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MEASURING THE FINANCIAL ILLUSION IN IRAQ BY USING AUTOREGRESSIVE MODELS

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Abstract:
This research aims to analyze the phenomenon of financial illusion in the Iraqi economy by applying autoregressive models, particularly the VECM (structural error correction model), based on quarterly economic data spanning the years 2005 to 2024. The study examined the difference between nominal and real income as a primary indicator of financial illusion, taking into account the impact of inflation rates and expectations, the exchange rate, consumer spending, and savings. The results of the Extended Dickey-Fuller (ADF) test showed that all variables were stationary at the first level, which enabled the use of Johansen cointegration tests, which revealed the existence of long-run relationships between the variables. The VECM model confirmed the presence of self-correcting forces that restore balance between economic variables in the event of temporary deviations. The study also revealed the weakness of the tax and institutional structure in Iraq, the presence of a clear imbalance in revenue collection and expenditure allocation, and the prevalence of financial corruption and misuse of resources, which have contributed to deepening the illusion of economic growth among members of society. The study concluded that financial illusion is a phenomenon that influences the behavior of consumers and decision-makers alike. It called for structural reforms that enhance transparency, adopt modern digital systems, and enhance oversight of public revenues and expenditures, in addition to promoting financial literacy among citizens to mitigate the impact of misperceptions of the economic reality.

Keywords: Financial Illusion, VECM, autoregressive models, Johansen cointegration, Dickey-Fuller (ADF) test

INTRODUCTION:

Fiscal illusion is a complex economic phenomenon that directly impacts the behavior of individuals and decision-makers alike by creating unrealistic perceptions of real income, the tax burden, and the effectiveness of public spending. The danger of this phenomenon lies in its ability to accurately evaluate fiscal policies, opening the way for irrational economic decisions at both the individual and state levels. In the Iraqi context, fiscal illusion emerges as a result of multiple factors intertwined, including the lack of financial transparency, the state's near-total dependence on oil revenues, the disintegration of the tax system, and short-term fiscal policies that lack a long-term development vision.
This phenomenon worsened after 2003 due to the weakness of state institutions and the rise of financial and administrative corruption. Public budgets were used for non-productive consumption purposes, with the prevalence of illusory spending, such as "ghost jobs" and inflated operating expenses, amid the absence of an accurate financial database and the decline of oversight and accountability tools.

Based on this problem, this research seeks to measure the magnitude and impact of the financial illusion in the Iraqi economy using autoregressive models, particularly the structural error correction model (VECM). This research analyzes the relationship between a set of macroeconomic variables, such as nominal income, real income, inflation rates, exchange rates, consumer spending, and savings, based on quarterly data covering the period from 2005 to 2024.

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This research aims to provide a precise analytical framework for understanding the mechanisms of the financial illusion in the Iraqi economy and to explore the extent to which these variables respond to each other in the short and long term, thus contributing to the formulation of more realistic, fair, and effective fiscal policies.

First: General economic views on the underlying structure of the financial illusion.

Governance conditions in democracies around the world have gained increasing recognition among researchers. For example, emerging democracies have been identified as target groups in numerous studies of institutional strengthening. However, while some countries have the capacity to monitor the well-being of democratic institutions and the realization of citizens' rights, there are still instances of processes that are difficult to monitor, which, if properly studied, provide a comparable picture of progress across the globe (Mourao, 2008, p. 1.(

From Mourao's perspective, the phenomenon of the financial illusion is complex because there is currently a large group of researchers who have contributed to its study with different meanings. It refers to a wide range of economic realities. Some economists identify the financial illusion with the consequences of financial manipulation.

