



The Relationship between Asset Growth and Sales Growth with Capital Structure at PT Indocement Tunggal Prakarsa Tbk for the 2014-2023 Period

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Abstract

This study aims to determine the relationship between asset growth and sales growth with capital structure in PT Indocement Tunggal Prakarsa Tbk for the 2014-2023 period. The method used is quantitative associative. The data analysis techniques used include descriptive statistical tests, classical assumption tests, Pearson correlation tests (*Pearson product moment*), multiple linear regression tests, determination coefficient tests (R^2) and hypothesis tests. Based on the results of the data processing carried out, it can be concluded that there is no partial relationship between asset growth and capital structure because it has a calculated t value ($0.977 < t_{table} (2.365)$) and a significance level of $0.361 (>0.05)$. Partially, there was no relationship between sales growth and capital structure because it had a t -value calculated ($1.969 < t_{table} (2.365)$) and a significance level of $0.090 (>0.05)$. Simultaneously, there was no relationship between asset growth and sales growth together with the capital structure because it had a value of $f_{calculated} (2.913) < f_{table} (4.737)$ and a significance level of $0.120 (>0.05)$.

Keywords: Asset Growth; Sales Growth; Capital Structure.

INTRODUCTION

The dynamics of the global economy in the last decade have brought about significant transformations in the landscape of the world's manufacturing industry, particularly the basic and chemical industrial sectors. The cement industry as one of the vital components in infrastructure development experiences high volatility due to various complex external and internal factors. The *COVID-19 pandemic* that has hit the world since late 2019 has changed the global industrial competition map, followed by geopolitical conflicts such as the Russia-Ukraine war that have had an impact on soaring energy and raw material prices. This condition is exacerbated by the tight monetary policies implemented by various countries to control post-pandemic inflation, creating a business environment full of uncertainty. In this context, manufacturing companies, especially the cement industry, are required to have an adaptive financial strategy and optimal capital structure to maintain operational sustainability and long-term growth.

Indonesia, as a country with relatively stable economic growth in Southeast Asia, has a strategic cement industry in supporting national

infrastructure development programs. The basic industrial and chemical sectors of the cement subsector in Indonesia recorded seven companies listed on the Indonesia Stock Exchange, namely PT Indocement Tunggal Prakarsa Tbk (INTP), PT Semen Indonesia (Persero) Tbk (SMGR), PT Solusi Bangun Indonesia Tbk (SMCB), PT Semen Baturaja (Persero) Tbk (SMBR), PT Wijaya Karya Beton Tbk (WTON), PT Waskita Beton Precast Tbk (WSBP), and PT Cemindo Gemilang Tbk (CMNT). Based on data from the Indonesian Cement Association, the national cement production capacity will reach around 80 million tons per year in 2023, while domestic consumption is only around 65-70 million tons, creating an *oversupply* condition of 15-23%. PT Indocement controls a market share of around 18-20% of Indonesia's total cement market, making it the second largest player after PT Semen Indonesia. The domestic cement industry faces a double challenge in the form of *oversupply* due to *overcapacity* that has occurred in recent years, while on the other hand there is a great opportunity from the development plan of the Nusantara Capital City (IKN) with an investment of around Rp 466 trillion and the urbanization phenomenon that



continues to increase at a rate of 1.3% per year. These paradoxical conditions create complexity in strategic decision-making, particularly in the management of optimal capital structures to anticipate market volatility and maximize company value.

PT Indocement Tunggal Prakarsa Tbk as the second largest manufacturing company in Indonesia in the ready-to-use cement and concrete industry has proven its durability since its establishment on August 4, 1975. The company has a cement production capacity of 18.6 million tons per year spread across four main factories in Citeureup, Palimanan, Tarjun, and Cirebon, with total asset investment of IDR 25.8 trillion at the end of 2023. Based on the financial statements, the company's net income reached IDR 15.4 trillion in 2023, up from IDR 14.0 trillion in 2022, with a net profit of IDR 1.2 trillion. The company's historical journey, which began with the name PT Distinct Indonesia Cement Enterprise (DICE), then changed to PT Indocement Tunggal Prakarsa in 1985, until it became a public company in 1989 shows high adaptability to changes in the business environment. The company's strategic position as a market leader with strong market dominance, supported by sustainable product innovation, international quality standards, and commitment to environmental sustainability through the use of alternative energy such as rice husks and *Refuse Derived Fuel* (RDF) amounting to 12% of total energy needs, makes INTP an attractive research object. This competitive advantage is reflected in the company's ability to maintain its existence in the midst of fierce competition and various external challenges faced by the global and national cement industry in the 2014-2023 period.

