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# Structural Determinants of Capital and Corporate Bonds and Their Implications on Yield to Maturity (YTM) and Economic Growth

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**Abstract:** This research is to now the determinant of DER and the implication toward YTM and Economic growth in Banking Sector on The Indonesian Stock Exchange. The research sample is 22 Bond Series which are banking companies listed on the Indonesia Stock Exchange for the 2019-2023 period. Methods of data analysis using panel data regression method. The empirical results of the first model show that Profitability (ROA), Firm Size (SIZE), and Interest Rate (IR) have a positive effect on Capital Structure (DER), while the Exchange Rate (FOREX) has a negative effect. Liquidity (CR) has no effect on DER. All independent variables consisting of; ROA, CR, SIZE, FOREX and IR together significantly influence DER. The goodness-of-fit test as measured by the termination coefficient (R2) shows a coefficient of 0.937202, meaning that the variation in the ups and downs of the DER can be explained by ROA, CR, SIZE, FOREX, and IR of 93.72 percent, while the rest, namely 6.28 percent can be explained by other variables not examined in this research model. For the adjusted coefficient of determination (R2 adjusted) the coefficient is 0.9217. The second model shows that the DER and IR variables have a negative effect on Yield to Maturity (YTM), while the SIZE and FOREX variables have a positive effect. ROA and CR variables have no effect on YTM. All variables DER, ROA, CR, SIZE, IR and FOREX together affect YTM. For the goodness-of-fit test as measured by the termination coefficient (R2) shows a coefficient of 0.6750, which means that the variation in changes in the rise and fall of YTM can be explained by; DER, ROA, CR, SIZE, IR, and FOREX are 63.30 percent, while the remaining 36.70 percent can be explained by other variables outside this research model.

**Keyword:** Economic Growth, Yield to Maturity, Capital Structure, Profitability, Liquidity, Company Size, Exchange Rate, Interest Rate

## **INTRODUCTION**

The capital market is an activity related to the public offering and trading of securities of public companies related to the securities they issue, as well as institutions and professions related to securities. The capital market is a means of forming capital and accumulating funds aimed at increasing public participation in directing funds to support financing national development. Currently, the only capital market in Indonesia is the Indonesia Stock Exchange (IDX). The capital market can be an alternative to raising funds other than the banking system. Raising funds through investment in the capital market, one of which is through bonds. For some investors, bonds can be used as an alternative long-term investment other than stocks. Several things make investors more interested in investing in bonds than stocks. First, the risk of loss that will be received by investors is low because the income provided by bonds tends to be fixed (fixed income) in the form of coupons paid every 3 months, 6 months or 1 year until maturity (Veronica, 2015). Second, bonds are safer than shareholders, because bond investors will be prioritized in returning their funds if a company goes bankrupt. This is because there is a contract agreement to pay it off (Sari and Rahyuda, 2019). There are two types of bonds, namely government bonds and corporate bonds. The difference between the two bonds lies in the yield and risk. Corporate bonds offer higher yields than government bonds with the same maturity. This higher yield must be paid for with higher risk. Meanwhile, government bonds can be said to be zero risk, but the yield and coupon given are low. Investors choose corporate bonds because the yield offered is higher compared to government bonds.

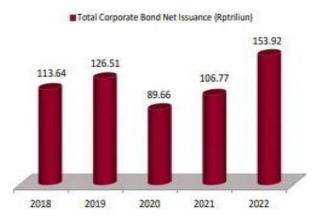


Figure 1. Total Corporate Bond Net Issurance

Based on Figure 1 shows the most active corporate bond issuance in terms of frequency recorded by the EBA-SP series owned by PT Sarana Multigriya Finansial Persero (SPSMFBTN02A2) with a total frequency of 10,061 transactions (total volume of IDR 78.31 billion). Meanwhile, the corporate bond with the largest total transaction volume was achieved by the PNM IV Phase II 2022 Series A Sustainable Bond series (PNMP04ACN2) which was worth IDR 5 trillion. In 2018 there was a decline because issuers chose to postpone bond issuance. The quiet bond issuance in 2018 was affected by the benchmark interest rate which rose to 6%. The high interest rate made companies have to think twice about providing yields or returns to investors because they considered the company's cost of funds to be higher. This factor is due to the increase in the benchmark interest rate. Bank Indonesia has raised the BI-7 Day Reverse Repo benchmark interest rate five times from 4.25% in January 2018, 4.50% in May 2018, 5.50% in August 2018, 5.75% in September 2018 and 6.00% in November (www.bi.go.id).

