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VALUATION GIANTS: A MULTIVARIATE INVESTIGATION INTO THE RISE OF THE MAGNIFICENT SEVEN

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Abstract: *This study examines the factors determining market value in leading technology companies in terms of financial performance, capital structure, and investor sentiment. Using a fixed effects model, the relationships between market value and variables such as earnings per share (EPS), debt-to-equity ratio, return on equity (ROE), return on assets (ROA), price-to-book ratio, and return on investment (ROI) were analyzed. The findings indicate that EPS and ROI have a positive effect on market value, while the debt-to-equity ratio has a negative effect. This suggests that investors are sensitive to profitability increases and that perceptions of financial risk influence valuation. Interestingly, negative relationships were found between ROE, ROA, and market value, implying that high leverage or artificially inflated profits may be perceived as risk factors. R&D and SG&A expenditures were found to have no significant short-term impact. Overall, the results support that market valuation in large-cap technology companies is shaped not only by financial indicators but also by investor perceptions and growth expectations.*

Keywords: *Technology Companies, Investor Sentiment, Market Value, Financial Performance*

JEL Classification: *G12, G14, G17*

INTRODUCTION

In recent years, structural transformations in global financial markets have significantly increased the impact of large-scale companies operating in the technology sector on the economic and financial system. Technological developments such as digitalization, artificial intelligence, cloud computing, and automation directly shape not only business models but also company valuations, investment decisions, and capital flows. One of the most notable reflections of this transformation is the increasing influence of seven major technology companies listed on the US stock Exchange, known as the "Magnificent Seven" (Apple, Microsoft, Alphabet, Amazon, Nvidia, Meta Platforms, and Tesla), on financial markets.

As of 2023, these companies have reached a very high share of the total market capitalization of major indices such as the S&P 500 and Nasdaq 100. This situation increases concentration risk in capital markets and indicates that the performance of these companies has become critical enough to determine the direction of broad market indices (Holder & Almada, 2025: 83). At the same time, this structure necessitates a reassessment of issues such as market imbalances, the influence of major players, and systematic risk in financial analysis.

This study aims to explain the financial performance of the companies known as the "Magnificent Seven," their impact on the stock market, and their relationship with investor behavior. In addition, the study will analyze the key financial dynamics, macroeconomic conditions, and forward-looking risk factors underlying the rise of these companies in capital markets.

LITERATURE REVIEW

In today's global economy, a few giant corporations possess the potential to shape its overall direction. The influence of these technology-driven conglomerates extends beyond financial markets, manifesting also in the digital transformation of societies in line with their growing interest in technology. In this context, the group commonly referred to as the "Magnificent Seven", Apple, Microsoft, Amazon, Alphabet (Google), Meta, Tesla, and Nvidia, has become the focal point of attention for both investors and economists in recent years. These companies stand out not only for their substantial market capitalization but also for their capacity for innovation, investments in artificial intelligence, and strategic initiatives that drive the evolution of technology.

Table 1. Literature Review on Firm Value

Author(s)	Research Topic	Methodology	Key Findings
Bui vd. (2023).	The relationship between capital structure and firm value has been examined for companies listed on the Vietnam Stock Exchange.	Data from 769 companies listed on the Ho Chi Minh and Hanoi Stock Exchanges between 2012 and 2022 were analyzed, examining ROA, ROE, and Tobin's Q using OLS, FEM, REM, and GLS regression analyses.	The findings indicate that long-term debt does not significantly affect firm value, whereas short-term debt has a negative impact. Both short-term and long-term debt ratios adversely influence ROA, ROE, and Tobin's Q, with the most pronounced effect observed on the decline of Tobin's Q. Therefore, it is essential for firms to regularly review and assess their current investments, enabling managers to make informed decisions and optimize overall organizational performance.
Nenkov D. (2024)	The impact of the "Magnificent Seven" technology companies on the S&P 500 stock market performance has been examined.	A comparative analysis method was employed using key financial indicators, including EPS, ROE, PE, and PBV ratios.	High price-to-earnings (P/E) and price-to-book value (PBV) ratios indicate that these stocks are not supported by their fundamental indicators. This suggests that market sentiment may be driven by speculative behavior rather than actual financial performance.

