Financial Ratio and Price Earnings Ratio: Analysis of Technology Companies Listed on the IDX

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Abstract: This study is a quantitative causality study which aims to investigate the relationship between Return on Equity Ratio, Current Ratio, and Debt to Equity Ratio with Price Earnings Ratio, with a focus on technology sector companies listed on the IDX from 2020 to 2023. Using SPSS 27, the study employs Multiple Linear Regression Analysis and Moderated Regression Analysis (MRA) as data analysis methods. The findings indicate that the Signaling Theory does not apply to technology companies during the COVID-19 pandemic. The Current Ratio significantly impacts the Price Earnings Ratio, while the Return on Equity Ratio and the Debt-to-Equity Ratio are not given much consideration by investors when assessing the Price Earnings Ratio. Additionally, the company size does not moderate the relationship between Return on Equity, Current Ratio, or Debt to Equity Ratio and Price Earnings Ratio.

Keywords: *Return on Equity, Current Ratio, Debt to Equity Ratio, Firm Size, Price Earnings Ratio.*

1. Introduction

The Society 5.0 era makes technology play an important role in every human activity. Humans rely heavily on technology-based service companies to carry out various kinds of activities, especially since the start of the Covid-19 pandemic which has brought these habits to the present day. In Indonesia, there has been rapid development in technology in recent years, marked by an increasing number of startups turning into public companies. This success has attracted the interest of many investors to buy shares through an Initial Stock Offering known as an IPO on the Indonesia Stock Exchange (IDX).

JCI, also known as the Composite Stock Price Index or IDX Composite, is often used by investors to evaluate stock performance and observe stock market conditions. The decline in JCI in technology sector companies listed on the IDX has occurred since 2022, even though the performance of this technology stock had increased rapidly during the COVID-19 pandemic. Even in 2023, the technology sector index (IDXTECHNO) is still declining even below other sectors. IDXTECHNO became the weakest when other sectors strengthened where IDXTECHNO minus 0.91% [1].

PER or Price Earnings Ratio is considered an indicator that is commonly used to evaluate stocks. An increase or decrease in PER in a certain period can affect the JCI because investors tend to buy or sell based on the assessment. The Price Earnings Ratio serves as a measure of a company's performance and has the potential to affect the rise or fall of a company's stock price [2]. PER can provide information to stakeholders regarding the profit productivity of an entity and its prospects [3]. With the increase in PER, investors' expectations for profit growth are also increasing [4]. Investors expect high net profit growth from the company through interest in high PER.

Shares of technology company PT Indosterling Technomedia Tbk (stock code: TECH) had touched an increase in the share price of IDR 9,500/per share at the end of 2021 with a very high PER valuation metric of 2200 times. Over time, TECH's share price declined due to macro conditions that affected such as inflation, high interest rates, and normalization conditions after the Covid-19 pandemic. According to information obtained from the IDX in the first trading segment on February 17, 2022, TECH is priced at IDR 1,025 per share with a net profit as of September 30, 2022, of IDR 1.85 billion. With a decline of almost 90%, TECH's valuation remains overvalued. TECH shares were sold with a

PER of 522 times, which was above the industry average of 26 times. Compared to other technology issuers, TECH shares are still overvalued, compared to the stock code CASH (PT Cashlez Worldwide Indonesia Tbk) with a negative PER, the stock code KIOS (PT Kioson Commercial Indonesia Tbk) with a PER of 29 times, and the stock code DIVA (PT Distribution Voucher Nusantara Tbk) with a PER of 21 times [5].

An increase in a company's total net profit can cause the PER to increase if the stock price is stable, and the JCI to increase if investors are confident that revenue growth is sustainable. Return on Equity Ratio (ROE) affects PER by playing a role in describing the performance of business entities in allocating funds invested by shareholders to create profits [6]. ROE represents a comparison that describes the productivity scale of a company's net profit as a result of shareholder investment [7]. The ROE growth reflects a better outlook for the company, signaling the potential for increased profits that the company can achieve [8]. The results of the study confirm that ROE has a positive and significant impact on PER [4].

