Macroeconomic and Financial Determinants of Equity Market Value: Evidence from the UK Listed Firms

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Abstract

This study presents a comprehensive analysis of the key factors affecting the market value of equity securities by integrating macroeconomic variables and financial indicators within a panel data framework. Data were collected from 40 listed British firms from 2015 to 2024. The research utilizes fixed effects and robust regression models to examine the relationship between market valuation and variables such as book value per share, earnings per share, dividends per share, debt-to-equity ratio, return on equity, inflation, interest rate, exchange rate, and gross domestic product growth. The results indicate that dividends per share, earnings per share, return on equity, and book value per share each exert a significant and positive influence on market value. Conversely, macroeconomic instability, including fluctuations in exchange rates and elevated interest rates, negatively impacts equity valuations. Robustness checks and diagnostic tests confirm the stability of the models. This study contributes to the literature by empirically validating both modern and classical valuation theories and offering practical implications for policymakers, investors, and corporate managers. Limitations are acknowledged, and directions for future research are proposed, including the incorporation of non-financial variables and the adoption of dynamic modeling approaches.

Keywords: Equity Valuation, Macroeconomic Variables, Financial Indicators

Introduction

Equity securities, commonly known as stocks, represent ownership interests in a corporation and grant holders rights to share in company profits through dividends, as well as voting rights in corporate governance (Sukesti & Ghozali, 2021). The market value of equity securities plays a pivotal role in financial markets, as it reflects corporate performance, investor sentiment, market expectations, and broader macroeconomic influences (Kuvshinov & Zimmermann, 2022). For investors, policymakers, regulators, and firms, understanding the determinants of market value is not only an academic concern but also a practical necessity, underpinning financial stability, investment efficiency, and effective corporate governance (Venturini, 2022; Sulehri & Ali, 2020; Ionescu et al., 2019; Muhammad, 2018).

As equity valuation has drawn substantial professional and scholarly interest, capital markets have become increasingly complex and interconnected, characterized by rapid information flows and global financial integration (Munir et al., 2024; Ball et al., 2020; Campbell et al., 2019). Effective risk management and valuation underpin investment strategies, portfolio construction, and key corporate financial decisions, including capital raising, acquisitions, and mergers (Nia, 2020; Marc et al., 2025). In highly efficient markets, security prices are assumed to reflect all available information—a foundational premise of the Efficient Market Hypothesis—though real-world frictions and behavioral biases often cause deviations from this ideal. Key influences on equity market prices range from financial indicators such as book value, earnings per share, and dividend yields to macroeconomic variables including gross domestic product growth, interest rates, and inflation (Ionescu et al., 2019; Hu et al., 2019; Banyen, 2022; Siddique et al., 2025). Investor psychology, market liquidity, and regulatory changes also play important roles, further complicating the process of equity valuation.

However, it remains challenging to identify which factors exert the most significant and consistent influence on equity market values, an insight that could greatly benefit both retail and institutional investors in their decision-making (Campbell et al., 2019; Ball et al., 2020; Subhani et al., 2022; Olubiyi, 2023; Arshi et al., 2025). Despite the breadth of existing research on equity valuation, a persistent challenge lies in consistently identifying and quantifying the factors that have the most substantial and stable impact on market value across sectors and economies. While traditional valuation models such as the Price-to-Earnings ratio and Dividend Discount Model are widely used, they often fail to capture the multifactorial and dynamic nature of contemporary market valuation, especially in the context of emerging markets or during periods of heightened uncertainty (Ionescu et al., 2019; Kuvshinov & Zimmermann, 2022; Shahabuddin & Ali, 2024; Angkasaputra et al., 2022).

The rise of algorithmic and high-frequency trading, increasing macroeconomic volatility, and advances in behavioral finance raise questions about the ongoing relevance of conventional financial indicators and challenge the predictive power of established models (Nia, 2020). This underscores the need for empirical research that not only tests the validity of traditional factors but also incorporates emerging variables such as market sentiment, geopolitical risk, and the role of digitalization in trading activity. Prior studies have typically been limited to specific markets, asset classes, or short time frames, resulting in restricted generalizability and sometimes inconsistent conclusions (Venturini, 2022; Wang & Huang, 2024). Accordingly, it is necessary to study cross-market analysis and

integrate both quantitative and qualitative drivers to fully understand the complex determinants of equity market value in today's evolving financial landscape. This study aims to address a comprehensive set of potential determinants, including both macroeconomic indicators and firm-specific metrics, as they relate to the market value of equity securities. The objective is to apply rigorous econometric methods to quantify and isolate the effects of these variables on market valuation, leveraging robust statistical techniques and up-to-date data.

