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-RESEARCH ARTICLE-

FACTORS IMPACTING PROFITABILITY AND CAPITAL STRUCTURE IN MANUFACTURING COMPANIES LISTED ON THE INDEX

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—Abstract—

This study investigates the relationship between organizations' size, growth, tangibility, liquidity, volatility, uniqueness, asset utility, and non-debt tax and their profitability and capital structure. In addition, the reciprocal effects of profitability and capital structure have been evaluated. The current study employed the purposive selection technique to choose a sample of 117 firms listed in the Manufacturing sector on the IDX between 2010 and 2019. Covariance-Based Structural Equation Modelling (CB SEM) was used to analyze the data using the AMOS program. The outcome demonstrated that profitability and capital structure have a mutually beneficial relationship. At the same time, only growth and asset utility affected profitability. In addition, the results demonstrated that size, liquidity, asset utility, and non-debt tax shield have a beneficial impact on capital structure. In addition, the current study is useful because it demonstrates that a manufacturing company with a fast growth rate and excellent asset management will achieve high profitability even if creditors do not contemplate lending to it. In addition, this is the first study to examine the reciprocal effects of profitability and capital structure.

Keywords: Profitability, Capital Structure, Size, Growth, Tangibility, Liquidity, Volatility, Uniqueness, Non-Debt Tax, Shield.

1. INTRODUCTION

Since 2010, manufacturing enterprises in Indonesia that utilize bank loans have grown, as seen by the annual increase in bank lending to the manufacturing sector in Indonesia (Tambunan et al., 2021). The distribution of credit to the manufacturing sector increased from Rp 246.188 trillion in 2010 to Rp 1111.300 trillion in 2019, representing an average annual growth rate of 17.97 percent (Chandra et al., 2019). This demonstrates that manufacturing companies utilize debt from banks or external companies in order to boost business expansion and enhance shareholder welfare (Surasmi et al., 2019). Moreover, one of the most discussed topics in financial management is the firms' top capital structure (Takhumova et al., 2018).

Similarly, research demonstrates that the choice of capital structure in developing countries is driven by factors that are relatively comparable to those that influence capital structures in industrialized nations (Booth et al., 2001; Demirgüç-Kunt et al., 2020). Following the "irrelevance theory," Modigliani et al. (1958) began researching capital structure and concluded that capital structure did not affect the value of enterprises. Later, other scholars disputed the idea, saying that the underlying assumptions were overly restrictive, one of them being that there is no tax system. Theoretically, modifications were made in 1963 by relaxing tax assumptions (Al-Kahtani et al., 2018; Modigliani et al., 1963). The new version emphasized the capital structure's role in enhancing the company's worth. Additionally, it was argued that corporations with greater loans pay higher taxes due to their higher interest expenses. Companies can boost

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their profitability ratios (Pattiruhu et al., 2020). Many financial professionals are still divided on this opinion. Demirgüç-Kunt et al. (2020) note that there is currently no agreement that explains the capital market structure under all conditions and for all types of businesses.

Moreover, the three most prominent capital structure theories are: (Frank et al., 2009). The first theory is the theory of trade-offs. This notion indicates that a company's use of indebtedness is a good deed that ultimately results in great output (Michael et al., 1976). This is owing to the fact that interest charges on debts are tax-deductible (Hunt Ferrarini et al., 2021). In addition, greater profitability is one of the most notable advantages of using debt. However, a substantial increase in debt leads in increased financial costs. On the other hand, research reveals that organizations' profitability falls as a result of increased financial distress brought on by excessive debt payments (Durana et al., 2021). Therefore, researchers reported the significance of applying trade-off theory to debts carefully (Tarighi et al., 2022).

The second idea is the Pecking Order Theory (Frank et al., 2009), which begins with asymmetric information, namely the mismatch between the investor's and the corporate manager's information (Yıldırım et al., 2021). As a result, there are varied reactions to the policies implemented by company management, with investors' responses frequently differing from what company managers anticipated. In addition, Myers et al. (1984) proved that corporations utilize external funding sources rather than internal ones. Using external money can also result in asymmetric knowledge, which increases the cost of capital and decreases profitability (Ahmad et al., 2021). Therefore, it is essential to maintain a careful balance between internal and external financial sources. Market Timing Theory is the third theory (Baker et al., 2002). According to this hypothesis, firm managers attempt to use the least expensive money by changing the timing to market conditions (Allini et al., 2018). Consequently, firm managers choose the cheapest capital or debt to increase profitability, depending on the moment.

