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FACTORS THAT INFLUENCING CAPITAL EXPENDITURE: PERSPECTIVE PECKING ORDER AND MANAGERIAL HYPOTHESES

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Abstract

The objectives of this study are to observe the impact of internal cash flow, insider ownership, investment opportunity, investment opportunity and firm size on the capital expenditure in two different theories. Those theories are: (1) the pecking order hypotheses and (2) the managerial hypotheses, tested in Indonesian case. The pecking order hypotheses postulates that managers can choose the level of capital expenditure to maximize the wealth of current shareholders without considering insider ownership in the company. On the other hand, according to the managerial hypotheses, managers whose ownership proportions are small tend to use higher level of internal cash flows to finance the capital. The data of this study is collected from 11 manufacture companies as listed in the Indonesian Stock Exchange. The result of this study shows that the internal cash flow, insider ownership, firm size and investment opportunity have positive impact on the capital expenditure. However, the impact of insider ownership and investment opportunity on the capital expenditure are not significant. Eventually, this study is appropriate with the pecking order hypotheses.

***Keywords**: pecking order hypotheses, managerial hypotheses, internal cash flow, insider ownership, investment opportunity.*

Abstrak

Penelitian ini bertujuan untuk mengetahui pengaruh dari internal cash flow, insider ownership, investment opportunity, investment opportunity and firm size terhadap capital expenditure dengan menggunakan dua teori berbeda. Teori tersebut adalah (1) the pecking order hypotheses dan (2) the managerial hypotheses, dengan menggunakan kasus Indonesia. Pecking order hypotheses menyatakan bahwa managers dapat memilih besarnya capital expenditure dalam rangka memaksimumkan kesejahteraan pemegang saham tanpa mempertimbangkan kepemilikan insider dalam suatu perusahaan. Pada sisi lain, menurut managerial hypotheses, managers yang memiliki proporsi kepemilikan kecil cenderung untuk menggunakan tingkat pendanaan internal yang tinggi untuk mendanai belanja modalnya. Penelitian ini menggunakan data 11 perusahaan manufaktur yang terdaftar di Bursa Efek Indonesia. Hasil penelitian menunjukkan bahwa internal cash flow, insider ownership, firm size dan investment opportunity memiliki pengaruh positif signifikan terhadap capital expenditure. Namun, pengaruh dari insider ownership dan investment opportunity terhadap capital expenditure adalah tidak significant. Penelitian ini menunjukkan hasil yang mendukung pecking order hypotheses.

Kata Kunci: *pecking order hypotheses, managerial hypotheses, internal cash flow, insider ownership, investment opportunity.*
JEL: G32

1. Research Background

Capital expenditure is one of the most important concepts in one business entity financial theory. In financial theory explained that some main financial functions done by financial manager is making decision related to fundraising activity (financial decision) and also making decision related to how the fund obtained are invested (investment decision). Capital expenditure influences production, how much fund will be invested in fixed asset (Nicholson 1992 in Sartono 2001), and also strategic plan (Bromiley 1986 in Sartono 2001) decisions. Capital expenditure is often associated with company performance, because the higher capital expenditure is expected to be the better the company performance (McConnell and Muscarella 1985 in Sartono 2001).

Looking at the important ofcapital expenditure concept for company in financial theory, many research developed in order to analyze factors that influencing capital expenditure level from a company. Among others are internal cash flow, insider ownership, firm size, capital intensity, and investment opportunity. Yeannie and Handayani (2007) conduct research with independent variable used are investment opportunity, interval cash flow, and insider ownership, meanwhile dependent variable used in this research is capital expenditure. Research result is that investment opportunity has negative coefficient and significant impact to capital expenditure. Internal cash flow has positive coefficient and significant impact to capital expenditure. This thing means that the bigger company internal cash flow then the bigger its capital expenditures. In the other words, funding for capital expenditures will be taken from the internal fund first. Meanwhile insider ownership has negative coefficient but does not have significant impact to capital expenditures.

