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THE EFFECT OF FINANCIAL CONSTRAINT MODERATION IN CASH FLOW SENSITIVITY TO EXTERNAL FINANCING OF MANUFACTURING COMPANIES

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ABSTRACT

This study aims to test the pecking order theory by looking at the level of cash flow sensitivity as a source of internal financing for all types of external financing (debt and equity). This testing also considering the financial constraint variable as moderation. The data used are the financial statements of manufacturing companies listed on the Indonesia Stock Exchange in 2014 - 2018. The dependent variable is all types of external financing (debt and equity). Debt financing is divided into two forms, short-term debt financing and long-term debt financing. While the independent variable is cash flow. The results obtained is that cash flow does not substitute all types of external financing, and the highest cash flow sensitivity occurs in short-term debt financing. The next result is that financial constraint strengthen the sensitivity of cash flow to debt and equity financing.

Keywords: financial constraint, cash flow, internal financing, external financing, debt, equity, manufacturing companies.

INTRODUCTION

In previous corporate finance literature, debate often arose regarding capital structure. Various theories have emerged that support and refute each other. Because of the inequality of taxes and transaction costs, there are differences in priorities in both internal and external financing, these differences underlie the emergence of various theories. In fact the market is in an imperfect state and there is a lot of friction (Hubbard R.G, 1998; Hovakimian et al., 2001; Faulkender and Petersen, 2006; Kisgen, 2009; Lemmon and Zender, 2010; Denis and McKeon, 2012). Modigliani and Miller (1958) sparked a trade off theory that emphasizes the benefits of tax reduction due to interest payments so companies are willing to raise their debt levels to some certain optimal point. The pecking order theory (Myers and Majluf, 1984) arises and refutes the trade off theory, costs arising from the level of information asymmetry are the main points in pecking order theory, this theory notes that the company prioritizes internal financing first. This theory also explains that if a company is forced to use external funds for financing, then debt is at the first choice before the issuance of shares. The market timing theory put forward by Baker and Wurgler (2002) states that the issuance of company equity occurs when the market to book values are high, while corporate debt occurs when the market to book values are low. It can be interpreted that the capital structure is determined by the development of the equity market.

The theories above are theories that are often discussed and debated in testing the structure of capital and also become a topic in previous studies. Fama and French (2002) cannot confirm one theory of capital structure that is better among the others. Shyam Sunder and Myers (1999) also tested the trade off versus pecking order theory, in that study taking samples of non-financial companies in Industrial Compustat, the results showed a greater tendency to apply the pecking order theory than the trade off theory. In Abe de Jong's research (2011) which tests companies in the US in applying their capital structure theory (static trade off compared to pecking order theory), the results of this study show that pecking order theory is better than static trade off theory. Markus (2018), which compares the three theories of capital structure (trade off, pecking orders, market timing) by gathering mixed empirical evidence on determinants of capital structure and exploring variations between results through meta-regression analysis, this research produces ambiguity on the results for the determinants of capital structure which ultimately do not follow a single theory. So, it is necessary to investigate new ideas in empirical research.

In a series of previous studies, the topic that is often a comparison is the pecking order theory. For this reason, this research will focus on testing the pecking order theory. Deeper, many pecking order theory tests previously used different variables. Like Almeida and Campello's research (2010) which tested pecking order theory by measuring the sensitivity between internal funds (profitability) and external funds demand (debt issuance) when companies face financial constraints, the results of this study indicate that the negative effect of internal funds on demand for external financing is concentrated among companies that are least likely to face high external financing costs (not experiencing financial constraints). External financing is not sensitive to internal funds if the company has a high level of financial counstraint. Similar research was also carried out by Jin Park (2019) who also tested the pecking order theory by measuring the sensitivity of cash flow and external financing requests. External financing is separated into two forms, debt and equity financing, debt financing is also separated again into short-term debt financing and long-term debt financing. It aims to find out in more detail the portion of external financing that is most substituted by internal financing.

Most of the companies listed on the Indonesia Stock Exchange (IDX) are dominated by manufacturing companies. Most of the company's activities in the manufacturing industry are funded by external funds because the production process is carried out continuously. Therefore the influence of financial constraints is very large on the survival of manufacturing companies. Manufacturing companies must have an appropriate policy regarding the proportion of internal and external funds to be used. Given the amount of influence that arises when financial constraints occur in the manufacturing industry, one way to overcome them is by investing in profitable products, investing in current assets that are ready to be disbursed when needed, also investing in tangible assets to raise the value of collateral if long-term debt is needed. All of that is directly related to the sensitivity of cash flow to external financing.