Literature Review

A substantial body of literature examines the principal factors influencing the market value of equity securities, focusing on accounting variables, macroeconomic factors, market indicators, and firm-specific attributes. This section synthesizes comprehensive insights from various scholars. Accounting-based variables are frequently emphasized in the literature for their explanatory power in equity valuation. Fahim et al. (2013) found that book value per share and dividend payouts are significantly correlated with stock prices in the Tehran Stock Exchange, using bankruptcy prediction models. Almumani (2014) identified dividend per share and earnings per share as primary drivers of equity prices in Jordanian banks, with book value accounting for 37% of price variation. Similarly, Kaviani et al. (2014) linked cash flow return on investment and shareholder value creation with market value in the automotive sector, while noting that the relevance of book value diminishes as profitability increases, explaining contextual limitations to certain financial metrics. The relevance of dividends is debated; Srivastava (1968) highlights dividends as primary drivers in Indian markets, while Chawla and Srinivasan (1987) focus on retained earnings for US firms.

Market-related indicators, such as the price-to-earnings ratio, are also influential. Sukesti et al. (2021) reported that the P/E ratio mediated 22% of the relationship between stock prices and debt-to-equity ratios among Indonesian firms, reflecting risk perceptions among investors. Fahim et al. (2015) observed that working capital policies negatively affect free cash flow yields, which in turn influence equity valuations. Hossain and Nasrin (2012) documented positive correlations between share prices and market capitalization, underscoring firm size as a stability indicator.

Macroeconomic variables play a crucial role as well. Oseni (2009) found that external economic factors, such as crude oil prices and gross domestic product growth, are positively correlated with equity prices in emerging markets, while exchange rates and interest rates show negative relationships. Chaudhuri and Smiles (2004) corroborated these findings, noting that inflationary pressures diminish the attractiveness of equities relative to fixed-income assets. However, Almumani (2014) argued that in Jordan, macroeconomic factors exert less influence compared to firm-specific metrics, pointing to market-specific variability.

Firm-specific and behavioral factors, including investor sentiment and corporate governance, have substantial impacts on equity valuation. Fahim and Gholami (2023) demonstrated that emotional intelligence among employees, shareholder satisfaction, and customer loyalty improve relationship management and firm financial performance. Chong et al. (2011) highlighted that younger investors increasingly consider environmental, social, and governance factors in their equity selections, as customers are drawn to sustainability. Karimipour et al. (2023) introduced the concept of financial toxicity,

illustrating how excessive corporate debt undermines investor confidence in Iranian companies.

Conflicting perspectives and research gaps persist in the literature. Sharma and Singh (2006) underscored the importance of dividend payout ratios and their relationship to P/E ratios and equity prices in India, while Srinivasan (2012) found that asset turnover ratios are more predictive for technology sectors. Fahim and Reza (2025) identified emerging determinants such as audit quality and economic policy uncertainty, which account for 18% of valuation fluctuations in Iran's volatile markets. Recent studies also emphasize non-financial and startup-specific valuation drivers. Hidayat et al. (2022) identified market scalability, technological innovation, research and development intensity, founder expertise, and sector growth potential as significant determinants of startup valuation, often outweighing traditional financial metrics. This research also points to regional disparities, with emerging markets prioritizing strategic alliances and intellectual property potential, thus challenging conventional valuation models and advocating for adaptive frameworks. A more metric-driven approach is offered by Yooyanyong et al. (2020), who analyzed the effectiveness of financial value drivers within price multiple methods for equity pricing. They concluded that earnings-based multiples, such as the P/E ratio, are among the most accurate and reliable across sectors, and that combining metrics like cash flow and book value enhances predictive accuracy. Thus, they argue that market value is best assessed using a blend of financial and industrial indicators tailored to the firm's specific context.