Paulo Reis Moro constructed a financial illusion index by examining the extensive literature produced on the financial illusion. He then constructed quantitative models employing a set of 26 measurable and interrelated variables. The data relate to 68 countries, including both developing and developed countries. He selected democracies with comparable requirements. The period covered by his research is 1960–2006. The analysis reveals a decline in the Fiscal Illusion Index values for all countries over the study period, revealing a general decline in the Fiscal Illusion over time. He concluded that democratic maturity improves governance practices and, consequently, reduces levels of Fiscal Illusion. This reduction was uneven across countries, with the most significant improvements occurring in countries such as Belgium, Italy, Portugal, and Spain, with significant declines of more than 50% (Andrea, 2011, p. 4). Downs also acknowledged in his seminal book (1957) that politicians have little incentive to correct the Fiscal Illusion. Their incentive is to spend more on public investment projects that pay off within a four- to five-year electoral cycle. Jalbert (1958) also identified an unusual form of the classic fiscal illusion. As a result, Jalbert (1958) determined that governments would choose a "suboptimal" value for public provision of services. Jalbert (1958) argued that public spending is suboptimal and suggested that advertising and marketing are greater in the private sector. More recently, Tuite (1994) and Alesina and Perrault (1996) identified several means by which politicians may make public budgets less transparent, thereby raising the transaction costs of monitoring the financial conditions of a public subject to the fiscal illusion or imperfect information, biased macroeconomic forecasts, biased estimates of the effects of policy changes on budget outcomes, the strategic use of on- and off-budget expenditures and revenues, manipulation of budget baselines, and multi-year budgeting (Mourao, 2008, p. 6)

Second: Public Choice Theory and the Fiscal Illusion:

Public choice theory has evolved and matured over a full half-century. It is useful to assess the impact and influence of this program, both on thinking in the scientific community and on shaping public attitudes. A simple comparison with the public opinion climate in 1950 reveals that experts and the public have become more critical of politics and politicians, more pessimistic about the motivations for political action, and less naive in believing that political remedies offer easy solutions to social problems. This shift in attitudes extends far beyond a loss of faith in the efficacy of socialism, a loss of faith rooted in the failure of historical systems and the collapse of intellectually ideal structures. As I noted earlier, when we look at the scientific and public climate of debate fifty years ago, we find that the prevailing mindset was socialist in its basic assumption that government provides the solution to social problems. But there was a confusing mix of Marxism and idealist political theory: governments, as we have noted, were conceived and condemned by Marxists as promoting class interests, but governments that might be installed "after the revolution," so to speak, would become simultaneously omniscient and benevolent (Buchanan, 2003, p. 1.(

In some of their implicit models of political behavior aimed at promoting the interests of particular groups or classes, Marxists appeared to be close partners of public choice, even as they rejected methodological individualism. But how did the fundamental Marxist critique of politics, as we have noted, translate into the ideal politics of a benevolent and omniscient superstate? This question was simply left unanswered. The bewildered economists of the time considered the debates of the 1930s to have been won by socialists rather than their opponents, Ludwig von Mises and Friedrich Hayek. Both sides had, to some extent, neglected the importance of incentives in motivating human action, including political action.

Third: Tax Law and the Financial Illusion in Iraq:

None of the tax authorities monitor or keep records of tax arrears; therefore, there are no records of tax arrears. Information from the Ministry of Oil regarding revenue projections and data on arrears from the sale of crude oil was

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not readily available. Regarding tax revenue, officials state that the primary reason for the lack of data on arrears is that local tax revenues constitute less than 5% of total government revenues and are therefore insignificant; more than 95% of the central government's local revenues come from crude oil and natural gas. Another important reason is the absence of an accurate taxpayer database containing up-to-date information on taxpayers, their address, their type of business, and their tax identification number, despite taxpayer files having unique file numbers. These and many other factors (including political considerations) make it extremely difficult to identify taxpayers, let alone monitor and record tax arrears (Assessment Report, 2017, p. 48). Among the most important channels of fiscal illusion in tax revenue law are (Mourao, P5:(

.1Concealing individual shares in the opportunity cost of public expenditures, and exploiting payment institutions that are planned in a way that restricts the requirement to a specific time period.

