PROCEEDING
Call for Paper – 4th International Seminar on Accounting Society
"The Evolving of SDG's in Advancing Business Longevity from Accounting International View"

THE EFFECT OF INFLATION LEVELS, TANGIBLE ASSET AND BUSINESS RISK ON CAPITAL STRUCTURE

Sinta Safitri[a,1], Suciati Muanifah[b,2]
[ab]Accounting Study Program Pamulang University
Email: sintaasafitri151@gmail.com; suciatimuanifah43@gmail.com;

ABSTRACT
This research aims to determine the influence of Inflation Levels, Tangible Assets and Business Risk on Capital Structure in Property and Real Estate sector companies listed on the Indonesia Stock Exchange in 2018-2022. The research method used is a quantitative descriptive approach. The population in this study was 93 Property and Real Estate sector companies listed on the Indonesia Stock Exchange in 2018-2022. The sample in this research was 19 companies with a purposive sampling method as a sampling technique. Hypothesis testing in this research uses panel data regression analysis using Eviews version 12 software. Based on the results of panel data regression analysis, it shows that the Inflation Level has a positive effect on Capital Structure, Tangible Assets has a negative effect on capital structure and Business Risk has no effect on Capital Structure. Simultaneously the Inflation Level, Tangible Assets and Business Risk simultaneously influence the Capital Structure.

Keywords: Inflation Rate, Tangible Assets, Business Risk, Capital Structure.

1. INTRODUCTION

Economic stability is a crucial factor in an organization. Economic stability can be seen through the level of capital structure owned by a company. It is very important and a concern for companies to consider the capital structure they want to manage. Not only are competitors a challenge for the company, but the effects of the pandemic are also a bad threat for the company. Many companies have an unstable capital structure.

According to Law Number 25 of the Republic of Indonesia concerning Capital Investment 2007), capital investment states that in facing changes in the global economy and Indonesia's participation in various international cooperation, it is necessary to create an investment climate that is conducive, promotive, provides legal certainty, justice and is efficient while still paying attention to national economic interests. With the cases experienced in the property and real estate sector which occurred at PT. Agung Podomoro Land Tbk (APLN) explained that the role of capital structure is very important in a company in order to facilitate the company's progress.

According to Brona et al., (2023) there are several factors that influence the capital structure of a company, such as profitability, business risk and sales growth. The first factor is the inflation rate which can affect the capital structure. High inflation rates are usually a result of the country's unstable economic conditions. Inflation also determines the strength or weakness of the influence on the capital structure. The second factor is tangible assets. Tangible Assets where the bigger a company, the bigger its assets (Putri & Dillak, 2023). The third factor is business risk. Business risk is assessed as a result of uncertainty which can give rise to opportunities for loss and poor planning results (Permana & Agustina, 2021).

2. LITERATURE REVIEW

For literature related to this research, the author uses literature as a basis for understanding the use of modeling in the research methods that will be used. Modigliani and Miller (1963) trade off theory explains that how much debt the company has and how much equity the company has, so that there is a balance between costs and profits. This theory is about balancing the benefits and sacrifices that arise as a result of using debt. Companies must consider the costs and benefits they will obtain. Sudana (2011:143) in (Mahanani & Asandimitra, 2017) capital structure is related to the long-term spending of a company measured by the comparison of long-term debt with its own capital. Capital structure identifies how a company finances its operational activities, whether the company tends to use debt or utilize company capital.

The factors that influence capital structure in this research are divided into 3, namely inflation rate, tangible assets and business risk. Research conducted by (Anggita & Stiawan, 2023) and Brona et al., (2023) to determine the capital structure in a company states that that capital structure can be measured using the Debt to Equity Ratio (DER) formulation. This ratio is a measure of how large the proportion of debt is compared to the company's total equity capital used for funding. In this research, the capital structure is projected with the following formulation:

