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PENGARUH RETURN SAHAM, NILAI PERUSAHAAN DAN UMUR PERUSAHAAN TERHADAP LEVERAGE PADA IDX30 UNTUK PERIODE 2020-2024

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ABSTRAK

Tujuan dari penelitian ini adalah untuk mengetahui pengaruh return saham, umur perusahaan, dan nilai perusahaan terhadap leverage pada perusahaan-perusahaan yang terdaftar dalam IDX30. Sampel diambil menggunakan metode purposive sampling dari IDX30, dengan jumlah sampel sebanyak 15 perusahaan. Hasil penelitian menunjukkan bahwa return saham tidak berpengaruh signifikan terhadap leverage. Umur perusahaan berpengaruh negatif dan signifikan terhadap leverage. Sedangkan nilai perusahaan memiliki hubungan positif dan signifikan terhadap leverage. Penelitian ini juga menemukan bahwa teori pecking order berlaku pada hubungan antara umur perusahaan dan leverage. Teori signaling berlaku pada hubungan antara nilai perusahaan dan leverage, namun tidak berlaku pada hubungan antara return saham dan leverage.

***Kata Kunci**: IDX30; Nilai Perusahaan; Umur Perusahaan; Leverage; Return Saham*

THE EFFECT OF STOCK RETURN, FIRM'S VALUE AND FIRM'S AGE ON LEVERAGE OF IDX30 FOR THE PERIOD OF 2020 – 2024

ABSTRACT

The objective of this study is to determine the effect of stock return, firm's age, and firm's value on leverage on the firms listed in the IDX30. The samples were taken by purposive sampling from IDX30, there were 15 samples. The study conducted found that there was no significant effect of stock return on leverage. There was a negative and significant effect of firm's age on leverage. And there was a positive and significant relationship of firm's value on leverage. This study also found that pecking order theory applies to the relationship between firm's age on leverage. Signaling theory applies to the relationship of firm's value on leverage but does not apply to the relationship between the stock return on leverage.

Keywords: IDX30; Firm Value; Firm Age; Leverage; Stock Return

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INTRODUCTION

One of the important functions of a financial manager is to decide on the best means of getting fundings to fund the firm's projects and/or operational (other than dividend and investment). One such means is by using fundings from debt. A lender will consider several factors when giving out debt to firms. One of which is the capacity to repay the debt by considering the profitability of the firm, the higher the profitability of the firm, the more likely the repayment to be done, on the other hand, the lower the profitability of the firm, the lower the likelihood of the repayment. During the COVID-19 pandemic which ravaged the world's economy, many firms which have taken on debt realized that they could not repay their debt and had to renegotiate the terms of the debt.

This situation highlights the importance of prudent debt management and forecasting by financial managers. Taking on debt may provide immediate capital for expansion or operational continuity, but it also imposes a fixed obligation regardless of economic conditions. During an economic downturn such as the COVID-19 pandemic, even well-established firms experienced drastic revenue drops, rendering them temporarily unprofitable. This drop in profitability made it difficult for them to meet debt obligations, which in turn affected their credit ratings and long-term financial health. As a result, many firms were forced to renegotiate terms with creditors, often resulting in higher interest rates, extended payment schedules, or even partial forgiveness – all of which affect future borrowing ability.

This research will focus on the IDX30 index which is a stock market index published by the Indonesia Stock Exchange (IDX) that tracks the performance of 30 of the most liquid and largest stocks listed on the exchange. The companies included in this index are selected based on criteria such as trading volume, transaction frequency, market capitalization, and financial health. The IDX30 serves as a benchmark for investors, representing the performance of the most actively traded and influential stocks in Indonesia. It is reviewed and updated semi-annually to ensure relevance and accuracy. As such, the IDX30 is commonly used by investors, fund managers, and analysts to track market trends and evaluate portfolio performance. The debt level of the IDX30 varies for each firm, however, each one of them is generally healthy. However, according to data gathered from the financial report, it was found that the average debt-to-equity ratio increases slightly over time.