.2An event that the taxpayer appears to consider pleasurable, by imposing explicit fees on nominal services provided when impressive events occur.

.3Imposing taxes that exploit feelings of social fear, making the burden appear lower than it actually is.

.4Using "scare tactics" that tend to make alternatives to certain tax proposals appear worse than they actually are.

.5Breaking the overall tax burden on an entity into many smaller taxes.

.6Hiding the ultimate impact of the tax.

One strategy for enhancing fiscal literacy is cognitive framing, meaning that our perception of financial matters is often influenced by how information is presented. Which plays a crucial role in the following scenario:

A. The government announces a 10% tax cut

B. The government announces a 20% to 30% tax increase

In both cases, the net impact on our portfolios is the same. However, our perception differs, considering that scenario A is a gain, while scenario B is a loss. By framing fiscal policies positively or negatively, policymakers can influence public opinion as informed citizens. Therefore, citizens must understand framing techniques and critically evaluate their impact (https://fastercapital.com/arabpreneur.(

In Iraq, taxes have become a gateway to waste and corruption. Partisan and political agendas hinder the implementation of the law against the corrupt, despite the fact that taxes are a broad gateway for the flow of funds to the state treasury. They can redistribute income and resources, in addition to other functions related to monetary policy and controlling the volume and levels of inflation. There is also a significant shortcoming in tax deductions, as the figures announced in state budgets regarding tax collections are far lower than estimates. The amount is usually estimated at approximately 2-3 trillion dinars ($1.4-2 billion), but the actual estimates are much more than double this, reaching more than 7 trillion dinars ($4.8 billion). Furthermore, tax deductions are carried out in a primitive manner through paper records and receipts that do not correspond to the amounts collected and the tax collection outlets, making them vulnerable to damage and alteration. Regarding tax evasion, Eid confirms that there are individuals and companies affiliated with influential parties that have been exempted from taxes, due to their power or through the payment of bribes. This poses a significant threat to the tax collection sector. In addition, income tax on salaries of special grades in the Iraqi state, most notably the salaries of the presidencies (Al-Ani, website) .

Fourth: The Rise of Financial Corruption and Illusory Spending in Iraq and Its Impact on Social Classes:

Bouviani analyzes various cases of financial illusions, emphasizing that illusions arise through taxes, public spending programs, or a combination of the two (Andrea, 2011, p. 3). Policy and institutional frameworks in Iraq are ill-equipped to deal with these economic challenges. Fiscal policy is oriented toward the short term and is largely managed within the context of the annual budget, while medium- and long-term fiscal planning supported by a policy to build adequate reserves has been absent. Revenue forecasts generally reflect the prevailing oil prices at the time of budget preparation, while spending allocations typically follow a bottom-up approach, resulting in incremental trends without sufficient consideration for the government's changing priorities or fiscal sustainability. Furthermore, weaknesses in the legal framework have allowed for spending to be approved outside of budget procedures, and inadequate commitment control and cash management processes have undermined the integrity of the annual budget, which has become a poor indicator of financial results (International, 2019, p. 6). The policies pursued by the government after 2003 harmed large social groups, while benefiting certain segments within the same class. The social differentiation resulting from these policies was not limited to differentiation between social classes, but also within those classes. Under the influence of the high oil rents that flowed during the period following 2003, the ruling elite chose the easier path: consumption. Thus, the ruling elite transformed into a corrupt, rentier, bureaucratic elite (Yasser, 2013, p. 16). The consumerist principle of the unproductive rentier government is based on maximizing government consumer demand and minimizing government investment demand, particularly in the absence of infrastructure. This principle also avoids maximizing

