

THE FACTORS THAT INFLUENCE FIRM'S CASH HOLDINGS

**Elleonora Valencia Herijanto
A. Totok Budisantosa**

International Financial Accounting Program, Faculty of Economics

**UNIVERSITAS ATMA JAYA YOGYAKARTA
Jalan Babarsari 43-44, Yogyakarta**

ABSTRACT

This research is conducted to find evidences relate to the determinant of firm's cash holdings. Every firm will have different policy and decision relate to the cash level or cash holdings. Many factors can affect the determinant of cash holdings. This research uses 84 Indonesian listed manufacturing firms from the year 2006 until 2014. Therefore, there are 756 firm-year observations. The research tests 6 independent variables with 1 dependent variable. Multiple regression analysis is used for the hypothesis testing. The results found that there are significant relationships of net working capital, dividend payment, sales growth, and cash from operations to firm's cash holdings. There is no significant effect of firm size and firm age to firm's cash holdings. Those results are following the existing theories which are static trade off theory and pecking order theory. This research is also consistent with prior researchers' findings.

Keywords: cash holdings, firm characteristics, dividend payment, sales growth, cash from operations.

I. INTRODUCTION

Background

Cash and Cash Equivalent is one of important elements included in current asset section. Cash and Cash Equivalent will be stated in the balance sheet and cash flows statement. Cash is the amount of money that is ready to be used. Based on IAS 7 Paragraph 7, Cash Equivalents are held for the purpose of meeting short-term cash commitments rather than for investment or other purposes (IFRS Interpretations Committee , 2013). In 2014, Alam Karya Unggul Tbk., Budi Starch & Sweetener Tbk., Unilever Indonesia Tbk., Astra Internasional Tbk., Duta Pertiwi Nusantara Tbk., and Taisho Pharmaceutical Indonesia Tbk., hold 0.078%, 1.408%, 6.016%, 8.856%, 25.914%, 41.968% cash to total assets consecutively. The greater amount of cash held by a firm does not reflect the good performance or the profitability of firm. The various amounts of percentage cash to total assets show that there should be some factors that influence the determinant of firm's cash holdings.

Every firm will have different decision related to cash holdings. There are so many motives or the determinants of cash holdings. At least, there are four motives for firms to hold cash. There are transaction motive, precautionary motive, tax motive, and agency motive. There is one additional motive to hold cash that is speculative motive. Every firm can decide its own cash level. Static trade off, pecking order, and free cash flow theory also explain the determinant of cash holdings. All the theories predict the relationship for some factors that influence cash holdings. The prediction may be same each other, but sometime one theory gives different arguments with other theory and it will be contradicted each other. No theory can be 100% right to be implemented, because one theory will complement the others. The theory can be proven by conducting the research.

Firm should determine cash holdings wisely. Having a lot of cash might invite problem. Having a little cash also can be bad. Based on static trade off theory, the good one for holding cash is by weighting the marginal cost and marginal benefits of holding cash. Ferreira & Vilela (2004) said that the benefits related to cash holdings are the following: reduces the likelihood of financial distress, allows the pursuance of investment policy when financial constraints are met, and minimizes the costs of raising external funds or liquidating existing assets. Ferreira & Vilela (2004) also said that the main cost of holding cash is the opportunity cost of the capital invested in liquid assets. The benefits and costs of holding cash should be equal, therefore the optimal level of cash holdings can be achieved (Schuite, 2012). In the reality, there are no perfect optimal cash holdings, but there can be almost perfect optimal cash holdings.

Based on pecking order theory, firms will choose retained earnings as the priority for financing, and then choose safe debt and risky debt, and finally will issue equity. Internal financing is better compared to external financing in pecking order theory. This theory suggests that firms do not have target cash levels, but cash is used as a buffer between retained earnings and investment needs (Ferreira & Vilela, 2004). The free cash flow theory

predicts that cash holdings are positively related to shareholder dispersion and negatively related to managerial ownership (Nguyen, 2005). Ferreira & Vilela (2004) said that having cash available to invest, the manager does not need to raise external funds and to provide capital markets detailed information about the firm's investment projects. Hence, managers could undertake investments that have a negative impact on shareholders wealth (Ferreira & Vilela, 2004).

