activity: An Econometric Study in the Economy of Iraq between 2006-2021

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Received: August 19, 2023 Accepted: September 25, 2023 Published: October 3, 2023

doi:10.5296/bms.v14i2.21368 URL: https://doi.org/10.5296/bms.v14i2.21368

**Abstract**

This research paper aims to measure the impact of value-added tax on wholesale and retail trade and hotels on economic activity in Iraq from 2006-2021. The study applied the Autoregressive Distributed Lag (ARDL) model to clarify the effect and demonstrate the relationship between the variables. Results showed an integrative relationship between the value-added tax on wholesale and retail trade and hotels (independent variable, X), and economic growth (the dependent variable Y). The short-term parameters showed a statistically significant relationship at a significance level of less than (1%), as the value-added tax on wholesale and retail trade and hotels significantly positively affects economic growth in the short term. Furthermore, the long-term relationship results showed a statistically significant negative relationship between the variables at a probability level of less than (1%). The value-added tax on wholesale and retail trade and hotels has a major impact on national economic expansion, as an increase in the value-added tax by one dinar leads to an increase in GDP by 10.52684 dinars. This result is consistent with economic theory and verifies the study's hypothesis. The quality and validity of the model were confirmed through standard tests, including a heteroscedasticity test, serial correlation test, diagnostic tests for functional form, and stability tests for estimated model parameters.

**Keywords:** ARDL, economic activity, hotels, retail, value, wholesale

## 1. Introduction

Value-added was first developed by Alfred Marshall in 1896 under the name of economic profit, and he modified capital (Koc, F, 2017). Value-added represents a measure of

performance that calculates the value of added wealth. It is the difference between the total output value of the production unit and the value of intermediate inputs during a certain period, usually a year. The value-added represents the amount that each production unit adds to the Gross Domestic Product (GDP). The benefit of value-added helps improve decision-making. It also provides more information about the economic situation of sectors, helps eliminate inefficient activities. It is an important indicator for measuring the cash value output of the economic sector (Jowan, H. K, 2021).

The value-added is the amount that is added to the product during each stage of production as a result of the transformational and operational processes carried out on it. It is the addition that the company provides to the product by converting raw materials into a final product. The value-added is the amount that has been added to the GPD by the establishment as a result of its activity, and it is calculated by subtracting intermediate consumption from the value of production (Directorate of Trade Statistics, 2014).

Wholesale trade refers to the sale of goods to other wholesale or retail trade establishments, as well as the sale of goods in large quantities to industrial users in various sectors such as construction, manufacturing, transportation, hospitality, healthcare, education, and government institutions. It involves the selling of goods primarily for commercial use, and may also include selling goods wholesale for private label production by a separate company under its own management, or acting as agents or brokers in buying goods for others. On the other hand, retail trade involves the sale of goods to individuals or households for personal or household consumption, and may include selling goods in small quantities to industrial users. Retail trade is usually categorized based on the type of goods traded or by general classification.

Retail trade includes businesses engaged in selling goods and repairing the same type of goods, gas stations, mobile and street vendors, kiosks in government and public entities, companies, factories, organizations, theaters, and amusement parks. Retailers sell goods in small quantities to the general public, and this sector consists of two main categories: store-based retailing and non-store-based retailing (John, W, 2008). Retail trade is the resale of new and used goods to the public without any transformative processes, for personal or household consumption, through stores and kiosks (Planning and Statistics Authority, 2020). Hotel activities include accommodation services, restaurants, and all services provided to guests.

The wholesale, retail, and hotel sectors are considered amongst the important economic activities in Iraq. They form part of the GDP and contribute to employment by linking between producers and consumers. Therefore, it is important to focus on developing and improving these sectors to promote comprehensive economic development. The hotel industry is one of the most important components of tourism; it is significant for its contribution to the national economy through financial resources that support development and increase employment opportunities by accommodating a large number of workers from various levels in diverse tourism activities, including hotels, restaurants, recreational areas,

markets, and traditional industries. The financial resources generated from tourism contribute to balancing the balance of payments. The hotel and tourism sector is also related to retailers through the number of visitors. This relationship contributes to the growth and development of retail trade that plays a crucial role in the country's economic development towards sustainable growth. Therefore, studying this sector is an important goal to determine its contribution to economic growth, enabling researchers, planners, and the government to identify the potential of this sector and draw economic policies to achieve higher growth that supports the local economy.

