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# EXPLORATORY STUDY ON THE IMPLICATIONS OF FINANCIAL REPORTING ON RETURN OF SHARES

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***Abstract:*** *In terms of informational value, financial reports released by listed firms provide a comprehensive picture of a company's financial health and viability. They are also a crucial tool for determining a company's capacity to create shareholder value. The current study uses correlation and multiple regression analysis to analyse the implications of pertinent financial indicators in the process of making investment decisions, specifically their impact on the stock market performance of securities traded on the Bucharest Stock Exchange. A sample of Romanian businesses operating in the sales, services, and industrial sectors for nine fiscal years has been included in the study. The findings indicate that the stock return and price-to-book ratio (PBR) are not significantly impacted by ROE, turnover increase, or auditor reputation (Big 4, Non-Big 4). However, the implications of leverage, industry sector, and company size are significant in relation to the evolution of PBR, and in the case of stock returns, the asset structure shows considerable predictive power. Consequently, even though a company's financial performance serves as the main benchmark for stock market investments, the evolution of other variables, such as financial leverage and firm size, has a greater impact on the sample of Romanian firms under analysis when it comes to determining the variation in the performance of stocks. This highlights the fact that an overall analysis of the economic situation and reported accounting information is necessary to determine the efficiency of investing capital in financial instruments.*

***Keywords:*** *Financial reporting, Stock returns, Price-to-book ratio, Correlation analysis, Multiple linear regression*

***JEL classification:*** *D53, G14*

## 1. Introduction

Market efficiency theory argues that stock prices of securities instantaneously incorporate all the information available in the capital market, so they are an essential pillar in the process of informing strategic and investment decisions. Annual reporting becomes a key instrument in exploring and identifying profitable investment opportunities, to ensure a judicious and efficient investment of the financial resources made available by investors.

The diversity of information provided to investors through financial reporting leads to the emergence of a question about the predictive power of various factors in determining the market value of a company, as well as its stock market return. The market return of securities has always been a topic of interest for researchers in the field, so one of the main relationships addressed concerns the determinant link between the profitability of a firm's activity and the stock market performance of its shares. Berggrun et al. (2020) dealt with this relationship from the perspective of the multiple existing econometric models (CAPM, Fama & French three-factor model (1993) and five-factor model (2015), Carhart (1997) model) and their explanatory power, and established that the model developed by Fama & French in 2015, consisting of 5 essential factors, considerably explains the expected returns of financial instruments. The same relationship has also been analyzed by other authors, such as Lim et al. (2024), Arshad (2021), but Yifang et al. (2023) addressed this issue from the perspective of classifying

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equity markets as bull and bear, highlighting that the short-term variation in returns has an incremental predictive value for expected stock returns, predominantly in bear markets than in bull markets.

Mahirun et al. (2023) and Chhajer et al. (2020) analyzed, in addition to the influence of financial returns, the impact of dividend payout policy and leverage on stock market performance and found that ROE and dividend payout ratio have significant impacts on the level of stock market returns, while the impact of leverage and firm size is minimal. In addition, Elfiswandi et al. (2020) clarified the effect of macroeconomic factors (inflation level, interest rate, exchange rate) on stock returns, highlighting their significant predictive power, without neglecting the importance of traditional financial indicators such as ROE, total debt to equity ratio and earnings per share (EPS).

This study is structured in 4 sections, which include the review of the literature on the subject, the methodology applied, together with the working hypotheses, the results obtained from the empirical analysis and the conclusions, as well as the research limitations.

## 2. Literature review and study hypotheses

In the context of globalization and the continuous evolution of capital market transactions, financial information is a strategically important tool in the process of informing investment decisions. Being found at market level, as well as in the annual reports published by listed companies, financial information contributes to capital market prospecting and the identification of promising investments, emphasizing its role in facilitating predictions of future cash flows, risk assessment, and future returns on securities (Dumontier et al, 2002). The publication of annual financial statements updates the economic picture of a company for current and potential investors, generating fluctuations in stock prices in line with expectations and emotions provoked by capital market news.

In terms of placing capital in financial instruments traded on regulated markets, investors' attention is mainly focused on a firm's ability to create more value for shareholders, by accessing information on the past and current financial performance of the target companies, the level of cash-flow generated, and the policy of distributing profits in the form of dividends (Yifang et al., 2023). Ștefan (2016) highlights the contradictions in the literature regarding the pre-eminence of a firm's profitability ratios or cash flow regarding the incremental power of their influence on investment decisions. The content analysis of previous studies has confirmed the predilection of investors for values related to the profits generated by a company's activity, however, the significant weight of their influence on stock market performance compared to other financial indicators has not been precisely established.