Sartono (2001) conducts a research using sales in order to control size and capital intensity which play role as property, factory, and tools needs difference controller. This research result applied to all business entity listed in Jakarta Stock Exchange says that internal cash flow has impact to capital expenditure, but internal cash flow itself cannot directly indicate the occurrence of pecking orders or managerial hypotheses theory. Meanwhile insider ownership does not have significant impact to capital expenditure. This finding supported the research from Myers and Majluf (1984) in Sartono (2001) in pecking order hypotheses theory which stated that manager will choose capital expenditure level that maximizing recent stock holder welfare without consider manger ownership for company stock. Manager tend to make capital expenditure decision based on internal cash flow with the excuse of asymmetries information between manager with potential prospective stock holder.

Manurung and Ratnaningsih (2005) conduct a research with dependent variable of capital expenditure and dependent variable of internal cash flow, insider ownership, firm size, and capital intensity, shows that: internal cash flow has impact on capital expenditure, but insider ownership has positive but insignificant impact to capital expenditure. Beside that frim size and capital intensity are very influencing to capital expenditure. Mansor and Hamidi (2008) state that internal cash flow and form size have positive and significant impact to capital expenditure meanwhile insider ownership and investment opportunity have negative and significant impact to capital expenditure.

Based on the background explained above, known that insider ownership and firm size are having tendency of having opposite direction relationship with capital expenditure in manufacture business entity. Meanwhile internal cash flow and investment opportunity variables show tendency of unidirectional relationship capital expenditure in business entity.

Because of that, can be identified the problems of this research is if it is internal cash flow, insider ownership, investment opportunity, and firm size have impact to capital expenditure (perspective pecking order hypotheses and managerial hypotheses) in business entity manufacture sector which go public and listed in Indonesia Stock Exchange limited liability company.

2. Research Method

Population target in this research is all business entity which have go public in Indonesia Stock Exchange limited liability company which include into manufacture industry. Data collection in this research using sample determined based in characteristics below: (1) Publish coherent financial statements every year during 2000-2009 and have been audited (2) business entity that has insider ownership during research period.

Dependent variable in this research which is capital expenditure. Capital expenditure variable obtained from the natural logarithm of the difference between the current total fixed assets and the total fixed assets in the previous period. Meanwhile independent variables which are internal cash flow, insider ownership, and investment opportunity. Internal cash flow proxied by natural logarithm of net profit of the company after payment of debt and tax (profit after tax) (Murhadi 2010). Insider ownership measured by add manager ownership and commissioner ownership percentage (Murhadi 2010). Investment opportunity measured by comparison between book value of property, plant and equipment (PPE) with book value of total assets (BVA). Control variable in this research is firm size measured from natural logarithm of total sales (Murhadi 2010).

3. Result and Discussion

The processing results in this research indicate that the observation data used in the research model has met the normality assumptions, which uses normal assumptions, as well as the proposed research model has fulfilled the basic assumptions in multiple linear regression analysis that is free of multicollinearity, autocorrelation, and heteroscedasticity symptoms.

Table 1. Data Processing Results

Variable	Beta	Significance
Constant	-4.095	0.039**
Ln_FLOW	0.258	0.015**
IO	0.012	0.547
IOP	0.296	0.505
Ln_Size	0.406	0.000***
Lag_Capex	0.433	0.000***
R Squares		0.789
Adjusted R-Squared		0.779

From the regression coefficient of the equation above, it shows that the internal cash flow variable has a regression coefficient of 0.258, which means that internal cash flow has a positive connection to capital expenditure. If the internal cash flow increases by 1%, then capital expenditure will increase by 0.258%. In pecking orders and managerial hypotheses, when internal cash flow increases, capital expenditure also increases. These results are relevant to the opinion of Myers and Majluf (1984) cited by Sartono (2001) which states that managers tend to make capital expenditure decisions based on cash flow. This is because the larger the internal cash flow, the greater the amount of funds owned by the business entity to invest, so that the capital expenditure will increase.