$$DER = \frac{Total\ Utang}{Total\ Modal}\ x\ 100\%$$

Inflation Rate

Inflation is the tendency for prices to increase generally and continuously (Mankiw, 2006: 145). A decrease in company profits will cause investors to not be interested in investing in the company, this will result in a decrease in share prices and an impact on a decrease in stock returns (Maronrong & Nugrhoho, 2017). The Consumer Price Index is an indicator commonly used in Indonesia to describe goods and services consumed by the public (Mahanani & Asandimitra, 2017) and (Septiani and Dwi Indah Lestari, 2020). The Consumer Price Index can be measured in the following way:

$$\text{Laju IHK} = \underline{|IHKt - IHKt\text{-}1|}$$

Tangible Assets

Tangible assets are the company's fixed assets. According to Brigham and Houston (2011:188) in Topowijono & Nuzula, (2016) "companies whose assets are sufficient to be used as collateral for loans tend to use quite a lot of debt." The indicators used for the tangible assets variable are fixed assets divided by total assets with the composition of fixed assets relative to the wealth or assets owned by the company (Christian & Yanuar, 2020) and (Putri & Dillak, 2023). Assets are measured in the following way:

$$Tangible\ Asset = \frac{Fixed\ Asset}{Total\ Asset}\ x\ 100\%$$

Business Risk

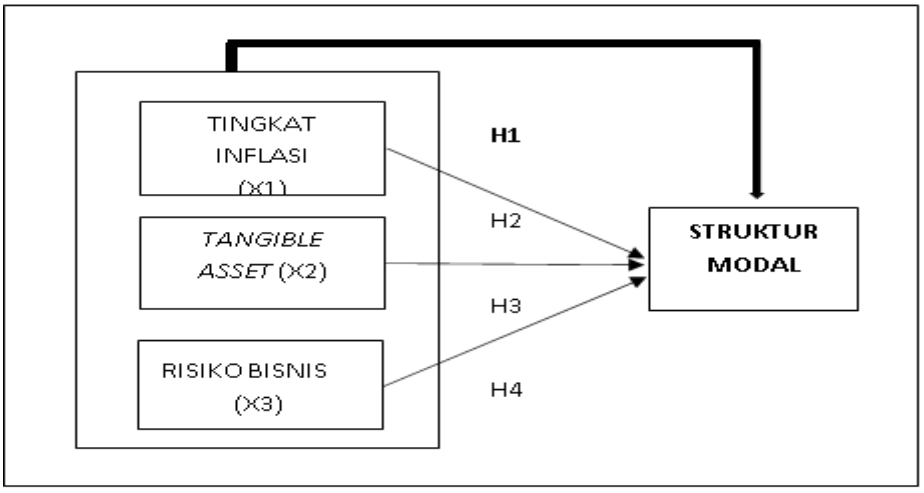
According to Brigham and Houston (2001:45) business risk is uncertainty in a company's projections of its future rate of return on profits or equity. Business risk is assessed as a consequence of uncertainty that may give rise to losses or opportunities for bad results from planning that are not desired by the entity (Permana & Agustina, 2021). The higher the increase in assets using capital from outside the company, the greater the business risk will be (Rahmadianti & Yuliandi, 2020). Companies that have high risk will make creditors hesitant to provide credit, because there is a high possibility that the company will not be able to repay the debt and experience bankruptcy (Amin et al., 2023). This is done to see the high and low risks faced by the company and the impact on company performance which is used according to Suharti et al., (2022) and (Brona et al., 2023) with the following formula:

$$BRISK = \frac{EBIT}{Total\ Aktiva}$$

Framework of thinking

According to Sugiyono (2019:95) a good thinking framework will theoretically explain the links between the variables to be studied. So, theoretically it is necessary to explain the relationship between independent and dependent variables. If there are moderator variables in the research, they also need to be explained. Based on the theoretical basis and previous research, the thinking framework in this research is as presented in the following picture:

Thinking Framework Image



Information:

H1: Relationship between inflation rate (X1), Company Size (X2) and Risk

Business (X3) to capital structure (Y) simultaneously.
H2: Relationship between inflation rate (X1) and capital structure (Y).
H3: Relationship between company size (X2) and capital structure (Y).
H4: Relationship between business risk (X3) and capital structure (Y)

3. DATA AND RESEARCH TECHNIQUE ANALISYS

The author conducted this research using secondary data, namely from year-end financial reports (annual reports) of property and real estate companies which have been published on the Indonesia Stock Exchange (BEI) site https://idx.co.id/ for 2018-2022. The research was carried out for 8 months, from July 26 to March 6. The data used are secondary data and research data sources obtained through intermediary media or indirectly in the form of books, notes, existing evidence, or archives, both published and not generally published.