The proportion of cash holdings can be affected by several factors. Prior researchers already conducted many researches relate to the determinants or factors that influence the proportion of cash holdings. The empirical findings of Magerakis (2015) suggest that cash holdings are positively related to investment opportunity and industry cash flow volatility. Cash holdings also negatively affected by cash flow, net working capital, capital expenditures, leverage, tax expenses, age, and size (Magerakis, 2015). Consistent with previous findings, cash holdings are decreasing with the firm's size and debt ratio, and increasing with its profitability, growth prospects, and dividend payout ratio (Nguyen, 2005). The evidence provides strong support for the hypotheses that growth options, size and cash flows of firms exert a positive impact on firm's cash holding decisions (Ozkan & Ozkan, 2004). There is a significant positive impact of cash flow, leverage, ROA and investment opportunity and negative impact of net working capital on the cash holdings except for the growth opportunity and firm size that have insignificant positive impact on cash holdings (Ogundipe, Ogundipe, & Ajao, 2012).

In Indonesia, similar researches are also conducted. Jinkar (2013) conducted research to analyze the factors that determine cash holdings in Indonesian manufacturing firms for the period of 2007 – 2011. Jinkar (2013) research found that growth opportunity, net working capital, leverage, and dividend payment are significantly affect cash holdings. Jinkar (2013) also found that there is no significant relationship of firm size, capital expenditures, and cash flow to cash holdings. Pranowo (2015) found that there is significant positive relationship of growth opportunity, leverage, net working capital, and cash flow from operation, independent board director, and board director size to cash holdings. There is also significant negative effect of dividend payment to cash holdings in Indonesian non-financial firms for the period 2011-2013 (Pranowo, 2015). Based on multiple regression analysis, it showed that the growth opportunity and net working capital have significant positive effect on cash holdings, while the cash conversion cycle and leverage have significant negative effect on cash holding company (Zulhildi, 2015).

Those all researches relate to the determinant of cash holdings give various results. One research might found the same result with another, but it also can generate different finding. The period of study can influence the results of study. The results also can be different because the object of the result is not same. Suppose the study in manufacturing firms will not give the same result if the study is conducted in service firms. The cash holdings policy in one country also can be different in other country. The different results that found by the prior researchers become one of the motives for conducting this research. Finding the factors that influence the cash holdings

determinant in Indonesia especially in manufacturing industry for period 2006 until 2014 will give additional empirical evidence for the similar research.

In prior researches, there are many variables that are tested for the effect to cash holdings. This research cannot test all variables that are ever used to be determinant of cash holdings. This research just take some common variables that are usually be tested for cash holdings determinant which are firm size, net working capital, dividend payment, growth opportunity, and cash from operations. Later on, dividend payment will be represented by dividend dummy and growth opportunity represented by sales growth. There is one additional variable which is firm age that rarely to be used for the determinant of cash holdings. Firm age is ever proven by some researchers having significant effect to cash holdings. In Indonesia, there is no researchers yet analyze the relationship of firm age to cash holdings.

Problem Statement

Analyzing the factors that can influence the determinant of cash holdings can give the explanation why every firm has different policy relate to its cash level or cash holdings. Firm size, net working capital, dividend payment, sales growth, cash flow from operations and firm age are the independent variables that will be tested to dependent variable which is cash holdings. Based on static trade off theory, firm size, net working capital, dividend payment, cash from operations and firm age will negatively affect cash holdings. Pecking order theory predicts that there is positive relationship of firm size, firm age, sales growth, dividend payment, and cash flow from operations to cash holdings. Free cash flow theory predicts that firm size will positively affect cash holdings and sales growth will negatively affect firm's cash holdings. Supporting by previous researches, firm size, net working capital, dividend payment, sales growth, cash from operations and firm age will affect firm's cash holdings. This research will find the factors that determine cash holdings and analysis the effect of those factors to cash holdings. Therefore, the research questions in this research are formulated as:

1. Does firm size affect firm's cash holdings?
2. Does net working capital affect firm's cash holdings?
3. Does dividend payment affect firm's cash holdings?
4. Does sales growth affect firm's cash holdings?
5. Does cash from operations affect firm's cash holdings?
6. Does firm age affect firm's cash holdings?