Using standard economic models in this paper allows us to quantitatively estimate the factors affecting all economic phenomena, their impact, and trends. We can use standard economics to estimate production factors at the partial level, as well as estimate the reasons for delaying all factors that affect production costs. Based on the results of standard economic studies, decisions can be made and these decisions are usually correct and ideal. The phenomena are easy to read as the model is a clear and numerical summary of the relationship between the value added of wholesale, retail, and hotel trade and economic activity. Standard economics works to exclude researchers estimation errors, as well as measure the real relationship and actual correlation, not just the apparent relationship between variables.

## 2. Literature Review

Ebere (2021) investigated the impact of wholesale and retail trade on the growth rate of Nigeria's GDP. The study confirms that enhancing wholesale and retail trade can mitigate the negative effects of falling oil prices and increase economic diversification. An OLS model was used to measure the relationship between variables, and the analysis results indicate a significant and positive impact of wholesale and retail trade on the GDP by 89%, contributing to economic growth (Ebere, O. U, 2021).

Moreover, Ahmed (2012) explored the impact of globalization on the value added of the Arab manufacturing industry for World Trade Organization (WTO) member countries for the period 1996-2009. The study adopted a linkage between descriptive and analytical approach, relying on changes in index values over time, expressed in years, before and during globalization. The study concluded that there are positive effects of globalization on the value added of Arab manufacturing industries that contribute to raising economic growth rates (Ahmed, D. S, 2012).

In the same vein, Alzubaidi (2022) studied the value added of flour milling (Nineveh Governorate) pertaining to Iraq in 2020. Not only did she figure out expenses, income, and profits, but she also identified problems plaguing the wheat-growing and milling sectors. According to the data, the average cost to mill one ton of wheat resulted in a value of IQD 27,632 per ton. Total costs per ton of crop was IQD 14,394, while the net value added for milling was IQD 26,556. The milling profit was on average IQD 13,237 per ton, while the return was IQD 56,824 per ton. According to the findings, the General Company for Grain Manufacturing is the factory's primary supplier, which will reduce production costs, leading

to an increase in value added, then an increase in factory profits and an increase in national income (Alzubaidi, E. F, 2022).

Moreover, Ali's study (2016) aims to formulate the content of value-added elements of food products, determine their impact on purchasing behavior of customers and consumers, identify the role that value-added elements of food products can play in stimulating and increasing their sales in markets, and recognize the behavior of customers and consumers towards purchasing food products from markets. The correlation and impact relationships were analyzed statistically, and the findings demonstrated a highly significant relationship between value-added dimensions. The statistical analysis also showed a significant impact relationship between value-added and the sales activation(Ali, D, 2016) .

Taher (2017) provided a description of the value-added intellectual coefficient (VAIC) and to focus on the role of human resources and how to measure it in joint-stock companies in Iraq that offer various products (medicine, clothing, engineering, food, textiles). Results showed a decrease in the value of the human capital coefficient and the financial unit invested in it by those companies, while the structural capital formed a significant increase compared to the size of spending and the value added achieved through it (Taher, I, 2017) .

## 3. Methodology

This paper aims to test the impact of the value added product of wholesale and retail trade and hotels on economic activity in the Iraqi economy for the period 2006-2021. It assumes a positive relationship between the variables. The GDP represents the economic activity variable, which represents economic growth. According to the Ministry of Planning, and the Central Bank, the information was compiled from a number of Iraqi government agencies, including the Directorate of Trade Statistics.

Table 1. The added value of wholesale and retail trade, hotels, and the GDP at current prices for the period 2006-2021 (million dinars).

| Years | Added value | GDP | Percentage of added value of wholesale and retail trade and hotels in the GDP % |
|---|---|---|---|
| 2006 | 6350 | 95588 | 6.6 |
| 2007 | 7038.5 | 107828.5 | 6.5 |
| 2008 | 10078.1 | 155635.5 | 6.5 |
| 2009 | 11486.6 | 139330.2 | 8.2 |
| 2010 | 14940.2 | 171957.0 | 8.7 |
| 2011 | 13941.6 | 211310 | 6.6 |
| 2012 | 14325.9 | 251907.7 | 5.7 |
| 2013 | 17688.3 | 267395.6 | 6.6 |

| | | | |
|---|---|---|---|
| 2014 | 20387.2 | 258900.7 | 7.9 |
| 2015 | 20575.6 | 191715.8 | 10.7 |
| 2016 | 19781 | 203869.8 | 9.7 |
| 2017 | 20204.4 | 225995.2 | 8.9 |
| 2018 | 19151.6 | 254870.1 | 7.5 |
| 2019 | 20449.7 | 262917.2 | 7.8 |
| 2020 | 19556.8 | 219768.8 | 8.9 |
| 2021 | 25958 | 301439.5 | 8.6 |

Sources: Central Bank of Iraq (2021), CSO (2023).