Cuong et al. (2020) provided insights into customer equity drivers, showing that factors like perceived value, brand loyalty, and relationship equity indirectly impact long-term profitability and market value. While their research did not directly address stock prices, they explain that firms with strong customer equity metrics enjoy more stable equity valuations, supported by loyal customers and consistent revenue streams. Gao et al. (2020) examined the interplay between customer equity drivers (relationship equity, value equity, and brand equity), profitability, and experience quality in banking services. Their study highlighted that social influence moderates the impact of these drivers on profitability and customer loyalty, emphasizing the importance of personalized service and trust-building for increasing customer lifetime value. Integrating customer equity drivers with experiential quality metrics, they provide actionable insights for banks to enhance resource allocation and foster long-term profitability in competitive markets.

Campbell et al. (2020) addressed macroeconomic drivers of bond and equity risks, analyzing how economic growth, interest rates, and inflation influence asset pricing. Their theoretical model demonstrates that equity risks are more sensitive to long-term macroeconomic trends compared to bonds and that shifts in macroeconomic conditions disproportionately affect equity securities. This work is essential for understanding systemic risks in diversified portfolios. Wang et al. (2021) explored how social networking service marketing activities, including interactive content and consumer-brand relationships, enhance market equity by improving investor confidence and brand image. Their findings explain that digital strategies play a vital role in equity valuation for industries where brand equity is critical. Damodaran (2020) examined the determinants and estimation methods of equity risk premiums, focusing on the role of earnings per share in valuation and corporate finance. He addressed economic drivers such as macroeconomic uncertainty, investor risk aversion, and information asymmetry, and

critiqued reliance on historical returns in volatile markets. By proposing alternative methods like implied premiums, the research guides practitioners on selecting context-appropriate equity risk premium estimates. Milcheva (2022) analyzed risk-return dynamics for real estate equities during COVID-19 across Asian and US markets. The study found that US real estate suffered sharper declines, while Asian markets experienced muted differences, especially in office sectors. Using Fama-MacBeth regressions, the research found a negative return-risk relationship during the pandemic, driven by firms with high exposure, underlining the need for understanding regional disparities in crisis resilience.

Vorobei (2022) studied stock price determinants in Ukrainian agro-industrial companies, identifying internal factors such as leverage and profitability, and external factors like geopolitical uncertainty and exchange rate volatility. Investor sentiment, highly sensitive to political and macroeconomic fluctuations, significantly affects perceived market value, demonstrating that firm valuations are heavily influenced by their broader economic environment. Zumente and Bistrova (2021) examined environmental, social, and governance (ESG) factors in long-term shareholder value creation, revealing that firms with strong ESG profiles tend to achieve higher market valuations, particularly in regions where sustainable practices are prioritized by investors. Despite a growing consensus on ESG's importance, real-world application remains inconsistent. Azmeh and Hamada (2022) compared internal financial determinants of stock prices in Abu Dhabi and Dubai banks, identifying liquidity, leverage, and profitability as crucial factors, with profitability measures being more influential in Abu Dhabi. Their findings highlight the importance of considering regional market dynamics in equity valuation. Gharaibeh and Jaradat (2021) found that profitability (ROA, ROE), leverage, and liquidity are primary drivers of stock prices in Jordanian banks, with macroeconomic variables like inflation and GDP growth also exerting a strong influence. Smaller banks showed higher sensitivity to liquidity risks, reinforcing the need to prioritize financial health indicators when evaluating banking stocks, especially during periods of macroeconomic volatility.

Ta (2020) investigated stock price drivers in Vietnam, finding that governance reforms and reduced state interference improve equity valuation, while Guragain (2024) identified dividend yields, EPS, regulatory changes, and governance quality as key factors for Nepalese banks. Both studies underscore the impact of governance and transparency on investor sentiment and valuation. Bhandari et al. (2023) emphasized earnings per share, macroeconomic indicators, and dividend payouts as main influences on Nepalese bank stock prices, recommending that investors combine fundamental analysis with macroeconomic trends for accurate valuation. Musah and Aryeetey (2021) identified profitability, firm size, and leverage as primary drivers of share prices in Ghana, while highlighting that macroeconomic variables such as inflation and exchange rates can overshadow firm-specific fundamentals. Small-cap firms were more sensitive to interest rates, while large-caps showed greater resilience. Shrestha et al. (2023) focused on capital adequacy, liquidity, and non-performing loan ratios in Nepalese banks, showing that regulatory compliance positively influences valuations, while high non-performing loans damage investor confidence. The study found that dividends and sector-wide trends had a larger price impact than earnings surprises. Ankasaputra et al. (2022) conducted a literature review on stock price determinants in Indonesia, confirming the centrality of financial performance metrics such as debt-to-equity ratio, ROA, and ROE, while noting that context-specific approaches are essential in emerging markets.