Capital structure as a fundamental component in a company's financial management plays a crucial role in determining the long-term success of a business entity. The concept of an optimal capital structure refers to the ideal combination of debt and equity that is able to maximize the value of the company while minimizing the *cost of capital*. In the context of modern financial theory, *trade-off theory* and *pecking order theory* are

two main paradigms that explain how companies determine the optimal composition of funding. Empirical data shows that PT Indocement Tunggal Prakarsa Tbk's capital structure has experienced significant fluctuations during the 2014-2023 period, with the *Debt-to-Equity Ratio* (DER) moving from 17.54% in 2014 to 41.39% in 2023. The movement of this DER shows a non-linear pattern, with a low of 15.34% in 2016 and a gradual increase since 2018 until it peaked in 2023. On average, the company's DER was in the range of 23.67% during the observation period, which is still below the industry standard of 80%. This increase in the debt-to-equity ratio reflects a change in the company's funding strategy that may be affected by dynamic internal and external conditions. A deep understanding of the factors that affect the capital structure is essential for management in optimizing investment and funding decisions to achieve the company's long-term goals.

Asset growth as an indicator of the company's expansion ability showed a highly variable pattern in the observation period. Data shows that PT Indocement's *asset growth* experienced high volatility, with the highest positive growth reaching 15.34% in 2023 and the lowest negative growth of -4.41% in 2021. During the 2014-2023 period, the company experienced negative asset growth in six years (2015, 2017, 2018, 2019, 2020, and 2021) with an average negative growth of -2.59%, while in the other four years (2014, 2016, 2022, and 2023) recorded positive growth with an average of 8.37%. A striking pattern was seen in the 2015-2021 period where there was a consistent contraction in assets, only then experienced a significant recovery in 2022-2023. This inconsistent pattern of asset growth reflects the company's strategic adaptation to changing market conditions, especially the impact of the construction sector slowdown, the *COVID-19* pandemic, and the post-pandemic economic recovery. In the context of financial theory, high asset growth often requires additional funding that can influence a company's capital structure decisions. The relationship between asset growth and



capital structure becomes complex when considering factors such as the availability of internal funds, access to capital markets, and the cost of capital. Companies with high asset growth tend to require greater *external financing*, which in turn can affect the composition of the *debt-equity ratio*. However, these relationships are not always linear and can be modified by a variety of contextual factors such as market conditions, management policies, and specific industry characteristics.

Sales growth as a reflection of the company's operational performance and effectiveness of marketing strategies shows trends that reflect the challenges of the cement industry as a whole. In the 2014-2023 period, PT Indocement's *sales growth* experienced extreme fluctuations with negative growth reaching -13.68% in 2016 and the highest positive growth of 10.53% in 2022. Data analysis shows that the company experienced a sales contraction in five years (2015, 2016, 2017, 2020, and an average decrease of -9.35%), while in the other five years recorded positive growth with an average of 7.15%. The 2015-2017 period was the most difficult phase with consecutive sales declines, reflecting the impact of the economic slowdown and *oversupply* of the cement industry. In contrast, the 2022-2023 period showed a strong recovery with sales growth of 10.53% and 9.93%, respectively. The coefficient of variation in sales growth reached 1.84, indicating a very high level of volatility throughout the observation period. This *volatile sales growth pattern* is in line with the condition of Indonesia's cement industry which is under pressure from *oversupply*, the slowdown in the construction sector during the pandemic, and changes in consumption patterns. From a theoretical perspective, stable and positive sales growth is a reliable source of internal funds to finance the company's expansion and operations, thereby reducing dependence on *external financing*. Conversely, negative or volatile sales growth can force companies to rely more on debt or the issuance of new shares, which has a direct impact on the capital structure. This phenomenon is interesting

to study in more depth given the complexity of the relationship between operational performance and funding decisions in capital-intensive industries such as cement.

The urgency of this research arises from the need to understand the dynamics of the relationship between the company's internal factors and capital structure decisions in the context of an industry that is undergoing significant transformation. The 2014-2023 period was a decade full of economic turmoil ranging from the 2015-2016 global economic slowdown, the 2017-2018 *commodity boom*, the 2020-2021 *COVID-19* pandemic, to the 2022-2023 global recovery and inflation. These dynamic macroeconomic conditions provide an *ideal natural experiment* to analyze how a company adjusts its capital structure in response to internal changes such as asset growth and sales. In addition, Indonesia's commitment to *sustainable development* and green energy transition creates additional pressure for the cement industry to undertake operational transformation that requires major investment and financial restructuring. PT Indocement as a *market leader* that has implemented various sustainability initiatives is a representative case study to understand how an *incumbent company* optimizes its capital structure in the face of industrial disruption and sustainable transition demands.

