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Research Paper

Oil Revenues and Inflation Dynamics in Iraq: Evidence from ARDL Approach

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ABSTRACT

This study examines the relationship between oil revenues and inflation dynamics in Iraq, a rentier economy highly dependent on oil as its primary source of public finance. Given the limitations of conventional inflation measures, the study adopts the GDP deflator as a more comprehensive indicator of price changes across the economy. The main objective is to analyze both the short-run and long-run effects of oil revenues and selected macroeconomic variables on the GDP deflator over the period 2004–2022. The study employs the Autoregressive Distributed Lag (ARDL) approach, which is suitable for small sample sizes and allows for the estimation of dynamic relationships among variables with mixed orders of integration. The findings reveal that broad money supply significantly influences the GDP deflator in the short run, while oil revenues exert a positive and statistically significant effect in the long run, confirming their dominant role in driving inflation. In contrast, variables such as the exchange rate, government expenditure, and tax revenues do not show significant long-term effects. These results indicate that inflation in Iraq is primarily demand-driven through oil revenue channels, reflecting structural dependence on the oil sector. The study concludes that effective management of oil revenues, alongside coordinated fiscal and monetary policies and economic diversification, is essential to achieving price stability and sustainable economic growth in oil-dependent economies.

Introduction

The Iraqi economy represents a distinctive example of a rentier system, in which oil revenues serve as the primary foundation for financing the public budget and sustaining gross domestic product (GDP). This excessive dependence on oil exposes the economy to pronounced external vulnerabilities, particularly fluctuations in global oil prices, which directly influence macroeconomic stability (Rasheed, 2023). One of the most comprehensive indicators reflecting these dynamics is the GDP deflator, which captures changes in the overall price level across the economy (Al-Sawaie et al., 2025; Asab, 2025). Although oil revenues constitute the dominant source of national income, other macroeconomic variables, such as the exchange rate, tax revenues, broad money supply, and government expenditure, also contribute to shaping inflationary trends. The central research problem arises from persistent structural imbalances associated with oil dependence, which amplify volatility in key economic indicators, especially price levels (Magaji et al., 2025). Accordingly, this study investigates the nature and direction of the relationship between oil revenues and the GDP deflator in Iraq, while also considering the role of complementary macroeconomic variables. The study is significant in that it provides empirically grounded insights to support policy formulation aimed at enhancing price stability and mitigating the adverse effects of oil revenue volatility.

From a theoretical perspective, oil revenues function as a critical driver of economic activity in rentier economies, primarily by financing public expenditure and stimulating aggregate demand. As argued by Okwueze et al. (2025), oil income plays a central role in shaping macroeconomic performance through fiscal channels. In line with the quantity theory of money, increases in oil revenues tend to expand liquidity, thereby raising aggregate demand and exerting upward pressure on nominal output and price levels (Aker et al., 2025; Mohammed et al., 2020). The GDP deflator captures these changes by reflecting the relationship between nominal and real GDP. However, when increases in oil revenues are not accompanied by corresponding gains in productivity, they are more likely to generate inflationary pressures rather than real economic growth (Ahmed et al., 2023; Ha et al., 2023). Furthermore, within the IS–LM framework, oil revenues influence macroeconomic equilibrium through their effects on interest rates, investment, and income, while exchange rate dynamics further shape these interactions in an open economy context (Sakanko et al., 2025).

The GDP deflator provides a comprehensive measure of the general price level, as it encompasses all components of economic output rather than a fixed consumption basket. Unlike the Consumer Price Index (CPI), which focuses on selected goods and services, the GDP deflator reflects price movements across both oil and non-oil sectors, making it particularly relevant for analyzing oil-dependent economies (Mensi et al., 2023; Wang et al., 2022). Within an open-economy framework, it serves as a key transmission channel through which oil revenues affect macroeconomic outcomes. Higher oil revenues typically stimulate government spending and aggregate demand, leading to increases in nominal output that may outpace real output growth, thereby raising the GDP deflator (Choi et al., 2018; Herrera et al., 2019) Nevertheless, this relationship is not always stable. Oil price volatility can generate uncertainty, weaken private investment, and limit real economic expansion, while still exerting upward pressure on price levels (Aladwani, 2025; Al Rasasi et al., 2019). Consequently, the GDP deflator becomes an essential tool for understanding the balance between inflationary pressures and real growth dynamics.

Recent theoretical contributions have increasingly emphasized the interconnected relationship between oil revenues, inflation, and real economic growth within a unified analytical framework. In this perspective, oil revenues act as a fiscal engine that drives aggregate demand, while the GDP deflator operates as a moderating mechanism that determines whether such demand translates into real growth or inflation (Cao et al., 2025; Ebimobowei, 2022; Nishandini et al., 2026). The effectiveness of oil revenues in promoting economic development therefore depends on the stability of the price level and the economy's capacity to absorb external shocks (Suresh et al., 2026; Ye et al., 2023). When price stability is maintained, oil revenues can enhance real output; however, in the presence of inflationary pressures, a significant portion of these gains is diverted away from real growth (Khazaleh, 2024). This dynamic is particularly relevant in rentier economies, where structural constraints often limit productive capacity and increase susceptibility to external shocks.

Empirically, the relationship between oil revenues, inflation, and economic growth in oil-exporting economies has been widely examined through interconnected thematic perspectives. A dominant strand of the literature emphasizes the role of oil revenues as a primary driver of economic growth, particularly in rentier economies where fiscal capacity is heavily dependent on resource income (Olasupo et al., 2026; Okwueze et al., 2025). However, this growth effect is often conditional upon institutional quality and the effectiveness of macroeconomic policy frameworks (Awad et al., 2024; Oladejo, 2025). Complementing this view, another body of research highlights the transmission mechanisms of oil-related shocks, demonstrating that fluctuations in oil supply and prices propagate across economies, influencing both output and inflation dynamics (Ibady & Hammadi, 2023; Mohaddes & Raissi, 2021). Within this broader context, inflation emerges as a critical channel through which oil revenues affect macroeconomic stability. Studies focusing on Iraq, for instance, reveal that oil revenues, alongside monetary factors such as reserves, exert a significant long-run influence on price levels, particularly when measured through comprehensive indicators like the GDP deflator (Al-Saedi, 2025; Rasheed & Al-Mzori, 2025). Furthermore, oil price volatility has been shown to intensify inflationary pressures and create macroeconomic uncertainty, reinforcing the sensitivity of price stability to external shocks (Drebee & Razak, 2022; Kazam, 2023). At the same time, the asymmetric nature of oil price shocks suggests that their effects on economic growth are not uniform, with expansionary and contractionary phases generating differing macroeconomic outcomes (Abdlaziz et al., 2022; Semenova & Al-Dirawi, 2022). In the Iraqi context, these dynamics are further compounded by the dominance of oil revenues in shaping economic growth through inflation-linked transmission channels (Mohammad & Ahmed, 2024). To sum up, these previous studies' insights indicate that oil revenues influence macroeconomic performance through a complex interaction of growth, inflation, and shock transmission mechanisms, rather than through isolated or linear relationships.