Peprah et al. (2024).	The pre- and post-COVID-19 pandemic stock prices, managerial efficiency, and economic value added (EVA) of the "Magnificent Seven" companies have been examined.	Using data from 2016 to 2023, an intra-group ANOVA analysis was conducted, and EVA calculations were performed using the Stern-Stewart formula.	The pandemic period was observed to have a positive impact on the decision-making processes of the "Magnificent Seven" management teams. The use of artificial intelligence, operational agility, and innovation emerged as key factors for enhancing managerial efficiency. It was also suggested that EVA serves as a reliable measure for assessing a company's financial performance and managerial effectiveness during periods of uncertainty.
Eteman, (2024).	The speculative bubble effect of artificial intelligence on the stocks of the "Magnificent Seven" has been examined.	The GSADF test and volatility spillover analyses have been conducted on the stocks.	Among the "Magnificent Seven" stocks, Nvidia and Tesla have exhibited AI-driven speculative bubbles, which may contribute to increased volatility in other companies. It is suggested that policymakers could mitigate these speculative effects through the implementation of new regulations.
Adip et al. (2024).	The relationship between financial performance and firm value has been examined for the highest market capitalization technology companies listed on the IDX stock exchange.	Using stock market data from 2018 to 2022, the analysis was conducted employing SPSS and multiple regression methods.	It has been demonstrated that financial performance is positively related to firm value and has a significant impact on financial distress in technology companies. At the same time, the relationship between PD/DD and financial distress does not produce clear market reflections, confirming that the Indonesian stock market remains in a semi-efficient state.
Plagge and Rowley, (2024).	The dominant role of the "Magnificent Seven" in the U.S. (Russell 3000) stock market has been examined, along with performance comparisons and the strategic value of portfolio diversification.	The period from 2000 to 2023 was divided into twelve two-year subperiods, and alternative portfolio simulations were conducted excluding the top and bottom 10 performing stocks in each subperiod. The performance of large- and small-cap stocks was evaluated through correlation analysis using FactSet data.	During the 2000–2013 period, excluding the lowest-performing stocks increased returns by 1–2%, reflecting small-cap outperformance. However, from 2014 onward, particularly under the dominance of the Magnificent Seven, excluding the top contributors led to a 1–2% (and in some cases up to –5%) loss, while large-cap stocks achieved a 5% outperformance. This cyclical pattern indicates that the weighting of large-cap stocks amplifies returns, making active management and market timing more challenging.
Benham et al. (2024).	This study examines the increasing dominance of seven large-cap technology stocks in the U.S. market, assessing their contributions to recent market returns, their similarities to the Dot-Com Bubble period, and the potential risks associated with market concentration.	Using FactSet data from 1986 to 2023, it tracks the weight and return contributions of the "Magnificent Seven" and the top 10 stocks in the Russell 3000 index.	As of December 31, 2023, the "Magnificent Seven" accounted for 22% of the Russell 3000 index, contributing nearly all gains from January to October 2023, with their impact diminishing in November and December. This concentration has reached historical peaks—similar to the Dot-com Bubble—with the 1986 average at 17%, and technology weights surpassing those of the Dot-com era. Low debt-to-income ratios, long-term debt structures, and a low-interest-rate environment have mitigated cash flow issues. However, historically, market leadership shifts through "creative destruction," with the top 10 stocks' weights declining over a ten-year horizon. Although such changes have slowed in recent years, the Magnificent Seven may not be able to maintain their growth and dominance in the face of trends like artificial intelligence.

