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# Preferences Among Expenditure: Growth or Short-term Performance?

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## Abstract

This study aims to examine the effect of capital expenditure on the investors' responses. The respondents were companies with the best stock performance in each sector in 2017. The observation period is 2017 to 2019. Top 10 companies in each sector with the best stock performance in companies listed on the Indonesia Stock Exchange were selected. The main variables are a growth signal which is proxied by growth in capital spending and capital expenditure, and risk and investor response, which is proxied by CAR. Financial performance as measured by ROA is a control variable in this study. The results showed that the signal of growth as measured by capital expenditures responded positively by the market, the risk moderates this influence, companies with high risk will be responded negatively by investors and vice versa. This finding corrects previous findings that only looked at the signal aspect of growth, without linking it to risk. In addition, these findings reinforce the argument that investors buy the future of the company, not a momentary financial performance. This can be seen from the absence of ROA influence on investor response. This study found that companies need to manage risk appropriately, because the risk aspect of the company is a crucial factor for investors. High risks will eliminate the benefits of strategic decisions in this case in the form of capital expenditures.

**Keywords:** Capital expenditure, Growth signals, Investor response, Risk

## 1 Introduction

Investment had a very significant role in entity's activity nowadays [1]. Instead of focusing only on operating activity, company needed to change the way to manage its cash flow so that it might not lose the chance to continuously grow and exist in the marketplace accordance to business development trend.

Nor capital and R&D expenditure had a simultaneous effect on financial performance [2]. Investment in R&D would contribute more on earnings especially in R&D-intensive

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companies. While in fixed asset-intensive companies, that finding could not be fulfilled. On the other hand, need for cash flow investment (CFI) was increased and affecting the whole company cash flow. Surprisingly, some companies' capital expenditures were positively appreciated by the investors [3]. For example, KAEF (PT Kimia Farma, Tbk.) was one of the highest R&D-intensive companies, that recorded a 95% increasing on its share price during March 2020.

Company wanted to increase its performance and competitiveness through plant assets investment or R&D expenditures [8]; that's why capital spending was chosen. It might remove any product bad effects in the declining phase by creating a continuously and overlapping company's growth cycle (S-curve).

This research focused on the facts that the investors were concerned more with their future investments. While the other research aimed to associate the short-term performances with the increasing of share price [10]. When company had capital expenditures, it sent its life cycle signal. It was possible that the company grew continuously or experienced any decreasing. This research aimed to explore the investor's responses on company's capital expenditures through a pattern of share price movement in the long-term and using company's life cycle as the control variable. When investors had enthusiasm on the future of the company, it confronted the previous findings stated that a bad-perform company would be negatively appreciated; investor would prefer the future share price projection to the company's current financial performances.

## **2 Review of literatures**

### **2.1 Signaling theory**

When the company had external financing as the tool to support its expansion, the market would get the signal that the fundamental of the company was strong [9]; only a strong company dared to bear financial distress risk when the portion of debt was high. Jensen and Meckling [7] in agency theory proposed an additional debt portion as a mechanism to reduce agency problem. Higher the debt, smaller the idle fund that could be use by the manager for any unnecessary expenditures.

The increase of share price when there was any debt increasing announcement (e. g. debt for equity exchange offer, debt finance share repurchases program, and debt financed cash tender offer) focused on gaining control over other companies. On the other hand, the debt decreasing (e. g. equity for debt exchange offer, IPO, and own-shares acquisition offering) would cut the share price [11].

### **2.2 Capital spending**

The use of capital intensive of new technology and production process would trigger the movement of modern economy were. When company planned to move forward, it needed adequate finance resources, techniques, and human resources. The company must have a

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capital spending, either through plant assets acquisition or R&D expenditures, to optimize the chances for the new investment.

In signaling model, by using capital investment, the company gave signal to confirm that it was a profitable one. That signal had an important role in the information asymmetry capital market. Capital spending done by the manager was a reliable signal of company cash flow.

When the company declared to increase its capital spending, including any expenditures for R&D, a significant share price increasing reached; otherwise, the share price would negatively react when the capital spending was decreased [4]. Right issue in a company that wanted to finance company expansion would gain a fewer negative response than other settle companies that would perform the same activity.