Despite these contributions, several critical gaps remain in the literature. First, most existing studies rely predominantly on the Consumer Price Index (CPI) as a proxy for inflation, thereby overlooking the broader and more comprehensive insights offered by the GDP deflator. Second, prior research tends to analyze fiscal and monetary variables in isolation, limiting the ability to capture their interactive and combined effects within a unified framework. Third, insufficient attention has been given to oil revenues denominated in domestic currency as a direct transmission channel of inflation. Finally, recent structural

changes in the Iraqi economy, particularly the 2020 exchange rate adjustment, have not been adequately incorporated into empirical analyses, raising concerns about the relevance of earlier findings in the current economic context.

In response to these gaps, this study offers a more integrated and context-sensitive analysis of the relationship between oil revenues and the GDP deflator in Iraq over the period 2004–2022. It develops a comprehensive empirical framework that incorporates key fiscal and monetary variables, including exchange rate, tax revenues, broad money supply, and government expenditure. The study hypothesizes a positive and significant long-run relationship between oil revenues and the GDP deflator, alongside a short-run influence of monetary expansion. The novelty of this research lies in three key aspects: (1) the use of the GDP deflator as a comprehensive measure of inflation; (2) the integration of fiscal and monetary variables within a single ARDL framework to capture both short- and long-run dynamics; and (3) the explicit consideration of recent structural transformations in the Iraqi economy. By doing so, the study provides a more nuanced and policy-relevant understanding of inflation dynamics in oil-dependent economies.

Method

Research Design and Context

This study adopts a quantitative econometric research design based on the Autoregressive Distributed Lag (ARDL) model to examine the relationship between oil revenues and the GDP deflator in Iraq over the period 2004–2022. This design goes beyond a general quantitative approach by explicitly employing a time-series econometric framework that allows for the analysis of both short-run dynamics and long-run equilibrium relationships among macroeconomic variables. The choice of this research design is particularly appropriate for the context of Iraq as an oil-dependent economy, where structural changes, policy shifts, and external shocks play a significant role in shaping inflation dynamics and macroeconomic stability.

The ARDL approach is well-suited for this study due to its flexibility in handling variables with mixed orders of integration, specifically I(0) and I(1), as well as its reliability when applied to relatively small sample sizes, such as the annual data used in this study (n = 19). In addition, the ARDL bounds testing procedure provides a robust framework for identifying cointegration relationships without requiring pre-testing for unit roots at the same order of integration.

The empirical model of the study is specified as follows:

$$GDPD_t = \beta_0 + \sum_{i=1}^{5} \beta_i X_{it} + \varepsilon_t \quad \ldots\ldots (1)$$

Notes: GDPD represents the GDP deflator; Xit denotes the set of independent variables; ε_t is the error term. The independent variables are defined as follows: X_1 represents oil revenues; X_2 represents the exchange rate; X_3 represents tax revenues; X_4 represents broad money supply; X_5 represents government expenditure.

From a theoretical perspective, X_1 (oil revenues) and X_4 (broad money supply) are expected to have a positive relationship with the GDP deflator due to their influence on aggregate demand and liquidity expansion. In contrast, the effects of X_2 (exchange rate), X_3

(tax revenues), and X_5 (government expenditure) may vary depending on macroeconomic conditions, fiscal policy stance, and the economy's capacity to absorb external shocks.

Data, Sample, and Data Collection Procedures

This study is based on annual time-series data covering the period 2004–2022, which has been selected to capture the trajectory of Iraq's economic transformation following the 2003 structural shift, as well as subsequent fiscal and monetary policy developments, including the exchange rate adjustment in 2020. This period is particularly relevant for analyzing macroeconomic dynamics in a post-conflict, oil-dependent economy undergoing significant structural changes. The data were primarily collected from the statistical bulletins of the Central Bank of Iraq and the Iraqi Ministry of Planning, in addition to reports from the World Bank and the International Monetary Fund (IMF). These institutions are considered reliable and widely recognized sources for macroeconomic data. A cross-verification process among these sources was conducted to ensure the accuracy and consistency of the dataset. Regarding variable measurement, all variables are expressed in annual frequency and are primarily measured in nominal terms. To improve the reliability of the econometric estimation and reduce heteroscedasticity, selected variables were transformed into their natural logarithmic form. The dataset includes the GDP deflator as the dependent variable, along with a set of independent variables representing key macroeconomic indicators, including oil revenues, exchange rate, tax revenues, broad money supply, and government expenditure.

Data Analysis

The study employs the Autoregressive Distributed Lag (ARDL) model to assess the impact of oil revenues on the GDP deflator in Iraq over the period 2004–2022. The ARDL approach was chosen for its flexibility in handling variables that are either stationary at level I(0) or at first difference I(1). The process begins by examining the time series properties of the variables using unit root tests to determine their order of integration. Next, the optimal lag length for both dependent and independent variables is selected based on statistical information criteria, such as the Akaike Information Criterion (AIC). A bounds test is then conducted to verify the existence of a long-run cointegration relationship among the variables. Once cointegration is confirmed, long-run coefficients are estimated, and an Error Correction Model (ECM) is derived to indicate the speed at which the GDP deflator returns to equilibrium following shocks in oil revenues. The stability of the model is checked using the CUSUM test, and diagnostic tests, including serial correlation, heteroscedasticity, and normality tests, are performed to ensure the reliability of the results. Finally, the estimated coefficients are interpreted from an economic perspective to provide clear insights into the relationship between oil revenues and the GDP deflator.

Results

Oil Revenue and GDP Deflator in Iraq

This section presents the main empirical findings of the study, focusing on the relationship between oil revenues and the GDP deflator in Iraq over the period 2004–2022.

The analysis is based on the ARDL model, which allows for examining both short-run dynamics and long-run relationships among the selected variables. The results are discussed in a structured manner to highlight the role of oil revenues, monetary factors, and other macroeconomic variables in shaping price levels. This section aims to provide a clear interpretation of the estimated coefficients and to link the empirical outcomes with the broader economic context of Iraq. Table 1 illustrates the trends in the relationship between oil revenues and the GDP deflator in Iraq for the period 2004–2022.

Table 1. Trend of Relationship between Oil Revenue and GDP Deflator in Iraq

Year	Oil Revenue	Implicit GDP deflator	Parallel Exchange Rate	Broad Money Supply	Government Spending	Tax Revenue
2004	24,160	52.27	1453	12,254,000	32,117,491	209,826
2005	39,625	71.01	1468	14,684,000	26,375,175	647,355
2006	46,633	87.73	1467	21,080,000	38,806,679	739,543
2007	50,744	100.00	1254	26,956,076	39,031,232	1,950,457
2008	74,357	130.18	1193	34,919,675	59,403,375	3,199,203
2009	51,719	104.76	1170	45,437,918	52,567,025	3,685,942
2010	63,549	122.14	1170	60,386,086	64,351,984	1,954,285
2011	98,090	152.30	1170	72,177,951	78,757,668	1,919,243
2012	116,594	156.36	1166	75,466,360	90,374,783	3,025,764
2013	110,890	156.34	1166	87,679,504	106,873,027	3,118,940
2014	97,072	148.83	1166	92,988,876	83,556,226	2,570,851
2015	51,312	106.03	1167	84,418,246	70,397,515	2,701,048
2016	44,267	94.25	1182	90,466,370	67,067,437	4,680,012
2017	65,070	108.06	1184	92,857,047	100,671,160	7,089,240
2018	95,620	132.62	1182	95,390,725	80,873,189	6,817,329
2019	99,216	131.21	1182	103,440,475	111,723,523	4,164,567
2020	54,449	114.65	1192	119,906,000	76,082,400	5,519,780
2021	95,270	148.70	1450	139,886,100	102,849,400	5,674,124
2022	97,600	180.34	1432	168,291,400	116,959,600	5,596,952