This study aims to determine a) whether manufacturing firms in Indonesia, one of the developing countries, tend to follow the Trade-off Theory (Michael et al., 1976) to maximize external funding to get a tax benefit from loans made or the Pecking Order Theory (Myers et al., 1984) which uses internal fund rather than external fund, and b) how exogenous constructs such as manufacturing firms' "Size (X1), Growth (X2), Tangibility.

2. LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

2.1 Profitability and Capital Structure

The trade-off theory posits that a company with high profitability may have a lower chance of bankruptcy and higher incentives to increase loans in order to get a tax benefit when loan interest can be used as a hedge against profits. (Viviani, 2008). Moreover,

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two schools of thought exist on the impact of profitability on capital structure. An earlier study by Milton et al. (1991) found that profitability has a negative effect on the capital structure, meaning that the higher a company's profit, the lower its capital structure. Similarly, Viviani (2008) and Vuran et al. (2017) demonstrated the negative relationship between enterprises' profitability and capital structure. In contrast, Acaravci (2015) found in a study of manufacturing enterprises in Turkey that profitability positively affects the capital structure of those farms. These studies also demonstrated that a company's ability to raise its debts and capital structure is contingent on its profitability. Similar findings are reported by Chandra et al. (2019) about the positive effect of profitability on enterprises' capital structure. Taking into account the contradicting findings of past academics concerning the impact of profitability on the capital structure, it is suggested that:

H1: *There is a positive effect of profitability on the capital structure.*

According to Xin (2014) research, the capital structure has a negative effect on the profitability of enterprises. These findings support the pecking order idea by revealing that forms favor internal financing sources over external ones. This further demonstrates that agency internal funds cut expenses, hence improving profitability Myers et al. (1984). Ameen et al. (2017) similarly discovered a negative relationship between profitability and capital structure. In contrast, Chavali et al. (2018) discovered a positive relationship between capital structure and the profitability of non-financial firms in India. Similarly providing the capital structure theory, Modigliani et al. (1963) argued that the cost of debts is decreased by utilizing additional debts based on the text deductions from the cost of interest, hence increasing profitability. Additionally, Sivathaasan et al. (2013) supported the favorable relationship between profitability and capital structure. It is therefore hypothesized that;

H2: *There is a positive effect of capital structure on profitability.*

2.2 Firms' Size, Profitability, and Capital Structure

The trade-off theory postulates that the majority of larger enterprises choose to use debts as a source of financing because debts reduce interest costs due to tax deductions, hence increasing profitability. In addition, Işık (2017) found, based on the trade-off theory, that business size has a beneficial effect on profitability. Similarly, Frank et al. (2009) concluded that the size of a company is a significant predictor of profitability. In contrast, Sivathaasan et al. (2013) concluded in their study of manufacturing firms in Colombo, Sri Lanka, that firm size has no effect on profitability. In contrast, Kim et al. (2006) found that the firm's size has a negative effect on their capital structures among Korean Stock Exchange-listed industrial companies. This further demonstrates that larger companies prefer to use their own funds as opposed to borrowed cash to reduce financing costs. These results are consistent with the parking order theory's hypotheses. In contrast, Acaravci (2015), in a study of manufacturing enterprises in Turkey, concluded that

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capital structure is positively influenced by firm size, indicating that debts are the primary source of financing for business development in larger organizations. These results are consistent with the trade-off theory's hypotheses. These results are validated by studies conducted at (Chan et al., 2018; Rezaei et al., 2016). Considering the contradicting data regarding the relationship between business size and profitability and capital structure, it is hypothesized that;

H3: *There is a positive effect of firm size on profitability.*

H4: *There is a positive effect of firm size on capital structure.*

2.3 Firms' Growth, Profitability, and Capital Structure

According to research, growth prospects positively effect profitability, therefore organizations with quick growth likely to boost their profitability (Chandra et al., 2022). Similarly, Lazăr (2016) revealed that firm size has a favorable and significant effect on profitability. Moreover, organizations with rapid expansion will have numerous investment opportunities (Chen et al., 2021). Consequently, agency expenses rise, which ultimately decreases profitability. In other words, possibilities for growth will have a negative impact on profitability (Chandra, 2015). According to the Trade-off theory, companies with high growth prospects will limit their usage of debt due to a greater likelihood of bankruptcy (Khoa et al., 2021). A creditor is hesitant to offer long-term financing to a firm with a strong development potential because the firm may make suboptimal investments (Viviani, 2008). This corporation will use short-term financing or issue convertible bonds as a solution (Michael et al., 1976). In addition, according to the Pecking order hypothesis, companies with excellent growth prospects are more likely to raise loans, such as short-term debt, than their own capital through rights offerings (Viviani, 2008). Which further illustrates the detrimental effect expansion prospects have on capital structure. This demonstrates that organizations with stronger growth prospects will utilize less debt. On the basis of this evidence and the preceding arguments, it is proposed that;

