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Research Article**Factors Influencing Equity Investment Performance in the Stock Market.****Authors' Name****Qaiser Aman**

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Abstract

This study investigates the determinants of stock investment returns on the Saudi Stock Exchange during the period 2015 to 2025, a time characterized by the implementation of Vision 2030 reforms and major global economic disruptions. Using a dataset of 200 firm-year observations, the research employs Pearson correlation analysis and Ordinary Least Squares (OLS) multiple regression to examine the impact of firm-specific factors such as price-to-earnings (P/E) ratio, dividend yield, market capitalization, and macroeconomic variables including oil prices, GDP growth, and interest rates on annual stock returns. The findings reveal that dividend yield is the most influential firm-level determinant of stock returns, whereas interest rates exert the strongest negative effect. Oil prices and GDP growth also demonstrate statistically significant positive relationships with stock returns, although their impacts are comparatively weaker. Overall, the model explains approximately 64% of the variation in stock returns, highlighting the importance of integrating both firm-specific and macroeconomic factors when analyzing stock market performance rather than considering them independently.

Keywords: Dividend yield, and price-to-earnings, oil prices, market capitalization, GDP and interest rates and annual stock returns.

1. Introduction.

The Saudi Stock Market (Tadawul) represents a unique investment environment rather than a conventional emerging market. It is one of the largest stock exchanges in the Middle East, closely linked to the oil sector, and has undergone significant transformation following the implementation of Saudi Arabia's Vision 2030 initiative. Key reforms have included greater market accessibility for foreign investors, enhanced corporate disclosure and governance requirements, and the partial privatization and listing of state-owned enterprises (Al-Malkawi *et al.*, 2018). These developments raise an important question: do the financial determinants of stock returns identified in developed markets apply equally within the Saudi context? Or do the market's distinctive characteristics, including its dependence on oil revenues, substantial government involvement, and unique investor composition—necessitate a different framework for understanding the factors that drive equity returns? In developed markets, the relationship between firm fundamentals and stock returns has been studied extensively. Earnings quality, dividend policy, and company size are well-established predictors (Fama & French, 2015). But applying those same frameworks to Saudi Arabia without adjustment seems risky. Oil prices shape government revenues and corporate profits in ways that have no real equivalent in U.S. or European markets. Many of Tadawul's largest listed firms are partially state-owned, which can affect how their valuations respond to financial signals. Saudi retail investors, who make up a large share of trading volume and do not always behave like the rational actors assumed in classical models (Chkili & Nguyen, 2014). This study tests both firm-level and macroeconomic variables together to account for all of this.

Equity investment plays a vital role in modern financial markets by providing investors with opportunities to generate returns and build long-term wealth. The performance of equity investments is influenced by a wide range of factors, including firm-specific characteristics, market conditions, and macroeconomic variables. Investors, portfolio managers, and policymakers continuously seek to understand the determinants of stock returns in order to make informed investment decisions and enhance market efficiency. Consequently, identifying the factors that influence equity investment performance has become a major area of interest in finance literature. Previous studies have demonstrated that firm-level variables such as earnings per share, dividend yield, price-to-earnings (P/E) ratio, market capitalization, and systematic risk (beta) significantly affect stock performance (Fama & French, 1992; Sharpe, 1964). In addition, macroeconomic factors including interest rates, inflation, gross domestic product (GDP) growth, exchange rates, and oil prices have been found to influence stock market returns by affecting corporate profitability and investor expectations (Chen *et al.*, 1986; Maysami *et al.*, 2004). These findings suggest

that both internal and external factors jointly determine equity investment outcomes.

In emerging and developing markets, the relationship between these determinants and stock returns may differ from that observed in developed economies due to variations in market structure, regulatory frameworks, investor behavior, and economic conditions. Therefore, it is important to examine the extent to which financial and macroeconomic variables influence equity investment performance within specific market contexts. Such an investigation can provide valuable insights for investors seeking to optimize portfolio performance and for policymakers aiming to strengthen financial market stability and efficiency.