Sources: Annual report Central Bank of Iraq (2004 – 2023); Annual Report World Bank (2004 – 2022)

The data in Table 1 reveal a clear cyclical pattern in Iraq's macroeconomic dynamics, strongly anchored in oil revenue fluctuations. During the period 2004–2013, the economy experienced relative stability characterized by a steady increase in oil revenues and government spending, accompanied by a stable exchange rate. This environment supported a gradual rise in the GDP deflator, reflecting controlled inflation alongside expanding aggregate demand. The simultaneous growth in broad money supply suggests that liquidity expansion was largely absorbed without triggering excessive inflation, indicating a temporary alignment between fiscal expansion and macroeconomic stability. However, this stability was structurally fragile, as it depended heavily on favorable oil market conditions rather than diversified economic productivity.

The period 2014–2017 marks a significant structural break driven by dual shocks: declining global oil prices and domestic security challenges. These shocks sharply reduced oil revenues and constrained fiscal capacity, yet government spending remained relatively elevated, creating fiscal pressure. The divergence between official and parallel exchange

rates signals underlying market distortions and increased reliance on imports, which contributed to imported inflation. At the same time, the continued expansion of money supply, without corresponding growth in domestic production, intensified inflationary pressures rather than stimulating real economic activity. This phase highlights the vulnerability of the Iraqi economy to external shocks and underscores the limited effectiveness of monetary expansion in the absence of structural economic support.

In the subsequent period (2018–2022), the economy exhibited partial recovery followed by renewed instability during the COVID-19 pandemic and exchange rate adjustment. While oil revenues rebounded briefly, the overall growth trajectory remained highly volatile and dependent on external conditions. The sharp increase in the GDP deflator after 2020 reflects the combined effects of currency devaluation, rising liquidity, and persistent structural weaknesses such as import dependence and limited productive capacity. The rapid expansion of broad money supply during this period appears to have translated predominantly into inflation rather than real output growth. Overall, the data suggest that inflation dynamics in Iraq are primarily driven by oil revenue cycles and policy responses, with limited buffering from domestic economic structures, thereby reinforcing the economy's exposure to external shocks and its dependence on oil-driven demand.

The Role of Oil Revenue in Determining GDP Deflator in Iraq

Oil represents the primary source of public revenues in Iraq, making it the most influential factor in determining macroeconomic indicators. The GDP deflator serves as an important tool to measure underlying price changes across the entire economic activity. Therefore, analyzing the role of oil revenues in determining this deflator during the period 2004–2022 is particularly significant, as it reveals the nature of Iraq's economic dependence on oil market fluctuations and their impact on economic growth and overall stability.

Summary of Stationarity Results

The stationarity of the study variables was tested using Eviews 13, applying the Augmented Dickey-Fuller (ADF) Test to verify whether the variables were stationary (i.e., mean-reverting) or non-stationary (i.e., contained a unit root). The order of integration for each variable was determined individually. Table 2 shows the results of stationarity test.

Based on the results reported in Table 2, the Augmented Dickey–Fuller (ADF) test provides clear evidence regarding the stationarity properties of the study variables. At the level form, the probability values indicate that most variables fail to reject the null hypothesis of a unit root across different model specifications (with constant, with constant and trend, and without both), confirming their non-stationary nature. The only exception is the broad money supply (X3), which demonstrates stationarity at level under specific specifications, suggesting that it is integrated of order zero, I(0). In contrast, the GDP deflator (Y), oil revenues (X1), parallel exchange rate (X2), government expenditure (X4), and tax revenues (X5) exhibit non-stationarity at level, reflecting the presence of stochastic trends and implying that their mean and variance are not constant over time.

Upon taking the first difference, the stationarity properties improve substantially, as evidenced by the statistically significant ADF test statistics for most variables. The GDP deflator, oil revenues, exchange rate, government expenditure, and tax revenues all become stationary after first differencing, indicating that they are integrated of order one, I(1).

Meanwhile, broad money supply remains non-stationary in some specifications at first difference, but its earlier stationarity at level confirms its classification as an I(0) variable. This mixed order of integration, where some variables are I(0) and others are I(1), has important econometric implications. Specifically, it justifies the use of the Autoregressive Distributed Lag (ARDL) modeling approach, which is particularly suitable for handling variables with different integration orders and allows for robust estimation of both short-run dynamics and long-run equilibrium relationships without requiring uniform stationarity among the variables.

Table 2. Results of Augmented Dickey-Fuller Test for the Stationarity of Variables

UNIT ROOT TEST RESULTS TABLE (ADF)							
Null Hypothesis: the variable has a unit root							
At Level							
		Y	X1	X2	X3	X4	X5
With Constant	t-Statistic	-1.8306	-2.4227	-1.5868	0.7253	-1.5473	-1.6035
	Prob.	***0.3548***	***0.1498***	***0.4685***	***0.9889***	***0.4877***	***0.4604***
		n0	n0	n0	n0	n0	n0
With Constant & Trend	t-Statistic	-2.3184	-2.4741	-0.8809	-3.9443	-3.2460	-3.7344
	Prob.	***0.4033***	***0.3347***	***0.9362***	***0.0369***	***0.1070***	***0.0480***
		n0	n0	n0	**	n0	**
Without Constant & Trend	t-Statistic	0.9167	-0.0957	-0.2023	1.6438	1.1872	0.1115
	Prob.	***0.8964***	***0.6370***	***0.5994***	***0.9698***	***0.9323***	***0.7055***
		n0	n0	n0	n0	n0	n0
At First Difference							
		d(Y)	d(X1)	d(X2)	d(X3)	d(X4)	d(X5)
With Constant	t-Statistic	-3.1656	-3.9487	-3.4760	-1.1977	-6.8428	-4.5887
	Prob.	***0.0405***	***0.0088***	***0.0224***	***0.6498***	***0.0000***	***0.0028***
		**	***	**	n0	***	***
With Constant & Trend	t-Statistic	-2.9847	-3.8246	-4.8995	-1.3876	-6.6396	-4.5068
	Prob.	***0.1640***	***0.0410***	***0.0060***	***0.8266***	***0.0003***	***0.0132***
		n0	**	***	n0	***	**
Without Constant & Trend	t-Statistic	-3.0214	-4.0019	-3.5887	-0.0995	-6.2618	-4.1606
	Prob.	***0.0049***	***0.0005***	***0.0013***	***0.6349***	***0.0000***	***0.0004***
		***	***	***	n0	***	***