A review of the literature shows that there is a significant *research gap* in the study of capital structure in the Indonesian cement industry, especially in a period that includes various economic cycles and *disruptions*. Most previous research has focused on *cross-sectional analysis* or relatively stable periods, so it has not been able to capture the dynamics of the relationship between asset growth, sales growth, and capital structure in the context of extreme volatility. Ahmad et al.'s (2021) study on 150 Pakistani manufacturing companies for the period 2010-2018 found a significant positive relationship between asset growth and *leverage* with a regression coefficient of 0.342 ($p < 0.05$), but did not specifically analyze the cement industry which has an average *capital intensity* of 65-70% and



cyclical demand) that are unique. Meanwhile, a study by Nguyen & Canh (2020) on 500 Vietnamese companies for the period 2009-2017 showed that sales growth had a negative effect on the debt ratio with a coefficient of -0.186 ($p < 0.01$), but this result may not be *applicable* to the Indonesian context which has a different market structure and regulations. Research by Suryanto & Darmawan (2019) on Indonesian manufacturing companies found an average DER of 45.3%, but focused on the relatively stable period of 2014-2017. Methodological gaps were also identified from the dominance of the use of static panel data analysis without taking into account *time-varying characteristics* and structural *breaks* that may occur during the observation period, in particular the impact of the *COVID-19* pandemic which led to a 3.2% decline in the average global cement demand in 2020.

The significance of this research lies in its contribution to the development of capital structure theory in the context of emerging markets with specific industry characteristics. The results of the study are expected to provide empirical insight into how companies in capital-intensive industries adjust their capital structures in response to internal and external changes. Practically, this research will provide guidance for the financial management of cement companies in optimizing funding decisions, as well as provide a perspective for investors and analysts in evaluating the company's performance and prospects in this sector. From a policy perspective, the findings of the research can provide input for regulators in designing frameworks that support the financial health of strategic industries such as cement. In addition, this research also contributes to the sustainable finance literature by analyzing how companies committed to sustainability manage their capital structures to support long-term transformation. By using robust methodologies and comprehensive longitudinal data, this research is expected to make a meaningful contribution to the development of financial management theory and practice in the context of the Indonesian manufacturing industry.

Based on the comprehensive description above, research on "The Relationship between Asset Growth and Sales Growth with Capital Structure at PT Indocement Tungal Prakarsa Tbk for the 2014-2023 Period" is very relevant and strategic to be carried out. The complexity of the dynamics of the cement industry, the volatility of the company's internal growth, and the paradigm shifts towards a *sustainable business model* create ideal conditions for analyzing the relationship between fundamental financial variables. This research will not only fill the empirical gap in the literature on Indonesian capital structure, but also provide practical contributions for *stakeholders* in understanding the dynamics of financial *decision making* in a transforming industry. Through an in-depth analysis of PT Indocement's data over a period that includes various economic turmoils, this research is expected to produce strong findings that can be applied to similar companies in emerging markets, as well as providing the foundation for further research in the field of *corporate finance* and *sustainable business strategy*.

METHODS

This study uses a quantitative method with an associative approach, where this approach is used to determine the relationship between variables. This research uses numerical data obtained from the financial statements of PT Indocement Tungal Prakarsa Tbk for the 2014-2023 period through the company's official website, namely www.indocement.co.id in the form of financial position statements and profit and loss statements. The sampling technique used in this study is *nonprobability sampling*, which is the sample taken has been determined based on certain criteria. The sample used in this study is the financial statements of PT Indocement Tungal Prakarsa Tbk from 2014 to 2023 in the form of financial position statements and income statements.

Data analysis uses multiple linear regression with the model $Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \varepsilon$, where Y is the capital structure,

X₁ is asset growth, and X₂ is sales growth. Data processing was carried out using *SPSS software version 27* with a significance level of 5%. The stages of analysis include descriptive statistics, classical assumption tests which include normality tests, multicollinearity tests, heteroscedasticity tests, and autocorrelation tests followed by *runs tests*, pearson correlation tests, multiple linear regression analysis, determination coefficient tests (R^2), and hypothesis tests which include t tests (partial) and f tests (simultaneous). Asset growth is calculated as the ratio of total assets (t) to total assets (t-1), sales growth is calculated as the ratio of total sales (t) to total sales (t-1), while capital structure is calculated as the ratio of total debt to total equity.