Stock return plays a crucial role in shaping a firm's capital structure, particularly its leverage. An increase in stock price boosts the market value of equity, thereby reducing the firm's leverage ratio. This mechanical relationship reflects a direct inverse effect of equity valuation on leverage. However, beyond this, rising stock prices often act as a positive signal to external stakeholders, especially lenders. Strong returns may indicate improved firm performance, reduced default risk, and greater financial health, prompting lenders to offer more favorable loan terms or expand credit access. From this perspective, stock return functions as a credibility signal in financial markets. According to signaling theory (Spence, 1973), the market interprets price appreciation as a reflection of underlying firm quality, which can encourage debt financing. Additionally, the pecking order theory suggests firms may utilize debt over equity when financing needs arise, especially when positive share performance reduces information asymmetry. Therefore, while rising stock prices mechanically reduce leverage through equity growth, they can simultaneously enable higher leverage through improved borrowing conditions.

Firm age is an important determinant of leverage, as it influences a firm's financing behavior over time. Older firms are typically associated with lower levels of leverage due to their ability to accumulate internal funds through retained earnings and established profitability. As firms mature, they develop stable cash flows and long-term relationships with investors and creditors, reducing their dependence on external debt. This behavior aligns with the Pecking Order Theory (Myers & Majluf, 1984), which posits that firms prefer internal financing over debt and equity to minimize information asymmetry and financing costs. Younger firms, in contrast, often face limited access to internal funds and a higher cost of equity, making them more reliant on debt financing to support growth and operations.

The Price-to-Book Value (PBV) ratio reflects how the market values a firm relative to its book value and is often interpreted as an indicator of firm quality and investor confidence. A higher PBV suggests strong market expectations for growth and efficient asset use, which can positively influence a firm's access to external financing. From a signaling theory perspective, a high PBV serves as a positive signal to lenders regarding the firm's financial health and prospects, thereby reducing perceived default risk and encouraging higher leverage. Conversely, a low PBV may indicate weak performance or undervaluation, prompting lenders to adopt a more conservative stance, resulting in lower leverage. This aligns with the pecking order theory, where firms with strong market standing may find it easier and cheaper to access debt than equity.

This research aims to analyze the effect of stock return, firm's age, and firm's value on leverage of firms listed in IDX30.

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LITERATURE REVIEW

Signaling Theory

Signaling theory explains how individuals or organizations can bridge gaps in information by taking deliberate actions that reveal their underlying quality to others. This concept is especially applicable in contexts marked by uneven information distribution—such as employment, investing, and corporate behavior—where one party possesses more knowledge than the other.

A landmark contribution to this theory was made by Spence (1973), who focused on the labor market. He proposed that job seekers attempt to mitigate information asymmetry by attaining higher education, which serves as a signal of their skills and capabilities to prospective employers. Since employers often cannot assess a candidate's true potential just by looking at their résumé, academic qualifications become a trusted indicator of ability and future performance.

Since its introduction, signaling theory has been widely adopted across other domains, including finance. In corporate finance, companies often send signals—such as issuing dividends or undertaking visible investments—to demonstrate their financial health and long-term viability. These signals help align the perceptions of investors with the reality known to management, thus narrowing the information gap.

Pecking Order Theory

The Pecking Order Theory, formulated by Myers and Majluf in 1984, suggests that firms prioritize their sources of financing based on the principle of least resistance or cost. According to this theory, companies prefer to finance their activities in a particular sequence: first by using internal funds, followed by borrowing (debt), and lastly through issuing new equity.

The use of internal resources, such as retained earnings, is favored as it eliminates the need for interest payments and external scrutiny. When internal capital is inadequate, firms opt for debt, which, although it involves repayment obligations, is still more attractive than equity since it preserves existing ownership stakes. Equity financing ranks lowest in preference due to its dilutive effect on current shareholders. The theory also implies that firms with strong liquidity positions are less likely to seek external capital, thereby avoiding the higher costs and risks linked to borrowing or issuing shares.

The Effect of Stock Return on Leverage

Stock prices, which rise often serve as a strong positive signal to external parties, especially creditors. Higher returns suggest enhanced firm performance, lower risk of default, and stronger financial stability, which can result in more favorable lending conditions or increased access to debt. This aligns with signaling theory (Spence, 1973), where price gains are interpreted as indicators of firm quality, encouraging lenders to extend credit. Furthermore, the pecking order theory posits that firms tend to prefer debt over equity for external financing, especially when strong stock performance helps reduce information asymmetry. Thus, while increasing stock prices directly reduce leverage by inflating equity, they may also indirectly support higher leverage by improving the firm's credibility and borrowing capacity.

Despite extensive research into the broader area of finance, there is a noticeable gap in this relationship between stock return and leverage. To date, the researcher has only found one direct empirical study that has examined how stock return influences leverage which is a study done in 2010. It is a study done by George & Hwang (2010) found that there is a negative relationship of stock return on leverage.