Source: Eviews 13

Model Estimation using ARDL

Following the confirmation of stationarity properties, the next step involves estimating the Autoregressive Distributed Lag (ARDL) model, the results of which are presented in Table 3 for the period 2004–2022. The selected specification, based on the Akaike Information Criterion (AIC), is ARDL (1, 0, 0, 1, 0, 0), indicating an optimal lag structure that appropriately captures the dynamic relationships among the variables while maintaining model parsimony. The estimation results reveal a strong explanatory capacity, as reflected by an R-squared value of 0.918 and an adjusted R-squared of 0.854, suggesting that approximately 85% of the variation in the dependent variable (GDP deflator) is explained by the included regressors, with only a small proportion attributed to random

disturbances. Moreover, the overall model is statistically significant, as evidenced by the F-statistic value of 14.41120 with a probability of 0.000314, confirming that the explanatory variables jointly exert a meaningful influence on the dependent variable. In terms of individual coefficients, changes in oil revenues (DX_1) exhibit a positive and highly significant effect, while broad money supply (X_3) also shows a statistically significant influence, both supporting their roles as key drivers of price dynamics in the short run. In contrast, other variables such as the exchange rate (DX_2), government expenditure (DX_4), and tax revenues (DX_5) do not demonstrate statistically significant effects within this specification. The negative but insignificant coefficient of the lagged dependent variable suggests limited short-term persistence in the GDP deflator. Diagnostic indicators further support the robustness of the model, as the Durbin–Watson statistic of approximately 2.25 indicates no evidence of autocorrelation in the residuals, and the relatively low standard error of regression reflects a good fit. Overall, these results confirm that the model is well-specified, statistically reliable, and suitable for capturing both the short-run dynamics and the underlying structure of the relationship between oil revenues and the GDP deflator in Iraq.

Table 3. Model Estimation using ARDL

Dependent Variable: DY
Method: ARDL
Date: 08/29/25 Time: 02:34
Sample (adjusted): 2006 2022
Included observations: 17 after adjustments
Maximum dependent lags: 1 (Automatic selection)
Model selection method: Akaike info criterion (AIC)
Dynamic regressors (1 lag, automatic): DX1 DX2 X3 DX4 DX5
Fixed regressors: C
Number of models evaluated: 32
Selected Model: ARDL(1, 0, 0, 1, 0, 0)

Variable	Coefficient	Std. Error	t-Statistic	Prob.*
DY(-1)	-0.019432	0.115013	-0.168955	0.8696
DX1	0.000795	0.000113	7.030802	0.0001
DX2	-0.051305	0.034727	-1.477389	0.1737
X3	1.03E-06	2.88E-07	3.583261	0.0059
X3(-1)	-1.01E-06	3.14E-07	-3.209647	0.0107
DX4	-7.84E-08	1.39E-07	-0.562613	0.5874
DX5	2.09E-07	1.78E-06	0.117192	0.9093
C	-6.997850	6.085918	-1.149843	0.2798

R-squared	0.918091	Mean dependent var	6.431176
Adjusted R-squared	0.854384	S.D. dependent var	22.03663
S.E. of regression	8.409088	Akaike info criterion	7.401691
Sum squared resid	636.4149	Schwarz criterion	7.793791
Log likelihood	-54.91437	Hannan-Quinn criter.	7.440666
F-statistic	14.41120	Durbin-Watson stat	2.250891
Prob(F-statistic)	0.000314		

Source: Eviews 13

Bounds Testing

The next step in the analysis involves testing for the existence of a long-run equilibrium relationship among the variables using the ARDL Bounds Testing approach, the results of which are reported in Table 4. The Bounds Test evaluates the null hypothesis of no levels (cointegration) relationship against the alternative of a long-run association among the variables. As shown in the table, the calculated F-statistic is 23.06502, which is substantially higher than both the lower bound (I(0)) and upper bound (I(1)) critical values across all conventional significance levels. For instance, even at the 1% significance level, where the critical upper bound is relatively stringent, the computed F-statistic far exceeds the threshold, indicating strong statistical evidence against the null hypothesis. This pattern remains consistent when compared with both asymptotic and finite sample critical values, further reinforcing the robustness of the result despite the relatively small sample size (n = 17). Consequently, the null hypothesis of no cointegration is decisively rejected, confirming the presence of a stable long-run equilibrium relationship among the GDP deflator and its explanatory variables over the period 2004–2022. This finding provides a solid foundation for proceeding with the estimation of long-run coefficients and the associated error correction model, as it validates the existence of meaningful long-term interactions among the variables under investigation.

Table 4. Bounds Test for Cointegration

F-Bounds Test			Null Hypothesis: No levels relationship	
Test Statistic	Value	Signif.	I(0)	I(1)
			Asymptotic: n=1000	
F-statistic	23.06502	10%	2.08	3
K	5	5%	2.39	3.38
		2.5%	2.7	3.73
		1%	3.06	4.15
Actual Sample Size	17		Finite Sample: n=35	
		10%	2.331	3.417
		5%	2.804	4.013
		1%	3.9	5.419
			Finite Sample: n=30	
		10%	2.407	3.517
		5%	2.91	4.193
		1%	4.134	5.761

Source: Eviews 13

Diagnostic Test

Following the estimation of the model parameters, it is essential to assess the reliability and adequacy of the model through a series of diagnostic tests, one of which is the Breusch–Pagan–Godfrey test for heteroskedasticity, as presented in Table 5. This test evaluates whether the variance of the residuals is constant (homoskedastic) or varies systematically (heteroskedastic). The results indicate that the model does not suffer from heteroskedasticity, as all reported probability values are statistically insignificant at conventional levels. In

particular, the probability associated with the F-statistic (Prob. F = 0.0963) exceeds the 5% significance threshold, while the probabilities for the Obs*R-squared (0.1262) and the scaled explained sum of squares (0.8759) similarly remain well above this level. These findings imply that the null hypothesis of homoskedasticity cannot be rejected, confirming that the variance of the error terms is stable across observations. This outcome is important because it ensures that the estimated coefficients are efficient and that the standard errors are reliable, thereby enhancing the credibility of statistical inference drawn from the model.

Table 5. Breusch–Pagan–Godfrey Test for Heteroskedasticity

Heteroskedasticity Test: Breusch-Pagan-Godfrey			
Null hypothesis: Homoskedasticity			
F-statistic	2.545752	Prob. F(7,9)	0.0963
Obs*R-squared	11.29536	Prob. Chi-Square(7)	0.1262
Scaled explained SS	3.097007	Prob. Chi-Square(7)	0.8759

Source: Eviews 13

Serial Correlation Test of the Residuals

From Table 6, the results of the Breusch–Godfrey LM test indicate that the estimated model does not suffer from serial correlation in the residuals. This conclusion is based on the insignificance of the reported probability values for both test statistics. Specifically, the probability associated with the F-statistic (Prob. F = 0.4002) is well above the 5% significance level, and the probability of the Obs*R-squared statistic (0.2166) similarly exceeds this threshold. These results imply that the null hypothesis of no serial correlation up to the specified lag cannot be rejected. The absence of serial correlation is a crucial diagnostic outcome, as it suggests that the residuals are independent over time and that the model has adequately captured the dynamic structure of the data. Consequently, the estimated coefficients and their corresponding standard errors can be considered reliable, enhancing the overall robustness and validity of the econometric model.