Table 1 displays the contribution of the wholesale and retail sectors as well as the hotel industry, to GDP in terms of value added. The highest contribution was 10.7% in the GDP for 2015; this industry contributed 7.8% on average to GDP between 2006 and 2021. The contribution of this sector to the economy is low, which is due to several reasons, including the fact that oil exports will account for 56% of Iraq's GDP in 2021/22 (Central Bank of Iraq, 2021). Like other economic sectors, this sector faces structural problems and obstacles that have led to a decrease in its contribution to the GDP. These problems include high levels of administrative and financial corruption, a decrease in the value of the local currency, weakness of the private sector, a decline in the productivity of industry and agriculture, political instability, and the presence of terrorism. All these factors have affected the growth of this sector.

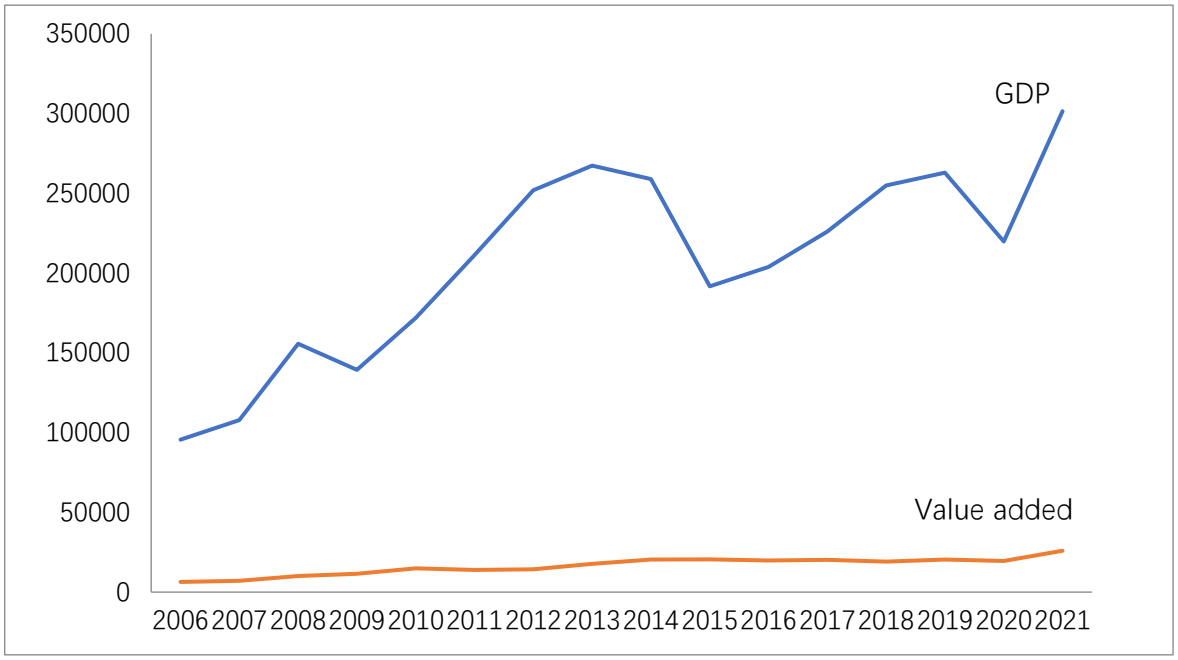


Figure 1. Developments in value-added and gross domestic product for hotels, wholesale and retail trade for 2006-2021

