International Journal of Research in Finance and Management

P-ISSN: 2617-5754
E-ISSN: 2617-5762
IJRFM 2024; 7(2): 544-548
www.allfinancejournal.com
Received: 14-11-2024
Accepted: 16-12-2024

Eman O AlForaih
Department of Insurance and Banking, College of Business Studies, The Public Authority for Applied Education and Training (PAAET), Kuwait

Ibraheem Alaskar
Department of Insurance and Banking, College of Business Studies, The Public Authority for Applied Education and Training (PAAET), Kuwait

Musaed S AlAli
Department of Insurance and Banking, College of Business Studies, The Public Authority for Applied Education and Training (PAAET), Kuwait

Correspondence Author
Ibraheem Alaskar
Department of Insurance and Banking, College of Business Studies, The Public Authority for Applied Education and Training (PAAET), Kuwait

Economic indicators and their effect on the stock performance of insurance companies in Kuwait

Eman O AlForaih, Ibraheem Alaskar and Musaed S AlAli

DOI: https://doi.org/10.33545/26175754.2024.v7.i2e.407

Abstract
This study investigates the effect of macroeconomic variables on the stock prices of insurance companies in Kuwait using quarterly data from 2014 to 2023. The analysis incorporates key macroeconomic indicators, including Gross Domestic Product (GDP), Consumer Price Index (CPI), and interest rates, to explore their relationship with insurance stock performance. The results reveal that GDP, CPI, and interest rates positively and significantly influence stock prices, with GDP emerging as the strongest determinant, underscoring the sector's reliance on economic growth. CPI and interest rates also demonstrate meaningful impacts, reflecting inflationary and investment income effects on stock valuations. These findings have important implications for policymakers, investors, and industry stakeholders. Policymakers are encouraged to foster economic stability and growth to support the insurance sector, while investors can benefit from integrating macroeconomic trends into their decision-making processes. Insurance companies should adopt strategies to mitigate risks and capitalize on favorable economic conditions. This research contributes to the literature by providing empirical evidence on the interplay between macroeconomic factors and insurance stock prices in an oil-dependent economy, with future research opportunities to explore non-linear relationships, additional variables, or cross-country comparisons.

Keywords: Economic indicators, insurance sector performance, stock price dynamics, Kuwait's financial market, economic growth, inflation and interest rates

Introduction
The financial performance of insurance companies, particularly their stock prices, is influenced by a variety of macroeconomic variables. As key players in the financial sector, insurance companies operate within a dynamic environment where economic conditions significantly shape their profitability and valuation. This study aims to investigate the relationship between macroeconomic factors and the stock prices of insurance companies in Kuwait, a country heavily reliant on oil revenues and subject to unique economic dynamics.

Insurance companies serve as financial intermediaries and risk managers, making them sensitive to broader economic shifts. Macroeconomic variables such as GDP, inflation, and interest rates can directly or indirectly affect the stock prices of these companies. For instance, inflation impacts the value of future liabilities, while interest rate changes affect investment returns. In oil-dependent economies like Kuwait, fluctuations in oil prices further amplify the complexity of these relationships, influencing economic growth and financial markets. Despite their significance, studies focusing on the interplay between macroeconomic variables and the stock prices of insurance companies in Kuwait remain scarce. Existing research often examines broader stock market indices or financial sectors without isolating the insurance industry, leaving a critical gap in understanding the unique sensitivities and drivers of this sector. This paper seeks to bridge this gap by providing empirical insights into the determinants of stock prices in Kuwait's insurance sector, leveraging advanced econometric methods and a comprehensive dataset.

The findings of this study are expected to contribute to the literature on financial markets and macroeconomics, offering valuable implications for policymakers, investors, and industry stakeholders. By identifying the key macroeconomic drivers of insurance stock prices, the research provides a foundation for informed decision-making in investment strategies and policy formulation within the Kuwaiti financial landscape.

Literature Review

The relationship between macroeconomic variables and stock prices has been extensively studied, with a particular focus on how these factors influence the financial performance of various sectors, including insurance companies. This literature review examines existing research on the impact of macroeconomic variables on stock prices, with an emphasis on the insurance sector and the Kuwaiti market.

Several studies have investigated the influence of macroeconomic factors on stock markets. Chen *et al*. (1986) [3] identified that economic forces such as industrial production, changes in risk premiums, and shifts in the yield curve significantly affect stock returns. Similarly, Mukherjee and Naka (1995) [7] found that in Japan, stock prices are positively related to the exchange rate, money supply, and industrial production, while their relationship with inflation and interest rates is mixed.