Table 6. Breusch–Godfrey LM Test for Serial Correlation

Breusch-Godfrey Serial Correlation LM Test:			
Null hypothesis: No serial correlation at up to 1 lag			
F-statistic	0.789319	Prob. F(1,8)	0.4002
Obs*R-squared	1.526674	Prob. Chi-Square(1)	0.2166

Source: Eviews 13

Figure 1 presents the results of the normality test of the residuals using the Jarque–Bera statistic, complemented by a histogram and descriptive statistics. The Jarque–Bera probability value of 0.966383 is substantially higher than the 5% significance level, indicating that the null hypothesis of normally distributed residuals cannot be rejected. This suggests that the residuals are symmetrically distributed around the mean and do not exhibit significant departures from normality. The descriptive statistics further support this conclusion, as the skewness value (-0.153835) is close to zero, indicating only a slight and

negligible left skew, while the kurtosis value (2.956523) is very close to the benchmark of 3, implying a distribution that approximates the normal shape without excessive peakedness or flatness. Additionally, the mean of the residuals is effectively zero, reinforcing the absence of systematic bias in the model. The histogram visually confirms these findings, showing a fairly balanced distribution of residuals around the central value, with no extreme outliers or pronounced asymmetry. Overall, these results demonstrate that the normality assumption is satisfied, which is essential for ensuring the validity of statistical inference, particularly in hypothesis testing and confidence interval estimation within the model.

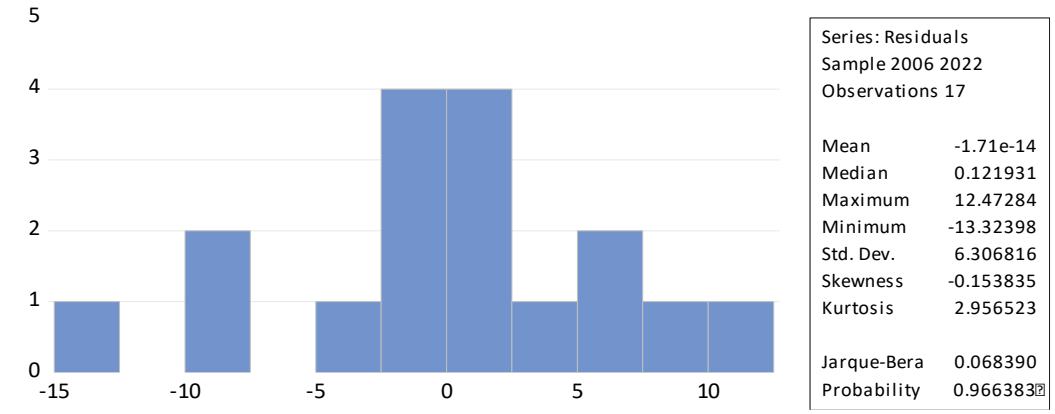

Figure 1. Results of the Normality Test of the Residuals

Structural Stability Test of the Model Parameters

To assess the structural stability of the estimated model, the CUSUM (Cumulative Sum of Recursive Residuals) test is employed, as presented in Figure 2. The CUSUM test evaluates whether the model's parameters remain stable over time by tracking the cumulative sum of recursive residuals against critical bounds at the 5% significance level. As illustrated in the figure, the CUSUM line (solid blue) remains entirely within the upper and lower critical boundaries (dashed lines) throughout the sample period. This indicates that there are no structural breaks or parameter instabilities affecting the model, even during periods characterized by economic shocks and fluctuations.

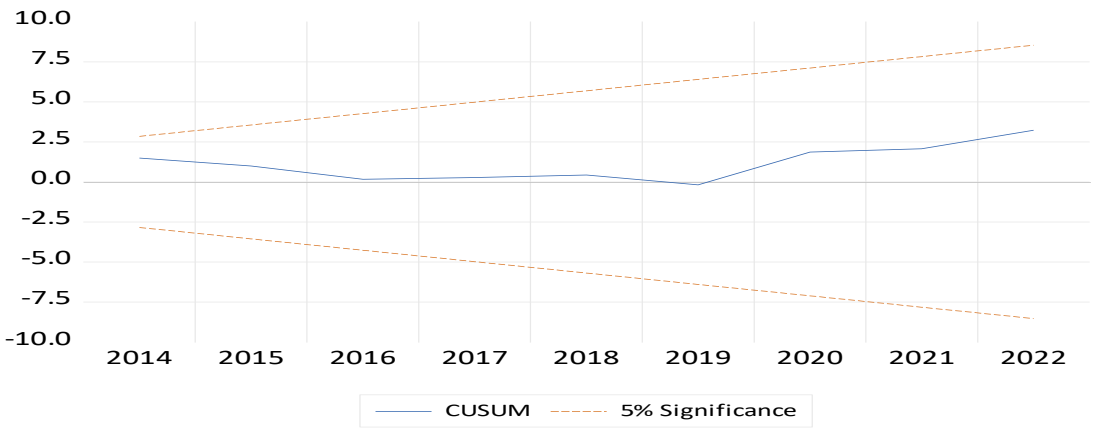

Figure 2. Structural Stability of the Estimated Model Using (CUSUM)

The relatively smooth movement of the CUSUM plot further suggests that any variations in the residuals are within acceptable limits and do not reflect systematic changes in the underlying relationships among the variables. This result confirms that the estimated coefficients are stable and reliable over time, implying that the model maintains consistent explanatory power across different sub-periods. Consequently, the absence of structural instability strengthens the robustness of the econometric results and supports the validity of subsequent interpretations and policy implications derived from the model.

Estimation of Short-run and Long-run Parameters and the Error Correction Term

In light of the diagnostic test results, which confirm both the stability of the estimated model and the existence of a long-run equilibrium relationship among the variables, the next step involves estimating the short-run dynamics through the Error Correction Model (ECM) within the ARDL framework, as presented in Table 7.

Table 7. Results of the Error Correction Model

ARDL Error Correction Regression

Dependent Variable: D(DY)
Selected Model: ARDL(1, 0, 0, 1, 0, 0)
Case 2: Restricted Constant and No Trend
Date: 08/29/25 Time: 03:06
Sample: 2004 2022
Included observations: 17

ECM Regression
Case 2: Restricted Constant and No Trend

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(X3)	1.03E-06	1.35E-07	7.613223	0.0000
CointEq(-1)*	-1.019432	0.062145	-16.40402	0.0000
R-squared	0.949589	Mean dependent var		0.758824
Adjusted R-squared	0.946228	S.D. dependent var		28.08973
S.E. of regression	6.513652	Akaike info criterion		6.695809
Sum squared resid	636.4149	Schwarz criterion		6.793834
Log likelihood	-54.91437	Hannan-Quinn criter.		6.705552
Durbin-Watson stat	2.250891			

Source: Eviews 13

The ECM results indicate a strong explanatory capacity, with an adjusted R-squared of approximately 0.946, suggesting that nearly 94% of the variations in the GDP deflator are explained by the model in the short run. A key feature of the ECM is the error correction term, CointEq(-1), which has a coefficient of -1.019432 and is highly statistically significant (P = 0.0000). The negative sign confirms the existence of a valid long-run equilibrium relationship, while its magnitude, slightly greater than unity, implies a rapid adjustment process, where deviations from equilibrium are corrected within a short period, potentially within one year, although the magnitude also suggests a slight overshooting effect before convergence is restored. In terms of short-run dynamics, the results reveal that changes in

broad money supply (D(X3)) exert a positive and highly significant impact on the GDP deflator, indicating that increases in liquidity directly translate into higher price levels.