Investors often look at liquidity ratios to assess a company's capabilities concerning the fulfillment of its current liabilities, such as the Current Ratio (CR) which implies the short-term financial health of a company. This part is very crucial for investors who are looking for stability and security in their investments. The CR reflects the ability of a business entity to pay short liabilities that are due soon to be due shortly [9]. CR is a comparison to identify the extent of a company's ability to complete its obligations by utilizing easily liquidated assets to assess the level of liquidity of the entity [2]. The higher this percentage, the stronger the company's ability to fulfill its current liabilities, thereby increasing investor confidence and triggering an increase in the PER [2]. Studies are showing the results that CR has a positive and significant influence on PER [9].

In addition, investors take into account the continuity of the company's financial strategy in the long term. A debt-to-equity ratio (DER) can be a key indicator of financial risk that helps evaluate a company's performance in paying off its debt. Companies with a balanced DER value are more likely to survive and develop sustainably. Investor confidence is increasing due to this sustainability, which can increase stock valuations and PER. DER is a type of solvency ratio that describes the proportion of assets (assets) funded through debt [10]. DER is increasing, indicating poor conditions for companies [4]. Lower DER describes an increase in internally funded corporate capital [8]. The results showed that DER partially affected PER [8].

To attract investors to invest funds, each company has a company value, one of which is driven by the company size. In particular, the size of a company will have an impact on the company's value and is often an indicator used in determining the company's value [11]. Company size is a parameter that can describe the situation or characteristics of a business entity with several indicators used as an instrument to determine the company size such as company revenue in a certain period, employees as a whole, or total assets of a company [12]. Investors are more interested in large companies because of their ability to achieve high efficiency and profitability, absorb interest expenses, and be more stable in managing their short-term liabilities. Classification of companies based on the scale of their operations can help investors make decisions [13]. Based on these conditions, this study takes the company size as a moderator.

The focus of this research is to examine how the financial ratio, represented by ROE, CR, DER to PER by considering the company size as a moderating variable. The researcher chose technology sector companies listed on the IDX for the 2020-2023 period as the subject of the study because stock transactions on the stock exchange continue to increase and have quite attractive prospects for many investors and analysts predict that IPOs of technology companies will increase so it is hoped that the results of this research will be able to generate a meaningful contribution to shareholders and other related parties about better investment and financial determination through fundamental analysis.

2   Theory and Hypothesis Development

2.1   Signaling Theory

Research by Spence (1973) The title "Job Market Signaling" introduces the Signaling Theory. Spence uses the analogy of an employer with a job applicant or potential employee when it comes to exchanging information. The assumption is that there is no way to determine whether an employee is good or bad and the fact it takes time to learn one's productive abilities means that hiring is an investment decision and the fact that these abilities are not known prior makes the decision uncertain [14].

Signaling Theory It addresses the problem of information asymmetry in the market, by showing how this information imbalance can be minimized when individuals or entities with more information relay signals to others [15]. In Signaling Theory, information asymmetry is implied by the separation of ownership, control of capital, and positive monitoring costs in Agency Theory [15]. This information asymmetry causes costs in the form of missed opportunities by company managers above average (Average Firm) to increase equity capital or debt. However, if the company is below average, the cost of information asymmetry is borne by the investor because, in the absence of a signal, the market assumes the company to be of average quality [15].

2.2   Trade-Off Theory

Modigliani & Miller (1958) was the first to propose the Trade-Off Theory. There are two uncertainties, namely profit maximization and market value maximization [17]. A company's decision doesn't lead to a single profit outcome in uncertain situations. Instead, there are multiple possible outcomes, which can be described using a subjective probability distribution. The profit outcome becomes a random variable, making maximization less operationally significant [17].

In particular, the use of debt rather than equity to finance certain ventures may increase the expected return to owners, but only with an increase in cost dispersion of outcomes [17]. When debt or DER increases, the company receives tax benefits by reducing interest payments and tax exemptions. However, when a company takes on too much debt so that the DER is high, then the company has the potential to go bankrupt [17].