This type of research is quantitative and associative in nature, namely research that asks about the relationship between two or more variables, looking for roles, influences and causal relationships, namely between independent (influencing), dependent (influenced) variables (Sugiyono, 2016). This research means focusing on the Effect of Inflation, Company Size, Business Risk on Capital Structure as the dependent variable.

This research is in the form of quantitative research. The data used in the research is secondary data. The population observed in this research is all property and real estate companies listed on the Indonesia Stock Exchange in 2018-2022, a total of 93 companies. The method used for sampling in this research was purposive sampling. The purposive sampling method is sampling based on criteria determined by the researcher and there are 19 companies in the sample for this research.

The research methods used are Descriptive Statistical Tests, Determination of Panel Data Regression Estimation Models, Data Analysis Stages, Lagrange Multiplier (LM) Test, Classical Assumption Test, Multiple Linear Regression Analysis, and Hypothesis Testing.

4. RESULT AND DISCUSSION

Data analysis and discussion from this research consists of tables 1 to table 8:

Descriptive Statistical Analysis

Descriptive statistics is a method of organizing and analyzing quantitative data, so that an organized picture of an activity is obtained.

Table 1: Descriptive Statistical Test Results

Date: 03/06/24
Time: 23:43
Sample: 2018 2022

	DER	TI	TA	RB
Mean	0.994009	118.7706	0.113045	0.097373
Median	0.510416	111.5900	0.057128	0.056190

Maximum	13.03261	137.4607	1.068932	2.005102
Minimum	0.002317	104.5539	0.000121	0.000278
Std. Dev.	1.632508	14.06034	0.178852	0.214951
Skewness	5.047282	0.350773	2.925140	7.578447
Kurtosis	34.09307	1.247080	12.56524	66.93126
Jarque-Bera	4230.188	14.11104	497.6400	17087.88
Probability	0.000000	0.000863	0.000000	0.000000
Sum	94.43088	11283.21	10.73924	9.250437
Sum Sq. Dev.	250.5177	18583.16	3.006878	4.343187
Observations	95	95	95	95

Source: Data processed with eviews 12, 2024

From this table, the results of descriptive statistical calculations for each variable are obtained. The sample size of 19 Property and Real Estate companies listed on the Indonesian Stock Exchange in 2018-2022 is obtained. The following is an explanation of the table above:

1. Capital Structure. The results of descriptive statistical tests can be concluded that the Capital Structure (Y) value measured using the DER scale has a minimum value of 0.002317, a maximum value of 13.03261, a mean value of 0.994009 and a standard deviation value of 1.632508.
2. Inflation Rate. The results of descriptive statistical tests can be concluded that the Inflation Rate (X1) value measured using the CPI scale has a minimum value of 104.5539, a maximum value of 137.4607, a mean value of 118.7706 and a standard deviation value of 14.06034.
3. Tangible Assets The results of descriptive statistical tests can be concluded that the value of Tangible Assets (X2) as measured by the tangible assets scale has a minimum value of 0.000121, a maximum value of 1.068932, a mean value of 0.113045 and a standard deviation value of 0.178852.
4. Business Risk The results of descriptive statistical tests can be concluded that the business risk value (X3) as measured by the Return On Equity (ROE) scale has a minimum value of 0.000278, a maximum value of 2.005102, a mean value of 0.097373 and a standard deviation value of 0.214951.

Multikilinearity Test

Table 2: Multicollinearity Test Results

	TI	TA	RB
TI	1.000000	0.108293	0.195639
TA	0.108293	1.000000	0.018825
RB	0.195639	0.018825	1.000000

Source: Data processed with eviews 12, 2024

Based on the test results, it is understood that the correlation coefficient value is < 10. The inflation rate variable has a value of 0.195, for tangible assets it has a value of 0.018 and business risk has a value of 1,000. Of all the variables, the correlation coefficient value is < 10, so there is no relationship between the high and independent variables. It can be concluded that the independent variables do not experience multicollinearity.