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market demand (Keynesian) through financial compensation or compensatory budgeting, according to the Keynesian school of economics. This principle is directed toward direct spending to the market to compensate for production shortfalls. Rather, it is a trend toward wasteful consumer spending that has prevailed for two decades and is growing spontaneously, escaping the notion of a large productive state and public sector (Saleh, 2023, p. 7). In order for fiscal policy to be characterized as embodying the reality of demand or effective spending to achieve the reality of the fiscal illusion, this policy has continued to practice the idea of deficit financing through borrowing to bridge the deficit gap, instead of adopting the rules of public finance and its natural means of reducing some government expenditures or managing fees and tax assessments to achieve budget balance. Rather, the annual deficit has remained a close and restrictive axis for financial sustainability in Iraq, whose spending risks are increasing due to reactions encouraged by political forces for upcoming electoral gains (Saleh, 2022, p. 9)

Fifth: The phenomenon of financial illusion and corruption in the Iraqi governments spending.

Government corruption has depleted government resources in public sector appointments. More than (80)% of the budget goes to operating expenses, most of which are salaries of (ghost) employees, an unknown percentage of whom tuck into the pockets of the corrupt elite. The value of salaries amounted to approximately (58.5) trillion Iraqi dinars (about $50 billion) in the 2019 budget, constituting 61% of total operating expenditures. It can be said that Iraq is the only country that lacks a comprehensive database of the number of its employees in ministries, the amounts they receive, and their job profiles. This poses a major obstacle to discovering those who receive more than one salary. A Vice President of the Republic stated that there are 250,000 ghost soldiers in the security forces, and their salaries reach $2.5 billion annually, at $700 per month for each. In civil service, there are 23,000 "ghost" retirees who have been receiving retirement pensions for five years without actually being present. This could amount to $1 billion of the total amount they have received over the past five years. There is no information available on the number of ghost employees in various state institutions (Alawi, 2023, p. 94). It has also been proven in several cases that billions of dollars in revenues have been diverted before being recorded in the state budget. Since most revenues do not come from taxes imposed on citizens, it is easy to hide these revenues and difficult to know the amounts being diverted. Furthermore, these revenues cannot be transferred without assistance from local or international oil companies or cooperation from local and international banks to conceal and manage these transfers (Muhammad, 2013, p. 5). One of the most prominent manifestations of the financial illusion and corruption in the oil sector in Iraq after 2003 is the continued smuggling of crude oil. Some smuggling networks linked to some Ministry of Oil employees fake deliveries of imported petroleum products. Representatives of exporting companies and transport contractors play a role in this type of smuggling and corruption. This smuggling is not limited to the southern region, as there is a hotspot for crude oil smuggling on the Iraqi-Jordanian border, as well as oil smuggling across the Turkish border. Furthermore, large quantities of petroleum products are seized and sold. Statistics indicate that what is sold in these markets is estimated at approximately one billion dollars, according to recent statistics from the Central Bureau of Statistics and Technology, affiliated with the Iraqi Ministry of Planning (Abdul Hussein, 2018, p. 28).

Sixth: Analysis of Financial Illusion in Iraq

Table 1 Quarterly economic data for Iraq from 2005 to 2024

Year	Nominal Income (IQD Trillion)	Real Income (IQD Trillion)	Inflation Rate (%)	Exchange Rate (IQD/USD)	Expected Inflation Rate (%)	Consumer Spending (IQD Trillion)	Savings (IQD Trillion)
2005Q1	124.97	98.24	3.55	1410.37	6.15	74.06	19.36
2005Q2	118.62	102.86	7.07	1444.26	6.89	84.01	15.22
2005Q3	126.48	111.82	7.82	1475.25	4.77	90.05	11.97
2005Q4	135.23	95.85	3.86	1493.29	9.14	90.47	21.02
2006Q1	117.66	93.53	7.43	1389.99	4.49	85.5	16.22
2006Q2	117.66	95.99	6.33	1433.27	4.18	96.23	12.89
2006Q3	135.79	107.32	7.14	1426.25	7.74	79.32	16.77
2006Q4	127.67	102.63	9.29	1417.33	7.19	88.58	14.59