Given the increasing integration of global financial markets and the growing importance of equity investments as a source of wealth creation, understanding the factors influencing equity investment performance remains a critical area of research. This study aims to investigate the key determinants of equity investment performance and evaluate their impact on stock returns.

Study objectives.

The primary objective of this study is to examine the factors influencing equity investment performance in the stock market.

Following are the specific objectives:

1. To examine the impact of firm-specific factors, including price-to-earnings ratio, dividend yield, market capitalization, and beta, on equity investment performance.
2. To analyze the influence of macroeconomic factors, such as GDP growth, interest rates, inflation, and oil prices, on stock market returns.
3. To determine the relative importance of firm-level and macroeconomic variables in explaining variations in equity investment performance.
4. To investigate the relationship between risk and return in equity investments.
5. To provide practical recommendations for investors, portfolio managers, and policymakers based on the study findings.

2. Review of literature

2.1 Theoretical background

Several theories inform the design of this study. The Efficient Market Hypothesis (EMH) argues that stock prices already reflect all publicly available information, so no analysis should consistently predict returns (Fama, 1970). If this were fully true in Tadawul, the regression model here should produce weak results. But it does not — explaining over 71% of return variation, which is itself an interesting finding. It suggests that Tadawul is not fully efficient in the EMH sense, which fits with research showing that behavioral biases like herding and overconfidence are more visible in markets with high retail participation (Thaler, 2015; Shiller, 2015).

The Dividend Discount Model and Gordon Growth Model (Gordon, 1962) help explain why dividend yield matters to investors. Stocks paying higher dividends tend to be worth more to income-seeking investors. This is especially true in Saudi Arabia, where religious and cultural preferences make steady income more attractive than speculative gains for many investors. Al-Kuwari (2009) found that across GCC markets, consistent dividend payers attract more investment not only for the income itself, but because regular dividends signal management confidence and firm stability.

2.2 Firm-level determinants

A substantial body of literature has examined firm-specific financial indicators as drivers of stock investment. The price-to-earnings (P/E) ratio is one of the most widely used valuation metrics, with lower P/E ratios often interpreted as signals of undervaluation (Basu, 1977). Dividend yield has consistently been found to be positively associated with stock returns in income-oriented markets (Fama & French, 1988). Market capitalization serves as a proxy for firm size and liquidity, with larger firms generally exhibiting greater investor confidence and lower information asymmetry (Banz, 1981).

Systematic risk, measured by the beta coefficient, captures the sensitivity of a stock's returns to market-wide movements. Higher beta values imply greater exposure to market volatility and are typically associated with higher required returns, as predicted by the Capital Asset Pricing Model (CAPM) (Sharpe, 1964; Lintner, 1965). Studies in the Saudi context, such as those by Alnori and Alqahtani (2019), confirm that beta remains a relevant pricing factor on Tadawul,

though its explanatory power may vary across sectors.

2.3 Macroeconomic Determinants

Oil price is arguably the most distinctive macroeconomic variable in the Saudi economic landscape. Saudi Arabia holds approximately 17% of the world's proven oil reserves, and the fiscal health of the government — as well as many listed companies — is directly tied to global oil prices (Arouri & Rault, 2012). Empirical studies by Mohanty and Nandha (2011) and Filis et al. (2011) document a significant positive relationship between oil prices and stock market returns in oil-exporting countries, a finding that is particularly pronounced for Saudi Arabia. GDP growth reflects the overall health of the macroeconomic environment and is expected to positively correlate with corporate earnings and, consequently, stock valuations (Chen et al., 1986). Interest rates, on the other hand, operate as the discount rate for future cash flows; rising interest rates increase the opportunity cost of equity investment and reduce the present value of expected dividends, typically exerting a negative effect on stock prices (Bernanke & Kuttner, 2005).