Jandhyala, (2025).	The stock market reactions following the earnings announcements of the seven major companies have been examined.	Earnings reports, trading volume, price reaction, and short-term volatility of the stocks were combined to construct the Composite Behavioral Curve (CBC).	The study demonstrates that stock trading exhibits specific and predictable patterns in response to significant announcements, with complex group dynamics shaping these reactions. Market movements are therefore far from random, unfolding within measurable and analyzable structures. For example, reaction patterns for stocks such as Apple and Amazon are relatively clear and repeatable, whereas responses for other companies, like Microsoft, are more variable, reflecting different aspects of crowd dynamics.
Krause, (2025).	The potential effects of the artificial intelligence system "DeepSeek," developed by China, on the "Magnificent Seven" have been examined.	The analysis was conducted using the Gordon Growth Model (GGM).	The decline in long-term growth expectations has been shown to significantly reduce the projected stock prices of these companies. Furthermore, their high sensitivity to changes in growth assumptions indicates that AI-driven competition can substantially shape market valuations and long-term investor expectations. Infrastructure providers such as Nvidia and Microsoft are highlighted as facing greater risks from cost-efficient AI models, whereas application leaders like Meta and Tesla may encounter longer-term challenges in maintaining high-quality AI services.
Bruneau, (2025).	This study analyzes the temporal dimension and market-implied correlations among the "Magnificent Seven" technology stocks, investigating their implications for portfolio optimization and risk management.	Correlations were calculated using the Pearson correlation coefficient with a two-year rolling window applied to daily return series. Market correlations were derived from S&P OTC derivative data using volatility indices and basket option prices, standardized with the "correlation shift" metric (α), and trends for the 2020–2024 period were analyzed.	Market-implied correlations contain an average premium of 12 points compared to historical values, with a contraction observed during the COVID-19 period (8.9 points) and a peak in 2022 (14.6 points). Tesla-focused pairs, however, are dominated by low-correlation patterns. The distribution of correlations has increased by 50%, and the implied values hold strategic significance for risk mitigation and derivatives trading, with the potential to create differences exceeding 10% in basket option premiums.
Umar et al., (2025).	It examines the return and volatility spillovers among the "Magnificent Seven" technology giants, focusing on asymmetric linkages under different market conditions.	Using the quantile connectedness approach (QVAR), daily stock returns and volatility spillovers between 2012 and 2024 were analyzed under different market conditions—bull, normal, and bear—through quantile-based modeling.	A high degree of connectedness among the companies has been observed, with large-cap firms (e.g., Alphabet and Microsoft) acting as net volatility transmitters, while smaller-cap firms (e.g., Tesla and Meta) serve as net receivers. Inter-quantile asymmetry becomes particularly pronounced during left-tail events, and idiosyncratic shocks amplify systemic risks. These findings provide critical insights for policymakers, investors, and regulators in developing risk management strategies.

Sahani, (2025).	It presents a comparative analysis of the major stocks in the S&P 500 index, examining macroeconomic impacts such as the COVID-19 pandemic, inflation, interest rate fluctuations, and the rise of artificial intelligence.	Based on annual firm-level data from Refinitive DataStream for 2014–2024, growth stocks were classified as those with an average P/E > 15, and value stocks as those with P/E ≤ 15. Analyses included the calculation of nominal and inflation-adjusted compound annual growth rates (CAGR), annual return comparisons, independent sample t-tests, and multiple linear regression models.	Although growth stocks significantly outperform value stocks in terms of long-term nominal CAGR (average 11.48% vs. 6.86%, p=0.0004) and real CAGR (average 8.36% vs. 3.87%, p=0.0004), annual return differences are not statistically significant. Regression results indicate that P/E and P/CF ratios are significant positive predictors of both nominal and real CAGR, though their explanatory power remains limited, while the P/B ratio is not significant. Growth stocks exhibit higher volatility and valuation ratios, suggesting that the technology-driven contribution of the "Magnificent Seven" necessitates a reevaluation of value investment strategies.

Source: Prepared by the authors based on the studies cited in the reference list

In recent years, the relationship between capital structure, firm value, and the market impact of technology companies has emerged as an important area of research in the financial literature. Bui et al. (2023) analyzed data from 769 firms listed on the Vietnam Stock Exchange between 2012 and 2022, revealing that short-term debt negatively affects firm value, whereas long-term debt has a limited impact. Similarly, Adip et al. (2024) identified a positive relationship between financial performance and firm value in Indonesia's information technology sector, while noting that the market remains semi-efficient. These studies indicate that, in emerging markets, the link between financial structure and performance is complex and highly dependent on country-specific dynamics.

Studies focusing on the technology sector particularly examine the dominant market influence of large-cap technology companies collectively known as the "Magnificent Seven." Nenkov (2024) highlights that the high P/E and P/B ratios of these stocks are not fully supported by fundamental indicators, drawing attention to speculative elements in market valuations. Benham et al. (2024) find that these companies account for 22% of the Russell 3000 index and contributed the majority of gains in 2023. Plagge and Rowley (2024) demonstrate that, between 2000 and 2023, the influence of large-cap stocks on returns has increased, complicating active portfolio management. Sahani (2025) compares growth and value stocks, showing that growth-oriented technology equities achieve higher long-term compound growth rates, albeit with increased volatility.