Research Objectives

This research will give the empirical evidences that:

1. Firm size affects firm's cash holdings.
2. Net working capital affects firm's cash holdings.
3. Dividend payment affects firm's cash holdings.
4. Sales growth affects firm's cash holdings.
5. Cash from operations affect firm's cash holdings.
6. Firm age affects firm's cash holdings.

II. LITERATURE REVIEWS AND HYPOTHESIS DEVELOPMENT

The Determinants of Cash Holdings

There are two primary reasons for holding cash based on (Ross, Westerfield, & Jaffe, 2010) which are transaction motive and compensating balances. Transactions-related needs come from normal disbursement and collection activities of the firm. The disbursement of cash includes the payment of wages and salaries, trade debts, taxes, and dividends. Cash is collected from sales from operations, sales of assets, and new financing. The cash inflows (collections) and outflows (disbursements) are not perfectly synchronized, and some level of cash holdings is necessary to serve as a buffer. If the firm maintains too small a cash balance, it may run out of cash. If so, it must sell marketable securities or borrow. Selling marketable securities and borrowing involve trading costs. Another reason to hold cash is for compensating balances. Cash balances are kept at commercial banks to compensate for banking services rendered to the firm. A minimum required compensating balance at banks providing credit services to the firm may impose a lower limit on the level of cash a firm holds. The economics and finance literature have identified four motives for firms to hold cash (Bates, Kahle, & Stulz, 2009). There are transaction motive, precautionary motive, tax motive, and agency motive.

Static trade-off theory talks about the optimal capital structure. Within the static trade-off model of holding cash, the costs and benefits of holding cash are weighted. The optimal amount of cash holdings is found when the marginal cost of holding cash equals the marginal benefit of holding cash (Schuite, 2012). Every firm will have the optimal target cash or the estimated cash level that is the optimal point to give the optimal returns. This level varies depending on firm specifics like growth potential, access to capital markets, size and leverage. Deviations from the optimum level reduce firm value. Hence, the management of firm liquidity is an important element and one that affects shareholder value (Martinez-Sola, Garcia-Teruel, & Martinez-Solano, 2013).

The pecking order theory of capital structure is one of the most influential theories of corporate finance. The pecking order theory suggests that firms have a particular preference order for capital used to finance their businesses (Myers & Majluf, 1984). Firm will prefer retained earnings to debt, short-term debt over long-term debt and debt over equity. This theory suggests that firms do not have target cash levels, but cash is used as a buffer between retained earnings and investment needs. Thus, when current operational cash flows are enough to finance new investments, firms repay debt and accumulate cash. When retained earnings are not enough to finance current investments, firms use the accumulated cash holdings and, if needed, issue debt (Ferreira & Vilela, 2004).

Free cash flow is cash flow in excess of that required to fund all projects that have positive net present values when discounted at the relevant cost of capital (Jensen, 1986). Jensen (1986) paper also states that conflicts of interest between shareholders and managers over payout policies are especially severe when the organization generates substantial free cash flow.

The problem is how to motivate managers to disgorge the cash rather than investing it at below the cost of capital or wasting it on organization inefficiencies. Jensen (1986) suggests that managers have an incentive to hoard cash to increase the amount of assets under their control and to gain discretionary power over the firm investment decision. Having cash available to invest, the manager does not need to raise external funds and to provide capital markets detailed information about the firm's investment projects (Ferreira & Vilela, 2004). Hence, managers could undertake investments that have a negative impact on shareholders wealth.

