

The Effect of Financial Performance to Capital Structure of Indonesian Plantation Company in 2010-2015

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Abstract: PTPN-V is Indonesian plantation companies which finance its operation from internal and external funding. The company utilized external fund for replanting investment activity and factory rehabilitation in 2010-2015. It is aimed to achieve the company's vision and the best performance in next period. External funding will increase the cost and affect the company performance. Determination of the best funding based on the composition of capital structure will generate the maximum value of firm and minimum cost of capital. The purpose of this study is to analyze the impact of financial performance on capital structure using multiple regression method. The result of this study shows that variables which statistically significant in affecting capital structure are company size, company growth, tangibility, activity, and lag leverage. Company size, company growth, and lag leverage have positive impact on capital structure. Meanwhile, tangibility and activity have negative impact on capital structure.

Keywords: Capital structure, financial performance, Plantation Company, regression

1. Introduction

A company requires an amount of funds, sourced from internal and external, to run its operation. Internal funding uses retain earning, while external funding is obtained by issuing bond or stock. The company's decision in determining funding source will affect the company value. Internal and external funding have their respective drawbacks and advantages that will influence management in making decision of the best funding source.

Selection of the best funding source is inseparable from the proper composition between internal and external funding so that the optimal company value could be obtained. The use of external funds create costs in the form of dividend payment to shareholders, as well as payment of interest and principal loans to bondholders. The company certainly wants the minimum cost in the provision of funding source. Capital structure decision will be influenced by the financial performance and may cause a risk of company bankruptcy.

PTPN-V is a plantation company in Indonesia with core business of palm oil and rubber commodity.. The company vision is to become an integrated agribusiness company which is sustainable and environmentally sound. The use of internal and external funding has been being part of its business activities. The company's financial performance affects the decision of capital structure taken. This leads to the optimization of funding source utilization to provide an efficient cost of capital and increase company value. This condition requires the company to figure out which financial performance that affects its capital structure.

PTPN-V keeps developing its business so that it requires additional funding. The additional funds are used for investment in replanting and factory improvement. Replanting activity has an impact in the decrease of production and factory's idle capacity which cause an

increased cost of raw materials and affects the company's financial performance. PTPN-V's financial condition in 2010-2015 can be seen in figure 1.

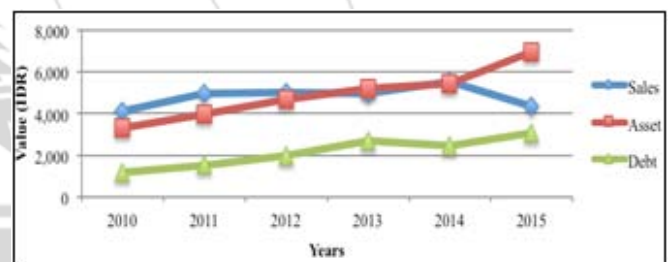


Figure 1: PTPN-V's total sales, total assets, and total debt, 2010-2015

The total debt during that period grew 19% annually, which means that the use of funding sourced from debt has become part of the company's operation. The debt growth is dominated by long-term debt to finance the investment. Revenues grew 1% annually, which gives a positive image that investment funded by debt generates a positive result. The debt growth is not linear with revenue, which means that debt does not always improve the company's financial performance.

The strategy of external funding management need to be formulated in an effort to fund the company's business activities so that it could improve its financial performance and possibility of business expansion. Based on the above explanation, the main objective of this study is to analyze the impact of financial performance on PTPN-V's capital structure 2010-2015. The result of this study is expected to give suggestions for PTPN-V regarding financial performance affecting capital structure.

2. Literature Review

The company's decision in determining funding structure will determine the company's ability in its operational activity and affect the company risk [13]. The factors affecting capital structure namely sales stability, management attitude, lender and rating agency attitude, market conditions, the firms internal conditions, and financial flexibility [7]. Meanwhile, other researcher said that factors affecting capital structure namely assets productivity, financial performance, and value of firm [25].

Profitability is the ability of a company in making profit [22]. Company with high profitability prefers internal source of funding [8]. So it can be said that profitability has negative effect on company's capital structure [20], [23], [24].

Company size can be seen from the amount of assets owned by the company [22] and from its amount of sales [4]. It can be said that company size has positive effect on debt ratio because big company has a more stable cash flow and less possibility of bankruptcy indication so that it is trusted to undertake the addition of debt [9], [17], [26].

Company growth can be seen from growth of total assets owned by the company [9], [10], [12], [22]. Company growth has positive effect on its capital structure. Company with high growth level needs external funding. Company's information transparency enhances the trust of external party that the funds it provides will be secured with company's assets.

Tangibility must be seen from the assets side available for the company's operational activity during the accounting period and assets that must be provided for company's operation permanently [14]. Company will firstly utilize the internal funding source to improve the assets structure; it will then utilize external funding if the internal funding is inadequate. So tangibility has negative effect on capital structure [3], [15], [16].

Liquidity is the ability of a company to pay maturing obligations [15]. Company with high liquidity tends to have high internal funds, so that the company will prioritize the use of its internal funding source for its operational activity. So liquidity has negative effect on capital structure [16], [11], [18].

Activity is the ability of a company in utilizing its assets effectively and efficiently to improve its revenue [21]. High amount of debt will reduce the efficiency level of assets management. So activity has negative effect on capital structure [18], [19].

Lag leverage or past leverage can explain its effect on current leverage [6]. Company that has experience of attaining large amount of debt in the past is trusted by the bank to add new debt. So lag leverage has positive effect on capital structure [2], [5], [27].