The insider ownership regression coefficient is 0.012, which means that insider ownership has a positive connection to capital expenditure. If the insider ownership increases by 1%, then capital expenditure will increase by 0.012%. Insider ownership shows the ownership of a portion of the company's shares and options by the managers and directors of a company. In managerial hypotheses, a manager who owns stocks (insider ownership) will use internal cash flow to make the level of capital expenditure in a position that exceeds the level of maximizing stockholder prosperity. Thus, the higher the insider ownership really affects the level of interest of managers in deciding the level of prosperity of managers as stockholders. So that the logic of large insider ownership will affect the interests of managers to decide the amount of corporate capital expenditures, because company managers must be more interested in capital expenditures that maximize their prosperity as stockholders.

The investment opportunity regression coefficient is 0.296. So, when investment opportunity experiences a 1% increase, capital expenditure will increase by 0.296. In pecking order hypotheses, if the investment opportunity in the future is better, the manager will use these opportunities to maximize stockholders wealth so that capital expenditure will increase in accordance with the increase in investment opportunity.

The coefficient of firm size is 0.406, which means that if the firm size has increased by 1%, the capital expenditure will increase by 0.406%. Manurung and Ratnaningsih (2005) say that the greater the firm size measured through the sales generated by the business entity, there will be enough funds available in the business entity to carry out expenditure so that the higher the firm size measured through sales, the higher the level of capital expenditure the bigger too.

The lag_capex coefficient is 0.433, which means that in the previous capital expenditure has increased by 1%, the future capital expenditure will increase by 0.406%. This shows that in the previous capital expenditure affects future capital expenditure.

Based on this regression result, it can be seen that the increase in internal cash flow, insider ownership, investment opportunity, firm size and lag_capex will cause an increase in business entity capital expenditure. Thus this study tends to be in accordance with pecking order hypotheses and not in accordance with managerial hypotheses.

The determination coefficient (adjusted R^2) shows a value of 0.779. This shows that changes in capital expenditure can be explained by internal cash flow variables, insider ownership, investment opportunity, and firm size of 77.9%, while the remaining 22.1% is explained by variables outside the internal cash flow, insider ownership, investment opportunity, firm size and lag_capex variables.

The simultaneously tests results through the F test show a significance value of less than 0,000. This information proves that the major hypothesis is accepted. A positive relationship shows that internal cash flow, insider ownership, investment opportunity, firm size and lag_capex variables together affect the dependent variable (capital expenditure). Significantly, the model can be used to predict capital expenditure. The influence of the independent variables and control variables together on the dependent variable shows that the independent variables and control variables can support each other in influencing the dependent variable which is capital expenditure. Simultaneous test results for this study are consistent with previous research, namely research conducted by Manurung and Ratnaningsih (2005) which states that internal cash flow, insider ownership, investment opportunity, and firm size together have a significant effect on capital expenditure.

Partial testing done through t-test on the variables studied showed that the internal cash flow variables proved to have a significant effect on capital expenditure at $\alpha = 5\%$. Insider ownership and investment opportunity variables do not have significant effect. Firm size is significant at $\alpha = 1\%$.

Internal cash flow variables have a significance value of 0.015. This information proves that hypothesis 1 is accepted. These results are relevant to the opinion of Myers and Majluf (1984) in Sartono (2001) regarding pecking order hypotheses which states that managers tend to make capital expenditure decisions based on internal cash flow.

Insider ownership variable of 0.547. This information proves that hypothesis 2 is rejected. Insider ownership variables have no significant effect on capital expenditure, this is due to the low level of insider ownership held by manufacturing business entities that go public and are listed on the Indonesia Stock Exchange in the 2000-2009 period. Can be seen in appendix 1, the insider ownership average is only 4.9907 or less than 5%, so the relationship between insider ownership and capital expenditure becomes relatively less strong. With the presence of relatively strong influence this indicates the occurrence of pecking order hypotheses. The results of this study are consistent with research conducted by Manurung and Ratnaningsih (2005) which states that insider ownership has a positive and not significant effect on capital expenditure.