In 2020, the decline in the value of corporate bond issuance was inseparable from the effects of the COVID-19 pandemic. According to the Indonesia Stock Exchange (IDX), the value of

banking corporate bond issuance was around IDR 7.88 trillion, a decrease compared to the issuance value in 2019 which reached IDR 24.28 trillion (<a href="www.liputan6.com">www.liputan6.com</a>).

Industri	2015	2016	2017	2018	2019	1H202
Multifinance	21.768	26.442	29.365	23.926	26.421	4.037
Lembaga Keuangan Khusus	9.651	23.150	19.620	17.940	31.375	4.00
Perbankan	13.282	43.496	50.542	26.073	24.287	3.690
Pertambangan	NA	3.509	6.336	2.076	2.239	2.29
Telekomunikasi	12.500	4.490	11.350	7.455	8.970	2.05
Industri Pembiayaan	2.900	3.000	4.100	7.970	6.794	1.19
Properti	2.471	4.583	4.605	1.782	6.095	510
Konstruksi	2.100	4.800	14.069	7.404	6.275	N/
Makanan & Minuman	500	1.700	3.050	764	NA	N/
Lainnya	2.647	11.620	41.968	37.034	34.033	12.24
Total	67.819	126.790	185.004	132.423	146.488	30.03

Figure 2. Number of Corporate Bond Issuers by Industry

PT Pemeringkat Efek Indonesia (Pefindo) and PT Bursa Efek Indonesia (BEI) recorded a decrease in debt issuance by banks during 2020 due to the impact of the COVID-19 pandemic. Director of Corporate Assessment of PT Bursa Efek Indonesia I Gede Nyoman Yetna said, based on 2020 data, the value of domestic corporate debt issuance reached IDR 86.96 trillion. As much as 56.89 percent or IDR 44.97 trillion came from sectors other than financial institutions, while 43.11 percent or IDR 41.97 trillion came from the financial sector. The decrease in the value of corporate debt issuance by banks is inseparable from relatively low credit growth so that banks experienced an increase in liquidity and capital that was still sufficient from the collection of Third Party Funds (DPK), so that banks still issued minimal debt for liquidity needs. During 2020, the value of corporate debt issuance by banks was only recorded at around IDR 7.88 trillion, a decrease compared to the issuance value throughout 2019 which reached IDR 24.28 trillion. This is the first time this has happened, because usually the issuance of financial sector bonds always dominates above 50% each year (www.money.kompas.com).

Low bond issuance is due to high interest rates. High interest rates make bond issuers have to think twice about providing yields or returns to investors because they consider the interest burden (cost of funds). This trend shows that investor interest in corporate bonds, especially in the banking sector, is lower because the yield to maturity given is low. This phenomenon is very interesting to analyze further about what factors influence corporate bond yields.

Yield is the most important factor for investors to consider when purchasing bonds as an investment profit instrument. Bond investors will calculate how much investment income is obtained from the funds used to purchase the bonds using a yield measurement tool (Nelmida, 2018). Yield to Maturity is widely used because it reflects the return or yield with compound interest rates expected by investors. There are several factors that affect the yield to maturity of corporate bonds, namely external factors and internal company factors. External factors are macroeconomic factors such as interest rates, bond ratings and exchange rates. Internal factors are economic factors that occur within the company, such as the company's financial performance, namely leverage, liquidity and the size of the company itself. Investors who invest in the corporate bond market must be aware of the risk of the bond issuing company being unable to fulfill its promises, namely the risk of the company being unable to pay coupons or return the principal of the bond (default risk or default risk). According to asset pricing theory, including the capital asset pricing model (CAPM) by

Sharpe (1964); Lintner (1965) and Mossin (1966) and arbitrage pricing theory (APT) by Ross (1976), systematic risk mainly determines the amount of the company's cost of capital and cannot be diversified. Systematic risk is the company's main component of business risk which is the main source of the company's credit risk and affects bond yields. Systematic risk is closely related to changes in macroeconomic conditions, including interest rates and exchange rates.