2.3   Relationship between ROE and PER

According to Signaling Theory, a company uses financial information such as ROE to signal to shareholders and the market about the company's performance and prospects. If the ROE rises and the company gives a positive signal, the Price Earnings Ratio tends to increase due to market expectations for the company's future performance. The ability of a company to create profits from the paid-up capital of equity investors can be determined through ROE [6]. The ROE growth reflects a better outlook for the company, signaling the potential for increased profits that the company can achieve [8]. Meanwhile, according to the Trade-off Theory, there is a trade-off relationship between ROE and PER related to risk and return where when a company increases ROE can mean taking a higher risk. Some of the research that supports this theory is by [4] and [18] which has the result that ROE affects PER.
H₁: ROE has a significant influence on PER

2.4   Relationship between CR and PER

According to Signaling Theory, CR helps companies inform shareholders that the company's financial state is in good shape. Current Ratio is a comparison to identify the extent of a business entity's capability in paying off current liabilities by utilizing current assets that are ready to be used to assess the level of liquidity of the entity [2]. The higher this percentage, the stronger the company's ability to fulfill its current liabilities, thereby increasing investor confidence and triggering an increase in the PER [2]. Trade-off theory says that there is a trade-off between profitability (measured by PER) and liquidity (measured by Current Ratio) where companies are required to choose between maintaining a high current ratio by holding a significant amount of current assets or using those assets to generate higher revenue. The theory is reinforced by research from [4] and [9] who explained that CR influences PER.
H₂: CR has a significant influence on PER

2.5   Relationship between DER and PER

According to Signaling Theory, companies use the Debt-to-Equity Ratio to inform investors of the level of risk taken. DER is a type of solvency ratio that describes the proportion of assets (assets) funded through debt [10]. Increasing DER reflects unfavorable conditions for the company [4]. Lower DER describes an increase in internally funded corporate capital [8]. Meanwhile, according to the Trade-Off Theory, there is a trade-off between the use of debt (measured by DER) and business profitability (measured by PER). Companies must choose between using debt to fund expansion or investments that can increase future profits with higher risk or limiting the use of debt to keep financial risk low but perhaps at the expense of profit growth potential. The results of previous studies provide empirical data support that DER influences PER [19]; [20]; [9]; [8]; [7]; [10].

H$_3$: DER has a significant influence on PER

2.6   Company size moderates the effect of ROE on PER

Large companies are more attractive to investors because of their ability to achieve high efficiency and profitability. In large companies, a high ROE is often considered positive by investors because large companies generate profits from equity and have a more stable reputation and lower risk, investors are willing to pay a larger share price, which is reflected in increased PER. Total assets and total income can indicate the state of the business entity, while other larger business entities will have excess funds to fund their investments and achieve profits [21]. The Relationship between PER and ROE is in accordance with the Trade Off Theory.

H$_4$: Company Size can strengthen the relationship between ROE and PER

2.7   Company size moderates the effect of CR on PER

Large companies are more stable in managing their current debt. The larger the company size, the more assets it has, so if the liquidity level is low, the possibility of the company defaulting on its short-term debt is also low [22]. Although a good CR level indicates healthy liquidity, investors are still worried about long-term stability and small business growth. As a result, the influence of CR on PER is not as strong as in large companies.

H$_5$: Company Size can strengthen the relationship between CR and PER

2.8   Company size moderates the effect between DER and PER

Large companies are better able to absorb interest expenses and manage debt-to-equity ratios more effectively. Growing companies tend to have an easier time gaining creditor trust, so they can increase their source of funds through loans [23]. Large companies with high DER are still considered safe because they have a lot of assets and income to support their debt burden. Investors value the stock with a high PER because of their confidence in the company's management's ability to manage debt well.