Heteroscedasticity Test

Table 3: Heteroscedasticity Test Results

Dependent Variable: ABS(RESID)
Method: Panel Least Squares
Date: 01/22/24 Time: 07:06
Sample: 2018 2022
Periods included: 5
Cross-sections included: 19
Total panel (balanced) observations: 95

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.007494	0.051367	-0.145895	0.8843
TI	0.000229	0.000436	0.524562	0.6012
TA	-0.023333	0.033602	-0.694410	0.4892
RB	-0.009559	0.028342	-0.337291	0.7367

R-squared	0.008184	Mean dependent var	0.016087
Adjusted R-squared	-0.024513	S.D. dependent var	0.057226
S.E. of regression	0.057924	Akaike info criterion	-2.818193
Sum squared resid	0.305317	Schwarz criterion	-2.710662
Log likelihood	137.8642	Hannan-Quinn criter.	-2.774743
F-statistic	0.250298	Durbin-Watson stat	1.245685
Prob(F-statistic)	0.860934		

Sumber: Data diolah dengan eviews 12, 2024

Based on the test results in Table, it is known that the prob value is greater than α = 0.05 (prob > 0.05) (0.8843 > 0.05), so the conclusion from the output test results of the Cross-Secion Dependence Test is that there are no symptoms of heteroscedasticity.

Autocorrelation Test

Table 4: Autocorrelation Test Results

Weighted Statistics

R-squared	0.344146	Mean dependent var	-1.128634
Adjusted R-squared	0.322524	S.D. dependent var	1.812932
S.E. of regression	0.545199	Sum squared resid	27.04897
F-statistic	15.91677	Durbin-Watson stat	0.797150
Prob(F-statistic)	0.000000		

Source: Data processed with eviews 12, 2024

Based on the table, the autocorrelation test using the Durbin-Watson (DW) method with the criteria for no autocorrelation occurring is -2 < DW < 2, where the DW value obtained is 0.797150 and the criteria for the value of no autocorrelation occurring is -2<0.797150< 2 which is sufficient. Based on decision-making guidelines, it can be concluded that the test results do not experience symptoms of autocorrelation.

Multiple Linear Regression Analysis Test

Table 5: Multiple Linear Regression Analysis Test Results

Dependent Variable: DER_LOG
Method: Panel EGLS (Cross-section weights)Date: 03/06/24 Time: 23:56
Sample: 2018 2022
Periods included: 5
Cross-sections included: 19
Total panel (balanced) observations: 95
Linear estimation after one-step weighting matrix

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.666580	0.079197	-8.416735	0.0000
TI	0.001722	0.000723	2.382365	0.0193

TA_LOG	-0.136789	0.022882	-5.978088	0.0000
RB	-0.083113	0.175295	-0.474131	0.6365

Source: Data processed with eviews 12, 2024

Through the multiple linear regression testing table, the regression formula can be obtained including:

$$Y = 0.666580 + 0.001722X1 - 0.136789X2 - 0.083113X3 + e$$

1. Through this equation formula, a constant of 0.66580 is obtained, meaning that if the inflation rate, tangible assets and business risk variables are considered constant, then the resulting capital structure is 0.66580.
2. The inflation rate coefficient of 0.001722 means that for every 1% increase in the inflation rate, the capital structure will decrease by 0.093400.
3. The tangible asset coefficient is -0.136789, meaning that for every 1% increase in the level of tangible assets, the capital structure will decrease to -0.136789.
4. The business risk coefficient is -0.083113, meaning that for every 1% increase in the level of business risk, the capital structure will increase by 0.083113.