Finally, this research investigates the pecking order theory by examining the relationship between internal financing (cash flow) and external financing of manufacturing companies listed on the Indonesia Stock Exchange. Apart from the 'explanatory variable' (cash flow), the company's Q and company size (based on

sales) are also included as control variables. This research focuses on the interaction between cash flow as a source of internal financing and external financing. This study is also different from Almeida and Campello (2010), this study examines more about the issuance of debt and equity separately, in debt financing is also carried out separate forms into short-term debt financing and long-term debt financing.

The level of financial constraints is considered in the next section as a variable that moderates the effect of internal financing and external financing. Fazzari (1988) began on this topic by examining the role of factors in corporate finance on capital structure, the result is that companies with high levels of financial constraints have a higher investment sensitivity to cash flow than those with low financial constraints. But Zingales (1997) and Cleary (1999), deny the results of the study and conducted similar tests. As a result, companies with low financial constraints have higher cash flow sensitivity to investment. The difference in their sample is the reason behind their different results. Kaplan and Zingales (1997) also examined the same topic and used a small sample from Fazzari's sample (1988), the results of his research contradicting Fazzari (1988).

LITERATURE REVIEW

The Pecking Order Theory put forward by Myers and Majluf (1984) emphasizes the decision to take financing sources based on the level of costs arising from the information asymmetry of management and fund owners. Typically companies must prioritize financing sources that have low costs. Therefore internal financing is the first financing chosen before external financing. When there is an internal financing deficit, the second option is debt financing, which is the first priority external financing before financing with equity issuance. The following statement by Myers and Majluf (1984):

Companies prefer internal financing over external financing. The ratio of dividend payments is adjusted to investment opportunities. A constant dividend policy, not affected by unexpected fluctuations in profitability and investment opportunities, means that cash flow generated internally may be more or less than investment expenditure. If the cash flow generated internally turns out to be lacking, the company will first reduce its cash balance or the portfolio of traded securities. If external finance is needed, the company will choose the safest security first. Starting with debt, then hybrid securities such as convertible bonds, then equity as a last resort.

There is no capital structure target in the Pecking order theory, but the Pecking order theory contains a financing sequence. The optimal level of debt is not calculated in the Pecking Order theory, the amount of funds needed depends on the investment needs. Pecking order theory explains how the company has a small debt when the company has high profits. The Pecking order theory model focuses on the motivation of company managers, the principles of valuation of capital markets are not valued explained in this theory. The basis of the pecking order theory is a reflection of information asymmetry. The company seeks to obtain sources of funds without obtaining more supervision from the creditors.

Short-term debt is the part of external financing that is most often substituted by cash flow (Jin park, 2019). That is because the maturity of short-term debt is shorter so that repayment will be faster than long-term debt. The above reasons also make information asymmetry on short-term debt smaller.

From the creditor's point of view the certainty of return on short-term debt is clearly greater than long-term debt, so that the interest which is the cost of the company's capital will also be smaller.

According to Almeida and Campello (2010), related to the existence of financial constraints in companies, there are three different but related effects that shape the relationship of internal funds and external financing. First of all, companies that have high levels of financial counstraints will face high investment opportunity costs as well as a result of constrained financing which ultimately causes investment projects to be delayed, therefore companies are more likely to use internal funds for additional capital expenditure rather than reducing external funds so that funds used up. Second, companies that have high levels of financial constraints, have concerns not only about investment financing in the present, but also about investments that will be made in the next period. The company will allocate internal funds to liquid assets such as cash, working capital, and investments in financial assets with short maturities in order to immediately disburse when needed. This effect also reduces the substitution of internal financing for external financing. The last point is the constraints in obtaining external financing that makes the company desires to increase the company's capacity in order to obtain facilities in increasing external financing. Therefore, companies that have high levels of financial constraints and high internal funds can direct a portion of these funds into tangible asset investments, with the aim of adding to the collateral value when submitting funds. This effect can also reduce the tendency of companies to substitute external funds using internal funds. In this research, several hypotheses can be tested to examine the sensitivity of cash flow from various uses of external funds (external financing, debt issuance, short-term debt issuance, long-term debt issuance, and equity issuance). H1. Internal financing has a negative effect on all types of external financing. H2. The negative influence of internal financing on all types of external financing is largely driven by short-term debt repayment. H3. The negative influence of internal financing on all types of external financing is stronger when the company does not experience financial constraints.