## 4. A Trial Model ( Primary Model or Empirical Model)

In order to employ normal economic approaches that will yield more accurate and objective results if the time series are long, the research variables' time series data were transformed from yearly to quarterly in their natural form in order to create a trial model (Jarwana, S. A, 2020). To obtain the impact of the value-added of wholesale and retail trade and hotels on economic growth in Iraq, the ARDL model was used, which helps to determine the impact of economic variables on each other. This model is preferred over others for its ability to obtain accurate results (Hammad, S. A. U, 2023). The economic model can be expressed as follows:

$$Y_t = \beta_o + \beta_1 X1_t + u_t \qquad (1)$$

Where (Y) represents the GDP (economic growth) as the dependent variable, (βo) represents the intercept, (X1) represents the value-added of wholesale and retail trade and hotels as the independent variable, (ut) represents the random variable, and (t) represents time. Before using the classic model, we conducted time series stability checks, including the initial estimation and unit root tests like the Augmented Dickey-Fuller (ADF) and Phillips-Perron (PP). We evaluated short-term and long-term error correction parameters, assessed boundary associations (F-test), and finally found the best lag duration for the lag periods. The model's validity was tested through an ARCH test to ensure that the model does not suffer from heteroscedasticity and a Lagrange Multiplier (LM) test to ensure that the model is free from autocorrelation. We also tested the appropriateness of the functional form and the structural stability of the estimated model parameters through the Cumulative Sum (CUSUM) test and CUSUM of Squares test.

## 5. Results and Discussion

### *5.1 Augmented Dickey–Fuller (ADF) Test and Phillips-Perron(pp)*

Unit root tests for level and first difference variables with a constant, a constant with a trend, and without a constant and trend are displayed in Tables 2 and 3, respectively, using the ADF and the PP tests.

Table 2. Unit root ADF test results

| **UNIT ROOT TEST TABLE (ADF)** | | | |
|---|---|---|---|
| **At Level** | | | |
| | | **Y** | **X** |
| **With Constant** | t-Statistic | -1.4957 | -0.9543 |
| | Prob. | 0.5294 | 0.7642 |
| | | n0 | n0 |
| **With Constant & Trend** | t-Statistic | -2.2097 | -2.3473 |
| | Prob. | 0.4759 | 0.4030 |

| | | | |
|---|---|---|---|
| | | n0 | n0 |
| **Without Constant & Trend** | t-Statistic | 0.9459 | 1.7233 |
| | Prob. | 0.9068 | 0.9785 |
| | | n0 | n0 |
| **At First Difference** | | | |
| | | **d(Y)** | **d(X)** |
| **With Constant** | t-Statistic | -8.0002 | -8.3513 |
| | Prob. | 0.0000 | 0.0000 |
| | | *** | *** |
| **With Constant & Trend** | t-Statistic | -7.9417 | -8.2833 |
| | Prob. | 0.0000 | 0.0000 |
| | | *** | *** |
| **Without Constant & Trend** | t-Statistic | -7.8102 | -7.8102 |
| | Prob. | 0.0000 | 0.0000 |
| | | *** | *** |

Source: Eviews econometrics program, ninth edition.

Based on the results shown in Table 2, the ADF test accepts the null hypothesis (H0) that the time series of the variables are not constant at the original level of the data and rejects the alternative hypothesis (HI) that the time series is constant at the original level of the data. This means there is a unit root in these time series, and we can no longer state that they are constant of order (0)I. At the 1% level of significance, these time series become constant after being subjected to a first difference.

PP test in Table 3 shows that the time series of the dependent variable (Y) is constant at the data level. However, we observe that the time series of the independent variable (X) is non-stationary at data the original level but it becomes constant after taking the first difference at a significance level of 1%.

Table 3. The outcomes of Phillips-Perron tests for unit roots

| **At Level** | | | |
|---|---|---|---|
| | | **Y** | **X** |
| **With Constant** | t-Statistic | -1.4908 | -0.8516 |
| | Prob. | 0.5318 | 0.7970 |
| | | n0 | n0 |
| **With Constant & Trend** | t-Statistic | -2.2380 | -2.3515 |
| | Prob. | 0.4607 | 0.4008 |
| | | n0 | n0 |
| **Without Constant & Trend** | t-Statistic | 0.9888 | 2.0290 |

| | | | |
|---|---|---|---|
| | Prob. | 0.9131 | 0.9892 |
| | | n0 | n0 |
| **At First Difference** | | | |
| | | **d(Y)** | **d(X)** |
| **With Constant** | t-Statistic | -8.0026 | -8.4554 |
| | Prob. | 0.0000 | 0.0000 |
| | | *** | *** |
| **With Constant & Trend** | t-Statistic | -7.9435 | -8.3836 |
| | Prob. | 0.0001 | 0.0000 |
| | | *** | *** |
| **Without Constant & Trend** | t-Statistic | -7.8102 | -7.8102 |
| | Prob. | 0.0000 | 0.0000 |
| | | *** | *** |

Source: Eviews econometrics program, ninth edition

*5.2 The Initial Estimation According to the ARDL Model*

Table 4 measures the impact of the value-added of wholesale and retail trade and hotels on economic growth.