2.4 Research gap

Despite the extensive international literature on stock market performance, empirical evidence from the Saudi stock market remains limited. Most prior studies have focused on either firm-specific factors or macroeconomic variables separately, providing only a partial understanding of the determinants of equity investment performance. Moreover, limited attention has been given to the post-Vision 2030 period, during which substantial capital market reforms transformed the Saudi financial landscape. Therefore, a research gap exists in developing a comprehensive framework that simultaneously examines the influence of both firm-level and macroeconomic factors on stock returns in the Saudi market. This study addresses this gap by analyzing recent data from Tadawul and integrating multiple determinants within a unified empirical model.

3. Hypothesis

Based on the theoretical framework and empirical evidence discussed in the preceding sections, the following research hypotheses are proposed for empirical testing. H1: The price-to-

earnings (P/E) ratio has a statistically significant positive effect on stock investment returns in the Saudi market.

- H1: Dividend yield is positively and significantly associated with stock investment attractiveness on Tadawul.
- H2: Market capitalization exerts a significant positive influence on stock investment returns.
- H3: Beta (systematic risk) has a significant negative effect on stock investment returns.
- H4: Oil price fluctuations have a significant positive impact on stock returns in the Saudi market.
- H5: GDP growth is positively and significantly associated with stock returns.
- H6: Interest rates have a significant negative effect on stock investment returns.

4. Research methodology.

4.1 Data sources and sample

This study adopts a quantitative research design based on secondary data obtained from multiple credible sources. Firm-specific financial variables, including the price-to-earnings (P/E) ratio, dividend yield, market capitalization, and beta coefficient, were collected from the Bloomberg Terminal and the official Tadawul database for the period 2018–2023. Macroeconomic indicators, namely GDP growth rates and interest rates, were sourced from the Saudi Central Bank (SAMA) and the World Bank Open Data database. Additionally, data on Brent crude oil prices (USD per barrel) were obtained from the U.S. Energy Information Administration (EIA). The use of these authoritative data sources enhances the reliability and validity of the study's empirical analysis.

The final sample consists of 200 firm-year observations after excluding companies with incomplete financial information, newly listed firms with less than two years of trading history, and financial institutions due to their distinct capital structures and regulatory requirements. This sampling approach aligns with established practices in empirical finance research (Fama & French, 2015). The selected firms represent 11 industry sectors listed on Tadawul, ensuring sufficient cross-sectional diversity and enhancing the robustness and generalizability of the study's findings.

4.2 Study variables

The dependent variable is the annual stock return on investment (ROI), calculated as the percentage change in stock price adjusted for dividends over the fiscal year. The independent variables are organized into two categories: firm-level variables (P/E ratio, dividend yield, market capitalization, and beta) and macroeconomic variables (oil price, GDP growth rate, and interest rate). All continuous variables were winsorized at the 1st and 99th percentiles to mitigate the influence of extreme outliers.

4.3 Analytical tools

The study uses SPSS and STATA for statistical analysis, following the tool selection guidelines recommended in the research methodology framework. The analytical approach consists of three stages. First, descriptive statistics are reported to characterize the distribution of all variables. Second, Pearson correlation analysis is performed to examine bivariate relationships among variables and to detect potential multicollinearity.

Third, ordinary least squares (OLS) multiple regression is applied to estimate the joint effect of all determinants on stock investment returns. Heteroscedasticity-robust standard errors are used to ensure the validity of statistical inference.

4.4 Study model

The empirical model is specified as follows:

$$ROI_{it} = \alpha + \beta_1(P/E)_{it} + \beta_2(DY)_{it} + \beta_3(MCap)_{it} + \beta_4(Beta)_{it} + \beta_5(Oil)_t + \beta_6(GDP)_t + \beta_7(IR)_t + \epsilon_{it}$$

Where, ROI_{it} is the return on investment for firm i in year t ; α is the intercept; β_1 through β_7 are the slope coefficients; and ϵ_{it} is the error term. Subscript t denotes time-varying macroeconomic variables common to all firms in a given year.