Research focusing on the impact of artificial intelligence has identified notable effects on technology stocks. Eteman (2024) detected AI-driven bubbles in Nvidia and Tesla shares, while Krause (2025) demonstrated that China's "DeepSeek" model could weaken the long-term growth expectations of these companies, thereby reducing their stock values. Both studies emphasize that AI-driven competition represents both an opportunity and a risk factor in market valuations.

Post-pandemic studies on managerial efficiency and investor reactions indicate significant patterns. Peprah et al. (2024) report that economic value added (EVA) increased in the "Magnificent Seven" companies, with artificial intelligence, operational agility, and innovation supporting managerial effectiveness. Jandhyala (2025) finds that stock movements following earnings announcements in these companies exhibit predictable behavioral patterns.

Findings on market correlation and volatility point to systemic risk implications. Bruneau (2025) reports that implied correlations among the "Magnificent Seven" stocks increased by 50% between 2020 and 2024, while Umar et al. (2025) show that Alphabet and Microsoft act as volatility transmitters, whereas Tesla and Meta serve as volatility receivers. These results indicate that the interactions of large-cap technology stocks amplify systemic risks within the market.

Overall, the literature addresses financial performance, firm value, market concentration, the impact of artificial intelligence, and volatility dynamics in a multidimensional manner, demonstrating that market movements have become increasingly dependent on the strategic decisions of a small number of large technology companies and investor sentiment. This study aims to investigate the firm-specific financial values underlying the rapid attainment of high market capitalization by the companies collectively known as the "Magnificent Seven."

DATA SET AND METHODOLOGY

In recent years, a group of large-scale, technology-oriented companies known as the "Magnificent Seven" have gained a remarkable position in global financial markets, both in terms of investor interest and their influence on capital markets. These companies stand out not only for their high market valuations but also for their innovative product and service portfolios, investments in digital infrastructure, and expenditures on research and development (R&D). Moreover, due to their leading role in strategic areas such as digitalization, artificial intelligence, and e-commerce, these companies are frequently and prominently represented in growth-oriented portfolios. In this context, the scope of the study encompasses seven U.S.-based technology giants: Apple Inc., Microsoft Corporation, Alphabet Inc., Amazon Inc., NVIDIA Corporation, Meta Platforms Inc., and Tesla Inc. The data set for all seven companies has been prepared and made suitable for analysis. In this context, annual data for the variables specified in Table 1, covering an 11-year period from 2014 to 2024, have been included in the analysis. A balanced panel data model has been constructed, as each unit included in the analysis is observed throughout the entire time period.

Table 2. Descriptions of the Variables

Variable name	Abbreviation	Explanation	Source
Market Cap	MC	Calculated by multiplying the number of a company's publicly traded shares by the market price per share.	Oberlo.com
Research and Development Expenses	RD	Annual Research and Development Expenses (Millions of US $)	Macrotrends.net
Selling, General, and Administrative expenses	SG&A	Annual SG&A Expenses (Millions of US $)	Macrotrends.net
Earnings per Share	EPS	Annual EPS	Macrotrends.net
Current Ratio	CR	Company's ability to pay short-term obligations	Macrotrends.net
Dept to Equity Ratio	D/E	A measure of a company's financial leverage calculated by dividing its long-term debt by stockholders' equity.	Macrotrends.net
Return on Equity	ROE	The amount of net income returned as a percentage of shareholders equity.	Macrotrends.net
Return on Assets	ROA	As an indicator of how profitable a company is relative to its total assets	Macrotrends.net

Return on Investment	ROI	It is calculated by taking the difference between the return and the cost of the investment, and dividing that difference by the cost.	Macrotrends.net
Employee Count	EC	Annual worldwide employee count	Macrotrends.net
Price/Book Ratio	P/B	Latest closing price and dividing it by the most recent earnings per share	Macrotrends.net

Source: Prepared by the authors based on the relevant literatüre

Descriptive statistics for the variables used in the study are presented in Table 3. Accordingly, the company with the highest market value is Apple Inc., while the one with the lowest is NVIDIA Corporation. The company with the highest expenditures in Research & Innovation investments as well as Marketing and Sales expenses has been identified as Amazon Inc. While Apple Inc. holds the highest value in terms of EBITDA, the company with the highest earnings per share stands out as Meta Platforms Inc.