The insurance industry is particularly sensitive to macroeconomic conditions. Eling and Schmeiser (2010) [5] noted that factors such as GDP growth, interest rates, and inflation directly influence insurance companies' profitability and stock performance. Christophersen and Jakubik (2014) [4] analyzed the relationship between growth in the insurance sector and key macroeconomic determinants, finding a strong link between gross written premiums and economic growth and unemployment.

In Kenya, Murungi (2014) [9] explored the relationship between macroeconomic variables such as interest rates, inflation, exchange rates, and GDP and the financial performance of insurance companies. The study concluded that these macroeconomic factors significantly affect the profitability and stock prices of insurance firms, underscoring the importance of the economic environment on the insurance sector.

The body of literature specifically focusing on the insurance sector in Kuwait is limited, although several related studies provide critical insights. Alaskar and AlAli (2024) [2] conducted a comprehensive investigation into the dynamic relationship between stock prices and key macroeconomic variables, including GDP, interest rates, oil prices, exchange rates, CPI, and foreign direct investment. Employing cointegration and Granger causality tests, their study identified a stable long-term relationship between stock prices and these macroeconomic indicators. Notably, bidirectional causality was observed between stock prices, GDP, and interest rates, indicating a feedback mechanism where economic growth and monetary policy shifts simultaneously influence and are influenced by stock market performance. Additionally, unidirectional causality from oil prices, CPI, and foreign direct investment to stock prices emphasized the critical role of oil prices and inflationary pressures in shaping Kuwait's financial markets. These findings offer a nuanced understanding of the complex interplay between macroeconomic forces and stock market dynamics in an oil-dependent economy, contributing valuable insights into the drivers of market performance.

Furthermore, research by Al Mutairi and Al Omar (2007) [1] on the determinants of stock prices in Kuwait identified interest rates, money supply, and oil prices as pivotal macroeconomic factors influencing stock prices. While these studies do not exclusively address the insurance sector, they strongly suggest that insurance company stock prices are similarly impacted by broader economic conditions and macroeconomic variables.

Together, these studies underscore the significant influence of macroeconomic variables on Kuwait's financial markets, including the insurance sector. The findings of Alaskar and AlAli (2024) [2] provide an in-depth perspective on the interactions between GDP, CPI, interest rates, and other macroeconomic factors with stock prices in the broader market. Concurrently, the works of Al Mutairi and Al Omar (2007) [1] highlight the pivotal roles of oil prices and monetary variables in shaping market dynamics. This body of research forms a robust foundation for future studies, particularly those aimed at exploring sector-specific dynamics, nonlinear relationships, and the unique challenges and opportunities within Kuwait's insurance market.

The existing literature highlights a significant relationship between macroeconomic variables and stock prices across various markets and sectors, including insurance. In Kuwait, studies indicate that factors such as oil prices, interest rates, money supply, and inflation substantially impact the stock market. However, there is a paucity of research focusing specifically on the insurance sector within Kuwait. This study aims to fill this gap by providing empirical insights into how macroeconomic variables affect the stock prices of insurance companies in Kuwait, contributing to a more nuanced understanding of the sector's financial dynamics.

Methodology

The primary objective of this study is to investigate the factors influencing the dividend payout ratio (DPR) in Kuwaiti banks. Specifically, the study aims to test the following hypotheses:

1- $H1_0$: There is no relation between stock prices (SP) and gross domestic product (GDP)
2- $H2_0$: There is no relation between stock prices (SP) and inflation (CPI)
3- $H3_0$: There is no relation between stock prices (SP) and interest rate (IR)

To address these hypotheses, the study examines the effect of three independent variables: gross domestic product (GDP), inflation (CPI), and interest rate (IR), on the dependent variable, the stock prices (SP). The relationship between these variables is expressed in the following regression model:

$$SP_t = \alpha + \beta_1 GDP_t + \beta_2 CPI_t + \beta_3 IR_t + \varepsilon \quad (1)$$

To estimate the specified regression model, the study employs the Ordinary Least Squares (OLS) method, a widely used technique in econometric analysis for its efficiency and simplicity in estimating linear relationships between variables. OLS is particularly appropriate for this study as it minimizes the sum of squared residuals, ensuring unbiased and efficient parameter estimates under the classical linear regression assumptions (Gujarati *et al*., 2017) [6]. This method is well-suited for examining the impact of macroeconomic variables on stock prices, as evidenced in prior studies exploring similar relationships (Mukherjee and Naka (1995) [7].