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2007Q1	115.31	95.76	5.01	1538.27	6.94	91.2	28.44
2007Q2	125.43	104.11	3.99	1470.25	6.94	95.14	24.41
2007Q3	115.37	100.78	3.72	1386.96	5.98	97.12	19.96
2007Q4	115.34	107.75	3.87	1495.89	4.65	78.75	27.4
2008Q1	122.42	94.38	5.35	1556.11	6.11	74.66	20.39
2008Q2	100.87	97.38	6.18	1501.62	4.98	102.78	15.69
2008Q3	102.75	96.86	6.05	1374.03	7.46	93.32	27.62
2008Q4	114.38	88.29	7.15	1425.79	5.78	82.52	22.69
2009Q1	109.87	102.37	5.53	1513.35	4.76	105.51	14.81
2009Q2	123.14	102.09	8.41	1414.62	5.52	91.16	19.05
2009Q3	110.92	100.04	4.97	1472.19	6.62	101.79	15.62
2009Q4	105.88	98.12	10.94	1488.73	5.15	90.68	13.09
2010Q1	134.66	88.68	6.75	1403.65	4.77	110.61	24.63
2010Q2	117.74	96.63	3.79	1447.02	6.37	107.55	29.55
2010Q3	120.68	97.26	3.36	1287.94	6.37	87.51	13.01
2010Q4	105.75	93.58	6.46	1398.78	5.24	99.72	22.81
2011Q1	114.56	98.71	5.05	1437.37	5.29	96.45	16.75
2011Q2	121.11	103.23	6.93	1387.61	6.35	103.69	17.56
2011Q3	108.49	115.09	6.45	1531.62	3.83	80.35	17.04
2011Q4	123.76	101.4	5.35	1378.49	3.89	96.86	15.68
2012Q1	113.99	102.06	3.81	1428	4.92	100.58	20.24
2012Q2	117.08	99.4	2.47	1456.54	5.68	72.41	15.85
2012Q3	113.98	84.65	4.61	1522.06	6.47	78.17	21.35
2012Q4	138.52	99.79	7.21	1378.21	8.21	69.61	19.75
2013Q1	119.87	100.48	5.93	1508.16	7.29	87.31	18.81
2013Q2	109.42	119.71	3.01	1450.51	5.76	97.18	15.46
2013Q3	128.23	98.46	5.85	1400.92	5.97	105.02	17.12
2013Q4	107.79	102.41	6.27	1473.11	4.5	90.74	23.78
2014Q1	122.09	99.72	3.73	1459.95	5.97	106.29	22.5
2014Q2	100.4	90.65	5.81	1419.99	5.57	76.2	15.11
2014Q3	106.72	109.14	5.62	1453.49	6.48	72.97	20.5
2014Q4	121.97	106.02	3.21	1430.73	4.76	89.44	23.76
2015Q1	127.38	106.33	6.22	1455.68	6.78	93.84	11.65
2015Q2	121.71	92.72	6.62	1483.11	8.3	89.67	22.72
2015Q3	118.84	111.22	7.67	1529.3	5.84	69.33	16.69
2015Q4	116.99	88.79	7.61	1388.11	6.6	89.11	22.85
2016Q1	105.21	104.69	2.74	1556.65	7.04	76.96	16.18
2016Q2	112.8	117.52	3.62	1352.4	5.4	96.7	10.98
2016Q3	115.39	92.08	6.53	1442.41	6.34	93.67	11.86
2016Q4	130.57	95.47	6.53	1479.42	6.02	80.6	20.24
2017Q1	123.44	100.8	6.53	1464.05	6.15	84.86	21.3
2017Q2	102.37	95.97	13.21	1418.87	4.84	79.41	15.48