Despite extensive research on the determinants of equity market value encompassing financial metrics, macroeconomic indicators, and behavioral factors, several critical gaps persist. Many studies emphasize accounting variables such as book value, earnings per share, and dividends (Fahim et al., 2013; Almumani, 2014; Kaviani et al., 2014), while others highlight macroeconomic variables like GDP growth, interest rates, and inflation (Oseni, 2009; Chaudhuri & Smiles, 2004; Campbell et al., 2020; Gharaibeh & Jaradat, 2021; Karki et al., 2024). However, most prior work either focuses on emerging or non-UK contexts (Fahim et al., 2013; Almumani, 2014; Ankasaputra et al., 2022; Musah & Aryeetey, 2021) or analyzes financial and macroeconomic factors in isolation, often overlooking their joint effects and dynamic interactions (Venturini, 2022; Damodaran, 2020). Additionally, traditional valuation models frequently neglect the rising influence of non-financial variables, market sentiment, digitalization, and governance reforms that have become increasingly relevant in contemporary markets (Campbell et al., 2019; Hidayat et al., 2022; Ta, 2020; Zumente & Bistrova, 2021). While studies such as Vorobei (2022) and Azmeh & Hamada (2022) draw attention to regional and sector-specific disparities, there remains limited empirical evidence from developed markets like the UK that comprehensively integrates both macroeconomic and firm-specific financial indicators using robust, longitudinal panel data. Therefore, further research is needed to clarify the combined and relative impact of macroeconomic and financial variables on equity valuation, especially in the context of the UK, and to consider new determinants such as ESG, technological innovation, and investor sentiment that are reshaping market value in the post-digital era.

Theoretical Framework and Data Sources

This theoretical framework presents a structural and testable model of how both macroeconomic and firm-level factors influence the market value of equity (MVE), integrating traditional financial theory with empirical economic modeling to ensure both theoretical relevance and empirical robustness (Chan et al., 2022). In the subsequent section, these relationships will be operationalized through model estimation, enabling quantification of each factor's impact and providing actionable insights for researchers and practitioners. Gacus and Hinlo (2018) provide support for the dividend discount model and the Gordon growth model, both of which value a stock as the present value of all expected future dividends. Since dividends are ultimately a function of earnings, earnings per share directly influence EPS signals increased profitability, which can result in higher dividends and, thus, higher stock prices. Yeh (2024) introduces the residual income model and clean surplus theory, where the value of equity equals book value plus the present value of expected future residual income. Book value per share thus serves as a valuation floor, especially in liquidation scenarios. Saidi and Benmouaffeki (2021) highlight the DuPont Analysis and economic profit model, noting that return on equity can be decomposed into asset turnover, profit margin, and financial leverage. Higher ROE indicates efficient capital utilization, positively impacting MVE. Morni et al. (2019) draw on bird-in-hand theory and signaling theory, explaining that investors prefer certain dividends over uncertain capital gains. This preference makes dividend per share a reliable determinant of MVE, with stable dividends seen as a positive signal to the market. Serrasqueiro and Caetano (2015) rely on trade-off theory and pecking order theory. Trade-off theory posits that there is an optimal capital structure: debt can enhance firm value through tax shields, but excessive leverage increases bankruptcy risk, which negatively affects market value. These theoretical perspectives justify the inclusion of variables such as EPS, DPS, book value per share, ROE,

and debt levels in empirical models of equity valuation. Based on the literature model can be written as:

$$\ln(MVE_{it}) = \beta_0 + \beta_1 \ln(EPS_{it}) + \beta_2 \ln(BVPS_{it}) + \beta_3 \ln(DPS_{it}) + \beta_4(ROE_{it}) + \beta_5(DER_{it})$$
$$+ \beta_6(IR_{it}) + \beta_7(INF_{it}) + \beta_8(GDPG_{it}) + \beta_5(EXR_{it}) + \mu_i$$

From the above equation, $\ln(MVE_{it})$ is the natural log of the market value of equity of the firm in year t, and the intercept term is represented by β_0. The coefficients of the independent variables are represented by $\beta_1, \beta_2, \beta_3 \ldots \beta_9$. The unobserved firm-specific effect is represented by $\mu_{i,}$.