Table 4. Results of the initial estimation for ARDL model

| Variable | Coefficient | Std. Error | t-Statistic | Prob.* |
|---|---|---|---|---|
| Y(-1) | 3.398605 | 0.084856 | 40.05139 | 0.0000 |
| Y(-2) | -4.69796 | 0.234557 | -20.029 | 0.0000 |
| Y(-3) | 3.138596 | 0.238454 | 13.16228 | 0.0000 |
| Y(-4) | -0.86425 | 0.089606 | -9.64501 | 0.0000 |
| X | 11.10173 | 1.598164 | 6.946552 | 0.0000 |
| X(-1) | -36.3512 | 5.682802 | -6.39671 | 0.0000 |
| X(-2) | 48.29874 | 8.532625 | 5.660479 | 0.0000 |
| X(-3) | -30.7936 | 6.363136 | -4.83938 | 0.0000 |
| X(-4) | 8.007609 | 1.959634 | 4.086278 | 0.0002 |
| C | 762.7964 | 567.2572 | 1.34471 | 0.1852 |
| R-squared | 0.999763 | Mean dependent var | | 215117.8 |
| Adjusted R-squared | 0.999718 | S.D. dependent var | | 46927.35 |

| | | | |
|---|---|---|---|
| S.E. of regression | 788.2624 | Akaike info criterion | 16.33551 |
| Sum squared resid | 29203806 | Schwarz criterion | 16.69394 |
| Log likelihood | -455.562 | Hannan-Quinn criter. | 16.47481 |
| F-statistic | 22047.18 | Durbin-Watson stat | 1.796157 |
| Prob(F-statistic) | 0.00000 | | |

Source: Eviews econometrics program, ninth edition

Coefficient of determination and adjusted coefficient of determination are both 99% as shown in Table 4. The tax on wholesale and retail commerce as well as hotels accounts for 99% percent of the variance in GDP growth. Plus, the F-value is statistically significant.

*5.3 Test for Optimal Delay Time*

The findings of the optimal lag length test for the ARDL model of the connection between wholesale and retail trade value-added and hotel expansion are displayed in Figure 2.