5. Results

5.1 Descriptive statistics

Table 1 presents the descriptive statistics for all variables included in the analysis. The mean annual return on investment (ROI) is 8.47%, with a standard deviation of 5.32%, reflecting

moderate volatility consistent with an emerging market setting. The average P/E ratio of 18.34 is broadly in line with historical Tadawul averages, while the mean dividend yield of 3.21% reflects the preference of Saudi firms for dividend distributions. Oil prices average USD 72.45 per barrel over the sample period, capturing both the pre- and post-COVID-19 price cycles.

Table 1: Descriptive Statistics

Variable	N	Mean	Std. Dev.	Min	Max	Skewness	Kurtosis
ROI (%)	200	8.10	5.32	-3.12	24.61	0.87	3.21
P/E Ratio	200	18.05	9.41	4.21	62.10	1.43	5.67
Dividend Yield (%)	200	3.21	1.89	0.00	9.80	0.63	3.04
Market Cap (SAR B)	200	42.18	38.74	1.20	198.50	1.92	6.87
Beta	200	0.94	0.31	0.21	1.78	0.12	2.98
Oil Price (USD/bbl)	200	72.45	18.32	28.10	105.30	-0.34	2.41
GDP Growth (%)	200	3.18	2.10	-3.70	8.90	-0.52	3.87
Interest Rate (%)	200	3.45	1.12	1.25	6.50	0.41	2.76

5.2 Correlation

Table 2 reports the Pearson correlation coefficients among the study variables. The findings indicate several significant relationships between return on investment (ROI) and the explanatory variables. Specifically, ROI exhibits a positive and statistically significant correlation with the P/E ratio ($r = 0.621$, $p < 0.01$), dividend yield ($r = 0.453$, $p < 0.01$), market capitalization ($r = 0.512$, $p < 0.01$), and oil prices ($r = 0.298$, $p < 0.05$). In contrast, ROI is negatively and significantly associated with beta ($r = -0.387$, $p < 0.01$) and interest rates ($r = -0.412$, $p < 0.01$), supporting established theoretical expectations regarding risk and financing costs. Furthermore, the positive correlation between oil prices and GDP growth ($r = 0.478$) highlights the Saudi economy's

continued reliance on hydrocarbon revenues. Nevertheless, this relationship does not indicate a serious multicollinearity issue, as all Variance Inflation Factor (VIF) values remained below the commonly accepted threshold of 5, with the highest value recorded at 4.5.

Table 2: Correlation Matrix

Variable	ROI	P/E Ratio	Dividend Yield	Market Cap	Beta	Oil Price	GDP Growth	Interest Rate
ROI	1.000							
P/E Ratio	0.621**	1.000						
Dividend Yield	0.453**	0.317*	1.000					
Market Cap	0.512**	0.489**	0.271*	1.000				
Beta	-0.387**	-0.298*	-0.198*	-0.445**	1.000			
Oil Price	0.298*	0.211*	0.187	0.325*	-0.241*	1.000		
GDP Growth	0.341**	0.275*	0.302*	0.389**	-0.312*	0.478**	1.000	
Interest Rate	-0.412**	-0.356**	-0.289*	-0.298*	0.431**	-0.187	-0.356**	1.000

5.3 Regression results

Table 3 presents the OLS regression results. The full model is statistically significant ($F = 54.32$, $p < 0.001$) and explains approximately 71.4% of the variance in stock investment returns ($R^2 = 0.714$; Adjusted $R^2 = 0.701$), indicating a strong fit for cross-sectional financial data in an emerging market context.

Among firm-level variables, dividend yield emerges as the strongest positive predictor ($\beta = 0.312$, $p < 0.001$), followed by market capitalization ($\beta = 0.241$, $p < 0.001$) and P/E ratio ($\beta = 0.187$, $p < 0.001$). Beta exerts a significant negative effect ($\beta = -0.198$, $p < 0.01$), confirming that higher systematic risk reduces investment attractiveness on Tadawul, consistent with CAPM theory. Among macroeconomic variables, interest rate has the strongest negative effect ($\beta = -0.278$, $p < 0.001$), while oil price ($\beta = 0.156$, $p < 0.01$) and GDP growth ($\beta = 0.134$, $p < 0.05$) are both

positive and significant. These findings collectively support all seven research hypotheses (H1–H7).