RESEARCH METHOD

This study uses a quantitative approach with measurements based on financial statements and annual reports of manufacturing companies with a sample period of 2014 to 2018, and all financial data are obtained from the official website of the Indonesia Stock Exchange. The final sample contained a total of 499 observations.

This study examines the sensitivity of cash flow to external financing by moderating financial containts. In line with Jin Park (2019) the dependent variable in this study is external financing which is divided into several measurements:

External Financing

$$ExFin_{i,t} = \Delta Dbt_{i,t} + Eq_{i,t}$$

Debt Financing

$$\Delta Dbt_{i,t} = \Delta StDbt_{i,t} + \Delta LtDbt_{i,t}$$

Hort-term Debt Financing

$$\Delta StDbt_{i,t} = \frac{Sort\ Term\ Debt_{i,t} - Sort\ Term\ Debt_{i,t-1}}{TotalAset_{i,t}}$$

Lng-term Debt Financing

$$\Delta LtDbt_{i,t} = \frac{Long\ Term\ Debt_{i,t} - Long\ Term\ Debt_{i,t-1}}{TotalAset_{i,t}}$$

Equity Financing

$$Eq_{i,t} = \frac{CapitalIncrease_{i,t} + SellingStock_{i,t-1} - CapitalDecrease_{i,t-1} - RepurchaseStock_{i,t-1}}{TotalAset_{i,t}}$$

The independent variable in this study is cash flow:

$$CF_{i,t} = \frac{NetIncome_{i,t} + Depreciation_{i,t} + Amortization_{i,t}}{TotalAset_{i,t}}$$

The moderating variables in this study are the Dividend Earning Ratio and Size of total assets, the formula for calculating each variable is as follows:

$$DPR_{i,t} = \frac{TotalDividen_{i,t}}{NetIncome_{i,t}}$$

$$Size_{i,t} = Ln\ (totalassets)_{i,t}$$

Financial constraint ratings are given to companies based on their Dividend Payout Ratio (DPR) by ranking the results of the DPR's calculations into 10 parts (deciles). Measurements using dummy variables, for dummy variables (1) are companies that do not experience financial constraints, namely companies that are in the top 3 ranks, while for dummy variables (0) are companies that experience financial constraints, ie those with lower DPR (Fazzari et al, 1988). In another literature that discusses financial constraints, Fama and French (2002) use dividend payout ratios, which are variables that are valued in the market.

The financial constraint rating is also given to companies based on the size of their assets (SIZE) by ranking the results of the SIZE calculation into 10 parts (deciles). Measurement using dummy variables, where the dummy variable with value (1) is a company that does not experience financial constraints and is ranked in the top 3 in its asset size, and the dummy variable will have a value (0) if the company experiences financial constraints with lower asset sizes. . Generally, companies that are classified as small companies are companies with young age and less well known, which have high credit uncertainty (Fama and French, 2002; Frank and Goyal, 2003).

This study adopts the methodology of Almeida and Campello (2010) which also uses Tobin's Q and company size by sales as a control variable. Equations (1) - (10) are ordinary least square (OLS) regression models in this study:

Model Analysis 1

$$ExFin_{i,t} = \beta_0 + \beta_1 CF_{i,t} + \beta_2 TbQ_{i,t} + \beta_3 SizeBySl_{i,t} + e_{i,t}$$

Model Analysis 2

$$\Delta Dbt_{i,t} = \beta_0 + \beta_1 CF_{i,t} + \beta_2 TbQ_{i,t} + \beta_3 SizeBySl_{i,t} + e_{i,t}$$

Model Analysis 3

$$\Delta StDbt_{i,t} = \beta_0 + \beta_1 CF_{i,t} + \beta_2 TbQ_{i,t} + \beta_3 SizeBySl_{i,t} + e_{i,t}$$

Model Analysis 4

$$\Delta LtDbt_{i,t} = \beta_0 + \beta_1 CF_{i,t} + \beta_2 TbQ_{i,t} + \beta_3 SizeBySl_{i,t} + e_{i,t}$$