Investment opportunity variable is 0.505. This information proves that hypothesis 3 is rejected. Investment opportunity has no significant effect on capital expenditure but the direction of the connection is positive. This shows that if investment opportunity increases, capital expenditure will also increase. In the opposite, if the investment opportunity decreases, capital expenditure will decrease. Based on pecking order hypotheses, if the investment opportunity in the future is better, the manager tries to take the opportunity to prosper the interests of stockholders so that capital expenditure will increase in accordance with the increase in investment opportunity. Thus, the results of this study tend to be in accordance with pecking order hypotheses. According to Myers (1984) in Sartono (2001) Investment choice is an opportunity to develop, but often companies cannot always implement all investment opportunities in the future. For companies that cannot use the investment opportunity, they will experience a higher expenditure compared to the value of the opportunity lost. The value of investment opportunity is the present value of the company's choices to make investments in the future. Therefore, the insignificant results are likely due to the future realization of investment opportunities that are valued in the future because the conditions faced by the business entity in the future may not be profitable and delay the investment. The most decisive thing is the loan interest rate. The higher the interest rate, the more expensive investment costs. As a result, interest in investment has declined. However, it is not uncommon, even though the loan interest rate is low, interest in investment remains low. This is because the total investment costs are still high. Factors that influence mainly are institutional problems. For example, the complicated and long-term investment permit procedures cause economic costs by taking into account the time value of money from investment, which is increasingly expensive. Likewise, with the existence and efficiency of financial institutions, the level of legal certainty, and political stability (Rahardja 2004).

Firm size variable of 0,000. This information proves that hypothesis 4 is accepted. The results of this research are relevant to the opinion of Manurung and Ratnaningsih (2005) which states that the greater the sales, the greater the capital expenditure made by the company. Sales performance that reflects the level of the company's ability to manage consumer purchasing decisions and consumer loyalty to buy company products has a positive effect on capital expenditure. This shows that companies tend to allocate funds to support the prospects of sales growth achieved by the company.

4. Conclusion

Based on the hypothesis testing results, it can be seen that internal cash flow variables have a significant effect on capital expenditure, insider ownership variables do not have a significant effect on capital expenditure, investment opportunity variables have a significant effect on capital expenditure, and firm size variables have a significant effect on capital expenditure. Based on the results of the research conducted, internal cash flow and sales have a positive effect on capital expenditure so that the greater the internal cash flow and firm size, the greater the capital expenditure. Thus the use of internal cash flow, insider ownership, investment opportunity, and firm size in capital expenditure business entities tend to be in accordance with pecking order hypotheses. While insider ownership and investment opportunity that have a positive influence on capital expenditure do not provide support for managerial hypotheses. The results of the study on insider ownership are not likely due to the low level of insider ownership possessed by business entities manufacturing companies that go public at the Indonesia Stock Exchange, so the relationship between insider ownership and capital expenditure becomes relatively less strong. With the presence of relatively strong influence this indicates the occurrence of pecking order hypotheses. Whereas the results of the study on insider ownership are not significant due to the possibility of spending to realize an investment opportunity that is valuable in the future because the conditions faced by business entities in the future may not be profitable and delay the investment.

Although this study does not explicitly indicate the existence of pecking order hypotheses, the observations show a tendency that is consistent with pecking order hypotheses. Therefore, stockholders do not need to provide insider ownership to management in order to reduce agency conflict when making capital expenditure decisions because the use of internal cash flow in capital expenditure is not caused by a conflict of interest between managers and stockholders, but because of information asymmetry between management and stockholders.

For further research, it is recommended to include other internal factors that also have an influence on business capital expenditure, considering that in this study, changes in business capital expenditure have been explained by internal cash flow, insider ownership, investment opportunity, and firm size factors of 78.9%. In addition, the next study should try to use other variables that are used to control the size, where this study used sales variables. In this study, the number of business entities was relatively small. Therefore, in further research, it is recommended that the number of business entities be added so that the results obtained are more accurate.

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