RESULTS OF RESEARCH AND DISCUSSION

Research Results Classic Assumption Test

The classical assumption test is a series of statistical tests that must be met because it is a crucial step in conducting data analysis. It aims to ensure that the regression model used is valid, reliable, and provides accurate results. In this study, the purpose of data analysis is to use *SPSS software version 27*. Classical assumption testing consists of:

Normality Test

The normality test has the purpose of finding out whether the data can be considered normally distributed or not. In this study, the normality test can be carried out by analyzing the *normal charts of P-Plots* and the *Komlogorov-Smirnov* test below:

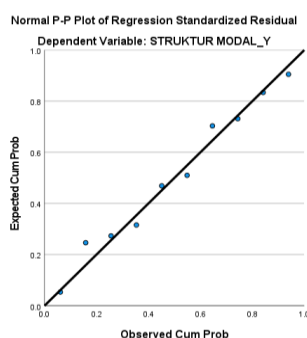


Figure 1: Normality Test Results

Table 2: Normality Test Results

One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		10
Normal	Red	.0000000
Parameter ^{a, b}	Std. Deviation	.06093454
Most	Absolute	.128
Extreme	Positive	.107
Differences	Negative	-.128
Test Statistic		.128
Asymp. Sig. (2-tailed) ^c		.200
Monte Carlo Sig. (2-tailed) ^e	Sig.	.920
	99% Confidence Interval	.912
	Lower Bound	
	Upper Bound	.927

a. Test distribution is Normal.

b. Calculated from data.

c. Lilliefors Significance Correction.

d. This is a lower bound of the true significance.

e. Lilliefors' method based on 10000 Monte Carlo samples with starting seed 2000000.

Source: *SPSS output version 27*, data processed by researchers (2025)

Based on the presentation of images and tables from the *output of SPSS version 27* in the normality test above, it is known that the data does not spread far from the diagonal line, a significance value of 0.200 (>0.05) is obtained, therefore, it can be concluded that the data used in this study is normally distributed and deserves further testing to determine the relationship between the variables.

Multicollinearity Test

The multicollinearity test is useful to find out whether there is a correlation between independent variables in the regression model. In order to find out whether or not there is multicollinearity between regressions and independent variables, it can be seen from the *tolerance value* or *variance inflation factor (VIF)*.

Table 3: Multicollinearity Test Results

Coefficient		Collinearity Statistics	
Models		Tolerance	VIVID
1	GROWTH ASET_X1	.961	1.041
	GROWTH PENJUALAN_X2	.961	1.041

a. Dependent Variable: STRUCTURE
MODAL_Y

Source: *SPSS output version 27*, data processed by researchers (2025)

Based on the presentation of the table of *SPSS output version 27* in the multicollinearity test above, it can be seen that the asset growth has a *tolerance* value of 0.961 (>0.1) and a VIF value of 1.041 (<10) as well as sales growth. Where these results show that there is no multicollinearity in the independent variables in this study, so that each variable can be analyzed further to determine the relationship with the dependent variable.

Heteroscedasticity Test

The heteroscedasticity test was carried out to test whether in the regression model there was an unevenness of *variance* from one residual observation to another. If the *variance* of a residual is fixed, then homogeneity, whereas for different *variances* is called heteroscedasticity. A good regression model is homogenedasticity or in other words there is no heteroscedasticity.

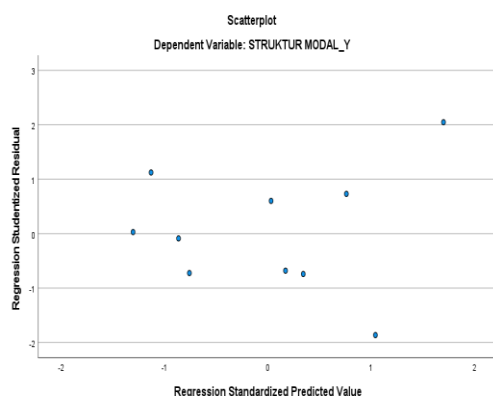


Figure 2: Heteroscedasticity Test Results

Autocorrelation Test

The autocorrelation test was carried out to find out whether in a linear

regression model there was a correlation between errors and disruptors in the current period and errors in the previous period. A good regression model is a regression that is free of autocorrelations. One of the tests carried out to find out whether or not there is an autocorrelation is by conducting the *Durbin-Watson* statistical test.