The long-run estimation results presented in Table 8 provide important insights into the determinants of the GDP deflator in Iraq within the ARDL framework. The findings reveal a statistically significant and positive long-run relationship between oil revenues (X_1) and the GDP deflator, as indicated by the coefficient value of 0.000795 and a high level of significance (P = 0.0001). This result implies that increases in oil revenues lead to a sustained rise in the general price level over time. Economically, this relationship reflects the central role of oil income in driving aggregate demand through increased government spending and higher inflows of foreign currency, which expand domestic liquidity. In an economy characterized by limited productive capacity and a high dependence on imports, this expansion in demand tends to generate inflationary pressures rather than proportional increases in real output, thereby elevating the GDP deflator in the long run.

Table 8. Results of Long-term Relationship

ARDL Long Run Form and Bounds Test				
Dependent Variable: D(DY)				
Selected Model: ARDL(1, 0, 0, 1, 0, 0)				
Case 2: Restricted Constant and No Trend				
Date: 08/29/25 Time: 03:20				
Sample: 2004 2022				
Included observations: 17				
Conditional Error Correction Regression				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-6.997850	6.085918	-1.149843	0.2798
DY(-1)*	-1.019432	0.115013	-8.863619	0.0000
DX1**	0.000795	0.000113	7.030802	0.0001
DX2**	-0.051305	0.034727	-1.477389	0.1737
X3(-1)	2.38E-08	7.55E-08	0.316072	0.7592
DX4**	-7.84E-08	1.39E-07	-0.562613	0.5874
DX5**	2.09E-07	1.78E-06	0.117192	0.9093
D(X3)	1.03E-06	2.88E-07	3.583261	0.0059
* p-value incompatible with t-Bounds distribution.				
** Variable interpreted as Z = Z(-1) + D(Z).				

Source: Eviews 13

In contrast, the results indicate that other macroeconomic variables, namely the parallel exchange rate (X_2), government expenditure (X_4), and tax revenues (X_5), do not exhibit statistically significant long-run effects on the GDP deflator. This suggests that their influence on price dynamics is either indirect or subsumed within the broader impact of oil revenues. The parallel exchange rate, although theoretically important in open and import-dependent economies, appears to have a limited long-term impact, possibly due to policy interventions that stabilize exchange rate movements and dampen their cumulative inflationary effects. Similarly, government expenditure does not show an independent long-run influence, which may be explained by its strong dependence on oil revenues; thus, its effect is already captured through the oil revenue channel. Tax revenues, on the other hand,

remain relatively insignificant due to their comparatively small contribution to total public revenue and the limited effectiveness of the tax system in influencing aggregate demand. Overall, these findings highlight the structural dominance of the oil sector in shaping long-term price dynamics in Iraq, while underscoring the weak and non-independent role of other fiscal and monetary variables in determining the general price trajectory.

Discussion

The empirical results indicate that broad money supply represents the most influential determinant of the GDP deflator in the short run, highlighting the dominant role of liquidity expansion in shaping price dynamics. This suggests that monetary growth translates rapidly into inflationary pressures through demand-side channels, particularly in an economy with limited absorptive capacity. These findings are consistent with Rasheed and Al-Mzori (2025), who emphasize the role of monetary reserves and liquidity in driving inflation, as well as Kazam (2023), who points out the importance of monitoring liquidity conditions in oil-dependent contexts. However, this result also reflects a structural weakness in the Iraqi economy, where underdeveloped financial markets limit the effectiveness of indirect monetary policy transmission mechanisms. Critically, the strong and immediate impact of money supply suggests that monetary expansion may be operating in a largely unsterilized environment (Abdlaziz et al., 2022), thereby amplifying inflation rather than supporting productive investment. This raises concerns regarding policy coordination, as reliance on liquidity expansion without parallel supply-side reforms may exacerbate inflationary instability rather than promote sustainable growth.

In the long run, the results confirm a positive and statistically significant relationship between oil revenues and the GDP deflator, indicating that oil income remains the primary structural driver of inflation in Iraq. This relationship reflects the fiscal dominance of oil revenues, whereby increases in oil income expand government spending capacity and inject substantial liquidity into the economy. Such findings are consistent with Mohammad and Ahmed (2024) and Abdlaziz et al. (2022), who highlight the central role of oil revenues in shaping macroeconomic outcomes. Rasheed and Al-Mzori (2025) further support this view by identifying oil revenues as a key determinant of inflation through the GDP deflator. From a critical perspective, this outcome suggests that inflation in Iraq is not purely a monetary phenomenon but is deeply rooted in fiscal dynamics associated with oil dependence. The transmission of oil revenues into inflation indicates the vulnerability of the economy to external shocks, as fluctuations in global oil prices directly translate into domestic price instability (Ibady & Hammadi, 2023; Semenova & Al-Dirawi, 2022), thereby reinforcing structural imbalances and limiting the effectiveness of stabilization policies.

In contrast, the absence of a statistically significant long-run relationship between the GDP deflator and variables such as the parallel exchange rate, government expenditure, and tax revenues provides an important insight into the structural nature of the Iraqi economy. While conventional macroeconomic theory assigns a substantial role to these variables (Abraham, 2023; Maashani et al., 2026), their weak influence in this study suggests that their effects are largely mediated through oil revenues rather than operating independently. The parallel exchange rate, for instance, may have a short-term impact on imported inflation, but its long-term effect appears to be mitigated by policy interventions and exchange rate management mechanisms (Mukhamediyev et al., 2026). Similarly, government expenditure

does not exhibit an independent inflationary effect, as it is predominantly financed by oil revenues, making it an extension of oil-driven fiscal policy. The limited role of tax revenues further reflects the underdevelopment of the fiscal system, reducing its capacity to influence aggregate demand. Critically, these findings challenge the conventional effectiveness of standard policy instruments in resource-dependent economies and highlight the need for structural reforms to strengthen non-oil fiscal and monetary channels.

Although the findings generally align with existing studies in emphasizing the importance of liquidity and oil revenues, this study advances the literature by adopting the GDP deflator as a comprehensive measure of inflation. Unlike the commonly used CPI, the GDP deflator captures broader price dynamics across the entire economy, including both tradable and non-tradable sectors. Prior studies (Abdlaziz et al., 2022; Kazam, 2023; Mohammad & Ahmed, 2024; Rasheed & Al-Mzori, 2025) have largely relied on CPI-based measures, potentially overlooking the full extent of inflationary pressures. Furthermore, this study contributes by integrating fiscal and monetary variables within a unified analytical framework, rather than examining them in isolation. Another critical contribution lies in accounting for recent structural changes, particularly the 2020 exchange rate adjustment, which likely altered the transmission mechanisms between macroeconomic variables. This integrated approach provides a more nuanced and context-sensitive understanding of inflation dynamics in Iraq, thereby addressing important gaps in the existing literature.