Model Analysis 5

$$Eq_{i,t} = \beta_0 + \beta_1 CF_{i,t} + \beta_2 TbQ_{i,t} + \beta_3 SizeBySl_{i,t} + e_{i,t}$$

Model Analysis 6

$$ExFin_{i,t} = \beta_0 + \beta_1 CF_{i,t} + \beta_2 FinCon_{i,t} + \beta_3 CF * FinCon_{i,t} + \beta_4 TbQ_{i,t} + \beta_5 SizeBySl_{i,t} + e_{i,t}$$

Model Analysis 7

$$\Delta Dbt_{i,t} = \beta_0 + \beta_1 CF_{i,t} + \beta_2 FinCon_{i,t} + \beta_3 CF * FinCon_{i,t} + \beta_4 TbQ_{i,t} + \beta_5 SizeBySl_{i,t} + e_{i,t}$$

Model Analysis 8

$$\Delta StDbt_{i,t} = \beta_0 + \beta_1 CF_{i,t} + \beta_2 FinCon_{i,t} + \beta_3 CF * FinCon_{i,t} + \beta_4 TbQ_{i,t} + \beta_5 SizeBySl_{i,t} + e_{i,t}$$

Model Analysis 9

$$\Delta LtDbt_{i,t} = \beta_0 + \beta_1 CF_{i,t} + \beta_2 FinCon_{i,t} + \beta_3 CF * FinCon_{i,t} + \beta_4 TbQ_{i,t} + \beta_5 SizeBySl_{i,t} + e_{i,t}$$

Model Analysis 10

$$\Delta Eq_{i,t} = \beta_0 + \beta_1 CF_{i,t} + \beta_2 FinCon_{i,t} + \beta_3 CF * FinCon_{i,t} + \beta_4 TbQ_{i,t} + \beta_5 SizeBySl_{i,t} + e_{i,t}$$

Where β_0 is constant, β_1 …. β_5 are the parameters of each variable, $ExFin_{it}$ is external financing, $\Delta Debt_{it}$ is debt financing, $\Delta StDebt_{it}$ is short-term debt financing, $\Delta LtDebt_{it}$ is long-term debt financing, Eq_{it} is Equity financing, CF_{it} is internal financing (Cash Flow), $FinCon_{it}$ are financial constraints, $CF * FinCon_{it}$ is the interaction of internal financing and financial constraints, TbQ_{it} is tobins'Q, $SizeBySL_{it}$ is the size of the company based on sales, and e_{it} is the residue of each company.

RESULT AND DISCUSSIONS

The table below explain about the results of multiple linier regression analysis

Tabel 1 : Results of Multiple Linear Regression Analysis

Variable	ExFin [1]	ΔDbt [2]	ΔStDbt [3]	ΔLtDbt [4]	ΔEq [5]
Intercept	0,072 (0,758)	-0,068 (0,743)	-0,031 (0,716)	-0,039 (0,834)	0,141 (0,186)
CF	-0,026 (0,868)	-0,647*** (0,000)	-0,300*** (0,000)	-0,349*** (0,005)	0,623*** (0,000)
TbQ	-0,002 (0,575)	0,001 (0,803)	0,001 (0,621)	0,001 (0,957)	-0,003 (0,087)
SizeBySl	0,001 (0,995)	0,005 (0,518)	0,002 (0,450)	0,003 (0,698)	-0,005 (0,209)
R-Square	0,001	0,043	0,054	0,017	0,139
F-Statistic	0,124 (0,946)	7,478*** (0,000)	9,385*** (0,000)	2,815*** (0,039)	26,629*** (0,000)

Source: Results of data processing IBM SPSS statistics 25 for windows

Tabel 2 : Results of Multiple Linear Regression Analysis

Panel A (DPR)

Variable	ExFin [6]	ΔDbt [7]	ΔStDbt [8]	ΔLtDbt [9]	ΔEq [10]
Intercept	0,135 (0,586)	0,088 (0,688)	0,021 (0,814)	0,061 (0,754)	0,048 (0,661)
CF	-0,076 (0,689)	-0,901*** (0,000)	-0,398*** (0,000)	-0,504*** (0,001)	0,826*** (0,000)
FinCon	0,016 (0,744)	-0,038 (0,395)	-0,015 (0,423)	-0,023 (0,559)	0,056*** (0,014)
CF*FinCon	0,078 (0,827)	0,754*** (0,018)	0,284*** (0,031)	0,468 (0,097)	-0,677*** (0,000)