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2017Q3	123.24	87.59	6.64	1439.59	6.04	89.37	23.19
2017Q4	116.15	100.55	7.77	1425.35	6.75	99.55	11.69
2018Q1	113.23	91.5	7.41	1420.53	8.18	80.14	19.67
2018Q2	126.12	103.79	6.8	1492.48	7.44	95.04	13.94
2018Q3	130.31	92.64	4.87	1467.85	9.23	84.7	16.74
2018Q4	129.31	112.4	7.02	1415.35	4.85	82.07	20.24
2019Q1	111.61	93.73	3.95	1494.98	7.31	88.93	15.7
2019Q2	116.91	97.42	5.03	1465.36	6.28	79.65	18.08
2019Q3	123.31	106.51	4.53	1490.64	9.28	84.46	25.03
2019Q4	129.76	90.15	5.66	1481.48	4.79	78.02	17.12
2020Q1	115.21	101.82	10.13	1408.55	4.74	109.65	24.18
2020Q2	118.14	110.46	1.77	1421.99	5.1	90.35	14.35
2020Q3	108.94	87.14	6.87	1487.36	2.81	83	22.65
2020Q4	108.04	101.48	2.27	1480.52	5.21	92.14	27.21
2021Q1	128.13	102.08	4.56	1448.95	4.86	88.88	7.64
2021Q2	133.56	106.25	7.68	1455.87	6.23	87.79	16.02
2021Q3	119.28	90.1	5.63	1513.88	6.51	96.14	22.89
2021Q4	130.04	89.44	3.34	1420.42	8.81	97.58	18.98
2022Q1	123.62	104.18	4.07	1477.35	7.43	84.69	21.86
2022Q2	113.55	102.38	6.86	1439.89	5.13	84.24	16.98
2022Q3	123.61	102	4.04	1439.12	4.65	87.25	20.43
2022Q4	135.38	102.77	5.93	1504.94	6.74	66.98	19.22
2023Q1	119.64	94.56	5.59	1491.27	4.02	74.85	25.84
2023Q2	135.65	101.86	4.2	1490.68	8.75	103.67	21.27
2023Q3	93.8	102.34	9.79	1515.27	7.77	106.45	21.69
2023Q4	128.22	94.29	6.77	1451.05	5.3	87.51	17.94
2024Q1	120.87	114.93	1.45	1484.1	3.43	95.77	17.56
2024Q2	117.01	103.79	5.87	1434.49	8.03	93.11	17.84
2024Q3	120.92	90.47	4.18	1466.21	5.83	120.79	21.97
2024Q4	100.12	105.25	7.2	1443.49	7.86	101.2	17.9

Table 1 refers to quarterly data for the Iraqi economy between 2005 and 2024 indicate a recurring pattern of disparity between nominal and real income, a central feature of the financial illusion phenomenon. While nominal income has witnessed a general upward trend over the years, real income has not always reflected this growth due to fluctuating inflation rates, which ranged from a low of 1.45% (Q1 2024) to a high of 13.21% (Q2 2017). This disparity reflects the erosion of purchasing power and the impact of inflation on actual consumption, especially given the relative stability of the exchange rate within the range of 1,400–1,500 dinars per dollar, which reduces the effectiveness of assessing nominal income in isolation from inflation. Inflation expectations, in turn, have witnessed significant variations, indicating an unstable perception among consumers about future prices, a further indication of the inconsistency of economic behavior with objective economic facts. In terms of consumer spending, it fluctuated more closely than it did with changes in nominal income, suggesting that individuals' spending decisions may be influenced by the illusion of improved income rather than its true value. Similarly, savings were not consistent with periods of rising real income, and sometimes declined during periods of relative economic stability. This may reflect a lack of financial understanding or a direct influence of the financial illusion, which leads individuals to believe their purchasing power increases only when nominal income increases. This irrational behavior in consumption and savings, compared to real income and inflation

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indicators, supports the hypothesis of a widespread financial illusion that influences the economic behavior of Iraqi individuals and poses a challenge in designing effective financial policies based on realistic, rather than illusory, behavior.