The profitability of a firm's business, defined by the efficiency of its operations and the effective management of its assets and liabilities (Silva, 2012), is a crucial indicator of its financial well-being and viability, ensuring easy access to foreign capital and strengthening its market position. Financial returns are often associated with a company's investment performance, so that firms with strong profitability are more likely to attract investors, emphasizing the efficiency of capital utilization and the ability to generate shareholder value. In this regard, the particular importance of the financial profitability achieved by firms on the evolution of the securities prices and, implicitly, on stock market capitalization (Mahirun, 2023) is outlined, considering the primary objective of the management of listed companies, namely the amplification of market value.

There are two types of factors that can influence security returns: microeconomic factors and macroeconomic factors, which sum up elements about firms' economic profile (financial indicators such as profitability ratios, total debt to equity ratios, book value of equity), as well as the global economic climate, which is emphasized by the level of inflation, fiscal and monetary policy (interest rates), foreign exchange rates etc. (Nadayani & Suarjaya, 2021). The empirical study conducted by Elfiswandi et al. (2020) confirmed the predictive power of macroeconomic factors in determining stock market returns, focusing on fundamental financial indicators with a significant influence on stock returns, such as leverage, financial profitability as measured by ROE, and earnings per share (EPS). However, Mironiuc (2009) argues that determining the stock price of financial instruments exclusively based on financial information reflected in annual reports is not recommended, given company management's tendencies

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to manipulate financial data, to attract additional external funding. Also, stock prices can be the result of investors' confidence and sentiments (Dombeu et al., 2024), being determined by both the available financial-accounting and non-financial information available in the market, as well as the divergent beliefs that define the investment behavior, leading to stock market volatility and frequent trading (Yifang et al., 2023).

According to Sitorus and Yuganda (2019), equity investment decisions in financial markets are based on the rate of return and the systemic risk associated with market circumstances, with the belief that riskier investments will lead to greater expected profits. Thus, in line with the Capital Asset Pricing Model (CAPM), developed by Sharpe (1964) and Lintner (1965), the existence of systemic risk will cause changes in equity prices in the capital market, with indirect repercussions on changes in expected stock returns. An additional risk associated with investments in securities illustrates the importance of financial leverage in establishing a firm's market value. Consistent with capital structure theory, a firm's market capitalization and, by implication, its stock returns, can be negatively influenced by the level of financial leverage (Chen & Chen, 2011). Therefore, a significant amount of financial leverage suggests a reduced financial profitability, affecting the stock price and stock trading volume. Regarding the relationship established between the degree of financial leverage and the firm's value, authors such as Durand (1959) and Modigliani & Miller (1958) have issued contradictory opinions, the former emphasizing that the link between the two variables is a far causal one, and the latter reasoning that capital structure is a irrelevant factor from this perspective, since the value of a firm is influenced by the representative risk class associated with the industry and by the forecasts of cash flows.

Indebtedness issues show interferences related to the size of listed companies, emphasizing the idea that their size, as expressed by total assets (Lim et al., 2024), will determine a certain degree of leverage, i.e. large firms are more independent from debt financing, face lower risks and are more attractive to investors compared to smaller entities. Other financiers' studies argue that in addition to firm characteristics such as firm efficiency or size, stock prices can also be predicted by analyzing whether there is a growth trend (Martani et al., 2009), emphasizing the idea that smaller firms, which have not reached a peak of economic maturity, have more room to grow and expand their market share compared to similar larger, mature and established firms in terms of their stages of development (Lim et al., 2024).

Capital providers, who exhibit a strong risk aversion in informing investment decisions (Aumeboonsuke & Caplanova, 2021), are also sensitive to audit firm reputation, perceiving reported results as more informative when financial statements are audited by partners with a flawless reputation and high service quality, such as Big4 firms. The reputation of the auditor serves as a positive signal to investors, it increases the level of confidence in the financial disclosures and decreases their perception of investment risk, while companies take advantage of lower equity costs (Ahmadzedeh et al, 2013), particularly for larger enterprises. Given the perspectives of researchers stated above, it is indisputable that the stock market returns of securities traded on the capital markets can be directly or indirectly influenced by various financial and non-financial indicators, so that, referring to the Romanian capital market, the intensity of their impact can be assessed through relevant empirical studies.

Therefore, the paper aims to create two econometric models to test the proposed research hypotheses, as follows:

***H1:*** *There are a set of financial and non-financial factors that influence the price-to-book ratio (PBR).*
***H2:*** *There are a set of financial and non-financial factors that influence stock returns.*

## 3. Methodology

The study outlines a positivist approach to assess the impact of financial disclosures, as well as non-financial indicators on the return on shares on the Bucharest Stock Exchange. The initial sample consisted of 204 companies, 4 of which were active in the banking sector, therefore, given the different financial structure and industry-specific parameters, we decided to eliminate them from the study. In this

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way, the final sample included 200 listed Romanian companies, the analysis being conducted for the period 2014-2022, i.e. 9 financial years.