Table 4: Autocorrelation Test Results

Model Summary ^b					
Mod els	R	R Squa re	Adjust ed R Squar e	Std. Error of the Estimate	Durbi n- Wats on
1	.67 4a	.454	.298	.0690 9	.972

a. Predictors: (Constant),
PENJUALAN_X2 GROWTH, ASET_X1
GROWTH

b. Dependent Variable: STRUCTURE
MODAL_Y

Source: *SPSS output version 27*, data processed by researchers (2025)

Based on the above calculations, it can be seen that the *Durbin-Watson* test is in a doubtful area so it cannot be concluded definitively, because of the $DL < DW < DU$ value. Therefore, an alternative step is needed, namely by conducting a *runs test* to confirm whether or not there is autocorrelation in the data used, the following are the results of the *runs test*:

Table 5: Test Runs Test Results

Runs Test		Unstandardized Residual
Test Value ^a		-.00182
Cases < Test Value		5
Cases >= Test Value		5
Total Cases		10
Number of Runs		4
Z		-1.006
Asymp. Sig. (2-tailed)		.314

a. Median

Source: *SPSS output version 27*, data processed by researchers (2025)

Based on the results of the autocorrelation test using *runs test* from the *SPSS output version 27* above, an Asymp value was



obtained. Sig (2 tailed) of 0.314 (>0.05). Therefore, it can be concluded that there is no autocorrelation in the data used in this study.

Pearson Correlation Test

The Pearson correlation test is a statistical test used to determine the relationship between variables and how strong the relationship is in a study, using numerical data (interval or ratio) and also aims to determine the statistical significance between the relationships between the variables. In this Pearson correlation calculation, the X1 variable is asset growth, the X2 variable is sales growth, and the Y variable is the capital structure. According to Sugiyono (2019:248), there are several criteria in determining the degree of closeness of the relationship between variables which can be determined based on the correlation coefficient value interval table below, namely:

Table 6 : Guidelines for Interpretation of Correlation Coefficients

Guidelines for Providing Interpretation of Correlation Coefficients

Interval Cows	Relationship Level
0,00-0,199	Very Low
0,20-0,399	Low
0,40-0,599	Medium
0,60-0,799	Strong
0,80-1,000	Very Powerful

Source : Sugiyono (2019)

Table 7 : Pearson Correlation Test Results Correlations

		GRO WT H ASE T_X 1	GROWT H PENJUA LAN_X2	STRU CTUR E MOD AL_Y
GROWT H ASET_X 1	Pears on Corre latio n	1	.199	.390

	Sig. (2- tailed)		.582	.265
	N	10	10	10
GROWT H PENJUA LAN_X2	Pears on Corre latio n	.199	1	.616
	Sig. (2- tailed)	.582		.058
	N	10	10	10
STRUCT URE MODAL _Y	Pears on Corre latio n	.390	.616	1
	Sig. (2- tailed)	.265	.058	
	N	10	10	10

Source: SPSS output version 27, data processed by researchers (2025)

Based on the output of SPSS version 27 which presents the results of the Pearson correlation test and is referred to by the correlation coefficient interpretation guidelines, it can be concluded that:

1. Based on the result $r = 0.390$ and significance value (Sig.) = 0.265 (>0.05), it can be seen that the level of relationship between asset growth and capital structure is included in the low and insignificant positive category. This means that the higher the asset growth, the more likely it is to be followed by an increase in the capital structure.
2. Based on the results $r = 0.616$ and significance value (Sig.) = 0.058 (>0.05), it can be seen that the level of relationship between sales growth and capital structure falls into the category of strong and insignificant positives. This can indicate a tendency to have a relationship between the two.
3. Based on the results $r = 0.1999$ and significance value (Sig.) = 0.582 (>0.05), it can be seen that the

level of relationship between asset growth and sales growth is included in the very low and insignificant positive category.

Overall, it can be concluded that the relationships between all of its variables vary. The results of the test show that both asset growth and sales growth do not have a significant relationship with the capital structure of PT Indocement Tunggal Prakarsa Tbk for the 2014-2023 period due to a significance value (Sig.) of > 0.05 .