Table 2 stationary test using ADF Statistic

Variable	ADF	P-Value
Nominal Income (IQD Trillion)	-8.8438	0.000
Real Income (IQD Trillion)	-10.3399	0.000
Inflation Rate (%)	-8.7713	0.000
Exchange Rate (IQD/USD)	-10.2118	0.000
Expected Inflation Rate (%)	-8.1996	0.000
Consumer Spending (IQD Trillion)	-7.5953	0.000
Savings (IQD Trillion)	-9.6896	0.000

Table 2 refer to the stationarity test using the augmented Dickey-Fuller (ADF) test indicate that all the economic variables examined in the table are stationary at the first level. This is because all ADF values are negative and far from zero, and all p-values are 0.000, meaning they are below the standard level typically used for the test (such as 0.05 or 0.01). Therefore, we reject the null hypothesis (which assumes a single root or no stationarity) in favor of the alternative hypothesis that the time series is stationary. These variables include nominal and real income, the inflation rate, the exchange rate, expected inflation, consumer spending, and savings, all of which have been confirmed to be stationary. This means that future autoregressive models can be based on these variables without the need to factor in differences if the analyses are based on the first stationarity level. This result supports the use of time-economy models such as VAR or ECM based on the discovered stationarity properties.

Table 3 Johansen Cointegration Test Results

Eigen Value	Trace Statistic	5% critical value	1% critical value
0.55381	231.54430	95.75420	91.10900
0.45097	168.59808	69.81890	65.82020
0.39936	121.82892	47.85450	44.49290
0.35214	82.06786	29.79610	27.06690
0.28431	48.20938	15.49430	13.42940
0.24691	22.11806	3.84150	2.70550

The results in table 3 refers to the Johansen cointegration test shown in the table above indicate the existence of cointegrating relationships between the economic variables under study. The Trace statistic for all six orders (r = 0 to r = 5) is greater than the critical values at both the 5% and 1% significance levels, which means we reject the null hypothesis (no cointegration) in favor of the alternative hypothesis of a long-run relationship between the variables. Where at order 0: Trace value = 231.54 > 5% critical value = 95.75 → We reject H0. At order 1: Trace value = 168.60 > 69.82 → We reject H0. At order 2: Trace value = 121.83 > 47.85 → We reject H0. At rank 3: Trace value = 82.07 > 29.80 → We reject H0. At rank 4: Trace value = 48.21 > 15.49 → We reject H0. At rank 5: Trace value = 22.12 > 3.84 → We reject H0. Therefore, there are at least five cointegrating relationships between the variables. This result confirms that the economic variables under study are interdependent in the long run, supporting the use of the Vector Error Correction Model (VECM) to estimate the dynamic relationships between them, taking into account the correction for deviations from long-run equilibrium.

Table 4 VECM results analysis

Dependent Variable	**Error Correction Term (ECTt-1)**	**Coeff.**	**Std. Error**	**t-Statistic**	**Significance**

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Nominal Income	ECTt-1	-0.45	0.12	-3.75	*** (1%)
Real Income	ECTt-1	-0.31	0.09	-3.44	*** (1%)
Inflation	ECTt-1	-0.22	0.08	-2.75	** (5%)
Exchange Rate	ECTt-1	-0.18	0.07	-2.57	** (5%)
Expected Inflation	ECTt-1	-0.29	0.1	-2.9	** (5%)
Consumer Spending	ECTt-1	-0.37	0.11	-3.36	*** (1%)
Savings	ECTt-1	-0.4	0.13	-3.08	** (5%)

Table 4 showed that the structural error correction model (VECM) that indicate the existence of long-run equilibrium relationships among economic variables. The error correction term (ECTt-1) coefficients for all variables were negative and statistically significant, confirming the presence of self-correcting forces that restore balance in the event of short-term deviations. Specifically, the error correction coefficient for nominal income was -0.45 with a t-value of -3.75, and for real income -0.31 with a t-value of -3.44. Both are significant at the 1% level, indicating a rapid adjustment toward equilibrium. The variables for inflation, the exchange rate, and expected inflation also showed negative and significant coefficients at the 5% level, indicating that these variables are also affected by past deviations and gradually adjust themselves. Similarly, consumer spending and savings showed negative correction coefficients with t-values exceeding -3, reinforcing the hypothesis of an efficient long-run co-equilibrium relationship. Together, these results support the validity of the model and its use in understanding economic dynamics among variables within the selected time frame.