TbQ	-0,003 (0,529)	-0,001 (0,836)	-0,001 (0,953)	-0,001 (0,789)	-0,002 (0,322)
SizeBySl	-0,002 (0,796)	-0,001 (0,943)	0,001 (0,871)	-0,001 (0,899)	-0,002 (0,650)
R-Square	0,002	0,058	0,066	0,024	0,172
F-Statistic	0,187 (0,968)	6,020*** (0,000)	6,993*** (0,000)	2,399*** (0,036)	20,494*** (0,000)

Panel B (SIZE)

Variable	ExFin [6]	ΔDbt [7]	ΔStDbt [8]	ΔLtDbt [9]	ΔEq [10]
Intercept	0,299 (0,371)	0,126 (0,671)	-0,016 (0,895)	0,130 (0,617)	0,173 (0,249)
CF	-0,023 (0,911)	-0,867*** (0,000)	-0,247*** (0,001)	-0,623*** (0,000)	0,848 (0,000)
FinCon	0,035 (0,476)	-0,017 (0,699)	0,015 (0,395)	-0,034 (0,383)	0,053*** (0,018)
CF*FinCon	0,068 (0,823)	0,579*** (0,032)	-0,126 (0,256)	0,705*** (0,003)	-0,516*** (0,000)
TbQ	-0,003 (0,464)	-0,001 (0,833)	0,001 (0,565)	-0,002 (0,608)	-0,002 (0,230)
SizeBySl	-0,008 (0,493)	-0,002 (0,871)	0,002 (0,722)	-0,003 (0,760)	-0,007 (0,227)
R-Square	0,003	0,053	0,058	0,035	0,166
F-Statistic	0,256 (0,937)	5,543*** (0,000)	6,005*** (0,000)	3,533*** (0,004)	19,577*** (0,000)

Source: Results of data processing IBM SPSS statistics 25 for windows

Table 1 shows the regression results from models 1 to 5. In column 1 with the external financing (ExFin) as dependent variable, the internal financing variable (CF) has an insignificant negative coefficient of -0.026 which means that an increase in one unit's internal financing will result in a decrease in external financing by 0.026 units. The significance value of the internal financing variable is 0.868 (more than the 0.05 significance level). In column 2 with the dependent variable debt financing (ΔDbt), the internal financing variable (CF) has a significant negative coefficient of -0,647 which means that an increase in internal financing of one unit will result in a decrease in debt financing of 0.647 units. The significance value of the internal financing variable is 0,000 (less than the 0.05 significance level).

In column 3 with short-term debt financing (ΔStDbt) as dependent variable, the internal financing variable (CF) has a significant negative coefficient of -0.3 which means that an increase in one unit's internal financing will result in a decrease in short-term debt financing by 0.3 units. The significance value of the

internal financing variable is 0,000 (less than the 0.05 significance level). In column 4 with long-term debt financing (ΔLtDbt) as dependent variable, the internal financing variable (CF) has a significant negative coefficient of -0,349 which means that an increase in one unit's internal financing will result in a decrease in long-term debt financing by 0.349 units. The significance value of the internal financing variable is 0.005 (less than the 0.05 significance level).

In column 5 with equity financing (ΔEq) as dependent variable, the internal financing variable (CF) has a significant positive coefficient of 0.623, which means that an increase in internal financing of one unit will result in an increase in equity financing of 0.623 units. The significance value of the internal financing variable is 0,000 (less than the 0.05 significance level). By looking at each significance value, it can be concluded that **H0** is accepted and **H1** is rejected, which means that internal financing has no negative effect on all types of external financing.

This happens because in each type of external financing (specifically debt) there is a different maturity factor, the repayment of short-term debt is faster than long-term debt due to the short maturity of the instrument. In addition, companies tend to prioritize paying off short-term debt rather than long-term debt because short-term debt is financing that is directly related to the manufacturing company's operating processes. Whereas in equity financing there is no maturity so the substitution (share buyback) between internal financing and equity is also longer or even less frequent, a significant positive relationship between internal financing and equity financing that occurs due to the effect of rising stock prices due to rising cash flow comes from company profits. When the stock price rises, the buyback of shares will be considered quite expensive by the company so that companies are increasingly reluctant to take this step.