F Test (Simultaneous)

Table 6: F Test Results (Simultaneous)

Weighted Statistics

R-squared	0.344146	Mean dependent var	-1.128634
Adjusted R-squared	0.322524	S.D. dependent var	1.812932
S.E. of regression	0.545199	Sum squared resid	27.04897
F-statistic	15.91677	Durbin-Watson stat	0.797150
Prob(F-statistic)	0.000000		

Source: Data processed with eviews 12, 2024

Based on the F test table obtained from the panel data regression table, it can be seen that the results obtained from the F test show an F value of 15.91677 with df1 (K-1) (4 – 1) = 3 and df2 (N-K) (95 – 3) = 92 , then the results obtained by the F-table are 2.70. So, F-calculation > F table, namely (15.91677 > 2.77), and the probability level is (0.000000 < 0.05), based on these criteria, then H1 is accepted, namely that simultaneously the inflation rate, tangible assets and business risk have an impact on capital structure.

t Test (Partial)

Table 7: T Test Results (Partial)

Dependent Variable: DER_LOG
Method: Panel EGLS (Cross-section weights)Date: 01/21/24 Time: 22:25
Sample: 2018 2022
Periods included: 5
Cross-sections included: 19
Total panel (balanced) observations: 95
Linear estimation after one-step weighting matrix

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.666580	0.079197	-8.416735	0.0000
TI	0.001722	0.000723	2.382365	0.0193
TA_LOG	-0.136789	0.022882	-5.978088	0.0000
RB	-0.083113	0.175295	-0.474131	0.6365

Source: Data processed with eviews 12, 2024

Through a number of observations (n=95), the number of independent and dependent variables is (k=4), then the degree of freedom (df) = n-k = 95-4 = 91, and the level of

significance α = 0.05. So the T-table is 1.98638 and the significance level α used is 0.05.

Based on Table 4, it is understood that the Inflation Rate (X1) has a T-calculated value of 2.382365, where the T-calculated value is greater than the T table (2.382365<1.98638) and the significance level is below the probability value (0.0193 <0.05), so that H1 is accepted which is This means that the inflation rate has an effect on the capital structure.

Tangible Asset (X2) has a T-count value of -5.978088, where the T-count value is below the T-table (-5.978088 < 1.98638) and the significance level is below the probability value of (0.0000 < 0.05) so that H2 is accepted which means Tangible Assets have an effect on capital structure.

Business Risk (X3) has a T-count value of -0.474131, where the T-count value is below the T-table (-0.474131 < 1.98638) and the probability value exceeds the significance level of (0.6365 > 0.05) so that H3 is rejected which means Business Risk has no effect on capital structure.

Coefficient Test Results

Table 8: Coefficient of Determination Test Results (R^2)

Weighted Statistics

R-squared	0.344146	Mean dependent var	-1.128634
Adjusted R-squared	0.322524	S.D. dependent var	1.812932
S.E. of regression	0.545199	Sum squared resid	27.04897
F-statistic	15.91677	Durbin-Watson stat	0.797150
Prob(F-statistic)	0.000000		

Source: Data processed with eviews 12, 2024

From the table it can be understood that the adjusted coefficient of determination (adjusted R-Square) is 0.322524 or 32.25% of the dependent variable, namely the capital structure is influenced or explained by the independent variables (inflation rate, tangible assets and business risk). Meanwhile, the remaining 67.75% is explained by other variables

5. CONCLUSION

Sourced from research results and discussion in the previous chapter regarding whether there is an influence between the Inflation Level, Tangible Assets and Business Risk on the Capital Structure of property and real estate companies listed on the Indonesia Stock Exchange (BEI) for the 2018-2022 period. The results of hypothesis testing that have been carried out in this research include: Inflation Level, Tangible Assets and Business Risk simultaneously influence the capital structure of property and real estate companies listed on the Indonesia Stock Exchange (BEI) in 2018-2022. The inflation rate has a positive effect on the capital structure of property and real estate companies listed on the Indonesia Stock Exchange (BEI) in 2018-2022. Tangible Assets have a negative effect on the capital structure of property and real estate companies listed on the Indonesia Stock Exchange (BEI) in 2018-2022. Business Risk has no effect on the capital structure of property and real estate companies listed on the Indonesia Stock Exchange (BEI) in 2018-2022.

REFERENCES

Agus, Y., & Tjandrasa. B. B. (2021). The Influence of Profitability, Liquidity, Solvency, Activity, Inflation and Interest Rates on the Capital Structure of Automotive and Component Sub-Sctor Manufacturing Sector Companies on the IDX 2014-2018. ME A Scientific Journal (Management, Economics and Accounting). 5(\\ 1828-1X43.