H$_6$: Company Size can strengthen the relationship between DER and PER

Based on the description above, the conceptual model in this study is as follows:
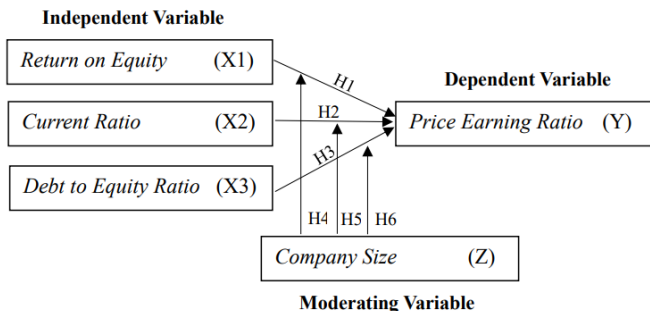
3   Research Methods

The population in this study is technology sector companies listed on the IDX from 2020 to 2023 and the sample of this study is technology sector companies that publish their complete financial statements in the period of 2020 – 2023 so 19 companies were obtained during the 4-year research period which produced 76 observation data. Secondary data in the form of financial statements from technology sector companies listed on the Indonesia Stock Exchange for 2020 – 2023 will be collected and measured for each variable.

Table 1. Variable measurement

No	Dependent/Independent	Variable
1	Dependent Variable	Price Earnings Ratio PER is determined by calculating the ratio between the share price per share and earnings per share [24]. $$PER = \frac{Harga\ per\ Lembar\ Saham}{Laba\ per\ Lembar\ Saham}$$
2	Independent Variable	Return On Equity ROE is determined by comparing net profit or earnings after tax to total equity [25]. $$ROE = \frac{Earning\ After\ Tax}{Total\ Equitas}$$
3	Independent Variable	Current Ratio CR is determined through a comparison of current *assets* to current liabilities [25]. $$CR = \frac{Current\ asset}{Current\ liabilities}$$
4	Independent Variable	Debt to Equity Ratio DER is determined through the ratio of total debt to total equity [25]. $$DER = \frac{Total\ Liabilities}{Total\ Equitas}$$
5	Independent Variable	Company Size The company size is determined through the total asset parameter of the company that is given natural logarithmic treatment (Ln) [26]. $$Company\ Size = Total\ Aset$$

4.   Results and Discussion

4.1 Descriptive Statistical Analysis

Descriptive statistics essentially describe numerically the central measure of tendencies,

dispersions, and distribution of data [27]. This method aims to provide an overview of phenomena related to research variables through the data that has been collected. The descriptive statistics in this study are used to answer the problem formulation of the condition of PER, ROE, CR, DER, and company size in Technology Sector Companies Listed on the IDX in 2020-2023.

Table 2. Descriptive Statistical Analysis Test Results

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
PER	76	-255,41	7114,29	279,8958	1157,62604
ROE	76	-11,09	2,95	-0,1695	1,48060
CR	76	0,24	38,08	5,1149	7,36411
DER	76	-4,09	78,61	2,2264	9,52372
Company size	76	22,84	31,43	27,4476	1,84101

The PER variable has a positive average because the pandemic that occurred in the middle of the research period has changed consumer behavior, thus benefiting technology companies in meeting needs during the pandemic. Investors may consider the company's future growth potential, indicated by the rising PER. The mean value of PER less than the standard deviation value shows that the research data has a wide deviation or distribution of data and relatively heterogeneous data.

The average ROE is negative because the company gets a fluctuating net profit due to the pandemic between the study periods. The company experienced fluctuations in financial performance from one year to the next such as revenue growth and profit conditions that fluctuated, so that it could produce a relatively stable ROE overall. The mean ROE value is less than the standard deviation value which reflects that the research data has a wide deviation or distribution of data and relatively heterogeneous data.

The average value of CR is positive because the company can maintain the value of current liabilities so that it does not experience a sharp increase or decrease so that it can still be covered with current assets. This condition indicates that the company tends to have more current assets than its current liabilities in the research period. The average value of CR is less than the standard deviation value which indicates that the research data has a wide deviation or distribution of data and relatively heterogeneous data.