To measure the impact of the reported financial information, as well as some non-financial determinants of the stock market return of securities, as dependent variables, we selected stock return and price-to-book ratio as stock market indicators. The latter indicator is defined as the ratio of the market value to the book value of a company's equity (Jagongo & Marangu, 2014) and has been the subject of previous relevant studies (Yeh & Liu, 2023; Martani et al., 2009; Carp & Mironiuc, 2014). Similarly, the stock return indicator, calculated as the ratio of the change in the stock price from one period to the next to the initial price of the securities (Chabachib et al., 2020), is one of the most representative stock market indicators, the variation of which has been the subject of other studies: Hertina & Mohd Saudi (2019), Amogha & Suresh (2019) and Pahlevi (2018).

According to Irwandi et al. (2019), among the financial indicators related to profitability ratios, return on equity (ROE) is the most pertinent measure in assessing the ability of a firm to provide a substantial level of profitability, expressed as the ratio of net income to shareholders' equity (Anwaar, 2016). Also, according to Sitorus & Yuganda (2019), companies that show a considerable asset value indicate prospects of increasing production capacity, thereby generating considerable profits, so asset value as a measure of a company is considered to affect its profitability. However, for the purpose of development and, by implication, to increase the return on activity, companies choose the external financing in the form of loans. In this context, we aim to analyze the impact of financial indicators such as asset structure and financial leverage on the return on shares.

Based on the Modigliani-Miller theory, we considered it relevant to include in the statistical analysis some dummy variables, such as industry type, to determine the extent to which the field of activity of listed companies influences investors' behavior, i.e. the stock market performance of securities. In addition, we also set out to analyze the impact of the audit firm reputation on the selected dependent variables, with the assumption that the association with an audit firm belonging to the Big4 group, in capital markets and investment decisions, is perceived by investors as an indicator of the quality and credibility of the financial accounting data reported, inspiring more trust and confidence, compared to non-Big4 firms.

Therefore, a comprehensive and centralized presentation of the defining variables of this study is reflected in Table 1.

**Table 1: Research variables**

| Variable type | Variable name | Variable description |
|---|---|---|
| Dependent | Price-to-book ratio | Market value and book value of shares ratio |
| | Stock return | Change of share price plus dividends paid divided by the stock's original price |
| Independent | Return on equity | The measure of a company's net income divided by its shareholders' equity |
| | Asset structure | The proportion of tangible fixed assets in total assets held by the company |
| | Auditor’s reputation | Dummy variable regarding the auditor's Big4 membership |
| | Industry type | Dummy variable regarding the company’s field of activity (manufacturing or trade and services) |
| | Firm’s size | Natural logarithm of total assets |
| | Gearing | Company's debt divided by its shareholders' equity |
| | Activity growth | Change in turnover from year t to year t-1 divided by turnover in year t-1 |

Source: Authors' processing

To statistically test the hypotheses mentioned above, the methods used include correlation analysis between the variables representing the stock market performance (stock return, PBR) and other

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relevant financial and non-financial indicators: financial profitability, leverage, asset structure, company size, auditor reputation. Also, in the process of building the multiple linear regression models, we processed the financial data to neutralize the effects of outliers on the statistical results, according to Tukey (1977). We also conducted a fundamental analysis (Sitorus & Yuganda, 2019) of the factors with considerable influence on the selected dependent variables.

In this regard, at the level of econometric modeling of a possible relationship existing between variables representing stock market performance and financial and non-financial indicators, equations (1) and (2) emphasize the presumptive connection mentioned under the two hypotheses as follows:

$$PBR_{i,t} = \beta_0 + \beta_1 ROE_{i,t} + \beta_2 AS_{i,t} + \beta_3 AR_{i,t} + \beta_4 IT_{i,t} + \beta_5 SZ_{i,t} + \beta_6 Gearing_{i,t} + \beta_7 Growth_{i,t} + \varepsilon \quad (1)$$

$$SR_{i,t} = \beta_0 + \beta_1 ROE_{i,t} + \beta_2 AS_{i,t} + \beta_3 AR_{i,t} + \beta_4 IT_{i,t} + \beta_5 SZ_{i,t} + \beta_6 Gearing_{i,t} + \beta_7 Growth_{i,t} + \varepsilon \quad (2)$$

where:

*PBR – price-to-book ratio;*
*$\beta_{0,..,7}$ – coefficients of the regression models;*
*ROE – return on equity;*
*AS – asset structure;*
*AR – auditor's reputation, dummy variable, which takes values equal to 1 in the case of belonging to the Big4 group, and 0 otherwise;*
*IT – industry type, dummy variable, which takes values equal to 1 when the firm's industry type is manufacturing and 0 when it is trade and services.*
*SZ – firm's size;*
*Gearing – indebtedness;*
*Growth – activity growth;*
*$\varepsilon$ – random variable.*

## 4. Results

### Descriptive statistics and correlation analysis

The sample of 200 firms included in this study sums up 1558 observations. The analysis of the descriptive statistics related to the dependent variables reveals a prudential perspective of investors on the financial instruments traded on the Romanian capital market, since the average ratio between the market value and the book value of shares, i.e. the PBR, materializes in a subunit value (0.7096), indicating an undervaluation of shares, but relatively close to their book value. At the same time, the return on securities is positive on average (1.1995), suggesting a favorable level of financial performance and an optimistic market perception of listed companies. Financial profitability, expressed as ROE, also reflects the ability of firms to generate generous profits, averaging 2.219. The asset structure implies a substantial percentage of fixed assets in total assets, since they are vital tools for fulfilling the business goal and creating profits. In general, the sample under analysis is made up of large enterprises, the indicator of their size averages 9.0882, while the degree of indebtedness of the companies is low (0.1854), with a relatively high standard deviation (0.2396). At the same time, there is a general downward trend in the activity of the analyzed firms, meaning that, from one period to another, their turnover changes in the direction of decrease.

**Table 2: Descriptive statistics**

| | Minimum | Maximum | Mean | Std. Deviation |
|---|---|---|---|---|
| **PBR** | 0,0080 | 1,9710 | 0,7096 | 0,5542 |
| **SR** | -0,9363 | 4,7817 | 1,1995 | 1,6747 |
| **ROE** | -13,2270 | 18,5210 | 2,2190 | 8,2634 |

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| | Minimum | Maximum | Mean | Std. Deviation |
|---|---|---|---|---|
| **AS** | 0,0000 | 1,0000 | 0,6372 | 0,2551 |
| **AR** | 0,0000 | 1,0000 | 0,0955 | 0,2940 |
| **IT** | 0,0000 | 1,0000 | 0,5686 | 0,4954 |
| **SZ** | 4,6137 | 13,4892 | 9,0882 | 1,6928 |
| **Gearing** | 0,0000 | 0,7208 | 0,1854 | 0,2396 |
| **Growth** | -0,6097 | 0,5813 | -0,0321 | 0,2878 |
| **Valid N** | 1558 | | | |

*Source: Authors' SPSS analysis*

The Pearson correlation coefficients of the analyzed variables are presented in Table 3, reflecting the strength of the relationship between them at the 2 levels of statistical significance, respectively 0.01 and 0.05. The outputs obtained, lower than 0.5, denote a relatively weak relationship between the outcome variables (PBR and SR) and the presumed determinants. However, we observe a negative correlation existing between PBR and indicators such as: asset structure (-0.117), company size (-0.045), similar dependence between stock return and financial return (-0.028), auditor reputation (-0.013), business domain (-0,042) and firm size (-0,086). On the other hand, there is a positive alignment between PBR and ROE (0.131), auditor reputation (0.096) and leverage (0.057) of the firms concerned. The positive association between variables is also identified for ROE correlated with asset structure (0.055), leverage (0.045) and activity growth (0.025).

**Table 3: Matrix correlation**

| | PBR | SR | ROE | AS | AR | IT | SZ | Gearing | Growth |
|---|---|---|---|---|---|---|---|---|---|
| **PBR** | 1 | | | | | | | | |
| **SR** | -0,304** | 1 | | | | | | | |
| **ROE** | 0,131** | -0,028 | 1 | | | | | | |
| **AS** | -0,117** | 0,055* | -0,254** | 1 | | | | | |
| **AR** | 0,096** | -0,013 | 0,148** | -0,092** | 1 | | | | |
| **IT** | 0,009 | -0,042 | -0,005 | -0,247** | 0,131** | 1 | | | |
| **SZ** | -0,045 | -0,086** | 0,208** | 0,010 | 0,465** | 0,144** | 1 | | |
| **Gearing** | 0,057* | 0,045 | 0,030 | -0,103** | 0,208** | 0,165** | 0,317** | 1 | |
| **Growth** | 0,032 | 0,025 | 0,217** | -0,054* | 0,050* | -0,018 | 0,061* | 0,045 | 1 |