The significance value of debt financing and short-term debt is less than the 0.05 significance level, but short-term debt financing is also part of debt financing (a combination of short-term and long-term debt financing). From the significance value it can be concluded that **H0** is rejected and **H2** is accepted, the negative effect of internal financing on all types of external financing is largely driven by paying off short-term debt. This happens because short-term debt repayment is faster than other external financing, besides short-term debt is financing that is directly related to the manufacturing company's operating processes. This result is in line with Jin Park's study (2019) which also concluded a similar result.

Table 2 shows the regression results from models 6 to 10. The difference with table 1 is the existence of financial counstrant moderation variables in each model, the table is divided into Panel A and Panel B based on DPR and SIZE financial counstrant moderation variables. In column 6 with the dependent variable is external financing (ExFin), the internal financing variable (CF) has an insignificant negative coefficient of -0.076 for Panel A (DPR) and an insignificant negative coefficient of -0.023 for Panel B (SIZE), which means that it means that an increase in internal financing of one unit will result in a decrease in external financing of 0.076 units for Panel A (DPR) and 0.023 units for Panel B (SIZE). The variable interaction between DPR internal financing and financial constraints

has a positive coefficient which is not significant 0.078 and SIZE has a positive coefficient which is not significant 0.068, which means that DPR and SIZE financial constraints strengthen the negative influence between internal financing and external financing of 0.078 and 0.068 units, respectively. The significance value of the DPR and SIZE internal financing variables is 0.689 and 0.911 (more than the 0.05 significance level) whereas for the variable interaction of internal financing and financial constraints (DPR and SIZE) 0.827 and 0.823 respectively (more than the 0.05 significance level) .

In column 7 with the dependent variable is debt financing (ΔDbt), the internal financing variable (CF) has a significant negative coefficient of -0.901 for Panel A (DPR) and a significant negative coefficient of -0.867 for Panel B (SIZE), this means that an increase in internal financing one unit will result in a decrease in debt financing by 0.901 units for Panel A (DPR) and 0.867 units for Panel B (SIZE). The variable interaction between internal financing and financial constraints of the DPR has a significant positive coefficient of 0.754 and SIZE has a significant positive coefficient of 0.579, which means that the financial constraints of the DPR and SIZE strengthen the negative influence between internal financing and debt financing of 0.754 and 0.579 units, respectively. The significance value of the internal financing variable with the DPR and SIZE financials is 0,000 and 0,000 (less than the 0.05 significance level) whereas for the variable interaction of internal financing and financial constraints (DPR and SIZE) respectively 0.018 and 0.032 (less than the significance level of 0, 05).

In column 8 the dependent variable is short-term debt financing (ΔStDbt), internal financing variable (CF) has a significant negative coefficient of -0,398 for Panel A (DPR) and a significant negative coefficient of -0,247 for Panel B (SIZE), which means that an increase in internal financing of one unit will result in a decrease in short-term debt financing by 0.398 units for Panel A (DPR) and 0.247 units for Panel B (SIZE). The internal variable interaction financing and financial constraints of the House of Representatives have a significant positive coefficient of 0.284 and SIZE has an insignificant negative coefficient of -0,126 which means that the House's financial constraints strengthen the negative influence between internal financing and short-term debt financing of 0.284 units, while the financial constraints SIZE weaken the negative influence between internal financing and short-term debt financing of 0.126 units. The significance value of the internal financing variable with the DPR and SIZE finances is 0,000 and 0.001 (less than the 0.05 significance level) while for the variable interaction of internal financing and financial constraints (DPR and SIZE) respectively 0.031 (less than the 0.05 significance level) and 0.256 (more than the 0.05 significance level).

In column 9, the dependent variable is long-term debt financing (ΔLtDbt), internal financing variable (CF) has a significant negative coefficient of -0.504 for Panel A (DPR) and a significant negative coefficient of -0,623 for Panel B (SIZE), which means that an increase in internal financing of one unit will result in a decrease in long-term debt financing by 0.398 units for Panel A (DPR) and 0.247 units for Panel B (SIZE). The variable interaction between internal financing and House financial constraints has a non-significant positive

coefficient of 0.468 and SIZE has a significant positive coefficient of 0.705, which means that House and SIZE financial constraints strengthen the negative influence between internal financing and long-term debt financing of 0.468 and 0.705 units, respectively. The significance value of the internal financing variable with the DPR and SIZE finances is 0,000 and 0.001 (less than the 0.05 significance level) while for the variable interaction of internal financing and financial constraints (DPR and SIZE) respectively 0.031 (less than the 0.05 significance level) and 0.256 (more than the 0.05 significance level).