3. Methods

3.1 Type and Source of Data

This study uses secondary data obtained from PTPN-V's monthly and annual financial report. Financial reports used in this study are income statement, balance sheet, and cash flow. The observational period is 72 months from 2010 to 2015. The objects of this study are financial performance and capital structure of PTPN-V.

3.2 Data Analysis

The effect of financial performance on capital structure in this study is analyzed using multiple regression method with leverage (Lev) as dependent variable and profitability (PRO), size (SZE), growth (GRO), tangibility (TAN), liquidity (LIQ), activity (ACT) dan lag leverage (Lag_Lev) as independent variables. The model in this study refers to [1].

The model equation can be written as follows:

$$\text{Lev}_t = \beta_0 + \beta_1 \text{PRO}_t + \beta_2 \text{SZE}_t + \beta_3 \text{GRO}_t + \beta_4 \text{TAN}_t + \beta_5 \text{LIQ}_t + \beta_6 \text{ACT}_t + \beta_7 \text{Lag_Lev} + e_{ij} \quad (1)$$

Where $\beta_1, \beta_4, \beta_5, \beta_6 < 0$ and $\beta_2, \beta_3, \beta_7 > 0$

Information:

- Lev_t : Debt to Total Asset
- PRO_t : EBIT to Total Asset
- SZE_t : Ln (sales)
- GRO_t : Percentage of Change of Total Asset
- TAN_t : Fixed Asset to Total Asset
- LIQ_t : Current Asset to Current Liabilities
- ACT_t : Sales to Total Assets
- Lag_Lev : Debt_(t-1) to Total Assets_(t-1)
- β₀ : intercept
- β_n : estimated parameter (n=1,2,...7)
- e_{ij} : Error term

4. Results

4.1 PTPN-V Financial Condition

PTPN-V works in the field of agribusiness and agroindustry of palm oil and rubber. It manages plantation and plant. It produces Crude Palm Oil (CPO), Palm Kernel Oil, Palm Kernel Meal, and Rubber. These products are sold through tender mechanism and direct sales to buyer or processor.

Table 1: Financial ratio, 2010-2015

Financial Ratio	2010	2011	2012	2013	2014	2015
Liquidity	0.80	0.88	0.86	0.78	0.60	0.43
Profitability	0.08	0.08	0.07	0.03	0.04	0.02
Leverage	0.56	0.57	0.60	0.63	0.62	0.63
Activity	1.24	1.26	1.07	0.96	1.01	0.62

Source: [28]-[33]

During the research period, total sales grew 1.16% annually; it is dominated by CPO sales. Total assets grew 16.09% annually; fixed assets dominate it. The company is investing in replanting and factory preparation that aims to maintain the company's performance. The addition of assets aims to provide benefits in long term while replanting activity do not provide impact directly on profitability. This condition

causes a decrease in current ratio, return on assets, and the total assets turn over ratio. The total debt grew 21.52% annually which is dominated by long-term debt and indicated by the increase of debt ratio every year. It can be concluded that addition of assets value are funded by external funding source.

4.2 Analysis of Impact of Financial Performance on Capital Structure

The result of this analysis is portrayed in table 2.

Table 2: The impact of financial performance on capital structure

Variables	Coefficient	Probability
C	-1.060	0.000*
Profitability (PRO)	-0.034	0.862
Size (SZE)	0.050	0.000*
Growth (GRO)	0.203	0.000*
Tangibility (TAN)	-0.095	0.002*
Liquidity (LIQ)	-0.006	0.539
Activity (ACT)	-0.630	0.000*
Lag Leverage (Lag Lev)	0.768	0.000*
R-squared	0.930	
F-statistic	0.000	

*Significant at 5%;

The regression model has met the classical assumption test. The R-Squared of this model that is 0.930 shows that 93.00% of the change of capital structure can be explained by the independent variables in the model, while 7.00% of the change can be explained by other factors outside the model.

The results of t-statistic shows that size, growth, tangibility, activity, and lag leverage have significant effect at 5% of the significant level. The estimation model of PTPN-V's capital structure can be written as follows:

$$\text{Lev} = - 1.060 - 0.034 \text{ PRO} + 0.050 \text{ SZE} + 0.203 \text{ GRO} - 0.095 \text{ TAN} - 0.006 \text{ LIQ} - 0.630 \text{ ACT} + 0.768 \text{ Lag Lev} + e_{ij} \quad (2)$$

The independent variables of SZE, GRO and Lag Lev have positive significant effect on capital structure. It means that the higher the variables, the higher the proportion of debt to total assets ratio. It is in accordance with the company condition that needs external funding for investment. The previous studies reveal the same result [5], [9], [10], [17] [26], [27].

The independent variables of TAN and ACT have negative significant effect on capital structure. It means that the higher the variables, then lower the proportion of debt to total assets ratio. The company prioritizes the use of internal funds for investment activity. On the other hand, the investment in replanting activity has no direct impact on sales so the assets growth is less than debt growth. The previous studies indicate the same result [15], [16], [18], [19].

The independent variables of PRO and LIQ have no significant impact on capital structure. The investment in

replanting activity needs time to be a productive asset so it has no direct impact on the increase of cash and profitability.

5. Conclusion and Suggestion

5.1 Conclusion

Financial performance has positive and negative significant effect on capital structure in PTPNV. The variables of size, growth, and lag leverage have positive effect on capital structure, while tangibility and activity have negative effect on capital structure. All of the estimation results are consistent with the hypotheses.

5.2 Suggestion

PTPN-V has to pay attention to financial performance variables which have significant effect on capital structure namely size, growth, tangibility, activity, and lag leverage. This study is expected to be beneficial for the investor in providing an insight of whether PTPN-V's capital structure owns the potential to improve or the default risk.

The future research is recommended to analyze with longer observational period and use other internal and external independent variables influencing the company capital structure.

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Authors Profile



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