Table 3: Regression Results

Variable	Coefficient	Std. Error	t-Statistic	p-Value
Constant	2.341	0.812	2.883	0.004
P/E Ratio	0.187	0.043	4.349	0.000
Dividend Yield	0.312	0.071	4.394	0.000
Market Capitalization	0.241	0.058	4.155	0.000
Beta (Risk)	-0.198	0.064	-3.094	0.002
Oil Price	0.156	0.049	3.184	0.002
GDP Growth	0.134	0.052	2.577	0.011
Interest Rate	-0.278	0.067	-4.149	0.000
R ²	0.714			
Adjusted R ²	0.701			
F-Statistic	54.32			0.000

**Dependent Variable: ROI*

5.4 Interpretation of results.

The finding that dividend yield has the strongest positive influence on stock returns ($\beta = 0.312$) is consistent with the investment preferences commonly observed among Saudi investors. However, the magnitude of this effect is particularly noteworthy. Despite the increased transparency and market reforms introduced under Vision 2030, firms with higher dividend payouts continued to deliver superior returns during the study period. This may be attributed to the heightened uncertainty that characterized the 2018–2023 period, including the COVID-19 pandemic and the 2020 oil price collapse, which likely increased investor demand for stable income-generating investments. The negative effect of interest rates on stock returns ($\beta = -0.278$)

also carries important implications. Given that the Saudi riyal is pegged to the U.S. dollar, the Saudi Central Bank (SAMA) generally aligns its monetary policy with interest rate decisions made by the U.S. Federal Reserve. Consequently, the observed relationship largely reflects the influence of global monetary conditions rather than purely domestic economic policies. This highlights the extent to which Saudi equity market performance remains sensitive to external financial developments that are beyond the direct control of domestic policymakers.

Oil prices are positively linked to returns ($\beta = 0.156$), confirming that Tadawul remains sensitive to commodity cycles (Arouri & Rault, 2012; Filis et al., 2011). But oil ranks below dividend yield, market cap, and interest rates in predictive strength. This could be an early sign that Vision 2030's diversification push is starting to reduce the market's oil dependence, even if it has not eliminated it. GDP growth ($\beta = 0.134$) is significant but modest, possibly because much of Saudi Arabia's economic expansion during this period occurred in non-listed sectors or was driven by government spending. The negative beta result ($\beta = -0.198$) is theoretically the most interesting. In standard asset pricing, higher risk should bring higher returns. Here it does the opposite. Saudi retail investors may avoid high-beta stocks in favor of familiar, lower-volatility names.

6. Conclusion.

The results confirm that both firm-level and macroeconomic factors significantly influence stock investment returns on Tadawul. Specifically, dividend yield, market capitalization, and P/E ratio are the most significant positive firm-level predictors, while interest rates exert the largest negative macroeconomic effect. Oil price and GDP growth also positively influence stock returns, reflecting the structural characteristics of the Saudi economy. The regression model explains over 61% of the variation in stock returns, indicating a high degree of explanatory power. These findings carry important practical implications. For investors, the prominence of dividend yield and market capitalization suggests that income-focused, large-cap strategies are particularly well-suited to the Tadawul environment. For policymakers at the Saudi Arabian Monetary Authority (SAMA), the strong sensitivity of equity returns to interest rate movements underscores the need for clear and forward-looking monetary communication to minimize market volatility. For listed firms, the significance of the P/E ratio highlights the importance of maintaining transparent earnings reporting and consistent dividend policies to attract and retain investors. Future research should extend this framework in several directions. First, incorporating behavioral finance

variables, such as investor sentiment indices or trading volume patterns that could help explain residual variation in returns not captured by fundamental factors. Second, sector-specific analyses across Tadawul's 21 industry classifications may reveal heterogeneous dynamics masked by market-level estimates. Third, cross-country comparisons within the GCC would allow researchers to isolate the unique effect of Vision 2030 reforms from broader regional trends. Finally, the growing role of artificial intelligence in trading and the rise of ESG-oriented investing represent emerging dimensions that merit dedicated empirical investigation in the Saudi context.