The average value of DER is positive because the amount of debt taken can still be covered by the amount of equity owned, the sample company is also seen to maintain the debt level so that it does not fluctuate too much or is far from its equity. The average value of DER is less than the standard deviation value which indicates that the research data has a wide deviation or distribution of data and relatively heterogeneous data.

The company size variable has a positive mean due to the stability of the calculation of the Ln value of total assets in the research sample. Despite the variations, they do not provide a significant change to the trend chart. The mean value of the company's size is more than the standard deviation value which indicates that the research data has a small deviation or data distribution. The company size is also around its average value which shows that the data is relatively homogeneous.

4.2   Test t

Before the Multiple Linear Regression Analysis and Moderated Regression Analysis (MRA), normality tests, multicollinearity tests, heteroscedasticity tests, and autocorrelation tests had been carried out, the results showed that the data had passed the classical assumption test. The following are the outputs of Multiple Linear Regression Analysis and Moderated Regression Analysis (MRA) conducted through the SPSS 27 application.

$$Y = -6{,}559 + 46{,}737X_1 + 5{,}922X_2 + 0{,}595X_3 \tag{1}$$

Table 3. Multiple Linear Regression Analysis Results

	Coefficients				
	Unstandardized B	Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.
(Constant)	-6,559	12,394		-0,529	0,600
ROE	46,737	25,127	0,338	1,860	0,071
CR	5,992	2,604	0,418	2,274	0,029
DER	0,595	8,322	0,016	0,071	0,943

Referring to Table 3, the significance of the ROE was obtained at 0.071 (> 0.05). Referring to the results of the analysis, the ROE did not have a significant influence on PER. The significance value of the CR) was obtained at 0.029 (< 0.05). Referring to the results of the analysis, the CR has a significant influence on PER. The significance value of the DER was obtained at 0.943 (> 0.05). Referring to the results of the analysis, the DER did not have a significant influence on PER.

The results of *Moderated Regression Analysis* (MRA) produce the following regression equation.

$$Y = -146{,}776 + 1284{,}576X_1 + 32{,}996X_2 - 23{,}761X_3 - 44X_1 Z - 1{,}005X_2 Z + 0{,}739X_3 Z \tag{2}$$

Table 4. Moderated Regression Analysis (MRA)

	Coefficients				
	Unstandardized B	Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.
(Constant)	-146,776	317,538		-0,462	0,647
ROE	1284,576	813,566	9,293	1,579	0,124
CR	32,996	69,332	2,327	0,476	0,637
DER	-23,761	284,030	-0,628	-0,084	0,943
Company size	5,352	11,440	0,279	0,468	0,643
ROE Company size	-44.000	28,939	-8,971	-1,520	0,138
CR Company size	-1,005	2,526	-1,953	-0,398	0,693
DER Company Size	0,739	10,029	0,558	0,074	0,942

Based on Table 4, the significance value of the ROE interaction variable and the company size was obtained at 0.138 (> 0.05). As a result, the company size variable cannot increase the influence of ROE on the PER. The significance value of the CR interaction variable and the company size was obtained at 0.693 (> 0.05). As a result, the company size variable could not increase the influence of CR on the PER variable. The significance value of the DER interaction variable and the company size was obtained at 0.942 (> 0.05). As a result, the company size variable cannot increase the influence of DER on PER.

4.3   Discussion

Relationship between ROE on PER

ROE has no significant influence on PER. On that basis, the H1 hypothesis that ROE has a significant effect on PER is rejected. Signaling theory suggests that companies use management actions to send signals to the market, which aims to reduce information asymmetry between management and investors. However, the technology sector may not align

ROE with growth and innovation, as many tech companies tend to reinvest profits into R&D for long-term growth potential, despite lowering short-term net profits. As a result, while ROE may seem low, investors are still showing a willingness to pay a high price as forecasted profits and high future growth potential remain a major attraction. Investors in technology companies are more focused on long-term growth prospects and innovation capabilities.