***P-value < 0,01.*
**P-value < 0,05.*

Source: Authors' SPSS analysis

**Regression analysis**

The multiple regression analysis of the research hypotheses revealed the degree of statistical significance of the predictors included in the study, as shown in Table 4, namely the regression coefficients. According to the results obtained for t-statistic and considering P-value, variables such as ROE, auditor reputation and company size have considerable influence on the ratio of stock price to book value as the dependent variable. Therefore, it shows a positive link between ROE and PBR, emphasizing that an increase in the former will generate an increase in the latter. The results obtained are congruent with those of Yeh & Liu (2023) and Jagongo & Marangu (2014), implying that the Romanian stock market has a larger PBR, which is associated with a significant degree of financial returns. The same influence is also outlined in the case of the leverage ratio, whose upward change leads to a 0.185 increase in the PBR. Also, in terms of the predictive usefulness of auditor reputation, there is a significant difference in the PBR of companies audited by Big4 audit firms compared to non-Big4 audit firms, with a 0.221 increase, holding constant the other variables included in the model. Firm size,

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moreover, exhibits an antipodal effect on the PBR, emphasizing the idea that large, listed firms have stock returns that are 0,040 lower than small firms. However, the asset structure, the industry type and the growth of activity of the companies analyzed have an insignificant impact on the PBR. Therefore, the first hypothesis stated, as the basis of the first regression model, is partially valid, given the level of statistical significance attributed to only some of the determinants studied.

**Table 4: Regression coefficients**

| Variable | β* | t-statistic | Sig | β** | t-statistic | Sig |
|---|---|---|---|---|---|---|
| *(Constant)* | 1,076 | 11,874 | 0,000 | 1,888 | 6,519 | 0,000 |
| **ROE** | 0,010 | 5,509 | 0,000 | -0,001 | -0,110 | 0,912 |
| **AS** | -0,119 | -2,028 | 0,043 | 0,408 | 2,234 | 0,026 |
| **AR** | 0,221 | 4,376 | 0,000 | 0,177 | 1,135 | 0,257 |
| **IT** | -0,024 | -0,851 | 0,395 | -0,051 | -0,572 | 0,567 |
| **SZ** | -0,040 | -4,158 | 0,000 | -0,116 | -3,777 | 0,000 |
| **Gearing** | 0,185 | 3,147 | 0,002 | 0,664 | 3,607 | 0,000 |
| **Growth** | -0,013 | -0,266 | 0,790 | 0,166 | 1,113 | 0,266 |
| | ***Dependent variable: PBR** | | | ****Dependent variable: SR** | | |

Source: Authors' SPSS analysis

In terms of stock returns, the variables included in the model define low predictive power, showing a significant influence only in the case of company size, congruent with Chabachib et al. (2020), and their leverage (Sig = 0.000). In this sense, the relationship between company size and stock returns is inverse, meaning that small firms have greater possibilities of expansion, reflecting higher stock market returns. This suggests, in accordance with Arshad (2021), that investors seek to place capital in smaller firms to achieve quick returns. The leverage ratio, on the other hand, has a different impact on stock returns, where an increase in the leverage ratio lead to an increase in the dependent variable by 0.664, results consistent with Hertina & Mohd Saudi (2019), Elfiswandi et al. (2020) and Chabachib et al. (2020). This denotes the market's perception of debt financing: borrowed financial resources are used strategically to finance expansion and innovation, with firms being proactive and able to capitalize on market opportunities, and demand for equity increasing proportionately.

However, the other financial and non-financial indicators in the model, including financial return on equity, in agreement with Hertina & Mohd Saudi (2019), Amogha & Suresh (2019) and Nadayani & Suarjaya (2021), lack considerable predictive power on stock market performance. Therefore, the second multiple regression model, associated with the second hypothesis regarding the existence of several factor variables that determine the variance of stock returns, shows a moderate level of relevance, as only a few predictors included in the study reveal a significant influence on the outcome variable, i.e. SR.

For a more in-depth analysis of the predictors of stock return, include ROE sensitivity variables, establishing correlations based on the firm's industry, auditor reputation, leverage and asset structure. In this way, a systematization of the multiple regression models is outlined by equations (3) and (4):

$$PBR_{i,t} = \beta_0 + \beta_1 ROE_{i,t} + \beta_2 AS_{i,t} + \beta_3 AR_{i,t} + \beta_4 IT_{i,t} + \beta_5 SZ_{i,t} + \beta_6 Gearing_{i,t} + \beta_7 Growth_{i,t} + \beta_8 ROE\_AS_{i,t} + \beta_9 ROE\_AR_{i,t} + \beta_{10} ROE\_IT_{i,t} + \beta_{11} ROE\_G_{i,t} + \varepsilon \quad (3)$$

$$SR_{i,t} = \beta_0 + \beta_1 ROE_{i,t} + \beta_2 AS_{i,t} + \beta_3 AR_{i,t} + \beta_4 IT_{i,t} + \beta_5 SZ_{i,t} + \beta_6 Gearing_{i,t} + \beta_7 Growth_{i,t} + \beta_8 ROE\_AS_{i,t} + \beta_9 ROE\_AR_{i,t} + \beta_{10} ROE\_IT_{i,t} + \beta_{11} ROE\_G_{i,t} + \varepsilon \quad (4)$$

where:
*$\beta_{8,..,11}$ – coefficients of the sensitivity variables of ROE;*
*ROE_AS – sensitivity variable of ROE depending on asset structure;*