H5: *There is a positive effect of growth on profitability.*

H6: *There is a negative effect of growth on the capital structure.*

2.4 Firms' Tangibility, Profitability, and Capital Structure

Profitability has a positive correlation with tangibility (Chalmers et al., 2021; Dalle et al., 2020). This demonstrates that enterprises with high asset tangibility have a high propensity to resolve agency issues with bondholders and other stakeholders and reduce agency costs in order to secure loans with lower interest rates due to the inherent risk. In contrast, Işık (2017) conducted a study among the companies listed on the Istanbul Stock Exchange and highlighted the detrimental impact of tangibility on profitability. This research supports this work (Dada et al., 2016; Xin, 2014). In contrast, Chen et al. (2021)

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found a positive effect of tangibility on the capital structure of Chinese enterprises, meaning that a high level of tangibility will enhance collateral assets, making it easier to get loans. These findings are consistent with the assumptions of the trade-off hypothesis, which Chan et al. (2018) also support. In contrast, Acaravci (2015) observed that tangibility has a detrimental effect on the capital structure of enterprises. While we suggested that;

H7: There is a positive influence of tangibility on profitability.

H8: There is a negative effect of tangibility on capital structure.

2.5 Firms' Liquidity, Profitability, and Capital Structure

According to research, liquidity has a favorable effect on profitability, therefore highly liquid farms take out less loans; consequently, their interest costs are low and their profitability is high Işık (2017). These outcomes are consistent with the pecking order theory, which posits that firms prefer to spend internal funds over external capital. Comparatively, Güner (2016) documented the negative impact of liquidity on profitability, demonstrating that firms with excess liquidity have a large number of unproductive funds, resulting in a decline in profitability. Moreover, according to the pecking order theory, corporations continue to prioritize the utilization of internal capital above foreign ones. Therefore, organizations with substantial liquidity will prioritize internal money above loans from outside sources. Therefore, liquidity has a detrimental effect on the capital structure of businesses. Inasmuch as the current study suggests;

H9: *Firms' liquidity positively influenced their profitability.*

H10: *Firms' liquidity negatively influenced their capital structure.*

2.6 Firms' Volatility, Profitability, and Capital Structure

Volatility has been demonstrated to positively effect profitability, indicating that companies with greater volatility will achieve greater profits (Susanto et al., 2021). This is for companies that have been in operation for an extended period of time. In the meantime, research indicates that volatility has a detrimental impact on the profitability of newer, smaller enterprises (Sikveland et al., 2021). With the assumption that the company's profits will decrease as its risk increases. In addition, Alipour et al. (2015) conducted research on Iranian companies listed on the Stock Exchange and discovered that volatility has a detrimental impact on the firms' capital structure. These outcomes are consistent with the trade-off theory, which postulates that the riskier a corporation is, the less debt it utilizes. This study is supported by the research of Rezaei et al. (2016). Huang (2006), in contrast, discovered that volatility positively effects capital structure. It demonstrates that although Chinese businesses are high-risk, they continue to get external capital because state-owned enterprises dominate the Chinese market. It is therefore hypothesized that;

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H11: *There is a positive effect of volatility on profitability.*

H12: *There is a negative effect of volatility on the capital structure.*

2.7 Firms' Uniqueness and Capital Structure

Uniqueness is detrimental to capital structure (Chandra et al., 2022). This is because the uniqueness of a product will result in greater prices for the product itself, as well as for its workers and suppliers. This makes it challenging for businesses to obtain loans from outside sources, so they rely more on their own funds (Oehmichen et al., 2021). While research by Kim et al. (2006) did not show a relationship between distinctiveness and capital structure. It is hypothesized that, based on the findings of Chandra et al. (2022) and the pecking order hypothesis,

H13: *Firms' uniqueness is negatively associated with the capital structure.*

2.8 Assets' Utility, Profitability, and Capital Structure

The effectiveness of a company's management can be judged by the manner in which its assets are utilized to generate profit. Asset Utility is a crucial financial metric for measuring management effectiveness (Muritala, 2012). Moreover, he argued that asset utility has a positive effect on profitability, implying that the more efficient a company's management, the greater its profitability. Dada et al. (2016) and Nurlaela et al. (2019) sponsored this research. Serghiescu et al. (2014) concurred that asset utility has a favorable impact on capital structure. This suggests that the more the efficiency of a company's management, the greater its profitability, and thus, the lower its external borrowing. It is therefore hypothesized that;