### **2.3 Company live cycle (S-curve)**

Miller & Friesen [4] divided company life cycles into four stages, as described below:

1. Introduction stage. This was a learn phase where fixed costs often burdened the company revenues. Company had to start to invest in order to change its market position. The source of this initial investment was part of company's earning; it needed a constant additional investment. As a result, a negative cash flow from operation (CFO) and investment (CFI), while cash flow from finance (CFF) would be positive.
2. Growth stage. In this phase, company experienced a break-even point (CFO>0) yet the additional investment and a solid competitive advantage (CFI<0) were needed. Company had reached a fast revenue growth, but the earning was not enough to finance the investment (CFF>0).
3. Maturity stage. Company had positive earning (CFO>0). Even tough its market position was strong; company still had a potential development. Investment should be protected (CFI>0), although the amount of investment is proportionally lower than the previous stage. In this phase, revenue growth and innovation rate were decreased, compared to the previous stage, so that the CFF<0.
4. Declining stage. In this phase, the sales were decreasing, and earning was negative because of the innovations were stopped. There was a decreasing of company assets' liquidity to continue the business and burden to pay the creditor (CFI>0). Dicinson (2011) found that the decreasing of CFF occurred when CFF>0 or CFF<0.

Coad et. al [21] used company's time of life to identify its life cycle, but it was not enough to become the proxy for company life cycle because of two reasons. First, company often operated in more than one industry, so it created any overlapping of its products life cycle [16]. Second, company in the different industry had different time related to its life cycle [1] so that the relations among the business life cycle stages and lifetime became explicitly unidentified.

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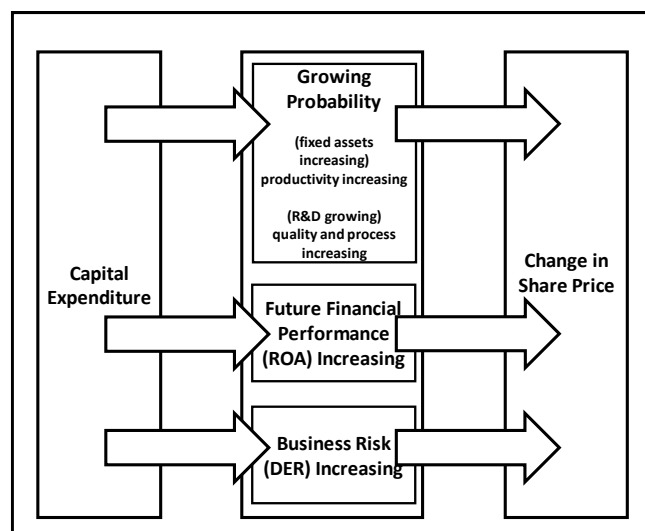
## 2.4 Total assets

Based on some empirical research in corporate finance, company size was the basic and important characteristic in determining dependent variable. Rajan & Zingales [5] found that company leverage was increased along with the company size. It was found in the merger and acquisition that small company had a higher abnormal announcement return than the bigger one. Moeller et. al [20] and [6] described that in the supply time, company size-based inverted U relation was found. Meanwhile, other research found that banks were concerned on the risk of company's investment project [17 & 18]. Company size affected the mitigation of company cash flow deficiency. Bigger company would reduce less investment portion compared to smaller one when there was a cash flow deficiency.

## 3 Research framework

Capital expenditure indicated any probability of company growth, which was marked with the increasing of plant assets and R&D expenditures. The increasing of plant assets was perceived as a better future company productivity, and the growing of R&D expenditures indicated any innovations and improvements in output quality. Capital expenditure increasing also brought any expectations on the increasing of potential financial performances (ROA). The increasing capital expenditure, on the other hand, would affect the risk escalation. It would be positively reacted by the investors, because the increasing capital expenditure brought any hopes on better future of company. Otherwise, if its capital expenditure was stagnant or decreased, investors would be worried, and resulting in an unpromising future signal.

Figure 1. Research Framework



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## **4 Research hypotheses**

Based on abovementioned explanations, following were the research hypotheses of this research:

**H1:** plant asset growth affected share price

When there was a trend of capital expenditure increasing, it was predicted:

**H2A:** total asset is positively affected the share price

**H2B:** total plant asset is positively affected the share price

When there was a trend of capital expenditure decreasing, it was predicted:

**H3A:** total asset is positively affected the share price

**H3B:** total plant asset is positively affected the share price

## **5 Research methods**

### **5.1 Research type**

This research aimed to identify the effect of capital spending on share price. Total assets, ROA, and DER were the control variables. The trend of capital spending growth was used as dummy variable. This research type was a quantitative causality using metric data in form of panel data. Data processing used Eviews software.

### **5.2 Population and sample**

This research population were company listed in Indonesia Stock Exchange (IDX) in the time range of January 1<sup>st</sup>, 2015, until second quarter of 2019. Financial sector was not participated because of the difference use of plant assets in its business process, compared to the others. There were 644 companies listed in IDX until July 1<sup>st</sup>, 2019, and there were 320 companies that accomplished this research sampling measures.