Bank Indonesia's benchmark interest rate is a policy interest rate that reflects the monetary policy stance set by Bank Indonesia and announced to the public. Bank Indonesia's benchmark interest rate is one of the mechanisms used by Bank Indonesia to control the stability of the rupiah (Nelmida, 2018).

Leverage ratio is a ratio that influences the extent to which a company uses debt funding (financial leverage). The leverage ratio is a ratio that shows the level of proportion of debt use in financing investment. In this study, leverage measurement uses Debt to Ratio (DER). DER is the ratio of the balance between the company's debt and its own capital. This ratio is useful for determining the amount of funds provided by borrowers (creditors) to the company's owners. Debt to equity ratio (DER) is an indicator of capital structure and financial risk and is a comparison between debt and equity. The theoretical basis used as a basis for explaining the relationship between DER and YTM is the agency theory of covenants (ATC) (Jensen and Meckling, 1976; Myers, 1977; Smith and Warner, 1979). The increasing DER of a company indicates the risk of distribution of the company's operating profits that will be absorbed to pay off the company's obligations (Purwanto and Haryanto, 2004). Company liquidity is an assessment of the company's ability to generate sufficient cash flow to meet all its obligations (Putri, 2013). The position or wealth of a company is also indicated by liquidity. In general, the level of liquidity is used as a benchmark for company decision making, especially within the company. The higher the level of liquidity of a company, the better the company's performance is said to be. Companies that have a high level of liquidity will receive a lot of support from parties outside the company, such as investors and creditors, in investing, so that the yield to maturity that the company will give to its investors will be higher (Ernawati, 2019)

Company size is a scale that can be classified into various ways, including: total assets, log size, market value of bonds or shares, and others. Large companies tend to be safer than small companies that have quite large risks, because companies that have larger assets tend to have better competitive abilities compared to companies that have smaller assets (Desnitasari, 2014). The theory underlying this research is Agency Theory and Signaling Theory. Issuance of debt or bonds can often cause problems between managers, shareholders and creditors. If debt increases in the company's capital structure, the business and operational risks of creditors increase but investment and operational decisions remain with managers and shareholders. There is a possibility that funds from bond issuance are not used for investment in projects with positive Net Present Value but are used for dividend payments, so that the company fails to pay debts to creditors. However, creditors cannot sue much because there is limited liability from the shareholders, meaning that shareholders cannot be sued for more than the paid-in capital.

#### **METHOD**

Population is a generalization area consisting of objects or subjects that have certain qualities and characteristics determined by researchers to be studied and then conclusions drawn (Sugiyono, 2017:80). The population in this study is corporate bonds in the banking sector traded on the Indonesia Stock Exchange (IDX) during the period 2015-2020.

The sample is part of the number and characteristics possessed by the population (Sugiyono, 2017:81). Sampling in this study will use the purposive sampling technique,

namely the technique of determining samples with certain considerations and criteria from researchers only that can be used as certain research samples (Sugiyono, 2017:81). The reason for choosing the sample of corporate bonds in the banking sector is because it dominates the issuance of corporate bonds in Indonesia.

The type of data used in this study is quantitative data. Based on the source, the data used is secondary data with the type of panel data. which consists of cross-section data and time series data. The use of panel data in observation has several advantages, namely first, panel data which is a combination of two time series data and cross-sections can provide more data so that it will produce a greater degree of freedom. Second, combining information from time series and cross-section data can solve problems that arise when there is a variable omitted problem. Based on the results of paired testing using the Chow test, the LM Breusch-Pagan (BP) test, and the Hausmant test on the three panel data regression methods above and summarized in table 4.7, it can be concluded that the fixed effect model is chosen to estimate and analyze the factors that influence the Capital Structure (DER) in banking sector companies that issue Bonds and are listed on the Indonesia Stock Exchange (IDX) during the 2019-2023 period.