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*ROE_AR – sensitivity variable of ROE depending on auditor reputation;*
*ROE_IT – sensitivity variable of ROE depending on the industry type;*
*ROE_G – sensitivity variable of ROE depending on leverage.*

The addition of the variables inserted in the econometric study recomposes the picture of the determinants of stock market performance of shares, as shown in Table 5, emphasizing the ability of ROE to influence the stock market return of securities, relating it to various factors regarding the characteristics of firms and their economic profile.

**Table 5: Updated regression coefficients**

| Variable | β* | t-statistic | Sig | β** | t-statistic | Sig |
|---|---|---|---|---|---|---|
| *(Constant)* | 1,019 | 11,125 | 0,000 | 1,972 | 6,690 | 0,000 |
| **ROE** | 0,022 | 5,931 | 0,000 | -0,013 | -1,120 | 0,263 |
| **AS** | -0,074 | -1,225 | 0,221 | 0,357 | 1,895 | 0,058 |
| **AR** | 0,148 | 2,581 | 0,010 | 0,030 | 0,171 | 0,864 |
| **IT** | -0,012 | -0,410 | 0,682 | -0,082 | -0,880 | 0,379 |
| **SZ** | -0,039 | -4,080 | 0,000 | -0,120 | -3,889 | 0,000 |
| **Gearing** | 0,210 | 3,562 | 0,000 | 0,734 | 3,927 | 0,000 |
| **Growth** | -0,005 | -0,110 | 0,913 | 0,160 | 1,076 | 0,282 |
| **ROE_AS** | -0,011 | -3,309 | 0,001 | 0,013 | 1,214 | 0,225 |
| **ROE_AR** | 0,014 | 2,816 | 0,005 | 0,025 | 1,568 | 0,117 |
| **ROE_IT** | -0,008 | -2,421 | 0,016 | 0,010 | 0,929 | 0,353 |
| **ROE_G** | -0,008 | -2,103 | 0,036 | -0,023 | -1,902 | 0,057 |
| | ***Dependent variable: PBR** | | | ****Dependent variable: SR** | | |

Source: Authors' SPSS analysis

In terms of the ratio between the market value and the book value of shares (PBR), all the sensitivity variables introduced have a considerable influence compared to stock return, on which they have insignificant predictive value. Therefore, the financial performance of firms with generous investments in tangible fixed asset, emphasizes limited financial flexibility, being reflected in a PBR lower by 0.011. The increase in fixed assets creates uncertainties for investors about the ability of companies to adapt to changes in their specific area of operations, and this leads to concerns about future performance.

Moreover, the over-indebtedness of companies also points to a reduction in their long-term profitability, with negative repercussions on the PBR (-0.008). Investors' aversion to financial risk generates a more conservative assessment of firms, so that a substantial degree of indebtedness (above the 0.66 limit) points to uncertain growth prospects, leading to a reduction in the market value of financial instruments. Moreover, the financial profitability of firms operating in manufacturing reflects a significant impact on the PBR, compared to those in areas such as trade and services, but is negatively perceived by capital providers, leading to a 0.008 decrease in the PBR. At the same time, the ROE of companies audited by Big4 audit firms increases the ratio of market to book value of shares by 0.014, suggesting that investors have greater confidence in the accuracy and transparency of the financial information provided by these firms, particularly the credibility of their reported financial results.

Therefore, investors on the Romanian capital market consolidate their investment decisions by referring to the intrinsic value of companies, as it provides an overview of the business fundamentals and its long-term growth potential, while stock market returns are characterized by increased volatility due to the impact of short-term market factors (speculation, news or rumors).