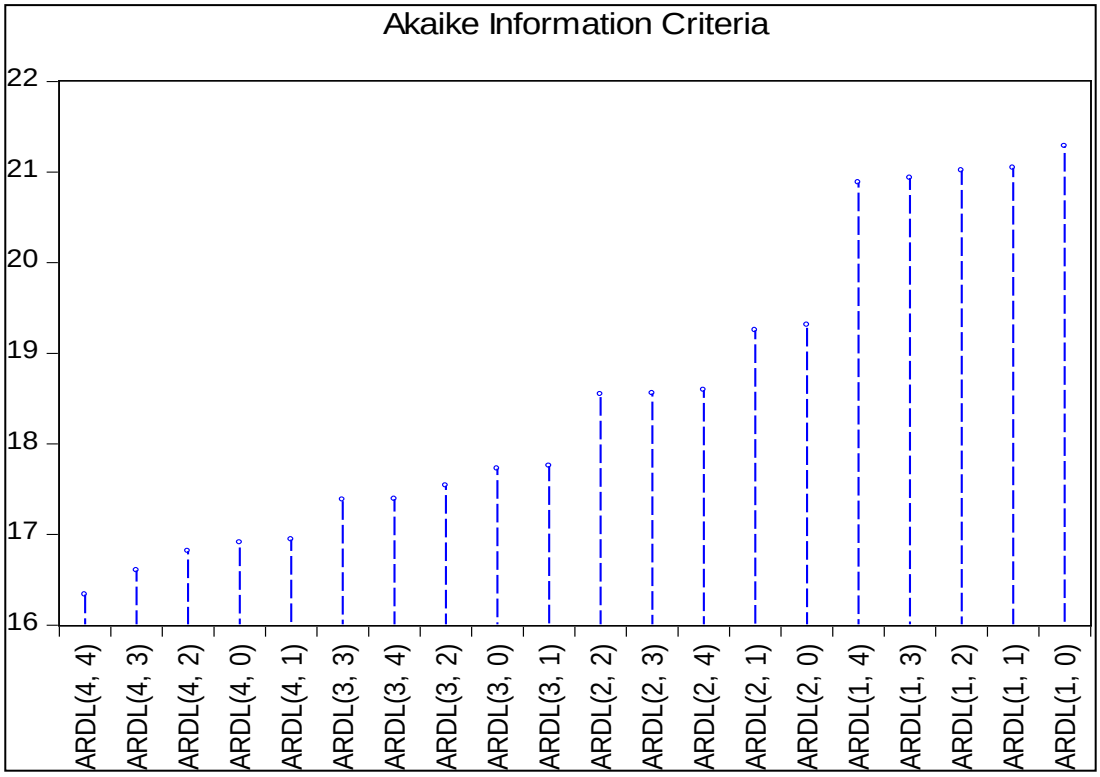


Figure 2. Results of the optimal lag length test for the ARDL model

Source: Eviews econometrics program, ninth edition.

Figure 2 indicates that the optimal lag periods selected according to the ARDL model are of order (4, 4) based on the criteria used in the model. The optimal lag period is chosen to give the minimum value for these criteria (Fawaz, N. A., & Hammad, 2022).

*5.4 A Variable-Relationship-Limits Test*

The value-added of wholesale and retail commerce and hotels is the independent variable, and economic growth is the dependent variable; the crucial statistic (F) is calculated to determine the presence or absence of a long-run link between the two. The hypothesis of no long-term link is rejected and the alternative hypothesis of a long-term relationship between the variables is accepted if the computed (F) value is greater than the upper critical value. Conversely, if the calculated (F) value falls below the lower critical value, we accept the null hypothesis and reject the alternative hypothesis. If the calculated (F) value falls between the two critical values, we cannot determine the existence of a long-run relationship without conducting a parameter estimation test for short-run and long-run parameters and error correction parameters (Diebold, F. X, 2019) . Table 5 shows the results of the limits testing for the ARDL model.

Table 5. Test limits

| **Test Statistic** | **Value** | **K** |
|---|---|---|
| F-statistic | 10.57925 | 1 |
| **Critical Value Bounds** | | |
| **Significance** | **I0 Bound** | **I1 Bound** |
| 10% | 4.040 | 4.780 |
| 5% | 4.940 | 5.730 |
| 2.5% | 5.770 | 6.680 |
| 1% | 6.840 | 7.840 |

Source: Eviews econometrics program, ninth edition

According to the results presented in Table 5, the (F) statistic value is 10.57925, which exceeds the critical value of (F) at the upper bound of 7.840 for a significance level of 1%. This leads to the rejection of the null hypothesis and the acceptance of the alternative hypothesis, indicating the presence of a long-run relationship between the variables throughout the research period.

*5.5 Error Correction Parameter Estimation, Including Short- and Long-Term Forecasting*

Now that we know there is a long-term connection between the variables, we need to get short- and long-term estimates of the model parameters and the error correction parameter. These results are illustrated in Table 6.

Table 6. Error correction parameter estimation, including short- and long-term forecasting

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|---|---|---|---|---|
| D(Y(-1)) | 2.423611 | 0.084486 | 28.68648 | 0.0000 |
| D(Y(-2)) | -2.27434 | 0.15175 | -14.9874 | 0.0000 |
| D(Y(-3)) | 0.864252 | 0.089606 | 9.645012 | 0.0000 |
| D(X) | 11.10173 | 1.598164 | 6.946552 | 0.0000 |
| D(X(-1)) | -48.2987 | 8.532625 | -5.66048 | 0.0000 |
| D(X(-2)) | 30.79363 | 6.363136 | 4.839379 | 0.0000 |
| D(X(-3)) | -8.00761 | 1.959634 | -4.08628 | 0.0002 |
| CointEq(-1) | -0.02501 | 0.005436 | -4.59982 | 0.0000 |
| Cointeq = Y - (10.5268*X + 30505.0662 ) | | | | |
| **Long Run Coefficients** | | | | |
| **Variable** | **Coefficient** | **Std. Error** | **t-Statistic** | **Prob.** |
| X | 10.52684 | 1.140631 | 9.22896 | 0.0000 |
| C | 30505.07 | 22047.01 | 1.383637 | 0.1730 |