#### RESULT AND DISCUSSION

Capital structure theory attempts to answer the proportion of debt and equity observed on the right side of a company's balance sheet (Myers, 2001). The company's capital structure determines the cost of capital that must be borne by the company. The cost of capital is a reflection of the stock returns expected by investors. In addition, capital structure theory explains whether there is an effect of changes in capital structure or funding composition, for example replacing some of the capital itself with debt (or vice versa) on the value of the company, if investment decisions and dividend policies are held constant. If changes in capital structure bring changes to the value of the company, then the best capital structure will be obtained. The capital structure that can maximize the value of the company, or the stock price is the best capital structure (Widodo, 2023a). The interest rate structure is the relationship between maturity and yield for a category, namely bonds. The longer the maturity of a bond, the higher the risk of uncertainty, so that the interest rate will be higher and the value of the yield spread will also be high (Tendelilin, 2010). This theory explains the influence of the expected interest rate level as one of the factors that investors pay attention to in buying or selling bonds. According to Martelli, Priaulet, & Priaulet (2003), Yield or Term Structure of Interest Rate (TSIR) is an interest rate that is sorted into several structures based on a certain maturity time. The interest rate structure is associated with the maturity period of the bond which is depicted in a yield curve. According to Nawalkha and Soto (2009) Term Structure of Interest Rate (TSIR) is also called a yield curve which is interpreted as the relationship between investment results and investment maturity time.

Bonds are debt acknowledgement letters for loans from investors for a period of at least three years by promising interest rewards whose amount and payment time have been determined in advance by the issuer. Bonds are also one of the financial instruments traded on the capital market (Situmorang, 2017).

Bonds are debt securities issued by issuers (companies or governments) that require funds for their operational needs or expansion. Investing in bonds has the potential for greater profits than banking products. The advantage of investing in bonds is getting interest and the possibility of capital gains. In general, bonds can also be interpreted as long-term debt securities issued by an institution with a certain nominal value and maturity date (Zainal et al., 2019). Bond issuers can be private companies, state-owned enterprises or governments, both central and regional governments. One type of bond currently traded on the capital market is a coupon bond with a fixed interest rate during the bond's validity period (Pinanditha, 2016). Brigham and Houston

(2018:283) state that yield to maturity can be seen as the promised rate of return on bonds at maturity. Yield to Maturity (YTM) is the internal rate of return obtained from a bond if the bond is held until the maturity date (Hamid et al., 2019). Bond yield is the most important factor for investors to consider in purchasing bonds as an investment instrument. Investors will calculate how much investment income is obtained from the funds purchased using a yield measuring tool. Bond yield is a measure of bond income that will be received by investors which tends to be non-permanent (Putri et al., 2020)

Specifically, the higher the yield to maturity, the lower the rate of price change. For the same yield change at a low yield rate, the price change will be greater than at a high yield rate. In other words, for a given yield change, the price change will be greater at a low yield than at a high yield. If the yield to maturity is higher than the estimated yield to maturity, the bond is said to be underpriced and is a candidate for purchase (Widodo et al., 2019). Conversely, if the yield to maturity is lower than the estimated yield, the bond is said to be overpriced and is a candidate for sale. Bond investment must consider the size of the interest rate. Because the interest rate affects the yield of the bond that will be received. Investors can determine the interest rate that can be used as a benchmark before buying bonds. The interest rates that can be used as benchmarks consist of various types, one of which is the Bank Indonesia interest rate or known as the BI rate. The BI rate is a policy interest rate that reflects the attitude or stance of monetary policy set by Bank Indonesia and announced to the public. Interest rates are an attraction for investors to invest in the form of deposits or SBI so that investments in the form of shares will be competitive (Prawiranegara and Ramdhan, 2016).