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**Table 6: Models' performance and significance**

| | Dependent variable | R-square | ANOVA | |
|---|---|---|---|---|
| | | | F-statistic | Sig |
| **Model no. 1** | Price-to-book ratio (PBR) | 0,048 | 11,895 | 0,000 |
| | Stock return | 0,017 | 3,901 | 0,000 |
| **Model no. 2** | Price-to-book ratio (PBR) | 0,063 | 9,963 | 0,000 |
| | Stock return | 0,022 | 3,192 | 0,000 |

Source: Authors' SPSS analysis

The proposed models, corresponding to the two research hypotheses, show a considerable statistical significance (Sig = 0.000), however, the explanatory power of the variation in stock market performance is relatively low, indicating that the variation in PBR is explained by 4.8% by the first model, and the stock return, respectively the second model, by only 1.7%, the difference being associated with other variables not included in the study. Following the introduction of the sensitivity variables of ROE, the explanatory power of the econometric models analyzed increases to 6.30% in the case of PBR and 2.2% for stock return. However, the level of the stock market return of securities traded on the Bucharest Stock Exchange is also influenced by other determinants, and the set of financial and non-financial indicators relevant to the study needs to be extended.

## 5. Conclusions

The information contained in the annual reports of listed entities is essential in informing capital investment decisions and helps to identify promising investment opportunities in financial instruments. Transparency of information and access to relevant financial data allow research on historical trends, analysis of financial stability and anticipation of future developments to build an economic profile of companies, as a guide between past, present and future.

The efficient integration of financial and non-financial information into investment analysis models improves the accuracy of predictions of stock market performance of securities, which is an axis mundus for capital market participants. The present study aims to explore the determinants of stock market return fluctuations, establishing that several financial and non-financial indicators exhibit considerable effects on the outcome variable. In this sense, the paper confirms that financial indicators such as ROE and leverage significantly describe the evolution of stock returns. High ROE and a balanced PBR/SR indicate a positive market valuation, while effectively managed leverage can boost stock returns in a favourable economic environment. In addition, non-financial factors such as auditor reputation, asset structure and company size have a noticeable impact on investor perception and hence on share price. These indicators make it easier to assess the quality of management and the sustainability of business practices and have implications for investor confidence and the investment attractiveness of firms.

Hence, the use of a balanced mix of financial and non-financial indicators contributes considerably to the recognition of relevant investment opportunities associated with higher stock market returns and controlled risks. The analysis has been limited to non-financial companies on the Romanian capital market, and the mechanism of the evolution of shares traded by financial institutions has not been studied. Looking ahead, it would be useful to investigate the impact of macroeconomic factors on the financial market, to compare their predictive value with the influence of microeconomic factors.

## References

- Ahmadzedeh, D., Badavar-e Nahandi, Y., & Baradaran Hasanzadeh, R., (2013), The relationship between auditor reputation and the cost of equity capital (with an emphasis on client size), *Advances in Environmental Biology*, 7(10), p. 2705-2712.

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- Amogha, S., & Suresh, N., (2019), An Empirical Study of Financial Ratios Affecting Stock Returns in the Indian Stock Market, *Journal of Engineering and Applied Sciences*, 14(3), p. 975-980.
- Anwaar, M., (2016), Impact of Firms' Performance on Stock Returns (Evidence from Listed Companies of FTSE-100 Index London, UK), *Global Journal of Management and Business Research: Accounting and Auditing*, 16(1), p. 31-39.
- Arshad, M. U., (2021), The relevance of earning-to-price and ROE predictability for explaining Shenzhen stock exchange (SZSE), returns in China: A dynamic panel data approach, *Journal of Corporate Accounting & Finance*, 32, p. 1-16.
- Aumeboonsuke, V., & Caplanova, A., (2021), An analysis of impact of personality traits and mindfulness on risk aversion of individual investors, *Current Psychology*, 42(1), p. 6800-6817.
- Berggrun, L., Emilio Cardona, E., & Lizarzaburu, E., (2020), Firm profitability and expected stock returns: Evidence from Latin America, *Research in International Business and Finance*, 51, p. 101-119.
- Carp, M., & Mironiuc, M., (2014), Substantiation of Investment Decisions by Studies of Association Between Traditional Financial Indicators and Stock Exchange Ratios, *Audit financiar*, 12(5), p. 37-47.
- Chabachib, M., Setyaningrum, I., Hersugondo, H., Shaferi, I., & Pamungkas, I. D., (2020), Does Financial Performance Matter? Evidence on the Impact of Liquidity and Firm Size on Stock Return in Indonesia, *International Journal of Financial Research, Sciedu Press*, 11(4), p. 546-555.
- Chen, L. J., & Chen, S. Y., (2011), The influence of profitability on firm value with capital structure as the mediator and firm size and industry as moderators, *Investment Management and Financial Innovations*, 8(3), p. 121-129.
- Chhajer, P., Mehta, V., & Gandhi, V., (2020), Factors Influencing Stock Returns: Evidence from National Stock Exchange, India, *International Journal of Management*, 11(5), p. 631-643.
- Dombeu, N., Nomlala, B. C., & Nyide, C., (2024), Investigating the effect of investor sentiment on stock return sensitivity to fundamental factors: Case of JSE listed companies, *Cogent Business & Management*, p. 1-32.
- Dumontier, P., Mendes, P., & Raffournier, B., (2002), Accounting and capital markets: a survey of the European evidence, *The European Accounting Review*, 11(1), p. 119-151.
- Durand, D., (1959), The cost of capital, corporation finance, and the theory of investment: Comment, *The American Economic Review*, 49(4), p. 639-655.
- Elfiswandi, E., Sanjaya, S., Pratiwi, N., Yulia, Y., & Ramadhan, M. F., (2020), Macroeconomic Factors, Energy Consumption and Firms Performance on Stock Return of Mining and Energy Sector: Evidence from Indonesia, *International Journal of Energy Economics and Policy*, *Econjournals*, 10(6), p. 229-234.
- Hertina, D., & Mohd Saudi, M., (2019), Stock Return: Impact of Return on Asset, Return on Equity, Debt to Equity Ratio and Earning Per Share, *International Journal of Innovation, Creativity and Change*, 6(12), p. 93-104.
- Irwandi, S. A., Ghozali, I., Faisal, F., & Pamungkas, I. D., (2019), Detection fraudulent financial statement: Beneish M-score model, *WSEAS Transactions on Business and Economics*, 16, p. 271-281.
- Jagongo, A., & Marangu, K., (2014), Price to Book Value Ratio and Financial Statement Variables (An Empirical Study of Companies Quoted at Nairobi Securities Exchange, Kenya), *Global Journal of Commerce & Management Perspective*, 3(6), p. 50-56.