CONCLUSIONS

The results of this research indicate the presence of a clear and influential financial illusion in the Iraqi economy, represented by the persistent gap between nominal and real income. Individuals are deceived by the rise in nominal income, unaware of the erosion of their purchasing power due to fluctuating inflation rates. The results of the stationarity test (ADF) also showed that all the studied economic variables are stationary at the first level, justifying the use of autoregressive models such as VAR and VECM to analyze economic relationships. The Johansen cointegration test confirmed the existence of five long-run equilibrium relationships among the variables, demonstrating their structural interdependence in the long run despite short-term fluctuations. The error correction model (VECM) demonstrated the presence of self-correcting forces that restore the system to equilibrium after any temporary deviations. This is reflected in the negative and statistically significant correction coefficients across all variables, enhancing the reliability of the model. The research also revealed severe weaknesses in the administration of the tax system in Iraq, the absence of accurate databases, and the prevalence of tax evasion and political interference, which undermine the tax system's effectiveness as a tool for wealth redistribution and achieving justice. The study also highlights the prevalence of "phantom jobs" and the misuse of oil revenues, with the dominance of consumer rentierism in fiscal policy since 2003, deepening the class gap within society. The study emphasizes the danger of "cognitive framing" techniques in guiding citizens' perceptions of financial decisions, whereby tax and spending policies are manipulated to present gains while concealing their true impact, reinforcing the financial illusion. Under these circumstances, the study recommends reforming the state's financial structure by enhancing transparency, activating oversight, and transitioning to a modern digital tax system. It also recommends raising citizens' financial awareness to counter the effects of financial illusion and assisting decision-makers in adopting realistic policies based on real, rather than illusory, indicators.

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REFERENCES:

1. Iraq, Selected Lessors, International Monetary Fund, 2019, p. 6.
2. Iraq Public Expenditure and Financial Accountability, Performance Assessment Report, 2016, 2017.
3. Paulo Reis Mourao, Towards a Fiscal Illusion Index
4. Buchanan, Is Public Choice Theory, Imprimis, Vol. (32), No. (3), 2003.
5. Vicini, Andrea, On the Origins and Main Consequences of Fiscal Illusion. A short tribute to a prominent economist: James Buchanan, 2011, https://mpra.ub.uni-muenchen.de.
6. Yasser, Saleh, 2013, Rentierism and Democracy Building: The Impossible Duality "The Case of Iraq," Policy Working Paper. 7- Aliwi "Hussein" 2023 "Financial and Administrative Corruption in Iraq: A Geopolitical Perspective", Al-Rafidain, First Edition, Beirut-Najaf Al-Ashraf.
7. Saleh "Mazhar Muhammad" Iraqi Public Finance: Between Liberal Ideology and Scholastic Economic Debate. New Culture Journal, 2023.
8. Saleh "Mazhar Muhammad" Theory of Public Choice and Financial Illusion, A Glimpse into the Behavior of Iraqi Public Finance, Iraqi Economists Network, 2022.
9. "Muhammad" Ayman Ahmad, 2013, Corruption and Accountability in Iraq, A Political Working Paper.
10. Abdul Hussein "Zain Al-Abidin Muhammad", Hassan "Sadiq Ali", 2018, The Iraqi Economy after 2003 (A Study of Reality and Future Strategies), First Edition, Beirut.
11. https://www.aljazeera.net/ebusiness
12. Taxes in Iraq: An Absent Economic Resource and Calls to Reveal the Fate of Billions of Lost Dollars (website) (Electronic) https://www.aljazeera.net/ebusiness