Table 3. Descriptive Statistics

Variable	Observation	Mean	Standard Deviation	Minimum Value	Maximum Value
MC	77	972.4204	879.349	10.89	3489
RD	77	18.51953	18.66462	.465	88.544
SG&A	77	24.15555	31.36819	.436	153.771
EPS	77	3.42961	4.191664	-.79	23.86
CR	77	3.13039	2.743375	.83	12.92
D/E	77	1.596104	1.521127	.1	6.45
ROE	77	.3017312	.3901676	-.901	1.6345
ROA	77	.1437688	.12247	-.125	.7786
ROI	77	.2519182	.234363	-.237	1.1365
EC	77	211519	368657.9	6384	1608000
PB	77	13.26974	11.50498	2.41	56.28

Source: Authors' calculations based on the study data

Since the study covers variables from seven companies over an 11-year data set, it constitutes a panel data structure in both the cross-sectional and time dimensions. Therefore, panel data analysis has been carried out in the study. The model constructed in this context is presented below.

$$MCit = \alpha it + \beta 1RDit + \beta 2SGAit + \beta 3EPSit + \beta 4CRit + \beta 5D/Eit + \beta 6ROEit + \beta 7ROAit + \beta 8ROIit + \beta 9ECit + \beta 10PBit + uit$$

ANALYSIS AND FINDINGS

The correlation matrix numerically illustrates the linear relationships between the dependent and independent variables. In cases where there is a high correlation between two or more independent variables, the problem of multicollinearity may arise, which can complicate the interpretation of regression coefficients and reduce the reliability of the model. Therefore, it is extremely important to examine the correlation matrix before beginning the analysis of the model in panel data.

Table 4. Correlation Matrix

Variable	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
(1) lnRD	1.000									
(2) lnSGA	0.9394	1.000								
(3) EPS	0.5310	0.4138	1.000							
(4) CR	-0.2838	-0.4162	-0.0710	1.000						
(5) D/E	-0.1377	0.0143	-0.2546	-0.5614	1.000					
(6) ROE	0.3839	0.2213	0.2829	-0.0743	0.0370	1.000				
(7) ROA	0.2390	-0.0016	0.3372	0.2287	-0.3905	0.7416	1.000			
(8) ROI	0.3323	0.1723	0.2635	-0.1078	-0.0933	0.8013	0.7558	1.000		
(9) EC	0.5391*	0.6066	-0.0256	-0.3373	0.1364	-0.0361	-0.2029	-0.0791	1.000	
(10) PB	-0.0882	-0.1375	-0.1056	-0.2402	0.5185	0.5390	0.3364	0.4436	-0.0326	1.000
Mean VIF: 3.26										

Source: Authors' calculations based on the study data

Upon examining the matrix, it is observed that the correlation between some variables is relatively high. However, the correlations between most pairs of variables are low to moderate, and the VIF value of 3.26 is relatively low, as it is generally expected to be below 10 (Neter et al., 2004; O'Brien, 2007), indicating that there is no multicollinearity problem. After this stage, it is possible to proceed with the analyses.

Before testing the fundamental assumptions, it is necessary in econometric analyses to choose between the fixed effects model and the random effects model. According to the results of the Hausman test conducted in this context ($Chi^2 = 37.5$; p-value = 0.000), in other words, since $p < 0.05$, it was concluded that the fixed effects model is the appropriate model for the analysis. The Pesaran test was conducted to examine whether there is cross-sectional dependence, that is, whether a variable in one unit affects another unit. According to the findings obtained ($Chi^2 = 0.299$; p-value = 0.7651) ($p > 0.05$), the null hypothesis (H_0) is accepted, indicating that there is no correlation between the units. In this case, when testing for stationarity, first-generation unit root tests should be employed (Yerdelen Tatoğlu, 2016: 230). The results of the Levin, Lin, and Chu panel unit root test conducted for this purpose are presented in Table 5.