Amen. M. A. N., Amirali, & Abdul Azis, L. (2023). Influence of Growth Opportunity, Asset Growth. Profitability and Business Risks on Capital Structure in Property and Real Estate Companies Listed on the Indonesian Stock Exchange 2017-2021. Scientific Journal of Management Science and Entrepreneurship, 3(1), 132-151.

Arini. L. S.. & Rohyani, T. (2022). The Influence of Business Risk, Liquidity and Asset Growth on the Capital Structure of Construction Services Companies Listed on the IDX in 2014 - 2016. Syntax Idea, 4(2), 364-375. https:// doi.org/10.46799/syntax-idea.v4i2.1777

Brona, A. M., Rinofah, R.. Prima Sari. P.. & Prima Sari, P. (2023). Influence on Profitability. Business Risks and Sales Growth on Capital Structure in Property and Real Estate Companies on the IDX for the 2016 - 2020 Period. Islamic Economics & Financial Journal, 2(1), 77-98. https://doi.org/10.56709/mesman.v2i 1.44

Candra, Y. D., & Ambarwati. (2023). The Influence of Inflation, Interest Rates and Profitability on Capital Structure in Property and Real Estate Companies. Journal o UKMC National Seminar on Accounting, 2(1). 576-588.

Christian. & Yanuar. (2020). Influence of the Relationship Between Profitability. Sales Growth and Asset Structure to Capital Structure. Journal of Business Management and Entrepreneurship, 4(2), 75-80.

Mahanani. R. M.. & Asandimitra. N. (2017). Effects of Exchange Rates. Interest Rates, Inflation. Gdp and Corporate Tax Rate on the Capital Structure of Infrastructure Sector Companies. Utilities and Transportation Listed on the Indonesian Stock Exchange 2011-2015. Journal of Management (JIM), 5(3).

Maronrong. R. M.. & Nugrhoho. K. (2017). The Effect of Inflation, Interest Rates and Exchange Rates on Share Prices Case Study of Automotive Manufacturing Companies Listed on the Indonesian Stock Exchange 2012-2017. STEI Ekononii Journal, 26(02), 277-295.

Permana, E. » & Agustina, Y. (2021). The Influence of Business Risk and Company Size on Return on Assets with Modal Structure! As a Moderating Variable (Study of Insurance Companies listed on the Indonesian Stock Exchange for the 2015-2018 Period). Compartment: Scientific Journal of Accounting, 19(\), 51-69. https://doi.Org/10.30595/kompartcmen.vl9il.l 1224

Putri, N. S., & Dillak, V. J. (2023). Effect of Company Size, Non Debt Tax Shield. Tangibility of Assets and Institutional Ownership of Capital Structure (Study of Property and Real Estate Sector Companies Listed on the Indonesian Stock Exchange for the 2017-2020 Period). E-Proceedings of Management, 10(2), 1493-1500.

Septiani and Dwi Indah Lestari. (2020). The Influence of Tangible Assets, Profitability and Business Risk on Capital Structure. Idea Syntax, 2(12), 1123-1136. file:///F:/SEMPRO/821 -Article Text-2125-1-10-20201220.pdf

Suharti, Hendra, & Rheny Afriana Hanif. (2022). The Effect Of Company Size, Dividend Policy, Business Risk, Profitability On Capital Structure And Company Value. Jamal Akantansi, Entrepreneurship and Business, 7(1), 68-84.

Topowijono, A. 1. W. S., & Nuzula, N. F. (2016). Influence of Firm Size, Growth Opportunity, Profitability. Business Risk. Effective Tax Rate. Asset Tangibility, Firm Age, and Liquidity Regarding Company Capital Structure. Jamal Business Administration, 3/(1), 108-117.

http://download.garuda.kemdikbud.go.id/article.php2articleM05123&val=64 68&title=The Influence of Finn Size Growth Opportunity Profitability Business Risk Effective Tax Rate Asset Tangibility Firm Age and Liquidity on Company Capital Structure Study on Company