Bank Indonesia Certificates (SBI) are securities issued by Bank Indonesia as an acknowledgement of short-term debt with a discount or interest system. Using the BI 7-day (reverse) Repo Rate mechanism published by Bank Indonesia for the 2015-2020 period and expressed in percentage (Sari and Rahyuda, 2019). The interest rate used in this study is the BI 7-Day Reverse Repo Rate published in the last month at the end of the year by Bank Indonesia. According to Fabozzi and Franco (1996) the exchange rate is the amount of a currency that can be exchanged for one currency of another country or the price of one currency calculated in the currency of another country. The rupiah exchange rate is the value of one rupiah translated into the currency of another country.

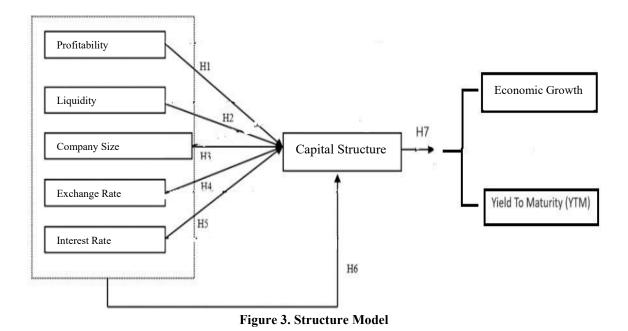
Currency exchange rates or exchange rates are one way for a country to transact with the outside world because by using exchange rates, transactions with foreign countries can run smoothly. However, there are obstacles in exchange rates, that not every country's currency value is the same (Widodo, 2023b). The value of this currency can be influenced by the amount of demand and supply of money that occurs in the foreign exchange market (Mahaputra, 2017). On the other hand, with the expectation of a positive exchange rate, the company's value will increase so that there will be an increase in the price of securities (stocks and bonds). Conversely, if interest rates rise, the burden of capital costs and operational costs will increase so that the operating income (EBIT) of the issuer will fall which will be reflected in the decline in the price of securities, both stocks and bonds (Sembiring et al., 2019). The profitability ratio used to predict Stock Returns is Return on Assets (ROA). ROA is used to measure the effectiveness of a company in utilizing its assets according to Hardiningsih et al in Haryani (2018). Meanwhile, according to Supriantikasari (2019), ROA is used to measure the effectiveness of a company in generating profits by utilizing its assets and is used to determine the company's performance based on the company's ability to utilize the number of assets it owns. The company's financial performance in generating net profit from the assets used will have an impact on the company's shareholders.

Bond liquidity is the company's ability to pay off its short-term debts using its current assets. An indicator of how easy it is for a bond held by capital owners to be converted into cash on the secondary market. High bond liquidity will make bonds more attractive because it shows

more availability of buyers and sellers so that investors can sell their bonds at any time, so that bond prices can increase (Putri, 2020). Bond liquidity is reflected in the number of trading frequencies. Bonds that are frequently traded on the bond market are bonds that have high liquidity. The higher the liquidity, the more likely the bond price is to increase, this causes the risk and yield to decrease (Sari, 2019). Company size is a scale that can be classified as large or small companies according to various methods, including: total assets, log size, stock market value, and others (Situmorang, 2017). Company size can be proxied by total assets, sales or equity. If the amount of assets, sales or equity is large, then the logarithm of that amount is used for research purposes. The purpose of the liquidity ratio is to see the company's ability to pay short-term obligations on time so that the company can be said to be healthy.

Theoretically, larger companies have greater business certainty than small companies, so that it will reduce the level of uncertainty regarding the company's future prospects. This can help investors predict the risks that may occur if they invest in the company. The composition of the company's external investment financing, both from equity and debt, determines the capital structure policy (Marsono et al., 2018). One source of debt financing is the issuance of corporate bonds that will be offered to investors who are interested in investing in instruments that provide fixed income until the bond expires. The yield that will be received by bondholders until maturity is known as Yield to Maturity (YTM). In accordance with the framework of thought, the study makes the capital structure variable a mediator of other factors both internally and externally to YTM. Factors that influence Capital Structure and its implications for Yield to Maturity, namely; external factors consisting of: Interest Rate variables, and Exchange Rates, while internal factors consist of; Profitability, Liquidity and Company Size. These factors are very necessary for investors in deciding on corporate bond investments.