In light of these findings, the study offers several important theoretical and practical implications. Theoretically, it reinforces the perspective that inflation in oil-dependent economies is driven by the interaction between fiscal and monetary channels, rather than being solely a function of monetary expansion. It also highlights the importance of incorporating broader inflation measures, such as the GDP deflator, in macroeconomic analysis to capture economy-wide price dynamics. Practically, the results suggest that policymakers should prioritize effective management of oil revenues and adopt coordinated fiscal–monetary strategies to control liquidity expansion and stabilize prices. Strengthening non-oil fiscal instruments, particularly taxation, is essential to reduce dependence on oil revenues and enhance policy flexibility. Additionally, promoting economic diversification and expanding domestic productive capacity are crucial to mitigating inflationary pressures arising from demand shocks. Overall, the study underscores the need for comprehensive structural reforms to improve macroeconomic resilience and achieve sustainable economic stability in Iraq and other resource-dependent economies.

The findings of this study also have important implications for understanding the linkage between oil revenues, economic growth, and inflation in the context of recent global energy disruptions. The positive long-run relationship between oil revenues and the GDP deflator suggests that increases in oil prices, by boosting government income and liquidity, tend to stimulate aggregate demand but simultaneously generate inflationary pressures rather than proportional real output growth. This dynamic is particularly relevant in light of the recent geopolitical tensions involving the US–Israel–Iran conflict, which have led to the near closure of the Strait of Hormuz, a critical global oil transit route. Current evidence indicates that disruptions in this strategic chokepoint, through which around 20% of global oil supply typically passes, have triggered sharp increases in oil prices and significant volatility in global energy markets. Such developments reinforce the study's core argument: in oil-dependent economies like Iraq, rising oil prices may temporarily enhance fiscal capacity and nominal economic growth, but they also intensify inflationary pressures due

to structural constraints such as limited domestic production and high import dependence. Critically, this suggests that external oil shocks, whether positive or negative, are transmitted into the domestic economy primarily through price channels, thereby amplifying macroeconomic instability. Consequently, the current global energy crisis further underscores the urgency of reducing reliance on oil revenues and strengthening economic diversification to mitigate the dual risks of inflation and growth volatility.

Conclusion

The findings of this study confirm that oil revenues constitute the dominant driver of inflation dynamics in Iraq, as reflected by movements in the GDP deflator and the broader rent-based structure of the economy. The results demonstrate that increases in oil revenues lead to a persistent rise in the general price level over the long run through interconnected fiscal and monetary channels, particularly via expanded government spending and increased domestic liquidity. While periods of relative price stability can enhance the contribution of oil revenues to real economic growth, the overall pattern suggests that inflation in Iraq is largely demand-driven and highly sensitive to oil revenue fluctuations. Moreover, the absence of a significant long-run relationship between the GDP deflator and variables such as the parallel exchange rate, government expenditure, and tax revenues indicates that conventional macroeconomic policy tools outside the oil sector have limited independent influence. These findings underscore the structural dominance of oil in shaping macroeconomic outcomes and highlight the need for more coordinated and forward-looking economic policies. In particular, effective management of oil revenues, strengthened fiscal discipline, and strategic investment in productive sectors are essential to mitigate inflationary pressures and support sustainable economic stability.

While this study provides important insights, several limitations should be acknowledged. The analysis is restricted to a specific time frame and a selected set of macroeconomic variables, which may limit the generalizability of the findings across different periods or economic contexts. In addition, the reliance on a single econometric framework, namely the ARDL approach, may not fully capture the complexity and potential nonlinearity of the relationships under investigation. Future research is therefore encouraged to incorporate a broader set of variables, including external shocks, financial development indicators, and institutional quality measures, to provide a more comprehensive understanding of inflation dynamics. Applying alternative modeling techniques, such as nonlinear or structural models, could also enhance the robustness of the results. Furthermore, deeper sectoral analyses, particularly focusing on non-oil industries, would offer valuable insights into the role of economic diversification in reducing dependence on oil revenues and mitigating long-term inflationary pressures.

Authors' Declaration

The authors made substantial contributions to the conception and design of this study. The authors take responsibility for the data analysis, interpretation, and discussion of the results. The authors have read and approved the final manuscript.

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References

Abdlaziz, R. A., Ahmed, Y. A., Mohammed, B. A., & Yaqub, K. Q. (2022). The impact of oil price shocks on economic growth in Iraq (1968–2019): *Symmetric and asymmetric co-integration. Qalaai Zanist Journal*, 7(2), 1045–1074. https://doi.org/10.25212/lfu.qzj.7.2.39

Abraham, A. (2023). Oil Revenue and Macroeconomic Performance in Nigeria. *Otuoke Journal of Social Sciences, 3*(1), 86-99. https://journals.fuotuoke.edu.ng/index.php/ojss/article/view/15

Ahmed, R., Chen, X. H., Kumpamool, C., & Nguyen, D. T. (2023). Inflation, oil prices, and economic activity in recent crisis: Evidence from the UK. *Energy Economics, 126*, 106918. https://doi.org/10.1016/j.eneco.2023.106918

Aker, H. A., & Akalpler, E. (2025). The Global Impact of Oil Revenue Dependency: Analysis of Key Indicators from Leading Energy-Producing Countries. *Energies, 18*(22), 6057. https://doi.org/10.3390/en18226057

Aladwani, J. (2025). Influence of oil price fluctuations on inflation uncertainty. *Journal of Chinese Economic and Foreign Trade Studies, 18*(1), 44-85. https://doi.org/10.1108/JCEFTS-06-2024-0045

Al Rasasi, M., Qualls, J., & Alghamdi, B. (2019). Oil revenues and economic growth in Saudi Arabia. *International Journal of Economics and Financial Research, 5*(3), 49-55. https://doi.org/doi.org/10.32861/ijefr.53.61.77

Al-Saedi, S. H. (2025). Contribution of oil revenues to the development of economic development indicators in Iraq (2005-2023). *Calitatea, 26*(209), 92-98. https://doi.org/10.47750/QAS/26.209.09

Al-Sawaie, K. M., Mohammad, S. I. S., Al-Smeiran, M. M., Oraini, B. A., Vasudevan, A., Alshdaifat, N., & Al Shurideh, M. (2025). Oil price volatility and its effects on macroeconomic stability in Jordan: A structural VAR approach. *International Journal of Energy Economics and Policy, 15*(4), 338-346. https://doi.org/10.32479/ijeep.19908

Asab, N. A. (2025). Are supply shocks a key driver of global inflation? Evidence from CPI and GDP deflator analysis. *Research in Globalization, 10*, 100279. https://doi.org/10.1016/j.resglo.2025.100279

Awad, K. R., Jassim, A. M., & Khuzam, R. N. (2024). Analysis of the Impact of Oil Revenues on Certain Indicators of Iraq's Economic Development for the Period (2004–2020). In *The AI Revolution: Driving Business Innovation and Research: Volume 2* (pp. 585-598). Cham: Springer Nature Switzerland. https://doi.org/10.1007/978-3-031-54383-8_45

Cao, H., Khan, F. U., Shaikh, P. A., Khan, F., Zehri, M., & Yousaf, H. (2025). Does oil price shock drive inflation? Evidence from G20 countries. Journal of the Knowledge Economy, 16(1), 904-924. https://doi.org/10.1007/s13132-024-01877-1