Source: Eviews econometrics program, ninth edition

The results presented in Table 6 confirm the existence of a long-run co-integration between the value-added of wholesale and retail trade and hotels and the economic growth. This is supported by the negative and statistically significant value of the error correction parameter (-0.02501) at a significance level of less than 1%. The error correction coefficient is a measure of the speed of adjustment from the short-run to the long-run, and its negative and significant value provides evidence of a co-integrating relationship between the variables.The short-run and long-run relationships can be interpreted as follows:

*5.6 The Short-run Relationship*

It was found that there is a relationship in the short term between the economic variables represented by the value added to wholesale trade and hotels (X) and economic growth (Y) at less than (1%). That is, increasing the added value by one dinar is reflected in an increase in economic growth of up to (11.10173) dinars in the short term.

*5.7 The Long-run Relationship*

It was found that there is a positive impact and an equilibrium relationship in the long term at less than (1%), and this supports the impact of value added on economic growth. Specifically, an increase of one dinar in the value-added of wholesale and retail trade and hotels leads to

an increase in GDP by 10.52684 dinars, assuming that other factors remain constant. This finding is consistent with economic theory and supports the hypothesis of the study.

*5.8 Quality Tests for the Standard Model*

As the ARDL model tests have been reviewed, it is required to guarantee the quality of the model's performance and its safety from standard issues. The following diagnostics can help with this:

5.8.1 Test for Homogeneity of Variance

According to the results in Table 7, the model does not exhibit non-homogeneity of variance. This is evident from the insignificant calculated value of (F), which was (0.007864) at a probability level of (0.9297). This indicates that the estimated model is not affected by non-homogeneity of variance and is considered to be free from this issue.

Table 7. Heteroskedasticity Test results

| **Heteroskedasticity Test: Breusch-Pagan-Godfrey** | | | |
|---|---|---|---|
| F-statistic | 0.007864 | Prob. F(1,54) | 0.9297 |
| Obs*R-squared | 0.008154 | Prob. Chi-Square (2) | 0.9280 |

Source: Eviews econometrics program, ninth edition

5.8.2 Autocorrelation Test for the LM Sequence

The computed (F) value of 1.288921 at a significance level of 0.2855 is not significant at the 5% level, as shown in Table 8, demonstrating that the results of the test validated the predicted model's validity and quality. This means that the estimated model has no serial correlation issues.

Table 8. Autocorrelation Test Results

| **Breusch-Godfrey Serial Correlation LM Test** | | | |
|---|---|---|---|
| F-statistic | 1.288921 | Prob. F (2,45) | 0.2855 |
| Obs*R-squared | 3.08835 | Prob. Chi-Square (2) | 0.2135 |

Source: Eviews econometrics program, ninth edition

5.8.3 Ramsey Test for the Model Adequacy

Table 9 displays that the statistical value (t) is calculated to be 1.565445, with a corresponding probability value of 0.1243. This value does not reach significance at a 5% level of significance. Similarly, the calculated value of (F) is 2.450619, with a probability value of 0.1243, which is also not significant at a 5% level of significance. Therefore, we can conclude that the estimated model is considered valid.

Table 9. Ramsey Test for the adequacy of the goodness of fit

| Ramsey RESET Test | | | |
|---|---|---|---|
| **Equation: UNTITLED** | | | |
| **Omitted Variables: Squares of fitted values** | | | |
| | **Value** | **Df** | **Probability** |
| t-statistic | 1.565445 | 46 | 0.1243 |
| F-statistic | 2.450619 | (1, 46) | 0.1243 |

Source: Eviews econometrics program, ninth edition.

5.8.4 The Structural Stability Test for the Estimated Model Parameters

Ensuring that the data used in estimating the model is free from structural changes and to assess the stability and consistency of the long-term parameter estimates with the short-term parameter estimates. Two tests are commonly used:

5.8.4.1 Cumulative Sum of Recursive Residual Test (CUSUM)

5.8.4.2 Cumulative Sum of Squares Recursive Residual Test (CUSUM OF SQUARE).

According to these tests, the structural stability of the estimated of ARDL parameters is confirmed if the plot of both CUSUM and CUSUM OF SQUARE tests falls within the critical bounds (upper and lower limits) at a significance level of 5%. This leads to accepting the hypothesis that all estimated parameters are structurally stable, as shown in the Figure 3.