Bond issuance is one of the company's funding source options. According to the Pecking Order Theory (POT), bond issuance is included in the financing order based on the costs that must be incurred by the company. For bondholders, the costs incurred by the issuing company are YTM. In addition, the company's capital structure is also influenced by other factors, both internal and external, which indirectly also have an impact on the YTM of bonds. Therefore, the choice of the optimal capital structure directly affects YTM, and the role as a mediator of other variables also determines. Lelan and Toft (1996) have developed a model of the relationship between capital structure and YTM.



#### Results

Table 1. Conclusion of Panel Data Regression Model Testing

No	Method	Testing	Results
1	Chow-Test	Common Effect vs Fixed Effect	Fixed Effect
2	Lagrange Multiplier-BP	Common Effect vs Random Effect	Random Effect
3	Hausman Test	Fixed Effect vs Random Effect	Fixed Effect

Based on the results of testing the panel data regression model in pairs using the Chow test, the LM Breusch-Pagan (BP) test, and the Hausmant test on the three panel data regression methods above and summarized in table 5.13, it can be concluded that the fixed effect model was chosen to estimate and analyze the factors that influence the Yield to Maturity (YTM) and economic growth of banking sector companies that issue Bonds and are listed on the Indonesia Stock Exchange (IDX) during the 2019-2023 period.

**Table 2. Conclusion of Panel Data Regression Model Testing** 

No	Metode	Testing	Results
1	Chow-Test	Common Effect vs Fixed Effect	Fixed Effect
2	Lagrange Multiplier-BP	Common Effect vs Random Effect	Random Effect
3	Hausman Test	Fixed Effect vs Random Effect	Fixed Effect

Based on empirical evidence, it shows that the Profitability (ROA) variable has a positive and significant effect on the DER of banking sector companies that issue bonds and are listed on the Indonesia Stock Exchange (IDX) during the 2019-2023 period. This finding reveals that banks that are able to increase ROA can increase the proportion of debt by issuing bonds. The results of the study are in line with the findings of Lemma and Negash (2014), Jahan (2014), and Wellalage and Locke (2015) which prove that profitability has a positive effect on capital structure. The study by Zafar et al. (2019) also proves that profitability has a significant negative effect on corporate leverage. The empirical findings differ from the studies conducted by Muntahanah et al., (2022), Mabrouk and Boubaker (2020), Feng et al. (2020), Hunnayan (2020), Sikveland and Zhang (2020), Lestari (2015), and Murhadi (2011) which prove that profitability has a negative effect on capital structure. Research by Julimar and Priyadi (2021) also revealed that profitability (ROA) has a negative effect on capital structure. This is in accordance with the pecking order theory which explains that companies with high profitability can use internal reserves first so that they do not need external capital. The existence of a significant negative effect is explained in each study, one of which is because the company has sufficient cash for operational activities so that it does not need debt financing (Mabrouk & Boubaker, 2020). Another explanation according to Hunnayan (2020), namely that companies that have high profitability are indicated to have sufficient internal funds to cover future investments so that dependence on external funds is not needed. Research by Taleb and Shubiri (2011) and Siregar and Tjandrasa (2021) revealed their findings that profitability has no effect on capital structure.

#### **Discussion**

## Effect of Liquidity (CR) on Capital Structure (DER)

Empirical evidence shows that the liquidity variable proxied by the current ratio (CR) has a positive but insignificant effect on the DER of banking sector companies that issue bonds and are listed on the Indonesia Stock Exchange (IDX) during the 2019-2023 period. This finding reveals that bank liquidity does not have an impact on debt levels. This is because the time period between short-term liquidity and DER mainly comes from bonds

which are long-term financing. The results are in line with the findings of Siregar and Tjandrasa (2021) who concluded that liquidity has no effect on capital structure.