In column 10 the dependent variable is equity financing (ΔEq), internal financing variable (CF) has a significant positive coefficient of 0.826 for Panel A (DPR) and a significant positive coefficient of -0.848 for Panel B (SIZE), meaning that an increase in internal financing one unit will result in an increase in equity financing of 0.826 units for Panel A (DPR) and 0.848 units for Panel B (SIZE). The interaction variable of internal financing and financial constraints of the DPR has a significant negative coefficient of -0,677 and SIZE has a significant negative coefficient of -0,516, which means that the House and SIZE financial constraints weaken the negative influence between internal financing and equity financing of 0.677 and 0.516 units, respectively. The significance value of the internal financing variable with the DPR and SIZE finances is 0,000 and 0,000 (less than the 0.05 significance level) while for the variable interaction of internal financing and financial constraints (DPR and SIZE) respectively 0,000 and 0,000 (less than the significance level of 0, 05).

By looking at each significance value, it can be concluded that **H0** is accepted and **H3** is rejected, which means that the negative influence of internal financing on all types of external financing is stronger when companies experience financial constraint, these results are not consistent with research conducted by Almeida and Campello (2010) which gives the opposite opinion. In debt financing, companies that experience financial constraint have difficulty getting funds in the form of debt from the owner of the funds because the financial constraint variable becomes a measure for fund owners to make decisions on what loan funds are appropriate for companies with certain financial constraints. Likewise with how many investors are willing to buy bonds and other debt securities from companies that have a certain level of financial constraints. The higher the financial constraint of a company, the less loan funds obtained due to the small trust of the fund owner to the company. Conversely the lower the financial constraint of a company, the loan funds obtained will also be even greater. This makes the financial constraints strengthen the substitution of internal financing and debt financing.

The same thing happens with equity financing, the regression results show that financial constraints weaken the positive influence of internal financing on equity financing, which means that internal financing substitutes for equity financing will be higher when the financial constraint level is high. That is because financial constraints are a benchmark for stock investors in making stock purchase decisions. The higher the financial constraints of a stock issuing company, the more reluctant investors will be to buy these shares, which in turn results in cheaper stock prices. If the stock price is cheap, the funds spent by the

company to buyback shares will be less so that the level of share conversion into cash flow is also higher.

CONCLUSION

Adopting the method from Almeida and Campello (2010), this study tested the sensitivity of internal financing (cash flow) to all types of external financing (debt and equity) moderated by the level of financial constraints on manufacturing companies listed on the Indonesia Stock Exchange. Debt financing which is divided into short-term debt financing and long-term debt financing is carried out to find out in more detail which parts are most substituted by internal financing. This study found interesting results in testing the sensitivity of internal financing to all types of external financing without the moderation of financial constraints. Internal financing (cash flow) does not substitute all types of external financing, substitution occurs in debt financing, especially short-term debt as indicated by the coefficient of significance value that is far below the significant level of 0.05 used in the regression. That was due to shorter maturities in short-term debt financing. The opposite result occurs in equity financing, internal financing does not substitute equity financing but rather supports the addition of equity financing when internal financing is high. This occurs due to rising stock prices when profits (internal financing sources from operations) are high so companies are reluctant to buy back shares that are currently expensive.

The next part of this research is testing whether financial constraints play a role in the amount of sensitivity of internal financing to external financing. The results of the test are financial constraints strengthen the internal financing substitution in debt financing, it is because the higher the financial constraints of a company, the less loan funds obtained due to the trust of small fund owners towards the company. Conversely the lower the financial counstrain of a company, the loan funds obtained will also be even greater. Similar results are shown in the internal financing substitution in equity financing. The results in this test are that financial constraints weaken the positive influence of internal financing on equity financing, which means that internal financing substitutes for equity financing will be higher when the financial constraint level is high. that is because the bad judgment given by stock investors when the financial constraints of the company is high, the higher the financial constraints of a stock issuing company, the investor will be more reluctant to buy these shares, which in turn will result in lower stock prices. If the stock price is cheap, the funds spent by the company to buyback shares will be less so that the level of share conversion into cash flow is also higher.

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