The use of OLS facilitates the evaluation of the individual and collective significance of the independent variables (GDP, CPI, and IR) in explaining variations in the dependent variable (SP). Additionally, OLS provides robust results when the underlying assumptions of linearity, normality, and homoscedasticity are satisfied, making it a reliable choice for the analysis conducted in this study. By employing OLS, the study aligns with established econometric practices in financial research and ensures that the estimation results are both statistically valid and interpretable (Wooldridge, 2019) [9].

Data and Empirical Results

This study aims to analyze the effect of macroeconomic variables on the stock prices of insurance companies in Kuwait over the period 2014 to 2023. The analysis is based on quarterly data from the insurance companies listed on the Kuwait Stock Exchange (KSE). The data utilized in this research were sourced from the KSE website and the quarterly reports published by the Central Bank of Kuwait.

The descriptive statistics presented in Table 1 provide key insights into the macroeconomic variables and stock prices analyzed in this study. The variables include Stock Prices (SP), Gross Domestic Product (GDP), Consumer Price Index (CPI), and Interest Rates (IR).

Table 1: Descriptive Analysis

	SP	GDP	CPI	IR
Mean	0.406	135897118119.887	111.161	1.780
Standard Error	0.023	1748234246.502	0.539	0.072
Kurtosis	5.436	-1.276	-0.825	0.896
Skewness	1.635	0.279	0.335	1.394
Range	1.763	69414458025.392	24.335	3.168
Minimum	0.040	105948807280.730	100.000	0.822
Maximum	1.803	175363265306.122	124.335	3.990

The mean values highlight the central tendencies for each variable over the period 2014 to 2023. Stock Prices have a mean value of 0.406, indicating a generally low stock price level for insurance companies in Kuwait. GDP, with a mean of approximately 135.9 billion Kuwaiti Dinars, reflects the economic size of Kuwait during this period. The CPI mean of 111.161 suggests a relatively stable price level, while the interest rate mean of 1.780% indicates low borrowing costs in the economy.

The standard errors provide a measure of variability, with SP showing the smallest variability (0.023), indicating relatively consistent stock prices compared to the other variables. GDP has the highest standard error (1.748 billion), reflecting the economic variability influenced by oil price fluctuations. CPI and IR show moderate variability with standard errors of 0.539 and 0.072, respectively.

The skewness and kurtosis values offer insights into the distribution characteristics. SP and IR are positively skewed, indicating a concentration of lower values with occasional higher extremes. In contrast, GDP and CPI are closer to symmetric distributions, with skewness values near zero. Regarding kurtosis, SP displays a high value (5.436), suggesting a leptokurtic distribution with more extreme values than a normal distribution, while GDP and CPI have negative kurtosis, indicating flatter distributions.

The range values indicate the spread of data, with GDP exhibiting the largest range (approximately 69.4 billion KD), reflecting significant economic fluctuations during the study period. The smallest range is observed for CPI (24.335), suggesting relative price stability.

The Pearson correlation coefficients presented in Table 2 provide insights into the linear relationships among the variables: Stock Prices (SP), Gross Domestic Product (GDP), Consumer Price Index (CPI), and Interest Rates (IR). The correlation between SP and GDP is 0.274, indicating a weak positive relationship, suggesting that higher GDP levels are associated with modest increases in the stock prices of insurance companies. This relationship potentially reflects the broader economic growth's impact on market performance. The correlation between SP and CPI is slightly stronger at 0.310, also indicating a weak positive relationship, which could imply that rising price levels, as captured by the CPI, are associated with moderate increases in stock prices, possibly due to inflationary conditions influencing the valuation of insurance assets or revenues. The correlation between SP and IR is 0.265, the weakest among the three relationships with SP, suggesting that changes in interest rates have a limited direct impact on the stock prices of insurance companies. This may reflect the balance between higher investment income from rising interest rates and potential downward pressures on stock prices due to increased borrowing costs.