H14: *There is a positive influence of Asset Utility on profitability.*

H15: *There is a positive influence of Asset Utility on the capital structure.*

2.9 Non-Debt Tax Shield and Capital Structure

In their study of manufacturing enterprises in Colombo, Sivathaasan et al. (2013) discovered that the Non-Debt Tax Shield (NDTS) has a beneficial impact on profitability. This demonstrates that a company with a greater NDTS has more assets, allowing it to acquire a larger loan at a cheaper interest rate due to a lower risk, which will have a positive effect on its profitability. This is consistent with Modigliani et al. (1963) capital structure theory, which postulates that the more the debt, the greater the debt tax shield achieved, resulting in increased profitability. In light of Sritharan (2015)'s finding that NDTS has no effect on profitability, the degree of a company's profitability does not depend on the size of the NDTS. In addition, an NDTS is a tax credit resulting from the depreciation of the investment made and a substitute for tax advantages resulting from loan financing. Consequently, the tax advantage of debt will diminish as other tax deductions rise (Viviani, 2008).

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In other words, a rise in the NDTS has a negative effect on the debt or capital structure. Moreover, the findings of Bradley et al. (2020) indicate that the NDTS favorably affects debt or capital structure. Enakirerhi et al. (2016) discovered, through a research of FTSE 100 businesses, that the NDTS favorably affected capital structure. This indicates that the expense of depreciation will increase as the company's fixed assets expand. This indicates that organizations with depreciable assets have a greater propensity to utilize debt. In contrast, Güner (2016) discovered that NDTS negatively impacted capital structure. This corresponds to NDTS being a substitute for tax advantages associated with debt, and enterprises with substantial NDTS tend to employ less debt. Chan et al. (2018) reported comparable results. Considering the preceding considerations, we offered;

H16: *There is a positive effect of Non-Debt Tax Shield on capital structure.*

3. RESEARCH METHODOLOGY

3.1 Population and Sample

The current study assessed secondary data from industrial businesses listed on the Indonesia Stock Exchange from 2010 to 2019 using a strategy of purposive sampling. The selection criteria are manufacturing companies registered before to January 2010, and 117 companies meet them.

3.2 Method of collecting data

This study analyzed secondary data acquired from the financial reports of each firm that were made public via the media and the Indonesia Stock Exchange (www.idx.co.id). The endogenous constructs, such as enterprises' size, growth, tangibility, liquidity, volatility, uniqueness, asset utility, and non-debt tax shield, and exogenous variables, such as profitability and capital structure, were generated from financial statements from 2010 to 2019.

3.3 Research and Measurement Variable

The operational variable used in this study is in Table 1.

Path Analysis as a data analysis technique has been applied in this research. Structural model that can be used is:

$$YCS = \beta 1Yprof + \gamma 1XSize + \gamma 2\ XGO + \gamma 3\ X\ Tang + \gamma 4\ XLiq + \gamma 5\ XVol + \gamma 6\ Xuniq + \gamma 7\ XAu + \gamma 8\ XNTDS + \zeta 1$$

$$YProf = \beta 2YCS + \gamma 9\ XSize + \gamma 10\ XGO + \gamma 11\ X\ Tang + \gamma 12\ XLiq + \gamma 13\ XVol + \gamma 14\ XAu + \zeta 2$$

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Table 1. Operational Research Variable

No	Variable Name	Ratio	Source
1	**Profitability(Y1)**	$\text{Profitability} = \frac{\text{Earning Before Interest and Tax}}{\text{Total Asset}}$	(Chandra et al., 2022; Viviani, 2008)
2	**Capital Structure (Y2)**	$\text{Capital Structure} = \frac{\text{Debt}}{\text{Total Aset}}$	(Chandra et al., 2019; Lazăr, 2016)
3	**Firm Size (X1)**	Firm Size=Ln(sales)	(Chandra et al., 2019)
4	**Growth (X2)**	Growth=%change in sales	(Chandra et al., 2022; Lazăr, 2016)
5	**Tangibility (X3)**	$\text{Tang} = \frac{\text{Fixed Asset} + \text{Inv}}{\text{Total Aset}}$	(Alipour et al., 2015; Chandra et al., 2019)
6	**Liquidity (X4)**	$\text{Liquidity} = \frac{\text{Current Asset}}{\text{Current Liabilities}}$	(Alipour et al., 2015)
7	**Volatility (X5)**	$\text{Volatility} = \frac{\text{Std Dev. EBIT}}{\text{Total Aset}}$	(Chandra, 2015)
8	**Uniqueness (X6)**	$\text{Uniqueness} = \frac{\text{research \& Development}}{\text{Total Sales}}$	(Chandra et al., 2022)
9	**Assets Utility (X7)**	$\text{Assets Utility} = \frac{\text{Sales}}{\text{Total Aset}}$	(Serghiescu et al., 2014; Viviani, 2008)
10	**Non-Debt Tax Shield (X8)**	$\text{NTDS} = \frac{\text{Depreciation}}{\text{Total Aset}}$	(Bradley et al., 2020)