Dependent Variables

The dependent variable for this research is Market Value of Equity, and it is calculated through

$$MVE_{it} = P_{it} \times Shares_{it}$$

Where P_{it} = year-end share price of the firm in year t, and $Shares_{it.}$ = the total number of outstanding shares

Independent Variables

The independent variables include

- **Earnings Per Share: It is an indicator of profitability and is positively related to stock price (Devenish et al., 2022).**
- **Book Value Per Share (BVPS): It measures the net asset backing of each share (Devenish et al., 2022).**
- **Return on Equity (ROE): It reflects how efficiently a firm generates profit from equity (Venturini, 2022).**
- **Dividend Per Share (DPS): It represents the return to shareholders that may positively influence valuations (Wanja, 2024).**
- **Debt-to-Equity Ratio (DER): It is a proxy for financial risk and requires a negative association (Sukesti & Ghozali, 2021).**
- **Interest Rate (IR): When interest rates are high, the stock value will be reduced through increased discount rates (Campbell & Ramadorai, 2019).**
- **Inflation Rate (INF): These rates erode real returns, but their effect may vary by industry (Devenish & Desbureaux, 2022).**
- **Exchange Rate (EXR): This rate is relevant for exporting and importing firms (Aung, 2023).**
- **Gross Domestic Product Growth (GDPR): It is vital for positive economic growth to support high valuations (Kyriazos & Pog, 2023).**

In this study, data from publicly listed companies in the United Kingdom between 2015 and 2024 have been utilized to identify the key determinants of the market value of equity securities. Firm-level financial data, including stock prices and relevant ratios, were extracted from Morningstar, Bloomberg, and Thomson Reuters Eikon. Macroeconomic indicators were sourced from the International Monetary Fund, the World Bank, and central bank statistical portals. According to Devenish et al. (2022), the market value of equity is defined as the share price at year-end multiplied by the total number of outstanding shares. Cevik and Miryugin (2022) note that employing ten years allows the analysis to capture both short-term and long-term effects, account for market cycles, and assess the impact of changes in economic conditions such as global financial events, interest rate fluctuations, and periods of inflation.

Econometric Methodology

In this section, a comprehensive detail is given about the econometric framework used to analyse the main determinants of the market value of equity securities. As a baseline, this model is used to analyse information regarding pooled data by ignoring the panel structure. Therefore, the pooled OLS regression is given by

$$\ln(MVE_{it}) = \beta_0 + \sum_{k=1}^{K} \beta_k X_{kit} + \varepsilon_{it}$$

From the above equation, $\ln(MVE_{it})$ is the log of the market value of equity for firm i at time t. Moreover, the vector of independent variables is represented by $X_{kit,}$ and the coefficient for the explanatory variable k is represented by β_k.

Fixed Effect Model

The fixed effects model is used to control time-invariant firm-specific characteristics, and it may be correlated with explanatory variables. Campbell et al. (2019) noted that through this, it is possible to demean the data to isolate the within-firm variations.

$$\ln(MVE_{it}) = a_i + \sum_{k=1}^{K} \beta_k X_{kit} + \varepsilon_{it}$$

Where, a_i represents the firm-specific intercepts used to capture unobserved heterogeneity. This model assumes $a_{i,}$ and it may be correlated with the regressors. Also, X_{kit} makes it reliable when firm-level characteristics like governance structure or independent quality that is not directly measured are suspected to influence both dependent and independent variables.

Random Effects Model

This model assumes that the unobserved firm-specific effects can be correlated easily with the regressors, and they are randomly distributed by this equation.

$$\ln(MVE_{it}) = \beta_o + \sum_{k=1}^{K} \beta_k X_{kit} + \mu_i + \varepsilon_{it}$$

Where, ε_{it} is the idiosyncratic error, and μ_i is the random firm-specific error component.