H_1: Stock return has a positive effect on leverage

The Effect of Firm's Age on Leverage

The age of a firm plays a significant role in shaping its leverage decisions, as financing preferences tend to evolve over time. Mature firms generally exhibit lower leverage levels, largely because they have accumulated internal resources through retained earnings and consistent profitability. As these firms grow older, they benefit from more predictable cash flows and stronger, long-standing relationships with both investors and lenders, reducing their need to rely on external debt. This trend is consistent with the Pecking Order Theory (Myers & Majluf, 1984), which suggests that firms prioritize internal financing to avoid the costs and asymmetries associated with external funding. In contrast, younger firms often lack sufficient internal capital and face higher equity issuance costs, prompting greater dependence on debt to finance their growth and operational needs.

A study done by Meilita et al. (2024) on 424 non-financial firms listed in Indonesia Stock Exchange (IDX) found that the relationship between firm's age on leverage found that there is no significant relationship between firm's age and leverage. Further research into this area found a noticeable gap in this relationship and no further research was found that explains this relationship.

H_2: Firm's age has a negative effect on leverage

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The Effect of Firm's Value on Leverage

The Price-to-Book Value (PBV) ratio indicates how the market perceives a firm's value compared to its book value, often serving as a proxy for firm quality and investor sentiment. A high PBV reflects favorable market expectations regarding growth potential and efficient asset utilization, which can enhance the firm's ability to secure external funding. According to signaling theory, a strong PBV sends a positive message to creditors about the firm's financial stability and future prospects, thereby lowering the perceived risk of default and supporting greater leverage. In contrast, a low PBV may signal poor performance or market skepticism, prompting lenders to be more cautious and limiting the firm's debt capacity. This relationship is also in line with pecking order theory, as firms with a stronger market position are generally better positioned to obtain debt financing at lower cost compared to issuing equity.

Despite extensive research into the broader area of finance, there is a noticeable gap in this relationship between stock return and leverage. The only study that was found to have such relationship was done in 2014 by Sarwendhi & Samekto (2014) on firms listed in Indonesian Stock Exchange which found no significant relationship between firm's value (proxied by PBV) on leverage.

H_3: Firm's value has a positive effect on leverage

RESEARCH METHODOLOGY

Population and Samples

The population of this research is 30 stocks in the IDX30. Sampling method is done by purposive sampling which selects those firms which are continuously listed on IDX30 from year 2020 to 2024 and the firms IPO was done in 2020 or before. The total samples selected for this research are 15 listed companies in the IDX30 from the year 2020 to 2024.

Variables

The variables used in this research are made up of 3 independent variables and 1 dependent variable. The independent variables are stock return, firm's age and firm's value. The dependent variable is leverage. Each of the proxies of the variables are shown in Table 1. All measurements are done with ratio scale.

Table 1. Variables and Proxies Used

Variable	Proxies (Variable Measurement)	Source
Stock Return	$1\ Year\ Return = \frac{\sum \frac{P_t - P_{t-1}}{P_{t-1}}}{Total\ Number\ of\ Returns}$	Self, 2025
Firm's Age	Firm's Age = Years since IPO	Syafira & Bangun (2021)
Firm Value (FV)	$PBV = \frac{Market\ Price\ Per\ Share}{Book\ Value\ per\ Share}$	Salim & Prasetia (2022)
Leverage	$DAR = \frac{Total\ Debt}{Total\ Assets}$	Koh et al. (2016)

Source: Processed data, 2025

Where:

P_t : Current day stock price

P_{t-1} : Previous day stock price

$\sum \frac{P_t - P_{t-1}}{P_{t-1}}$: Sum of all daily returns in the year

Analysis Techniques

The analysis techniques in this research use descriptive analysis and multiple regression analysis with SPSS software. Tests carried out are classical assumptions test (normality, multicollinearity, heteroscedasticity), model test and hypothesis testing.

Conceptual Framework

The following figure shows the conceptual framework for this research:

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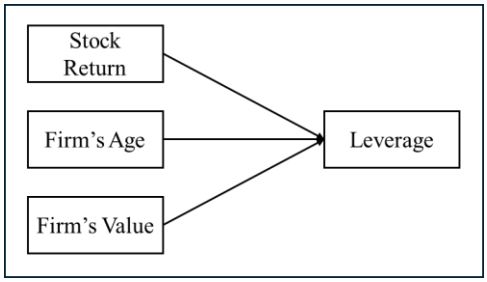

Source: Processed data, 2025

Figure 1. Conceptual Framework

RESULTS AND DISCUSSIONS

Descriptive Analysis

Table 2 illustrates the results of the average, minimum and maximum of each variable over the 5 years period from 2020 to 2024.