Table 5. Levin, Lin, and Chu Panel Unit Root Tests

lnPD	lnRD	lnSGA	EPS	CR	D/E	ROE	ROA	ROI	EC	PB
0.0908	0,000	0,000	0,8895	0,0231	0,1385	0,0012	0,1221	0,2839	0,1235	0,1414

Source: Authors' calculations based on the study data

According to the LLC test results, the variables lnRD, lnSGA, CR, and ROE are stationary at level ($p < 0.05$). However, the variables EPS, D/E, ROA, ROI, EC, and PB are not stationary. Therefore, the first differences of these variables should be taken, or alternative stationarization methods should be applied before including them in the model. Accordingly, after differencing, stationarity was tested again, and the results presented in Table 6 were obtained.

Table 6. Levin, Lin, and Chu Panel Unit Root Tests (First Difference)

lnPD	lnRD	lnSGA	EPS	CR	D/E	ROE	ROA	ROI	EC	PB
0,0000	0,0000	0,0000	0,0000	0,0231	0,0000	0,0012	0,0000	0,0000	0,0000	0,0000

Source: Authors' calculations based on the study data

According to the repeated Levin, Lin, and Chu panel unit root test results, the variables that were non-stationary at level became stationary at the 1% significance level after taking the first difference. Therefore, at this stage, it is possible to test the fundamental assumptions. For this purpose, heteroskedasticity across units was examined using the Modified Wald Test, testing the null hypothesis (H_0: the variances are homoskedastic across units). If the p-value is less than 0.05, the null hypothesis (H_0) is rejected, indicating the presence of heteroskedasticity (Tatoğlu, 2016: 221). Subsequently, the presence of autocorrelation was tested using the Durbin-Watson Test developed by Bhargava, Franzini, and Narendranathan. Although critical values for this test are not provided in the literature, a value below 2 is interpreted as indicating significant autocorrelation (Yerdelen Tatoğlu, 2016: 226). The results of the tests described above are presented in Table 7.

Table 7. Fundamental Assumption Tests of the Fixed Effects Model

Heteroskedasticity (Modified Wald Test)	Autocorrelation (Durbin-Watson Test)
Prob>chi2 = 0.0000	Durbin-Watson = 2.5513469 Baltagi-Wu LBI = 2.7015317
H_0: No Heteroskedasticity	If the values are below 2, autocorrelation is present.

Source: Authors' calculations based on the study data

As a result of the assumption tests applied to the fixed effects model, a heteroskedasticity problem was detected in the model ($p < 0.01$). However, it is understood that there is no autocorrelation ($DW > 2$). In this context, the standard errors used in the analysis must be calculated robustly, and the model estimates should be interpreted accordingly.

The Huber, Eicker, and White estimator is used to obtain pooled ordinary least squares regression with heteroskedasticity-robust standard errors (Yerdelen Tatoğlu, 2016: 253). In this case, the Huber, Eicker, and White estimator was employed as a fixed effects model with robust standard errors, which prevents misleading t-tests and incorrect p-values that could result from the heteroskedasticity problem identified in this study. The final model results obtained in this context are presented in Table 8.

Table 8. Panel Regression Analysis Results Using the Huber, Eicker, and White Estimator

Market Cap (Ln)**	Coef Robust	Std. Hata	t	p>t
lnRD	-.0546887	.1823219	-0.30	0.774
lnSGA	-.0471879	.1653454	-0.29	0.785
dEPS***	.0885435	.0196669	4.50	0.004*
dD/E	-.2658457	.0264486	-10.05	0.000*
CR	.0023329	.0153806	0.15	0.884
ROE	-.2354256	.0318729	-7.39	0.000*

dROA	-.8086735	.307009	-2.63	0.039*
dROI	.1209419	.0613703	1.97	0.096
dEC	4.23e-07	2.46e-07	1.72	0.137
dPB	.0603773	.0046328	13.03	0.000*
Cons	1.847444	.6666391	2.77	0.032

*It refers to the variables that are significant at the 0.05 level
**(ln): It denotes the values that have been transformed using the natural logarithm function for analytical purposes
***d: It indicates that the first difference of the variable has been taken to achieve stationarity
Source: Authors' calculations based on the study data