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DOI: 10.56043/reveco-2024-0029


- Lim, B., Sotes-Paladino, J., Jiaguo Wang, G., & Yao, Y., (2024), The value of growth: Changes in profitability and future stock returns, *Journal of Banking & Finance*, 158, p. 1-16.
- Mahirun, M., (2023), Determinants of LQ45 Stock Return in Indonesia, *Scientific Papers of the University of Pardubice*, Seria D, 31(2), p. 1-11.
- Mahirun, M., Jannati, A., A., K., & Prasetiani, T. R., (2023), Impact of dividend policy on stock prices, *International Scientific Journal about Logistics*, 10(2), p. 199-208.
- Martani, D., Mulyono & Khairurizka, R., (2009), The effect of financial ratios, firm size, and cash flow from operating activities in the interim report to the stock return, *Chinese Business Review*, 8(6), p. 44-55.
- Mironiuc, M., (2009), Metodologii şi instrumente pentru securizarea şi ameliorarea performanţelor bursiere. Abordarea actuarială. *Informarea financiar-contabilă în condiţii de criză: 15 ani de la implementarea noului sistem contabil din România*, 1, p. 168-186.
- Modigliani, F., & Miller, M. H., (1958), The cost of capital, corporation finance and the theory of investment, *The American Economic Review*, 48(3), p. 261-297.
- Nadayani, D. A., & Suarjaya, A. A., (2021), The effect of profitability on stock return, *American Journal of Humanities and Social Sciences Research (AJHSSR)*, 5(1), p. 695-703.
- Pahlevi, C., (2018), The effect of fundamental financial factor to stock return (Study on consumer goods industry sub sector food and beverages which is listed at Indonesia Stock Exchange in 2011 – 2016), *Jurnal Bisnis, Manajemen, dan Informatika (JBMI)*, 15(1), p. 30-44.
- Pham, T. N., Nguyen M. V., & Vo, D. H., (2018), The Cross-Section of Expected Stock Returns: New Evidence from an Emerging Market, *Emerging Markets Finance and Trade*, 54(15), p. 3566-3576.
- Silva, A. F., (2012), Decisions on investment and profitability: an empirical study using generalized linear mixed models in non-financial brazilian companies, *European Financial Management Journal*, p. 1-32.
- Sitorus, T., & Yuganda, K., (2019), Investor's stock selection decision: Influence of profitability, company size, and RAROC, *Copernican Journal of Finance & Accounting*, 8(2), p. 69-88.
- Ștefan, I. O., (2016), The implications of financial performance on stock exchange indicators of listed companies: empirical evidence for the Romanian capital market, *Audit Financiar*, 14(8), p. 875-896.
- Tukey, J. W., (1977), *Exploratory data analysis*, Vol. 2, Massachusetts, Addison-Wesley.
- Yeh, I. C., & Liu, Y. C., (2023), Exploring the growth value equity valuation model with data visualization. Financial, *Innovation*, 9(2), p. 1-37.
- Yifang, L., Baochen, Y., & Yunpeng, S., (2023), Changes in firm profitability, heterogeneous investor beliefs, and stock returns, *Journal of Management Science and Engineering*, 8(2), p. 258-272.