Table 2. Descriptive Analysis

	Stock Return	Firm's Age	Firm Value
Average	0.012	27.4	4.302
Min	-0.257	10.2	0.390
Max	0.430	43.0	56.800
Stdev	0.001	7.8	10.396

Source: Processed data, 2025

Over the 5 years period from 2020 to 2024, IDX30 has an average stock return of 0.012% with a minimum at -0.257% and maximum at 0.430%. The average value for firm's age over the same period has a value of 27.4 years with a minimum at 10.2 years and maximum at 43 years. Furthermore, Firm Value has an average value of 4.302 with a minimum value of 0.390 and a maximum at 56.80. Standard deviation of stock return is 0.001, firm's age is 7.8 and firm value is 10.396.

Data Normality Test

The data normality test was done using 1 sample Kolmogorov-Smirnov test. Further test using one sample Kolmogorov-Smirnov test gave asymptotic significance of 0.674, which is above the alpha of 5%, this confirms the normal distribution of the data.

Multicollinearity Test

Table 3 illustrates the results of the Multicollinearity test:

Table 3. VIF Results

Variable	VIF	Decision
Stock Return	1.080	No Multicollinearity
Firm's Age	1.322	No Multicollinearity
Firm's Value	1.280	No Multicollinearity

Source: SPSS, 2025

A good value for VIF according to Hair et al. (2019) is close to 3 or lower. The result gave values of less than 3 for all variables, indicating that there are no collinearity issues with the variables.

Heteroskedasticity Test

The result for heteroskedasticity using scatterplot is shown in Figure 3:

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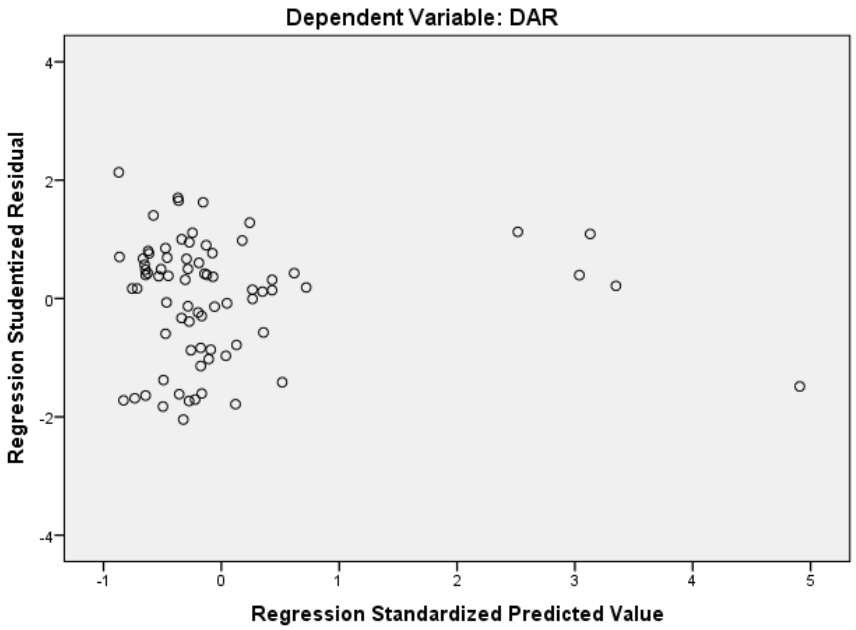