In the 2020-2023 research period, there was a pandemic that accelerated the adoption of technology in various sectors, leading to an increase in demand for technology products and services. Fintech companies experienced a surge in adoption during the pandemic due to the increasing need for digital transactions and app-based financial services. While user and transaction growth boosted fintech companies' valuations, high investments in technology and user acquisition could keep ROE at a moderate level, but PER remained high due to investor optimism regarding long-term growth. So, no matter how big the ROE is, it is not an indicator of valuation by investors.

Envy Technologies Indonesia Tbk. (ENVY) experienced fluctuations in ROE values in the 2020-2023 research observation period. Even so, the PER value remains low and the value is not much different. NFC Indonesia Tbk. (NFCX) even though it has a negative ROE value in 2023, the PER in that year is still positive and not too low. Telefast Indonesia Tbk. (TFAS) and Solusi Sinergi Digital Tbk. (WIFI) also have ROE values that are not much different every year, but the two companies have a fairly high PER value. The highest PER score also did not follow the highest ROE scores of the two companies during the research period. This proves that ROE is not a consideration for investors in valuing shares of technology sector companies.

The findings of this study are in line with the findings previously obtained by Wahyuni et al. (2020) which states that Return on Equity (ROE) has a positive and insignificant effect on the Price Earnings Ratio (PER) for plantation sub-sector companies listed on the Indonesia Stock Exchange (IDX) from 2014 to 2017 [28]. [7] who explained that ROE does not have a significant influence on PER. [29] Also stated that the PER in automotive industry companies that go public is not determined by Return on Equity [29]. The findings of this study are contrary to the research by [6], [8] and [18].

Relationship between CR and PER

CR has a significant influence on PER. On that basis, the H2 hypothesis that CR has a significant effect on PER is accepted. In signaling theory, information about good liquidity helps investors and management get more information. A high CR adds to the company's attractiveness to investors and reduces uncertainty about its ability to pay off current liabilities, which makes investing in the company safer. A high CR indicates that the company can effectively handle financial risks, thereby lowering the likelihood of encountering liquidity issues that could disrupt its operations. This reliability can improve investors' favorable view of the company.

Businesses with strong liquidity are better able to survive economic challenges or market downturns, making them more attractive to investors looking for stability. This is especially relevant in the technology industry, where there is a lot of volatility and a need for sustainable investment, so good liquidity is an important factor in investor valuation. Companies with good CRs have an easier time gaining access to external capital because they are considered a lower risk by lenders. Easier access to capital for expansion and innovation improves growth prospects, which increases PER.

Galva Technologies Tbk. (GLVA) has a stable CR value during the research period, which also results in a good and stable PER value as well. Likewise, M Cash Integration Tbk. (MCAS) which has a stable CR value and produces a high PER value during the research period. Telefast Indonesia Tbk. (TFAS) maintains its liquidity value and generates a PER value that continues to increase and the PER of Telefast Indonesia Tbk. in 2022 is the highest during the research period. This shows that CR provides good information and is used by investors as

a consideration before buying shares.

The findings of this study support the results found in the previous study stating that the Current Ratio has a positive and significant effect on the PER of food and beverage companies listed on the Indonesia Stock Exchange during the period 2016-2019 [4]. Another finding also states that CR affects the PER of manufacturing companies listed in the LQ 45 index for the 2015-2019 period [9], and CR partially had a significant influence on the PER of consumer goods companies listed on the IDX in 2018-2020 [30]. The findings of this study are contrary to the research by [2], [28] and [29].

The Relationship between DER and PER

DER has no significant influence on PER. Signaling theory explains that a company's actions can send a message to the market regarding future well-being and opportunities. Just like ROE, DER is not always the main indicator when assessing the value of technology companies in Indonesia. In the tech industry, investors are prioritizing future growth potential over the current debt situation. Tech companies typically concentrate on rapid expansion and innovation, preferring equity or venture capital overtaking debt.

The pandemic, which occurred between the 2020-2023 research period, made the government provide incentive support for digitalization, thereby improving the technology landscape. While companies are increasing their debt to take advantage of these incentives, investors are more interested in the prospects for growth and innovation. Amid the pandemic, GoTo is concentrating on expanding its digital services. Although DER is on the rise due to massive investments in technological advancements and market expansion, investors are more fixated on long-term growth potential than current debt levels. As a result, the DER value has no impact on the PER valuation, and it is not a factor that investors consider when evaluating technology company stocks.