Multiple Linear Regression Analysis

Multiple linear regression analysis aims to prove the influence of independent variables on dependent variables. The variables in this study are the variables of asset growth (X_1), sales growth (X_2), and capital structure (Y).

Table 8 : Multiple Linear Regression Test Results

Models	Coefficient		Standardized Coefficients	t	Sig.
	Unstandardized Coefficients	Standard Error			
	B	Std. Error	Beta		
1 (Constant)	.225	.022		10.080	.000
GROWTH_ASET_X1	.325	.333	.278	.977	.361
GROWTH_PENJUALAN_X2	.493	.250	.561	1.969	.090

a. Dependent Variable: STRUCTURE_MODAL_Y

Source: *SPSS output version 27*, data processed by researchers (2025)

From this equation, it can be seen that the value of constant (a) of 0.225 indicates that if there is no growth in assets and sales growth ($AG = 0$ and $SG = 0$), then the value of capital structure (DER) is estimated to be 0.225. Then, the regression coefficient owned by asset growth, which is 0.325, states that every time there is an increase in the asset growth rate of 1 (one) unit, the capital structure (DER) will increase by 0.325. Meanwhile, the regression coefficient

owned by sales growth, which is 0.493, states that every time there is an increase in sales growth rate of 1 (one) unit, the capital structure (DER) will increase by 0.493.

Coefficient of Determination Test (R^2)

The determination coefficient test (R^2) is used to measure the extent of the model's ability to explain variations in dependent variables. The value of the determination coefficient is between 0 (zero) and 1 (one). A small value of R^2 means that the ability of independent variables to explain the variation of dependent variables is limited. The determination coefficient indicates the magnitude of the independent variables together explaining the dependent variables.

Table 9: Determination Coefficient Test Results

Model Summary ^b				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.674 ^a	.454	.298	.06909

a. Predictors: (Constant), PENJUALAN_X2 GROWTH, ASET_X1 GROWTH

b. Dependent Variable: STRUCTURE_MODAL_Y

Source: *SPSS output version 27*, data processed by researchers (2025)

Based on the results of the determination coefficient test from the *SPSS output version 27* above, it can be seen that the *R Square* value is 0.454 or 45.4%. Where this shows the ability of asset growth and sales growth in explaining the capital structure, which is 45.4%, while 54.6% is influenced by other variables that are not studied in this study.

Hypothesis Test

According to Sugiyono (2019), a hypothesis is a temporary answer from the formulation of a problem in a study which is stated in the form of a question. It is said to be temporary because the answers given are based on relevant theories and not

based on empirical facts. There are 2 (two) types of hypothesis tests, namely:

1. T test (partial)

The (partial) T test shows how far the influence or relationship of one independent variable individually is in explaining the variation of the dependent variable. In order to find out whether it is influential (related) or not, there is a provision where the value $t_{is\ calculated} > t_{table}$. Meanwhile, to determine the level of significance, a significance level of 5% or 0.05 is used. From the results of the t-test processing (partial) using *SPSS version 27*, the following results were obtained:

Table 10: T Test Results (Partial)
Coefficient

Models	Unstand ardized Coefficie nts		Standar dized Coeffici ents	t	Si g.
	Std.				
	B	Error	Beta		
1 (Constant)	.225	.022		10.080	.000
GROWTH ASET_X1	.325	.333	.278	.977	.361
GROWTH PENJUALAN_X2	.493	.250	.561	1.969	.090

a. Dependent Variable: STRUCTURE
MODAL_Y

Source: *SPSS output version 27*, data processed by researchers (2025)

From the results of the calculation, it can be seen that:

- Asset growth has a $t_{\text{calculation}} (0.977) < t_{\text{table}} (2.365)$ with a significance level of 0.361 (>0.05). Therefore, it can be concluded that asset growth has no effect (related) to the capital structure.
- Sales growth has $t_{\text{count}} (1.969) < t_{\text{table}} (2.365)$ with a significance level of 0.090 (>0.05). Therefore, it can be concluded that sales growth has no effect (related) to the capital structure.

2. F test (simultaneous)

The F (simultaneous) test is used to find out whether all independent variables

together can significantly affect (related) significantly or not to the dependent variable.