According to the results of the fixed effects model, earnings per share, debt-to-equity ratio, ROE, ROA, and price-to-book ratio significantly explain the variation in the market value of the companies. In contrast, the effects of RD and SG&A expenditures were found to be insignificant; this suggests that such strategic expenditures may not have a short-term impact on market value. To summarize these findings briefly, a one-unit increase in earnings per share leads to an average increase of 8.85% in the logarithm of the company's market value. In other words, it can be stated that investors reward companies that increase their earnings per share with a higher market value. Indeed, this phenomenon corresponds to what is referred to in the literature as "market sensitivity". In particular, the negative effect of the debt ratio indicates that vulnerabilities in the financial structure influence investor perception. A one-unit increase in the debt-to-equity ratio results in an average decrease of 26.6% in the logarithm of the company's market value. This indicates that as the company's risk level increases, investors behave more cautiously, thereby lowering the valuation. The most striking finding is the significant and negative relationship between ROE and market value. According to classical finance theory, as return on equity increases, a company's performance and investor value are expected to rise. However, the findings show that a one-unit increase in ROE decreases the logarithm of market value by 0.23 units. Although this may initially appear contrary to theory, it would be appropriate to examine these companies' debts and equity in detail to clarify the situation. Indeed, in some cases, companies may artificially boost ROE by keeping equity low and increasing debt. This situation can be perceived as a risk by investors, thereby reducing the market value. Similarly, a significant and strongly negative relationship has been identified between ROA and market value. Since a very high ROA may have been perceived by investors as indicating that the company is deprioritizing growth, expectations for future market value could have decreased. ROI, which represents the return on investment, is statistically significant at the 10% significance level. This indicates that, holding other variables constant, a one-unit increase in ROI leads to an average increase of approximately 0.12 units in lnMV, the logarithm of the company's market value. In other words, it can be stated that companies with higher investment returns also experience positive responses in terms of market value.

CONCLUSION AND RECOMMENDATIONS

This study examines the financial factors determining the market value of large-cap technology companies and compares them with existing findings in the literature. As highlighted in previous research, financial performance, market concentration, the impact of artificial intelligence, and investor sentiment emerge as critical factors in understanding the market valuation of leading technology firms, particularly those known as the "Magnificent Seven" (Nenkov, 2024; Sahani, 2025; Bruneau, 2025).

The research findings indicate that earnings per share (EPS), debt-to-equity ratio, ROE, ROA, and price-to-book ratio significantly influence the market value of companies. The positive impact of EPS on market value aligns with the well-documented concept of "investor sensitivity" and profit-oriented reward mechanisms in the literature. Conversely, the negative effect of the debt-to-equity ratio demonstrates that financial vulnerabilities reduce investor perception and, coupled with increased risk, lower company valuations. This finding parallels debt sensitivity observed in emerging markets, as reported by Bui et al. (2023) and Adip et al. (2024).

Another noteworthy finding is the negative relationship between ROE and ROA with market value. According to classical finance theory, increases in equity and asset profitability are expected to enhance valuation; however, the results obtained contradict this expectation. This can be explained by strategic decisions in which companies artificially elevate ROE by maintaining low equity and increasing leverage, which investors perceive as a risk factor. Similarly, a high ROA may be interpreted by investors as indicating limited growth and reinvestment potential. The positive and significant effect of ROI confirms that investment returns constitute an important factor supporting market valuation.

The insignificant results regarding strategic expenditures (R&D and SG&A) suggest that such spending may have a limited direct effect on market value in the short term. This finding aligns with the managerial effectiveness and long-term investment impacts highlighted by Peprah et al. (2024) and Jandhyala (2025), indicating that the market has not yet fully priced short-term strategic expenditures.

Overall, this study both confirms the relationships between market sensitivity and financial performance emphasized in the literature and reveals findings that deviate from certain classical finance theory expectations. In particular, the negative relationships observed for ROE and ROA indicate that investors assess financial structure and growth potential holistically, and that market valuation cannot be explained solely by profit indicators. Consequently, the rapid attainment of high market values by large-cap technology companies is determined not only by fundamental performance metrics such as earnings and ROI but also by investor perception, debt structure, and strategic risk management.

Despite providing valuable insights into the financial determinants of market value in large-cap technology companies, this study has several limitations. First, the analysis is based on a specific set of companies commonly referred to as the "Magnificent Seven," which may limit the generalizability of the findings to other sectors or smaller firms. Second, the study primarily relies on traditional financial metrics (EPS, ROE, ROA, ROI, debt ratios, price-to-book), while non-financial factors such as corporate governance, innovation culture, and environmental, social, and governance (ESG) considerations were not incorporated. Third, the data period may not fully capture long-term structural shifts in the technology sector, especially in light of rapidly evolving AI-driven business models.