Source: SPSS, 2025

Figure 2. Scatterplot for Model 1

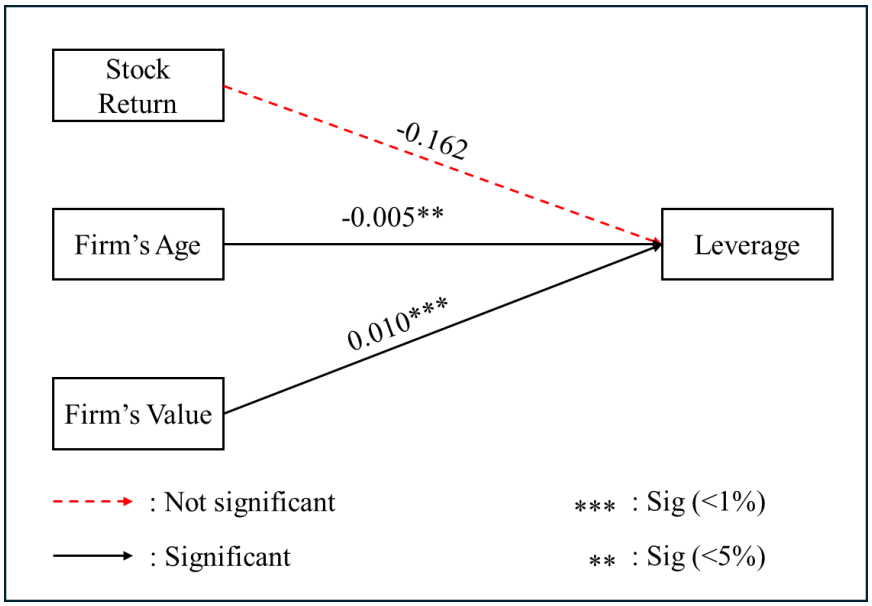
It can be seen from Figure 3 that the points are scattered above and below zero without forming patterns, this indicates that there is no heteroskedasticity happening in the result of this research.

Adjusted R^2

The result of the adjusted R^2 for the experiment Model 1 is 0.353 or 35.3%, this indicates that the independent variables (stock returns, firm's age, and firm's value) explain 35.3% of the dependent variable (leverage). The remaining 64.7% is explained by other factors not covered in this research.

Hypothesis Tests

The figure below illustrates the resulting coefficients and significance of the coefficients.



Source: Processed data, 2025

Figure 3. Results of Analysis

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Figure 4 shows the research model together with the coefficients and the significance of the relationship between the independent variables and the dependent variables. The relationship between stock returns on leverage is not significant (significance > 0.05). This explains that the increase or decrease of the stock price does not affect the level of leverage. This is not in line with the hypothesis proposed. Stock return is the measure of the gain or loss of an investment in stocks as a percentage of the initial investment. A firm with a good positive stock return will be seen as a stable firm in the eyes of lenders, thus, in theory, will give better access to debt. However, this is not the case with the firms in this research, the result suggests that such relationship does not exist. Firms in the IDX30 index are well-established firms with strong fundamentals and thus, it is more likely the firms are going to access their internal financing rather than external, thus weakening the effect of stock returns on leverage. This result is not in line with the result of research done by (George & Hwang, 2010).

Figure 4 also shows that firm's age has a negative and significant effect on leverage. This means that with the increase in firm's age, there is a decrease in the leverage. The negative relationship is in line with the hypothesis posited. Firms in the IDX30 are generally well-established firms, older and more established firms accumulate retained earnings over time, and thus able to finance its operations from internal fundings and rely less on external fundings, resulting in lower debt as the firm becomes older. This is in line with the Pecking Order Theory. This result is not in line with the result of the research done by (Meilita et al., 2024).

Finally, figure 4 shows that firm's value has a positive and significant effect on leverage. This means that with the increase in firm's value, there will be a decrease in leverage. The positive relationship is in line with the hypothesis posited. The firms in the IDX30, being well-established, signal to lenders that they have a good position in the market and are able to fulfil the financial obligations pertaining to the debt that is given. Thus, this makes it easier and cheaper for the firms in IDX30 to access debt, resulting in an increase in leverage. This finding is in line with signaling theory. The result of this research is not in line with the result of the research done by (Sarwendhi & Samekto, 2014).

CONCLUSIONS

Conclusions

The initial aim of this studies was to determine the effect of stock return, firm's age, and firm's value on leverage of companies listed in the IDX30. An interesting result came up where the changes in stock prices does not necessarily result in easier access to debt funding as shown by the result of the relationship that is not significant. Furthermore, another finding shows that the firm's age has a negative and significant effect on leverage which is consistent with Pecking Order Theory. Finally, another interesting finding is that firm's value has a positive and significant effect on leverage which shows that a better value firm can better access debt funding, which is consistent with signaling theory.

Recommendations

Companies listed in IDX30 can continue to increase their firm value to access debt funding, and the firm does not have to look too closely at share price as the firm's continuous increase in share price does not necessarily make it easier to access debt funding.

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