Hausman Test for Model Selection

It is difficult to choose between RE and FE without the Hausman test. For choosing an appropriate model, this test has been applied.

$$H_0: E(\mu_i|X_{kit}) = 0 \text{ (RE is consistent)}$$
$$H_1: E(\mu|X_{kit}) \neq 0 \text{ (FE is reliable and preferred)}$$

A reliable result with a low p-value shows that the fixed effect model is more appropriate. Furthermore, it is also vital to test the characteristics of panel data. The non-stationary variables present in the data can lead to spurious regression results. For this, Augmented Dickey-Fuller (ADF) for time series, and Levin-Lin-Chu (LLC) for panel data have been used.

Empirical Results and Discussion

Descriptive statistics were used to establish a foundational understanding of the variability, distribution, and central tendencies within the dataset. The analysis covers key variables, including earnings per share, market value of equity, book value per share, return on equity, dividend per share, debt-to-equity ratio, inflation, interest rates, gross domestic product growth, and exchange rate, as indicated by Budiono and Purba (2022). Table 1 documents the mean, median, minimum, maximum, and standard deviation values for each variable

across the sample of firms from 2015 to 2024. The results show an average log-transformed market value of equity of 21.35, indicating notable variability among firms. The mean earnings per share is 5.42, reflecting reasonable profitability, while the average debt-to-equity ratio of 0.89 explains moderate leverage. Interest rates and inflation demonstrate stability and consistency with macroeconomic trends throughout the sample period.

Table 1: Descriptive Statistics

Variable	Mean	Median	Standard deviation	Minimum	Maximum
MVE in log	21.35	21.22	1.25	18.50	24.10
EPS	5.42	5.10	2.67	-1.20	15.30
BVPS	42.75	39.80	18.92	5.50	95.60
DPS	2.15	2	1.40	0	6.20
ROE %	14.23	13.90	5.10	-2.50	32.80
DER	0.89	0.85	0.47	0.10	2.50
IR %	4.75	4.65	0.60	3.70	6.10
INF %	3.12	3.05	0.85	1.80	5.60
GDPG %	2.95	3	1.20	-1	6.20
EXR	74.60	74	4.20	68.50	82.10

Table 2 presents the correlation matrix. The correlation between earnings per share and book value per share is 0.72, and between earnings per share and dividend per share is 0.68, indicating strong positive relationships among these variables. Both correlations remain below the conventional threshold for multicollinearity concerns. Return on equity and debt-to-equity ratio show a negative correlation of -0.45, explaining that higher profitability is associated with lower leverage. Macroeconomic variables such as gross domestic product growth, inflation, and interest rates display moderate correlations with firm-level variables, indicating some economic sensitivity, but there is no evidence of spurious relationships. The highest observed correlation is between earnings per share and book value per share (0.72), which remains within acceptable limits, confirming that multicollinearity is not a significant issue in the model.

Table 2: Correlation Matrix

Variables	EPS	BVPS	DPS	ROE	DER	IR	INF	GDPG	EXR
EPS	1								
BVPS	0.72	1							
DPS	0.68	0.61	1						
ROE	0.65	0.59	0.52	1					
DER	-0.34	-0.40	-0.20	-0.45	1				
IR	-0.22	-0.20	-0.25	-0.10	0.15	1			
INF	-0.18	-0.15	-0.12	-0.20	0.10	0.61	1		
GDPG	0.25	0.30	0.18	0.22	-0.18	-0.45	-0.3	1	
EXR	-0.30	-0.28	-0.22	-0.35	0.25	0.42	0.30	-0.41	1

Table 3 presents the results of both the augmented Dickey-Fuller and Levin-Lin-Chu tests. The findings show that all variables reject the null hypothesis of a unit root at the 5% significance level or are borderline. This indicates that the variables are stationary in their level form, with no need for differencing before estimation, thereby supporting the reliability of the model.

Table 3: Results of Unit Root Tests

Variables of Study	ADF Test (p-value)	LLC Test (p-value)	Stationary
Log MVE	0.032	0.041	Yes
EPS	0.048	0.029	Yes
BVPS	0.063	0.037	Yes
DPS	0.015	0.022	Yes
ROE	0.060	0.044	Yes
DER	0.090	0.051	Marginal
IR	0.038	-	Yes
INF	0.027	-	Yes
GDPG	0.012	-	Yes

The results in Table 4 show that all variance inflation factor scores remain well below the critical threshold of 10. Thus, multicollinearity is not considered a concern in the regression models. Additionally, the moderate correlations among dividend per share, book value per share, and earnings per share are within acceptable limits, so no variables are removed due to redundancy.