According to Trade-Off Theory, companies achieve optimal funding by offsetting profits and the use of debt. Although the risk of bankruptcy is increasing, companies need to increase debt to maintain liquidity during the pandemic. In this situation, investors are paying less attention to the increase in debt ratios, but more focused on the company's ability to survive and grow after the pandemic.

Despite having a high DER value in 2022 and 2023, which is considered a bad signal, the PER value remains high for Anabatic Technologies Tbk (ATIC). The same thing happened to Cashlez Worldwide Indonesia Tbk. (CASH) which has a low DER or can be said to be good, but the PER value is low. Tourindo Guide Indonesia Tbk. (PGJO) has the most promising DER during the research period and should be a good signal for investors, but its PER value is quite small.

The findings of this study are consistent with the findings conducted previously which stated that the leverage variable (DER) did not affect PER in companies in the Trade, Service, and Investment sector listed on the Indonesia Stock Exchange for the period 2014-2018 [2]. The results of other studies also show that DER does not affect PER in property companies because most of the company's sources of funds are internal, so the company does not issue a certain amount of funds to pay debts to creditors [18]. Research [28] and [6] also showed that DER did not have a significant effect on PER.

Company Size

The company size cannot strengthen the connection between ROE, CR, and DER against PER. Thus H4, H5, and H6 were rejected because the company size proved to be unable to moderate the interaction between the X variable and the Y variable of this study. The tech sector tends to be very competitive and dynamic, and many companies are growing from small to large quickly. Sectors with rapid changes such as technology tend to make company size a less significant variable compared to adaptability and innovation. Even today, small companies are also making many innovation leaps so that they can compete with the current technology market conditions. While company size provides some scale advantage, factors such as growth potential, the ability to innovate, and response to market conditions have more effect on a company's valuation (PER). An empirical study show that company size has a significant negative impact on Price Earning Ratio, this result reflecting that investors are more willing to invest in small company [31].

The COVID-19 pandemic created highly dynamic and uncertain market conditions during the 2020–2023 research period. Tech companies large and small are facing issues such as changing demand and supply chain disruptions. This puts investors' attention on how businesses are handling these crises rather than the size of the business itself. Investors judge the company on its ability to innovate as a way of survival. Several innovations have been developed during the pandemic, such as the development of online shopping features, fast delivery services, digital payment integration, microloan services, bill payments, the development of interactive learning platforms, online classes, and digital educational content. The innovations that occurred during the 2020-2023 period also show that regardless of the company size, technology companies continue to adapt and innovate to meet the needs of a rapidly changing market.

5.   Conclusion

Based on research that has been conducted regarding the influence of ROE, CR, and DER on PER in technology sector companies listed on the IDX in 2020 – 2023, it is found that CR has a significant influence on PER. Meanwhile, ROE and DER did not affect PER. It can also be concluded that the Signaling Theory does not apply to technology sector companies listed on the IDX. The company size cannot moderate the interaction between ROE, CR, and DER to PER.

This research implies that it is hoped that the company's management will be able to maintain its liquidity well by focusing on the management of current assets and current liabilities. Both small and large companies must have a strong cash management policy to offset current assets and current liabilities to maintain or increase liquidity. Regulators must also ensure good financial reporting transparency to improve market stability and confidence.

The limitation of this study is the use of the research period, namely 2020 – 2023, which may not be long enough to capture long-term trends or structural changes in the technology industry. In addition, amid that period, the COVID-19 pandemic occurred which caused uncertainty and financial instability for the company so there was still outlier observation data because the value was quite extreme. Therefore, it is hoped that other researchers will take a longer research period and consider the use of other different variables that are estimated to affect PER more strongly such as NPM, ROA, or TATO. More relevant moderation variables such as innovation level, research and development (R&D) intensity, or other external factors may be other, more important moderation variables but have not yet been selected as variables in this study.

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