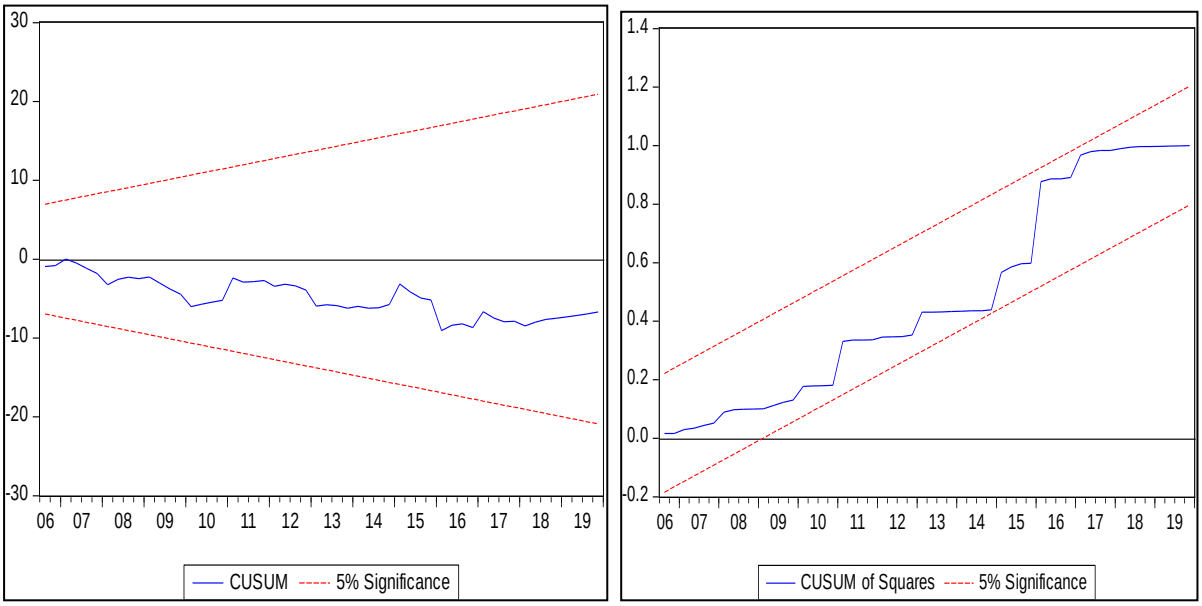


Figure 3. Model structural stability test

The scatter plot in Figure 3 shows that the data points for both tests are within the upper and lower limits defined by a 5% significance level. This suggests that the cumulative totals during the research period are centered around their average value, indicating strong evidence of stability and consistency in the model estimates between the short-term parameters and long-term parameters.

## 6. Conclusion

The wholesale, retail, and hotel sectors are crucial components of Iraq's economy, making significant contributions to the country's gross domestic product (GDP) and providing employment opportunities by facilitating the exchange between producers and consumers. The contribution of added value (wages, incomes, profits, rents, and interests) to the economy is low, with the average percentage of its contribution to GDP being around (8%). In contrast, the Iraqi economy depends on oil revenues, whose contribution percentage reaches higher than 70% in some cases. Econometric methods and models revealed the existence of a long-term equilibrium relationship between economic variables, and that any increase in value-added output contributes to the increase and growth of the economy in Iraq. However, there was also a significant negative relationship at a probability level of less than 1% between the variables. This suggests that the value-added of this sector had a negative and significant impact on economic growth over the research period, assuming other factors remained constant. More specifically, for every increase in the value-added of the wholesale, retail, and hotel sector by one unit, the GDP decreased by 10.52684 units.

Based on these results, the wholesale, retail, and hotel sector are interconnected with other sectors such as transportation, storage, housing, accommodation, food, and financial services.

The sector faces challenges and obstacles but also has economic advantages that contribute to the growth and development of the economy. This paper recommends the activation of the role of the government and the private sector in this sector to increase its contribution to the GDP.

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