Table 11 : F Test Results
(Simultaneous)

NEW ERA					
Models	Sum of Squar es	d f	Mean Squar e	F	Sig.
1 Regression	.028	2	.014	2.913	.120
Residual	.033	7	.005		b
Total	.061	9			

a. Dependent Variable: STRUCTURE
MODAL_Y

b. Predictors: (Constant),
PENJUALAN_X2 GROWTH, ASET_X1
GROWTH

Source: *SPSS output version 27*, data processed by researchers (2025)

From the results of the calculation, it can be seen that the value of $f_{is\ calculated}$ as $(2.913) < f_{table} (4.737)$ with a significance level of 0.120 (>0.05). Thus, it can be concluded that simultaneously asset growth and sales growth are not related to capital structure.

Discussion

The Relationship of Asset Growth with Capital Structure

Based on the results of the t-test analysis (partial) presented in table 10, it was found that asset growth did not have a significant relationship with the capital structure of PT Indocement Tunggal Prakarsa Tbk for the 2014-2023 period. The test results showed a t-count value of 0.977 which was smaller than the t-table of 2.365, with a significance level of 0.361 which was greater than the alpha of 0.05. This condition indicates that H_1 is rejected and H_0 is accepted, so it can be concluded that asset growth is statistically not significantly related to the company's capital structure. These findings show that the fluctuations in asset growth experienced by PT Indocement during the observation period, both positive and negative growth, do not directly affect management's decisions in determining the composition of the company's capital structure. This indicates that the company

has a relatively stable funding strategy and is not dependent on changes in the growth rate of assets.

The results of this study are in line with the findings of Mohammad Arridho Nur Amin, Amirah, and Lukman Abdul Aziz (2023) in their research entitled "The Influence of *Growth Opportunity*, Asset Growth, Profitability, and Business Risk on Capital Structure in Property and *Real Estate* Companies Listed on the Indonesia Stock Exchange in 2017-2021". The study stated that partially, asset growth was not significantly related to the capital structure because it produced a t-calculated value of -0.677 with a significance level of 0.501 which was greater than 0.05. The consistency of these results shows that the phenomenon of ineffectual asset growth on capital structure does not only occur in the cement industry, but also in the property and *real estate* sectors which have similar capital-intensive characteristics. This indicates a general pattern in capital structure decision-making in companies with high capital intensity in Indonesia.

Further confirmation was obtained from the research of Dimas Ananta and Elfina Okto Posmaida Damanik entitled "The Effect of Asset Growth, Company Size, and Liquidity on Capital Structure in Investment Companies Listed on the Indonesia Stock Exchange". The study also concluded that there was no significant relationship between asset growth and capital structure, with a t-value of -0.503 which was smaller than t-table 2.02809 and a significance level of 0.628 which exceeded the tolerance limit of 0.05. The consistency of these findings across industry sectors strengthens the argument that asset growth may not be the main determinant factor in corporate capital structure decisions in Indonesia. This phenomenon can be explained through the perspective of *pecking order theory*, which states that companies tend to prioritize internal funding before seeking external funding, so high asset growth does not automatically increase the use of debt as a source of external funding.

The Relationship of Sales Growth to Capital Structure

Based on the results of the t-test analysis (partial) presented in table 10, it was found that sales growth did not have a significant relationship with the capital structure of PT Indocement Tunggal Prakarsa Tbk for the 2014-2023 period. The test results showed a t-calculated value of 1.969 which was smaller than the t-table of 2.365, with a significance level of 0.090 which was greater than alpha 0.05. This condition indicates that H_1 is rejected and H_0 is accepted, so it can be concluded that sales growth is statistically not significantly related to the company's capital structure. These findings show that the volatility of sales growth experienced by PT Indocement, both positive and negative growth, does not directly affect management's decisions in determining the company's debt and equity composition.

The results of this study are in line with the findings of Geby Angellika in her research entitled "The Influence of *Non-Debt Tax Shield*, Asset Structure, and Sales Growth on Capital Structure". The study states that partially, there is no significant relationship between sales growth and capital structure because it produces a t-calculated value of 0.704761 which is smaller than the t-table of 1.66298, with a significance level of 0.4835 which is greater than 0.05. The consistency of these results shows that the phenomenon of ineffectual sales growth on capital structure is a common pattern in various companies. This indicates that companies tend to have funding strategies that do not depend on short-term sales performance fluctuations, but rather on long-term strategic considerations.

Further confirmation was obtained from the research of Tri Lediya Manalu and Vivi Isnawati Nusyirwan entitled "Analysis of the Influence of Company Size and Sales Growth on Capital Structure". The study also concluded that there was no significant relationship between sales growth and capital structure, with a t-calculated value of 0.575078 and a significance level of 0.5666 that exceeded the tolerance limit of 0.05. The consistency of the findings in these studies strengthens the argument that sales growth is not a major determinant factor in a company's



capital structure decisions. This phenomenon can be explained by the fact that management takes into account long-term factors such as *cash flow* stability, debt capacity, and capital market conditions in determining the optimal composition of the capital structure, compared to temporary sales fluctuations.