Table 2: Pearson Correlation Matrix

	SP	GDP	CPI	IR
SP	1			
GDP	0.273707	1		
CPI	0.309726	0.661221	1	
IR	0.265086	0.47965	0.723309	1

The interrelations among the macroeconomic variables themselves are also noteworthy. GDP and CPI show a strong positive correlation of 0.661, indicating that economic growth is often accompanied by rising price levels. Similarly, CPI and IR exhibit a very strong positive correlation of 0.723, suggesting that interest rates adjust in tandem with inflationary pressures. GDP and IR have a moderate positive correlation of 0.480, reflecting their interconnected dynamics in the macroeconomic environment. These correlation patterns provide preliminary evidence of relationships among the variables but do not imply causation.

The regression results presented in Table 3 provide valuable insights into the relationship between macroeconomic variables and the stock prices of insurance companies in Kuwait, aligning with findings from prior studies. The model demonstrates strong explanatory power, with a Multiple R value of 0.832 and an R-Square value of 0.691, indicating that approximately 69.1% of the variation in stock prices is explained by the included macroeconomic variables. The adjusted R-Square value of 0.681 further supports the robustness of the model, accounting for the number of predictors. The F-statistic of 117.267 and its significance ($p = 0.000$) confirm the overall statistical significance of the model, in line with studies emphasizing the critical role of macroeconomic factors in stock price determination (e.g., Alaskar and AlAli (2024) [2].

The coefficients of the independent variables further

highlight their influence on stock prices. GDP has a positive and statistically significant coefficient of 0.221 (p = 0.041), indicating that economic growth enhances the stock prices of insurance companies. This finding is consistent with prior research that underscores the positive correlation between GDP growth and stock market performance, as economic expansion often leads to increased profitability and valuation of financial institutions (Chen *et al*., 1986) [3] and (Eling and Schmeiser, 2010) [5].

Table 3: OLS Regression Results

Regression Statistics				
Multiple R	0.832			
R Square	0.691			
Adjusted R Square	0.681			
Standard Error	0.280			
F	117.267			
Significance F	0.000			
Observations	160			
	Coefficients	Standard Error	t Stat	P-value
Intercept	0.000	0.0640	0.253	0.877
GDP	0.221	0.0000	1.632	0.041
CPI	0.017	0.0016	0.107	0.039
IR	0.058	0.0276	2.084	0.039

CPI exhibits a statistically significant coefficient of 0.017 (p = 0.039), suggesting a modest positive influence of inflation on stock prices. This result aligns with studies showing that inflationary conditions can increase nominal revenues and asset valuations for insurance companies, offsetting potential adverse effects (Murungi, 2014) [9]. The finding also reflects the observed relationship between price level changes and stock market dynamics in oil-dependent economies like Kuwait.

The interest rate (IR) coefficient is 0.058 and statistically significant (p = 0.039), indicating a positive relationship with stock prices. This suggests that rising interest rates may enhance investment income for insurance companies, as highlighted in studies emphasizing the dual impact of interest rates on the financial sector through income and cost channels (Eling and Schmeiser, 2010) [5]. The intercept term, with a p-value of 0.877, is not statistically significant, indicating that the macroeconomic variables adequately explain stock price variations without a baseline constant.

These findings corroborate previous studies on the impact of macroeconomic variables on stock prices while contributing new evidence specific to the insurance sector in Kuwait. The results underscore the importance of GDP, CPI, and IR as critical determinants, echoing earlier works on the significant influence of economic growth, inflation, and interest rates on financial markets (Alaskar and AlAli, 2024) [2]. By linking these macroeconomic factors to insurance stock prices, this study enriches the literature and provides practical insights for investors, policymakers, and stakeholders in Kuwait's financial landscape. Future research could explore non-linear relationships or sector-specific dynamics to enhance the understanding of these interactions.

Implications

The results of this study have significant implications for policymakers, investors, and stakeholders in the insurance sector in Kuwait. The findings underscore the critical role of macroeconomic variables (GDP, CPI, and interest rates) in shaping the stock prices of insurance companies, offering valuable insights into the broader economic and financial dynamics influencing the sector.

The positive and significant relationship between GDP and stock prices highlights the importance of sustained economic growth for the performance of insurance companies. Policymakers should prioritize economic stability and growth through diversification efforts and strategic investments to mitigate the reliance on oil revenues. A stable and growing economy not only enhances the operational environment for insurance companies but also boosts investor confidence in the sector.

The CPI's modest but positive influence on stock prices suggests that insurance companies in Kuwait are capable of adapting to inflationary conditions, potentially through adjustments in premiums or asset valuations. This finding highlights the importance for investors to monitor inflation trends and their potential impact on the sector. Policymakers should consider implementing measures to control inflation while ensuring that the insurance sector remains resilient to moderate price level changes.