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3.4 Research Model and Data Analysis Technique

Figure 1 presents the theoretical framework of the study based on the discussion of the literature review.

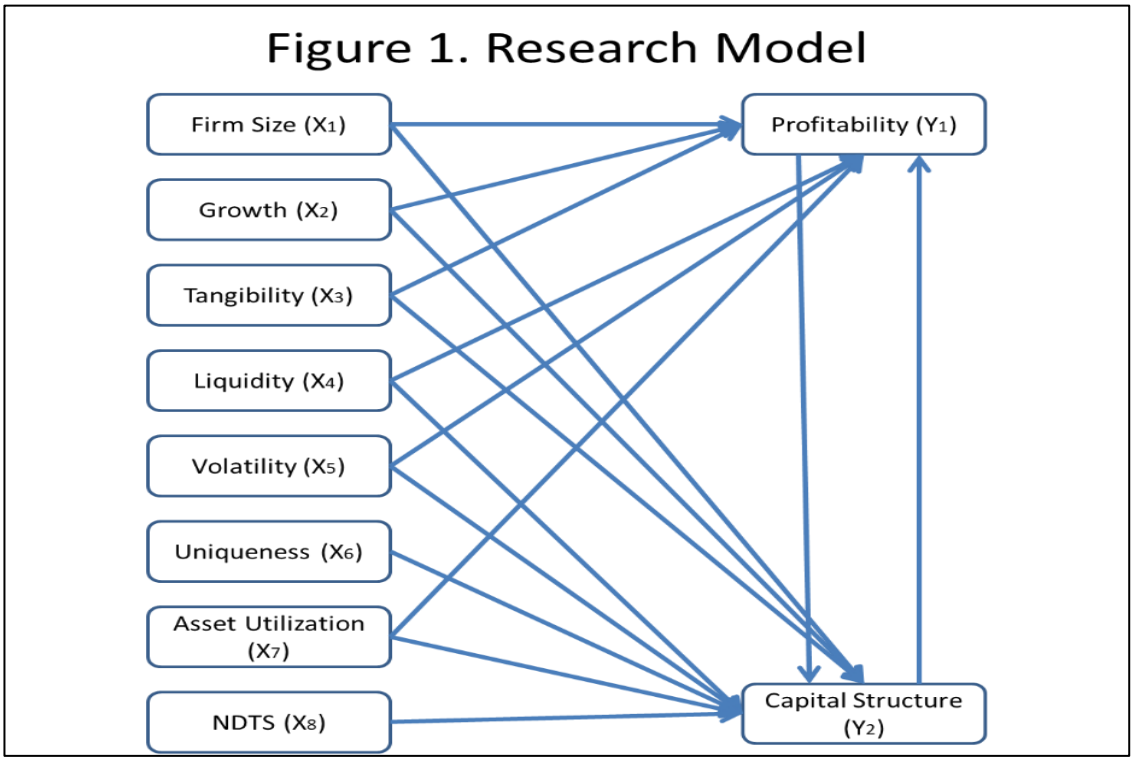

Figure 1: Theoretical Framework of the Study

Description:

γ1..γ14	: Gamma (Coefficients of Endogenous Variable)
β1..β2	: Beta (Coeficient of Exogenous Variable)
ζ1..ζ2	: Zeta (Error term)
YCS	: Capital Structure
YProf	: Profitability
XSize	: Firm Size
XGo	: Growth
XTang	: Tangibility
XLiq	: Liquidity
XVol	: Volatility
XUniq	: Uniqueness
XAu	: Asset utilization
XNTDS	: Non-Debt Tax Shield

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4. RESULT AND DISCUSSION

The current study's data were analyzed using the SPSS and AMOS programs (v. 23). The proposed model conducted Covariance-based Structural Equation Modelling (CB-SEM) in two steps (Hair et al., 2010). First, the fit of the data to the model was evaluated. The hypothesized relationships were then evaluated using the structural model with path analysis.