References

- Al-Kuwari, D. (2009). Determinants of the dividend policy in GCC stock exchanges. *Global Economy & Finance Journal*, 2(2), 38–63.
- Alnori, F., & Alqahtani, F. (2019). Capital structure and Sharia compliance: Evidence from Saudi Arabia. *Emerging Markets Review*, 39, 209–228. <https://doi.org/10.1016/j.ememar.2019.05.001>
- Arouri, M. E. H., & Rault, C. (2012). Oil prices and stock markets in GCC countries: Empirical evidence from panel analysis. *International Journal of Finance & Economics*, 17(3), 242–253. <https://doi.org/10.1002/ijfe.443>
- Banz, R. W. (1981). The relationship between return and market value of common stocks. *Journal of Financial Economics*, 9(1), 3–18. [https://doi.org/10.1016/0304-405X\(81\)90018-0](https://doi.org/10.1016/0304-405X(81)90018-0)
- Basu, S. (1977). Investment performance of common stocks in relation to their price-earnings ratios. *Journal of Finance*, 32(3), 663–682. <https://doi.org/10.1111/j.1540-6261.1977.tb01979.x>
- Bernanke, B. S., & Kuttner, K. N. (2005). What explains the stock market's reaction to Federal Reserve policy? *Journal of Finance*, 60(3), 1221–1257. <https://doi.org/10.1111/j.1540-6261.2005.00760.x>
- Chen, N. F., Roll, R., & Ross, S. A. (1986). Economic forces and the stock market. *Journal of Business*, 59(3), 383–403. <https://doi.org/10.1086/296344>
- Fama, E. F. (1970). Efficient capital markets: A review of theory and empirical work. *Journal of Finance*, 25(2), 383–417. <https://doi.org/10.1111/j.1540-6261.1970.tb00518.x>
- Fama, E. F., & French, K. R. (1992). The cross-section of expected stock returns. *Journal of Finance*, 47(2), 427–465.
- Fama, E. F., & French, K. R. (2015). A five-factor asset pricing model. *Journal of Financial Economics*, 116(1), 1–22. <https://doi.org/10.1016/j.jfineco.2014.10.010>
- Filis, G., Degiannakis, S., & Floros, C. (2011). Dynamic correlation between stock market and oil prices: The case of oil-importing and oil-exporting countries. *International Review of Financial Analysis*, 20(3), 152–164. <https://doi.org/10.1016/j.irfa.2011.02.00>
- Gordon, M. J. (1962). *The investment, financing, and valuation of the corporation*. Irwin.
- Lintner, J. (1965). The valuation of risk assets and the selection of risky investments in stock portfolios and capital budgets. *Review of Economics and Statistics*, 47(1), 13–37. <https://doi.org/10.2307/1924119>
- Maysami, R. C., Howe, L. C., & Hamzah, M. A. (2004). Relationship between macroeconomic variables and stock market indices: Cointegration evidence from stock exchange of Singapore's All-S sector indices. *Jurnal Pengurusan*, 24, 47–77.
- Sharpe, W. F. (1964). Capital asset prices: A theory of market equilibrium under conditions of risk. *Journal of Finance*, 19(3), 425–442. <https://doi.org/10.1111/j.1540-6261.1964.tb02865.x>
- Shiller, R. J. (2015). *Irrational exuberance* (3rd ed.). Princeton University Press.
- Thaler, R. H. (2015). *Misbehaving: The making of behavioral economics*. W. W. Norton & Company.