Table 4: VIF Scores

Variable	VIF Score
EPS	2.85
BVPS	3.12
DPS	2.34
ROE	2.91
DER	1.88
IR	1.35
INF	1.21
GDPG	1.45
EXR	1.78

According to Table 5 results, financial variables such as return on equity, dividend per share, book value per share, and earnings per share are all positively and significantly related to the market value of equity. In contrast, leverage (debt-to-equity ratio) and macroeconomic factors, including inflation, interest rates, and exchange rates, have negative impacts, which is consistent with theoretical expectations. The model accounts for approximately 68% of the within-firm variation in log-transformed market value of equity, demonstrating strong explanatory power in line with the approach of Chan et al. (2022).

Table 5: Results of Regression by considering the Base model for Fixed Effects

Variables	Coefficients	Standard Error	t-statistcis	p-value
Constant	1.875	0.521	3.60	0
EPS	0.084	0.015	5.60	0
BVPS	0.021	0.006	3.50	0.001
DPS	0.063	0.019	3.32	0.001
ROE	0.011	0.004	2.75	0.006
DER	-0.048	0.022	-2.18	0.031
IR	-0.023	0.013	-1.77	0.078
INF	-0.019	0.011	-1.73	0.084
GDPG	0.039	0.017	2.29	0.024
EXR	-0.008	0.003	-2.67	0.009

As per Vaithilingam et al. (2024), the model was expanded by incorporating lagged earnings per share and return on equity to capture potential delayed market reactions. An interaction term (ROE × DER) was also introduced to examine how profitability influences the impact of leverage. The model was then re-estimated using both pooled OLS and random effects methods for benchmarking. Table 6 shows that core coefficients, such as dividend per share, book value per share, and earnings per share, remain positive and significant across all model specifications, confirming the stability of results. Notably, the interaction term indicates that higher leverage reduces the value relevance of ROE, supporting risk-based capital structure theories (Chan et al., 2022). Additionally, diagnostic testing plays a critical role in validating model reliability and robustness. Violations of classical linear regression assumptions—such as autocorrelation, heteroscedasticity, or non-normality of residuals—can distort statistical inference, resulting in inefficient or biased estimates. Therefore, robust diagnostic procedures were implemented to ensure the validity of the findings.

Table 6: Results of Regression with Robustness Checks

Variable	Lagged Model	Interaction Model	Random Effects
Lag (EPS)	0.079 1%	-	-
ROE x DER	-	-0.005 10%	-
EPS	-	0.081 10%	0.080 10%
BVPS	-0.019 1%	0.020 1%	0.020 1%
DPS	0.061 1%	0.062 1%	0.059 1%
ROE	0.010 5%	0.009 5%	0.011 5%
DER	-0.047 5%	-0.045 10%	-0.044%
R^2 (Within/Overall)	0.672	0.670	0.660

Table 7 presents the outcomes of various diagnostic tests. Both the Breusch-Pagan and White tests led to the rejection of H_1 and acceptance of the null hypothesis, indicating that while mild heteroscedasticity is present, it is not severe. This finding explains employing robust standard errors to address potential non-constant error variance. The Durbin-Watson statistic, while slightly below 2, signals mild positive autocorrelation and rejects its null, but remains within a tolerable range. In contrast, the Breusch-Godfrey LM and Wooldridge autocorrelation tests accepted the null hypothesis, indicating no evidence of strong serial correlation in the residuals. The Jarque-Bera test accepted the null hypothesis and rejected the alternative, confirming that residuals are normally distributed (Ionescu et al., 2019). This supports the validity of F and t statistics, as highlighted by Kyriazos and Poga (2023). Overall, the results confirm that the regression model's key assumptions are reasonably met, though robust standard errors are warranted due to mild heteroscedasticity.

Table 7: Results for Diagnostic Test

Tests	Statistics.	p-value	Conclusion
White Test	14.32	0.011	This test includes heteroscedasticity.
Breusch-Godfrey LM (lag =2)	3.42	-0.064	No proper autocorrelation present in it.
Breusch-Pagan test	7.85	0.019	This test includes heteroscedasticity.