4.1 Goodness of Fit

Testing of the model is required to use the path analysis model. The result of testing the model can be seen in Table 2.

Table 2. Goodness of Fit Test Result

Goodness of Fit Index	Cut-off*	Results	Conclusion
Chi-Square		6.478	
Probability	>0.05	0.011	Marginal Fit
Cmin/DF	<5.00	2.940	Good Fit
GFI	>0.90	0.998	Good Fit
AGFI	>0.90	0.913	Good Fit
CFI	>0.90	0.984	Good Fit
NFI	>0.90	0.983	Good Fit
IFI	>0.90	0.986	Good Fit
RMSEA	0.05 – 0.08	0.062	Marginal Fit

*source: Hair et al. (2010)

From the model test result with the goodness of fit as shown in Table 2, it can be said that the model is appropriate to examine the underlying phenomenon and to conduct further analysis.

4.2 Hypothesis Test Result.

The hypothesized relationships were tested using path coefficient analysis. The results revealed a significant and positive influence of profitability on capital structure *(ß = 0.130**, t= 3.391)*. The results also showed that revealed capital structure significantly influence profitability *(ß = 0.130**, t=3.260)*. Moreover, the study results showed that the firms' size does has no impact on firms' profitability *(ß =* 0.041 *t= 0.943)*, but negatively influence the capital structure *(ß = -.080**, t= 3.052)*. At the same time, firms' growth positively impacted the profitability *(ß = .085**, t=2.352)* but did not influence the capital structure *(ß = - .029, t= 0.547)*. This study did not find the effect of tangibility on both profitability *(ß = -0.064, t= 1.560)* and capital structure *(ß = 0.030, t=0.662)*. Similar were the findings for liquidity with no impact on profitability *(ß = -0.014, t=0.300)*. However, liquidity showed a significant negative impact on capital structure *(ß = -0.081**, t=3.345)*. Moreover, volatility does not affect both profitability

(ß = 0.003, t= 0.173) and capital structure *(ß = -0.160, t= 0.450)*. Uniqueness does not affect capital structure *(ß = -0.004, t=0.073)*. In contrast, assets' utility has a positive effect on profitability *(ß = 0.146***, t=3.599)* and capital structure *(ß = 0.121**, t= 3.148)*. Finally, the NDTS had a positive effect on capital structure *(ß = 0.145***, t= 4.946)*. The result of hypothesis testing in this study can be seen in Table 3 and Figure 2 below.

5. DISCUSSION

5.1 Findings

This study demonstrated that profitability has a considerable beneficial effect on the capital structure of manufacturing companies listed on the Indonesian Stock Exchange. These findings are consistent with those of Acaravci (2015) and Chandra et al. (2019), who proved the importance of profitability in shaping the capital structure of firms. However, these findings contradict the conclusions of studies conducted by Vuran et al. (2017). They claimed that profitability has a negative impact on the capital structure of businesses. Our analysis reveals that corporations typically use profits to lower debts. In addition, the size of the company's profitability favorably effects its debt financing decision. In addition, the outcome demonstrated that capital structure has a large and favorable impact on profitability. These findings contradict the conclusions of Iqbal et al. (2018) and Ameen et al. (2017), who found that the capital structure has a detrimental impact on profitability. However, our findings are consistent with the findings of Chavali et al. (2018), who proved that capital structure positively impacts profitability. This study's findings suggest that capital structure has an effect on profitability, which further reduces debts. Thus, it is possible to assert that manufacturing firms in Indonesia adhere to the capital structure theory (Modigliani et al., 1963).

In addition, the results of the study demonstrated that the size of a company has no effect on its profitability, but has a negative effect on its capital structure. This indicates that huge corporations prefer to use their own capital as opposed to borrowing money. These results conform to the hypotheses of the Pecking order hypothesis. Kim et al. (2006), who reported the significance of manufacturing businesses' size as a significant predictor of their capital structure, provide additional support for this study. Concurrently, growth has a favorable impact on profitability. This study was supported by Wijaya et al. (2020) and Lazăr (2016) conclusions that companies with quick growth are more lucrative. In contrast, the results demonstrated that the expansion of a company has no effect on its capital structure, indicating the independence of a company's choice and forms of financing independent of its growth rate.

In addition, the effect of tangibility on profitability and capital structure was not discovered in this study. This indicates that manufacturing firms in Indonesia lack autonomy.