Future research could expand on this study by including a broader range of technology companies across different market capitalizations and regions. Integrating non-financial indicators and sentiment analysis from investor communications or social media could provide a more holistic understanding of market valuation drivers. Additionally, longitudinal studies that track post-pandemic market dynamics and the long-term effects of strategic investments, such as R&D, would help clarify the temporal impact of these expenditures on market value.

LITERATURE

Adib, N., Nugraha, R. A., & Putri, I. L. A. (2024). Unraveling the future: examining how financial performance and company value shape the destiny of tech giants. *Jurnal Akademi Akuntansi*, 7(2), 189-199. https://doi.org/10.22219/jaa.v7i2.31196.

Benham, F., Giordano, L. & Adams, A. (2024). The magnificent seven: should we be worried about market concentration?. Meketa Investment Group. https://meketa.com/wp-content/uploads/2024/02/MEKETA_The-Magnificent-Seven.pdf.

Bui, T. N., Nguyen, X. H., & Pham, K. T. (2023). The effect of capital structure on firm value: a study of companies listed on the vietnamese stock market. *International Journal of Financial Studies*, 11(3), 100. https://doi.org/10.3390/ijfs11030100.

Bruneau, R. (2025). Forecasting Correlations: Insights from the 'Magnificent Seven'. https://www.spglobal.com/content/dam/spglobal/mi/en/documents/general/Forecasting-Correlations-Insights-from-the-Magnificent-Seven-Final_1.1.pdf.

Eteman, V. (2024). Speculative bubbles in artificial intelligence investments: analysis of the "magnificent seven" technology stocks and volatility spillover effects. *Ekonomi ve Finansal Araştırmalar Dergisi*, 6(2), 198-220. https://doi.org/10.56668/jefr.1574019.

Holder, K. and Almada, L. (2025). Catching the magnificent seven: investing trends and economics lessons. *Social Education*, 89(2), 83-90.

Jandhyala, P. (2025). Collective market dynamics around magnificent seven earnings announcements: a quantitative model of crowd behavior and oscillatory response. Available at SSRN 5327701. http://dx.doi.org/10.2139/ssrn.5327701.

Krause, D. (2025). DeepSeek's potential impact on the magnificent 7: a valuation perspective. Available at SSRN 5117909. http://dx.doi.org/10.2139/ssrn.5117909.

Nenkov, D. (2024). "The magnificent seven" technology stocks and their impact on the S&P 500: a review 4 years later. *Finance, Accounting and Business Analysis*, 2(16), 180-195.

Neter, J., Kutner, M. H., Nachtsheim, C. J., & Wasserman, W. (1996). Applied linear statistical models.

O'brien, R. M. (2007). A caution regarding rules of thumb for variance inflation factors. *Quality & Quantity*, 41, 673-690. https://doi.org/10.1007/s11135-006-9018-6.

Peprah, W. K., Rafaliniony, H., & Peprah, P. (2024). A longitudinal study of the impact of the covıd-19 pandemic on the managerial effectiveness of the "magnificent seven" stocks firms: an economic value-added approach. *Review of Pacific Basin Financial Markets and Policies*, 28(01), 1-18. https://doi.org/10.1142/S0219091524500358.

Plagge J.C., & Rowley, J.J., (2024). The magnificent seven: a study in market cyclicality. https://institutional.vanguard.com/insights-and-research/perspective/the-magnificent-seven-a-study-in-market-cyclicality.html.

Sahani, V. (2025). Comparative analysis of growth and value stocks in the S&P 500: impacts of recent macroeconomic events from 2014-2024. Unıversity of Aberdeen. (Master Thesis).

Umar, Z., Hadad, E., Phiri, A., & Teplova, T. (2025). Dynamics of asymmetric connectedness among magnificent seven technology giants: insights from QVAR Analysis. *The Quarterly Review of Economics and Finance*, 101: 101977. https://doi.org/10.1016/j.qref.2025.101977.

Yerdelen Tatoğlu, Ferda (2016), Panel Veri Ekonometrisi, 3. Baskı, Beta Yayıncılık: İstanbul.