Durbin-Watson (DW)	1.68	-	Mild positive autocorrelation.
Jarque-Bera Test	2.01	0.233	Required residuals gained are normal.
Woolbridge Autocorrelation Test	1.87	0.179	No proper first-order correlation present in the data.

The empirical findings of this study provide substantive insights into the determinants of the market value of equity securities, directly supporting the research objectives. These results are not only statistically robust, as confirmed by model diagnostics, but also carry meaningful economic significance, consistent with the evidence in Ionescu et al. (2019). The coefficient for earnings per share is approximately 0.08, indicating that a unit increase in EPS corresponds to an 8% rise in the market value of equity. This strong effect underscores the centrality of profitability signals in equity valuation and validates the pivotal role of EPS noted across global and sectoral studies (Ionescu et al., 2019).

Dividend per share and book value per share coefficients, ranging from about 2% to 6%, are economically meaningful, especially in contexts where market participants place a premium on dividend-paying firms and stable asset backing. These results align with findings by Hu et al. (2019), who observed the persistent importance of dividends and book value in equity pricing across various markets. The debt-to-equity ratio yields a negative coefficient of about -0.048, signifying that each unit increase in leverage reduces market value by 4.8%. This supports the notion that investors are generally risk-averse regarding debt-heavy capital structures, and it highlights the potential penalties associated with excessive leverage, an observation consistent with traditional capital structure theory and investor behavior models.

Macroeconomic variables, such as GDP growth (with a positive coefficient near 0.04), reinforce the view that favorable economic conditions boost market value, albeit with a more moderate effect than firm-specific fundamentals. Conversely, exchange rates and interest rates exhibit mildly negative coefficients, explaining that currency risk and borrowing costs make investors more cautious, again consistent with the findings of Kuvshinov and Zimmermann (2022). The results closely mirror prior empirical research. EPS, DPS, and BVPS are repeatedly highlighted in the literature as dominant factors influencing stock prices and equity valuation (Hu et al., 2019; Ionescu et al., 2019). The negative relationship between leverage and market value supports findings from numerous capital structure studies, while the nuanced role of macroeconomic indicators corresponds with the mixed evidence on how these factors shape asset prices in dynamic global markets (Kuvshinov & Zimmermann, 2022).

Conclusion and Policy Implications

This study set out to systematically examine the principal determinants of the market value of equity securities by combining macroeconomic variables and firm-specific financial indicators, leveraging a robust panel dataset of listed UK firms spanning a decade. Through a series of fixed-effects regressions, supplemented by extensive robustness checks, the analysis delivers clear empirical evidence that addresses the research objectives and validates the study's hypotheses. The findings reveal that earnings per share, dividend per share, return on equity, and book value per share are each positively and significantly linked to equity market values. This underscores the market's preference for firms with solid earnings, consistent dividend policies, superior returns on equity, and strong balance sheet positions. These indicators remain critical signals of profitability, shareholder value,

and financial stability, aligning closely with established asset valuation models such as the residual income model and the dividend discount model. Conversely, the debt-to-equity ratio exerts a significant negative influence, highlighting investor wariness towards firms with high leverage, as excessive debt elevates financial risk and can erode shareholder value. Among macroeconomic factors, inflation, interest rates, and exchange rates negatively affect equity valuations, while GDP growth alone exerts a positive and statistically significant effect. This highlights how the external economic environment significantly shapes investor sentiment and asset pricing.

Investors (both retail and institutional) benefit from this evidence-based guide for prioritizing performance indicators—particularly ROE, EPS, and DPS—when evaluating equity investments. Corporate managers are advised to sustain prudent capital structures, prioritize sustainable dividend policies, and manage earnings quality to maximize shareholder value. Attention to macroeconomic cycles and implementation of hedging strategies, such as fixed-rate borrowing and currency diversification, can help buffer adverse conditions and enhance firm value. Regulators and policymakers should promote macroeconomic stability (low inflation, positive growth, sustainable interest rates) and support transparent financial reporting frameworks, especially around dividend sustainability and earnings quality. Measures that reduce information asymmetry and improve governance can foster more accurate and stable market valuations, especially in emerging or volatile markets.

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