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Table 3. Measurement Model Parameters and Hypotheses Testing

Endogenous Variables	Exogenous Variable	Hypo.	Std. Beta	t-statistics	Sig.	Supported
Profitability (Y1)	Capital Structure (Y2)	+	0.130	3.391	0.005	Yes
	Firm Size (X1)	+	0.041	0.943	0.346	No
	Growth(X2)	+	0.085	2.352	0.013	Yes
	Tangibility (X3)	+	-0.064	1.560	0.119	No
	Liquidity(X4)	+	-0.014	0.300	0.764	No
	Volatility(X5)	+	0.003	0.173	0.942	No
	Asset Utility	+	0.146	3.599	0.009	Yes
Capital Structure(Y2)	Profitability(Y1)	+	0.100	3.260	0.007	Yes
	Firm Size (X1)	+	-0.080	3.052	0.040	Yes
	Growth (X2)	-	-0.029	0.547	0.585	No
	Tangibility(X3)	-	0.030	0.662	0.508	No
	Liquidity(X4)	-	-0.081	3.345	0.015	Yes
	Volatility(X5)	-	-0.16	0.450	0.652	No
	Uniqueness(X6)	-	-0.004	0.073	0.942	N0
	Asset Utility (X7)	+	0.121	3.148	0.020	Yes
	Non-Debt Tax Shield (X8)	+	0.145	4.946	0.000	Yes

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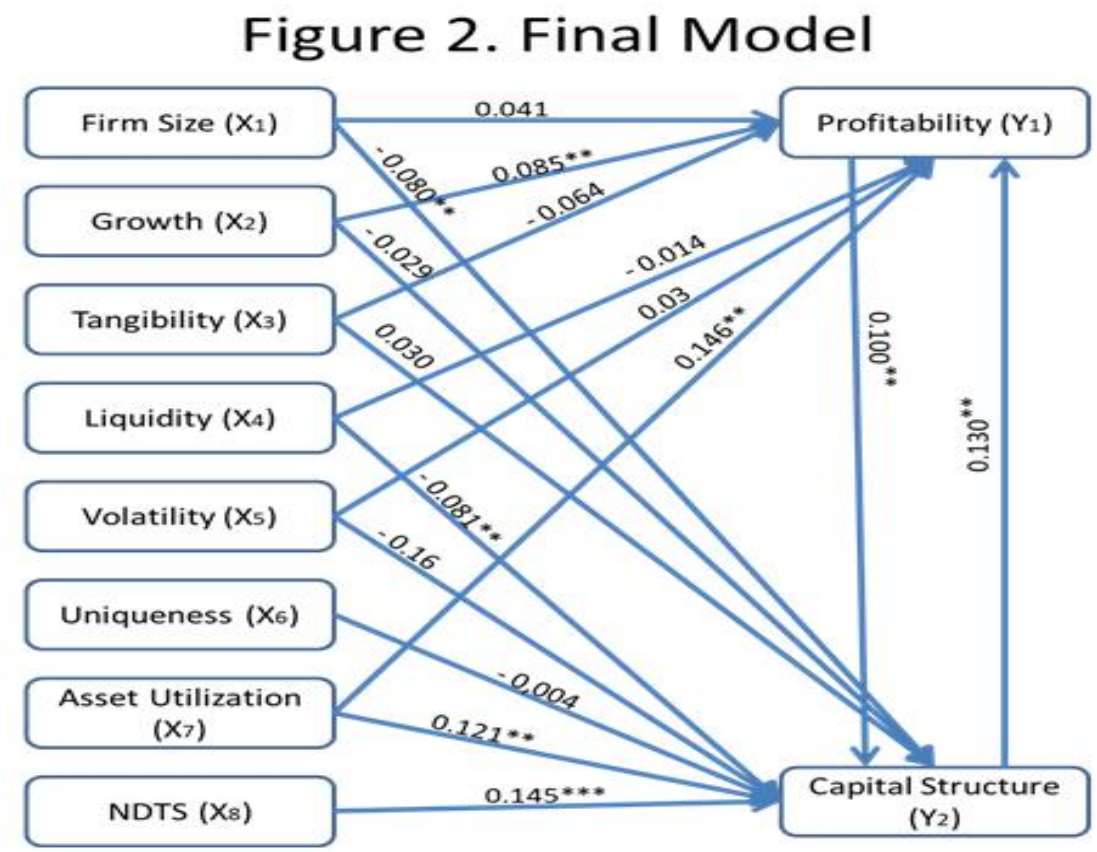

Figure 2: Structural Model Assessment

That is, if they have substantial assets, they will also have substantial liabilities, and vice versa. Similarly, a large asset does not always improve profitability, nor does a small asset always decrease it. The asset's size has no bearing on profitability and capital structure. In other words, the quantity of collateral in the form of the asset is not considered by the creditor when extending credit to the industrial sector Chandra et al. (2019). The fact that liquidity has no effect on profitability indicates that a company with surplus liquidity has not used it to reduce debt, which might have a negative effect on boosting profitability. While this study indicated that liquidity has a negative effect on capital structure in accordance with the Pecking order theory's assumptions that the company prefers to use internal funds over external funds, a company with high liquidity will utilize internal funds before taking out an external loan. Güner (2016) presented comparable findings.