Choi, S., Furceri, D., Loungani, P., Mishra, S., & Poplawski-Ribeiro, M. (2018). Oil prices and inflation dynamics: Evidence from advanced and developing economies. *Journal of International Money and Finance, 82*, 71-96. https://doi.org/10.1016/j.jimonfin.2017.12.004

Drebee, H. A., & Razak, N. A. A. (2022). Impact of oil price fluctuations on economic growth, financial development, and exchange rate in Iraq: Econometric approach. *Industrial Engineering & Management Systems, 21*(1), 110-118. https://doi.org/10.7232/iems.2022.21.1.110

Ebimobowei, A. (2022). Oil revenue and economic growth of Nigeria: 1990–2019. *African Journal of Economics and Sustainable Development, 5*(1), 17-46. https://doi.org/10.52589/AJESD-JWZXIFNW

Ha, J., Kose, M. A., Ohnsorge, F., & Yilmazkuday, H. (2023). Understanding the global drivers of inflation: How important are oil prices?. *Energy Economics, 127*, 107096. https://doi.org/10.1016/j.eneco.2023.107096

Herrera, A. M., Karaki, M. B., & Rangaraju, S. K. (2019). Oil price shocks and US economic activity. *Energy policy, 129*, 89-99. https://doi.org/10.1016/j.enpol.2019.02.011

Ibady, B. M., & Hammadi, I. B. (2023). The role of oil revenues to enhance international reserves in Iraq for the period (2004-2021). *Russian Law Journal, 11*(10S), 173-191.

Kazam, B. G. (2023). The impact of oil price fluctuations on inflation rates in Iraq (2004–2020). *International Journal of Research in Human Resource Management, 5*(1), 86-89. https://doi.org/10.33545/26633213.2023.v5.i1a.135

Khazaleh, M. (2024). The relationship between crude oil prices and gdp, inflation, and unemployment: Evidence from Jordan. *Manarah Business Series*, 3(2). https://doi.org/10.59759/business.v3i2.595

Magaji, S., Musa, I., & Ismail, Y. (2025). Evaluating the link between oil price and macroeconomic dynamics in Nigeria. *New Advances in Business, Management and Economics, 5*(5), 96-115. https://doi.org/10.9734/bpi/nabme/v5/4860

Maashani, S. S. S., Gamal, A. A. M., Shaarani, A. Z., Rambeli, N., & Zulkifli, N. (2026). The role of specific macroeconomic factors on tax revenue policy in an oil-dependent economy: evidence from Oman. *Review of Economics and Political Science, 11*(1), 60-78. https://doi.org/10.1108/REPS-06-2024-0017

Mensi, W., Rehman, M. U., Hammoudeh, S., Vo, X. V., & Kim, W. J. (2023). How macroeconomic factors drive the linkages between inflation and oil markets in global economies? A multiscale analysis. *International Economics, 173*, 212-232. https://doi.org/10.1016/j.inteco.2022.12.003

Mohaddes, K., & Raissi, M. (2021). The U.S. oil supply revolution and the global economy. *Energy Economics, 94*, 105081. https://doi.org/10.1016/j.eneco.2020.105081

Mohammad, W. S., & Ahmed, D. H. (2024). The impact of financial sustainability on Iraq's economic growth (2004–2022). *Humanities Journal of University of Zakho, 12*(1), 120–133. https://doi.org/10.26436/hjuoz.2024.12.1.1320

Mohammed, J. I., Karimu, A., Fiador, V. O., & Abor, J. Y. (2020). Oil revenues and economic growth in oil-producing countries: The role of domestic financial markets. *Resources Policy, 69*, 101832. https://doi.org/10.1016/j.resourpol.2020.101832

Mukhamediyev, B., Khitakhunov, A., Temerbulatova, Z., Mukhamediyeva, A., & Sabikenova, A. (2026). The Effects of Oil Revenue Allocation between Accumulation and Current Use on Macroeconomic Responses to External and Internal Shocks in a Small Oil-exporting Economy. *International Journal of Energy Economics and Policy, 16*(2), 537-546. https://doi.org/10.32479/ijeep.22421

Nishandini, E., Sugiharti, T., & Wulandari, R. (2026). The Effect of World Oil Price Returns, Inflation Returns, and Interest Rate Returns on JCI Returns on the IDX for the Period

2020-2024. *International Journal of Economics and Management Research, 5*(1), 568-582. https://doi.org/10.55606/ijemr.v5i1.704

Okwueze, F. O., Gueh, D., Kaze, V., Krivins, A., & Etalong, T. (2025). Oil Revenue Dependency: economic and legal challenges. *Access Journal, 6*(2), 270-286. https://doi.org/10.46656/access.2025.6.2(2)

Oladejo, T. (2025). Non-oil revenue and economic growth in Nigeria. *Journal of Accounting, Finance, and Contemporary Management Research, 2*(1), 72-93. https://jafacomar.lautech.edu.ng/index.php/jafacomar/article/view/31

Olasupo, S., Owolabi, B., Owolabi, O., Akinbode, J., Afolabi, O., Otekunrin, A., ... & Doorasamy, M. (2026). Oil Revenue and Non-Oil Revenue Impact on Economic Development. *International Journal of Energy Economics and Policy, 16*(1), 988-994. https://doi.org/10.32479/ijeep.20016

Rasheed, S. A. (2023). The impact of oil price volatility on economic growth and stability in Iraq through the public expenditure for the period (2003-2020). *International Journal of Professional Business Review*, 8(6), 1-35. https://openaccessojs.com/JBReview/article/view/2059/1032

Rasheed, K. N., & Al-Mzori, B. I. (2025). An econometric study of some macroeconomic indicators on inflation in Iraq (2004–2023). *Journal of Accounting and Financial Studies*, *20*(71), 332–352. https://jpgiafs.uobaghdad.edu.iq/index.php/JAFS/article/view/2154

Sakanko, M. A., Adeniji, S. O., & Akume, M. (2025). Exploring the drivers of inflation in Nigeria: the roles of insecurity, oil, food and crop production. *African Journal of Economic and Management Studies*. https://doi.org/10.1108/AJEMS-09-2024-0557

Semenova, T., & Al-Dirawi, A. (2022). Economic development of the Iraqi gas sector in conjunction with the oil industry. *Energies, 15*(7), 2306. https://doi.org/10.3390/en15072306

Suresh, G., Naveen, R., & Naveenan, R. V. (2026). Oil Price and Inflation in India: Exploring Asymmetric Relationship with the NARDL Approach. FIIB Business Review, 23197145261421703. https://doi.org/10.1177/23197145261421703

Wang, G., Sharma, P., Jain, V., Shukla, A., Shabbir, M. S., Tabash, M. I., & Chawla, C. (2022). The relationship among oil prices volatility, inflation rate, and sustainable economic growth: Evidence from top oil importer and exporter countries. *Resources Policy, 77*, 102674. https://doi.org/10.1016/j.resourpol.2022.102674

Ye, M., Si Mohammed, K., Tiwari, S., Ali Raza, S., & Chen, L. (2023). The effect of the global supply chain and oil prices on the inflation rates in advanced economies and emerging markets. *Geological Journal, 58*(7), 2805-2817. https://doi.org/10.1002/gj.4742