The Relationship of Asset Growth and Sales Growth with Capital Structure

Based on the results of the analysis of the F test (simultaneous) presented in table 11, it was found that asset growth and sales growth together did not have a significant relationship with the capital structure of PT Indocement Tunggul Prakarsa Tbk for the 2014-2023 period. The test results showed an F-count value of 2.913 which was smaller than the F-table of 4.737, with a significance level of 0.120 which was greater than the alpha of 0.05. This condition indicates that H_1 is rejected and H_0 is accepted, so it can be concluded that asset growth and sales growth simultaneously do not have a significant relationship with the company's capital structure. These findings show that the combination of the two independent variables does not have sufficient predictive power to explain the variation in PT Indocement's capital structure during the observation period.

The results of this study are in line with the findings of Ranti Agus Astuti, Prof. Dr. Kirmizi Ritonga, MBA, Ak, and Drs. Al Azhar A, MM., Ak in their research entitled "The Effect of Asset Growth, Profitability, and Sales Growth on Capital Structure in *Real Estate* and Property Companies Listed on the Indonesia Stock Exchange for the 2010-2012 Period". The study states that simultaneously, asset growth and sales growth together are not significantly related to capital structure. The consistency of these results shows that the phenomenon of simultaneous influence of these two variables on the capital structure does not only occur in the cement industry, but also in the *real estate* and property sectors. This indicates a general pattern in the capital-intensive industry in Indonesia where internal growth factors are not the main determinant of capital structure decisions.

This finding of the absence of simultaneous relationships provides important theoretical and practical implications for corporate financial management. Theoretically, these results support the argument that a company's capital structure decisions may be more influenced by external factors such as capital market conditions, interest rates, and fiscal policy, than by internal factors such as asset growth and sales. In practical terms, these findings show that PT Indocement's management has a funding strategy that is relatively independent of short-term operational growth fluctuations. This can be explained through the perspective of *trade-off theory* which states that companies tend to maintain an optimal target capital structure based on long-term considerations, rather than based on changes in operational performance variables that are temporary and can change along with the business cycle.

CONCLUSION

Based on the results of the Pearson correlation test in table 7, the relationship between asset growth and capital structure shows a value of $r = 0.390$ with a significance level of 0.265 (>0.05), which indicates a low and insignificant positive relationship. This finding is strengthened by the results of the t-test (partial) in table 10 which shows a t-count value (0.977) $<$ t-table (2.365) with a significance level of 0.361 (>0.05). These results indicate that the fluctuations in asset growth during the 2014-2023 period do not have sufficient strength to affect PT Indocement's capital structure. This suggests that changes in the company's total assets do not directly affect management's decision in determining the composition of funding through its own capital or loans, so the company's capital structure is likely to be more influenced by other factors beyond the research variables.

The relationship between sales growth and capital structure shows different characteristics than asset growth. The results of the Pearson correlation test showed a value of $r = 0.616$ with a significance level of 0.058 (>0.05), which indicated a strong positive relationship but

not statistically significant. The results of the t-test (partial) showed a t-count value (1.969) < t-table (2.365) with a significance level of 0.090 (>0.05). Although not statistically significant, there is an interesting trend where sales growth is likely to have a stronger relationship with capital structure than asset growth. This can be seen from the significance value that is close to the tolerance limit of 0.05, indicating a potential relationship that is weak but not statistically strong enough to be declared significant. This phenomenon suggests that sales performance may have a greater influence on the company's funding decisions.

Analysis of the simultaneous relationship between asset growth and sales growth with capital structure shows results consistent with partial findings. The Pearson correlation test yielded a value of $r = 0.199$ with a significance level of 0.582 (>0.05), indicating a very low and insignificant positive relationship. The results of the F-test showed the value of F-calculated (2.913) < F-table (4.737) with a significance level of 0.120 (>0.05), which reinforces the conclusion that together the two independent variables are not significantly related to the capital structure. These findings show that the combination of asset growth and sales growth does not have sufficient predictive power to explain the variation in PT Indocement's capital structure during the 2014-2023 period. This indicates that the decision on a company's capital structure is likely to be more influenced by long-term strategic factors, macroeconomic conditions, or management policies that are not covered by this study.

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