### **5.3 Data collection**

Finance data and share price were recorded quarterly to identify the fluctuation of capital spending, more detail than the annual interval. Such financial data as ROA, DER, and capital spending were not presented directly in the financial statement, so that those data had to be counted on another from the financial statement. Share price was taken from Yahoo! Finance. Share capitalization was taken from official website of IDX, idx.co.id. Some additional data were taken from TICMI. Plant assets growth was equal to company's plant assets in a quarter minus plant assets from previous quarter.

### **5.4 Research model**

Research model were stated in these following equations:

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$$TQ_{i,t} = \beta_0 + \beta_1 \text{Log } TA_{i,t} + \beta_2 \text{Log } FA_{i,t} + \beta_3 \text{GFA}_{i,t} + \beta_4 \text{ROA}_{i,t} + \beta_5 \text{DER}_{i,t} + \varepsilon_{i,t} \quad (1)$$

The sample would be tested separately further, based on the group of growth, which is the group that experienced increasing plant assets growth trend and decreasing ones with these following equations:

$$TQ_{i,t} = \varphi_0 + \varphi_1 \text{Log } TA_{i,t} + \varphi_2 \text{Log } FA_{i,t} + \varphi_3 \text{ROA}_{i,t} + \varphi_4 \text{DER}_{i,t} + \varepsilon_{i,t} \quad (2)$$

$$TQ_{i,t} = \theta_0 + \theta_1 \text{Log } TA_{i,t} + \theta_2 \text{Log } FA_{i,t} + \theta_3 \text{ROA}_{i,t} + \theta_4 \text{DER}_{i,t} + \varepsilon_{i,t} \quad (3)$$

### 5.5 Variables explanation

1. Capital spending. Proxied with total assets (TA) and total plant assets or fixed assets (FA). TA was measured using logarithm of TA, while FA using logarithm of FA.
2. Capital spending growth (GFA). Measured using the accumulation capital spending in a period with the previous one, divided by prior period capital spending. Company with GFA increasing trend in a five-year period is categorized as growth (scored as 1), otherwise, it was not growing (scored as 0).
3. Return on asset (ROA) as the financial performance indicator, which was measured using net income divided by TA.
4. Debt to equity ratio (DER) as the company risk indicator, which was measured using total liabilities divided by TA.
5. Tobin's Q. Proxied of change in share price because TQ combined TA based on investors' perspective. TQ was measured using market value of equity shares plus book value of liabilities.

## 6 Discussion

Tests of hypotheses were using the assistance of Eviews software. Panel data with five years' time range, started from first quarter of 2015 until second quarter of 2019, with the total of 320 non-financial companies, resulted in total observation of 6,400. The tests were performed for all samples to identify whether the growth of plant assets would be appreciated by the investors or not, using the first equation. Furthermore, the samples were clustered into two parts based on the trend of plant assets growth. Each part was tested separately. These separate tests of each part were performed to prove that the investors prefer to maintain company's potency in future earnings rather than relying on current earnings or performances. These hypotheses were taken to fix alleged quasi beliefs that share price would be determined by the current condition, instead of the future one.

Table 1. Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	0,262(a)	0,069	0,042	0,51198	2,191

a Predictors: (Constant), ROA, GFA, FATA, DER, RFATA, RGFA

b Dependent Variable: TQ

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Based on the data presented in Table 1, it was concluded that the research model could explain the behavior and pattern of the dependent variable of 4,2%.

## 7 Conclusion

Table 2. Test for Hypotheses

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta	B	Std. Error
(Constant)	-1,020	,383		-2,663	,008
GFA	,457	,294	,394	1,555	,121
FATA	1,071	,601	,356	1,782	,076
1 DER	,925	,264	1,209	3,502	,001
RFATA	-,586	,288	-,592	-2,035	,043
RGFA	-,524	,235	-,959	-2,236	,026
ROA	-1,542	1,331	-,084	-1,158	,248

a Dependent Variable: TQ

Table 2 described the result of this research. Based on the data, the proposed hypotheses could be explained as follows:

**H1:** based on the sig. value (more than 0.5), plant asset growth did not affect the change in the share price.

When there was a trend of capital expenditure increasing, it could be concluded as follows:

**H2A:** based on the sig. value (more than 0.5), total asset did not affect the change in the share price.

**H2B:** based on the sig. value (more than 0.5), total plant asset did not affect the change in the share price.

When there was a trend of capital expenditure decreasing, it could be concluded as follows:

**H3A:** based on the sig. value (less than 0.5), total asset is positively affected the share price.

**H3B:** based on the sig. value (less than 0.5), total plant asset is positively affected the share price.

Allegedly, it was presumed that the investors in IDX could be identified as conservative investors; they had not valued the financial performance based on the future indicators yet. They might do it using the bottom line of income statement as the basic indicator of company's performance.

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