# Effect of Company Size (SIZE) on DER

Based on empirical research findings, it shows that the variable Company Size (SIZE) has a positive and significant effect on the DER of banking sector companies that issue bonds and are listed on the Indonesia Stock Exchange (IDX) during the 2019-2023 period. This finding reveals that banks with larger assets can increase their debt capacity. Large companies can easily access the capital market and quickly obtain funds through bond issuance. In addition, bond investors feel safer lending to large companies because the possibility of default risk is lower than small companies. Research by M'ng et al. (2017) revealed that companies that are larger in terms of assets tend to have higher leverage, and larger and more diversified companies face a lower risk of default.

## **Effect of Exchange Rate (FOREX) on Capital Structure (DER)**

Based on the research findings, it shows that the Exchange Rate variable has a negative and significant effect on the DER of banking sector companies that issue Bonds and are listed on the Indonesia Stock Exchange (IDX) during the 2019-2023 period. This finding reveals that the depreciation of the Rupiah exchange rate against the US Dollar encourages banks to lower their debt levels. The results of the study are in line with the findings of Mufidah (2012) which proves that the exchange rate has a negative and significant effect on the capital structure because an increase in the foreign exchange rate variable results in a decrease in the company's capital structure.

# **Effect of Interest Rates (IR) on Capital Structure (DER)**

Based on empirical evidence, it shows that the Interest Rate (IR) variable has a positive and significant impact on the DER of banking sector companies that issue bonds and are listed on the Indonesia Stock Exchange (IDX) during the 2019-2023 period. This finding reveals that an increase in interest rates encourages banks to increase long-term financing through bond issuance. The results of this study indicate that the interest rate issued by Bank Indonesia will result in an increase in the company's capital structure

### Effect of Capital Structure (DER) on YTM

Empirical evidence shows that the Capital Structure (DER) variable has a negative and significant effect on the Yield to Maturity (YTM) of banking sector companies that issue bonds and are listed on the Indonesia Stock Exchange (IDX) during the 2019-2023 period. The research findings reveal that the increasing proportion of debt can reduce the YTM of banking sector corporate bonds. Hapsari (2014) stated that the higher the DER, the greater the risk that will be faced and investors will ask for a higher level of return. Thus, it can be said that the higher the DER, the higher the company's risk in the future, which will have an impact on the high yield of corporate bonds. The research results are in line with the findings of Listiawati and Paramita (2018), Norliza Che-Yahya et al. (2016) and Hamid et al. (2019) which state that leverage has a negative effect on yield to maturity.

## Effect of Capital Structure (DER) on Economic Growth

Based on empirical evidence, it shows that the Capital Structure (DER) variable has a negative and significant effect on the Economic Growth of banking sector companies that issue Bonds and are listed on the Indonesia Stock Exchange (IDX) during the 2019-2023 period. The research findings reveal that the increasing proportion of debt can reduce the PE of banking sector corporations. Wulandari (2019) stated that the higher the DER, the greater

the risk that will be faced and investors will ask for a higher level of profit. Thus, it can be said that the higher the DER, the higher the company's risk in the future, which will have an impact on the company's high Economic Growth. The research results are in line with the findings of Hidayat (2022), Prihata. (2019) and Raihana (2019) which state that leverage has a negative effect on Economic Growth.