The positive association between interest rates and stock prices suggests that rising interest rates, while often viewed as a deterrent to equity performance, may benefit the insurance sector by increasing investment income. This insight is particularly relevant for central bank policymakers, who should weigh the broader economic implications of interest rate adjustments on the financial sector, including insurance companies.

For investors, these results emphasize the necessity of incorporating macroeconomic indicators into their decision-making processes when evaluating the performance and valuation of insurance stocks. Understanding the sensitivities of stock prices to GDP, CPI, and interest rates can provide a more nuanced approach to portfolio management and risk assessment in the Kuwaiti financial market.

Lastly, for industry stakeholders, the results underscore the importance of aligning business strategies with macroeconomic conditions. Insurance companies should adopt proactive measures to capitalize on favorable economic trends while mitigating risks associated with economic downturns or inflationary pressures. These strategies may include diversified investment portfolios, dynamic pricing models, and enhanced operational efficiencies to ensure sustainable growth and profitability.

Conclusion

This study examines the impact of macroeconomic variables on the stock prices of insurance companies in Kuwait, using quarterly data from 2014 to 2023. The analysis highlights the significant roles of GDP, CPI, and interest rates in influencing stock prices, providing insights into the dynamics of the insurance sector within Kuwait's oil-dependent economy. The findings indicate that GDP positively impacts stock prices, reflecting the importance of economic growth in driving the financial performance of insurance companies. Similarly, CPI and interest rates show positive relationships with stock prices, suggesting that inflationary conditions and changes in borrowing costs have

nuanced effects on the sector.

These results underscore the importance of macroeconomic stability for the growth and sustainability of the insurance sector in Kuwait. Policymakers, investors, and industry stakeholders must recognize the sensitivities of insurance stock prices to economic conditions and adjust their strategies accordingly. For policymakers, fostering economic diversification and controlling inflation are critical to ensuring a stable financial environment. Investors should consider macroeconomic trends when making investment decisions, while insurance companies should align their operations with prevailing economic conditions to enhance resilience and profitability.

This study contributes to the understanding of how macroeconomic factors influence the financial performance of insurance companies in Kuwait, addressing a gap in the existing literature. However, the findings also highlight opportunities for further research. Future studies could investigate the potential non-linear relationships between these variables, explore the impact of additional macroeconomic factors, or conduct cross-country analyses to provide comparative insights. By expanding the scope of analysis, future research can offer a more comprehensive understanding of the interplay between macroeconomic conditions and the performance of the insurance sector, both in Kuwait and beyond.

References

1. Al Mutairi A, Al Omar H. Macroeconomic determinants of the behavior of Kuwait stock exchange. Studies of Business and Economics. 2007;13:39-50. https://doi.org/10.29117/sbe.2007.0029
2. Alaskar I, AlAli MS. Macroeconomic forces shaping Kuwait's stock market: A time series analysis of an oil-dependent economy. Pakistan Journal of Life and Social Sciences. 2024;22:9145-9156. https://doi.org/10.57239/PJLSS-2024-22.2.00692
3. Chen N-F, Roll R, Ross SA. Economic forces and the stock market. Journal of Business. 1986;59(3):383-403. https://www.jstor.org/stable/2352710
4. Christophersen C, Jakubik P. Insurance and the macroeconomic environment. EIOPA-Financial Stability Report. 2014:44-55.
5. Eling M, Schmeiser H. Insurance and the credit crisis: Impact and ten consequences for risk management and supervision. The Geneva Papers on Risk and Insurance - Issues and Practice. 2010;35(1):9-34. http://dx.doi.org/10.1057/gpp.2009.39
6. Gujarati DN, Porter DC, Gunasekar S. Basic econometrics. The McGraw-Hill Series Economics. New York: McGraw-Hill; c2017.
7. Mukherjee TK, Naka A. Dynamic relations between macroeconomic variables and the Japanese stock market: An application of a vector error correction model. Journal of Financial Research. 1995;18(2):223-237. https://doi.org/10.1111/j.1475-6803.1995.tb00563.x
8. Murungi DU. Relationship between macroeconomic variables and financial performance of insurance companies in Kenya [Thesis]. Nairobi: University of Nairobi; c2014.
9. Wooldridge JM. Introductory econometrics: A modern approach. Mason (OH): Cengage Learning; c2019.