According to the findings of this study, volatility has little effect on both profitability and capital structure. This demonstrates that both high and low volatility manufacturing enterprises in Indonesia have no effect on profitability. Similarly, high and low volatility have no effect on the capital structure, thus manufacturing company managers do not

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consider risk variables while determining the capital structure. In addition, the research demonstrated that uniqueness had little effect on capital structure. This is consistent with the findings of Kim et al. (2006), who established that the capital structure of a company is independent of its specific characteristics. This demonstrates that creditors do not regard distinctiveness while offering loans to Indonesian manufacturing enterprises.

In addition, this study demonstrated that asset utility positively influences profitability. According to the findings of Muritala (2012) and Dada et al. (2016), these are the outcomes. This further demonstrates that organizations with superior management create greater profits. In addition, the study found that asset utility has a large and favorable impact on capital structure. This further indicates that the better the efficiency of a company's management, the larger its profitability, which reduces the need for external borrowing. This study is supported by research conducted by (Serghiescu et al., 2014). The outcome demonstrated that the NDTS has a good effect on capital structure. This indicates that the depreciation expense will increase as the company's fixed assets expand. Researchers have previously observed similar findings indicating that organizations with depreciable assets are more likely to use greater debts (Enakirerhi et al., 2016).

5.2 Study Implications

This research has numerous theoretical and practical ramifications for academics, business owners, managers, and investors. Comparing the Pecking Order Theory (Frank et al., 2009) and the Trade-off Theory, the current study evaluated the differential and reciprocal effects of profitability and capital structure on each other (Michael et al., 1976). This study also presented a consolidated framework by assessing the influence of eight distinct exogenous variables, including firms' size, growth, tangibility, liquidity, volatility, uniqueness, asset utility, and NDTS, on firms' profitability and capital structure, supported by intriguing results and theoretical justifications. In addition, secondary data from 117 companies listed on the Indonesian Stock Exchange from 2010 to 2020 were analyzed in order to present model fit indices and experimentally evaluate the impact of firm-level variables on profitability and capital structure.

According to the findings of the study, profitability has a positive effect on capital structure and vice versa. This demonstrates that profitability and capital structure are strongly interdependent. Creditors must take into account the profitability of a company before extending credit. Moreover, it can be extrapolated from the results that a firm with a high level of debt may have a negative impact on its profitability; therefore, creditors should carefully consider their financing choices before to engaging with such companies. In addition, the data indicate that growth and asset utility positively impact profitability, although size, tangibility, liquidity, volatility, and capital structure do not. This demonstrates that rapidly expanding enterprises, as defined by annual sales growth %, can take advantage of rising sales to produce greater profitability.

In the meanwhile, an asset-utility-based measure of a company's efficiency will have an impact on boosting profitability. Therefore, manufacturing companies in Indonesia with a high rate of sales growth and effective management have a tendency to be highly profitable and may be of considerable interest to investors. Capital structure is negatively influenced by business size and liquidity, and favourably influenced by asset utility and non-debt tax shield characteristics, according to the findings. In contrast, the characteristics of growth, tangibility, volatility, distinctiveness, and profitability have little bearing on the capital structure. According to the pecking order hypothesis, this study reveals that manufacturing enterprises with high sales and huge liquidity choose to use the profits generated by rising sales and excess liquidity to reduce loans. In addition, the findings of this study indicate that manufacturing firms with significant depreciable fixed assets and efficient management tend to finance company expansion using external capital and in accordance with the Trade-off theory. Therefore, while selecting to invest in manufacturing companies, investors should examine both eventualities. The finding also indicates that a company with rapid growth and efficient asset management will achieve high profitability, despite the fact that the creditor did not take this into account when lending. In reality, the creditor considers the company's asset management efficiency and the number of assets that can be depreciated when determining whether or not to grant a loan. As a result, companies with large fixed assets and high asset management efficiency tend to use external funds for business development, in accordance with the trade-off theory. This study collected samples from manufacturing companies listed on the Indonesia Stock Exchange. The next researcher should reexamine it for a broader sector.

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