#### **CONCLUSION**

- 1) The purpose of this study is to estimate and analyze the factors that influence Capital Structure and its implications for Yield to Maturity (YTM) and economic growth of banking sector companies that issue Bonds and are listed on the Indonesia Stock Exchange (IDX) during the 2019-2023 period using the panel data regression method. The panel data regression method is applied because the research data used is a combination of time-series data, where there are seven years of observation periods (2012-2018) and cross-section data, where there are twenty-two banking sector companies that issue Bonds and are listed on the Indonesia Stock Exchange (IDX) during the 2019-2023 period. More specifically, in accordance with the formulation of the problem, research objectives and research hypotheses, the conclusions of the study based on two structural models estimated using the panel data regression method are as follows: 1. The Profitability variable (ROA) has a positive and significant effect on the DER of banking sector companies that issue Bonds and are listed on the Indonesia Stock Exchange (IDX) during the 2019-2023 period. The empirical findings of this study are in line with the research hypothesis which states that the ROA variable has an effect on the DER of banking sector companies that issue bonds and are listed on the Indonesia Stock Exchange (IDX) during the 2019-2023 period.
- 2) The CR variable has a positive but insignificant effect on the DER ratio of banking sector companies that issue bonds and are listed on the Indonesia Stock Exchange (IDX) during the 2019-2023 period. The empirical findings of this study are not in line with the research hypothesis which states that the CR variable has an effect on the DER of banking sector companies that issue bonds and are listed on the Indonesia Stock Exchange (IDX) during the 2019-2023 period.
- 3) The SIZE variable has a positive and significant effect on the DER of banking sector companies that issue bonds and are listed on the Indonesia Stock Exchange (IDX) during the 2019-2023 period. The empirical findings of this study are in line with the research hypothesis which states that the SIZE variable has an effect on the DER of banking sector companies that issue bonds and are listed on the Indonesia Stock Exchange (IDX) during the 2019-2023 period.
- 4) The FOREX variable has a negative and significant effect on the DER of banking sector companies that issue bonds and are listed on the Indonesia Stock Exchange (IDX) during the 2019-2023 period. The empirical findings of this study are in line with the research hypothesis which states that the FOREX variable has an effect on the DER of banking sector companies that issue bonds and are listed on the Indonesia Stock Exchange (IDX) during the 2019-2023 period.
- 5) The Interest Rate (IR) variable positively and significantly affects the DER of banking sector companies that issue Bonds and are listed on the Indonesia Stock Exchange (IDX) during the 2019-2023 period. The empirical findings of this study are in line with the research hypothesis which states that IR has an effect on banking sector companies that issue Bonds and are listed on the Indonesia Stock Exchange (IDX) during the 2019-2023 period. 6. All independent variables consisting of; Profitability (ROA), Liquidity (CR), Company Size (SIZE), Exchange Rate (FOREX), and Interest Rate (IR) together significantly affect the Capital Structure (DER) of banking sector companies that issue

Bonds and are listed on the Indonesia Stock Exchange (IDX) during the 2019-2023 period. Of the variables that have a significant influence, the Interest Rate (IR) variable is the variable that has the most dominant influence on the DER of banking sector companies that issue Bonds and are listed on the Indonesia Stock Exchange (IDX) during the 2019-2023 period, while the SIZE variable is the variable with the smallest influence. For the goodness-of-fit test measured by the coefficient of determination (R2) shows a coefficient figure of 0.937202, which means that the variation in changes in the ups and downs of the Capital Structure (DER) of banking sector companies that issue Bonds and are listed on the Indonesia Stock Exchange (IDX) during the 2019-2023 period can be explained by; Profitability (ROA), Liquidity (CR), Company Size (SIZE), Exchange Rate (FOREX), and Interest Rate (IR) by 93.72 percent, while the rest, which is 6.28 percent, can be explained by other variables not examined in this research model. For the adjusted determination coefficient (R2 adjusted) produces a coefficient figure of 0.9217 which means that after considering the degrees of freedom of the fixed effect model used, all independent variables used in this study can explain changes in the Capital Structure (DER) of banking sector companies that issue Bonds and are listed on the Indonesia Stock Exchange (IDX) during the 2019-2023 period.

- 6) The Capital Structure (DER) variable has a negative and significant effect on the Yield to Maturity (YTM) of banking sector companies that issue Bonds and are listed on the Indonesia Stock Exchange (IDX) during the 2019-2023 period. The empirical findings of this study are in line with the research hypothesis statement which states that the Capital Structure (DER) variable has an effect on the Yield to Maturity (YTM) of banking sector companies that issue Bonds and are listed on the Indonesia Stock Exchange (IDX) during the 2019-2023 period.
- 7) The Capital Structure (DER) variable has a negative and significant effect on the Economic Growth of banking sector companies that issue Bonds and are listed on the Indonesia Stock Exchange (IDX) during the 2019-2023 period. The empirical findings of this study are in line with the research hypothesis statement which states that the Capital Structure (DER) variable has an effect on the Economic Growth of banking sector companies that issue Bonds and are listed on the Indonesia Stock Exchange (IDX) during the 2019-2023 period.

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