Hypothesis Development

1. Firm Size and Firm's Cash Holdings

Static trade off theory predicts that firm size will negatively affect firm's cash holdings. It is contradicted with the prediction of pecking order theory and free cash flow theory that predict firm size will positively affect firm's cash holdings. Based on the static trade off theory, every firm should weight the benefits and cost of holding cash. There is an optimum point of cash holding which can give optimum return to the firm. There is also economies of scale that make larger firms hold less cash compare to the smaller firms. Pecking order theory argues that larger firms tend to be more successful compare to smaller firms and hold more cash. Free cash flow theory argues managers in larger firms will have higher authority and control over the firms and hold more cash. In free cash flow theory, there is conflict of interests of managers that prefer to hold excess cash without pay attention to its shareholders' wealth.

According to prior researches, most of the results find that there is negative relationship of firm size to firm's cash holdings. Static trade off theory also supports their finding. Larger firms have the greater access to capital market and can hold less cash compare to smaller firms. Smaller firms tend to face many financial distress, so smaller firms tend to hold more cash for precautionary motives. Static trade of theory also support that larger firms can obtain cash by borrowing with low cost compare to smaller firms. Smaller firms also tend to need a lot of cash for growing its business. Thus, it is expected that firm size will negatively affect firm's cash holdings. Therefore the hypothesis alternative will be formulated as follow:

H_{A1} = Firm size will negatively affect firm's cash holdings

2. Net Working Capital and Firm's Cash Holdings

According to static trade off theory, net working capital will have inverse relationship with firm's cash holdings. Non-cash liquid assets are viewed as cash substitute that can be liquidated easily. This research is conducted in Indonesia where the economic condition is not stable. Trade off theory related to the negative effect prediction of net working capital to firm's cash holdings is not fit to be implemented in Indonesia. With the Indonesian bad economic condition, it is hard to liquidated non-cash liquid assets if there is cash shortage. Non-cash liquid assets cannot be substitute of cash holdings. Non-cash liquid assets and cash are parts of total assets, so there should be inline relationship, not the inverse relationship. Thus, it is expected that net

working capital will positively affect firm's cash holdings. Therefore the hypothesis alternative will be formulated as follow:

H_{A2} = Net working capital will positively affect firm's cash holdings

3. Dividend Payment and Firm's Cash Holdings

Static trade off theory predicts that there is inverse relationship of dividend payment to firm's cash holdings. Firms that currently pay dividend can deduct the dividend payment if there is cash shortage. Contradicted with static trade off theory, pecking order theory predicts the positive effect of dividend payment to firm's cash holdings. Firms that currently pay dividend to its shareholder will reluctant to cut the dividend payment and need more cash for dividend payment compared to non-paying dividend firms. Many prior researchers found there is positive impact of dividend payment to firm's cash holdings.

According to prior researches, most of the results find that there is positive relationship of dividend payment to firm's cash holdings. Contradicted with static order theory, pecking order theory supports those researches. Firms that currently pay dividend will need extra cash to be distributed for its shareholders. Thus, it is expected that dividend payment will positively affect firm's cash holdings. Therefore the hypothesis alternative will be formulated as follow:

H_{A3} = Dividend payment will positively affect firm's cash holdings

4. Sales Growth and Firm's Cash Holdings

Sales growth is representation of growth opportunity and investment opportunity. Higher sales growth means the high growth and investment opportunity. Static trade off theory and pecking order theory support the positive relationship of investment and growth opportunity to firm's cash holdings. Firms with high investment and growth opportunity will face many profitable investment opportunity and need additional cash compared to firms with low investment and growth opportunity. Contradicted with static trade off theory and pecking order theory, free cash flow theory suggests inverse relationship between investment opportunity and firm's cash holdings. In the free cash flow theory, managers tend to accumulate more cash and invest it in negative NPV (representation of low investment opportunity).

According to prior researches, most of the results find that there is positive relationship of investment and growth opportunity to firm's cash holdings. Investment and growth opportunity is represented by sales growth. Sales growth is predicted to have inline relationship with firm's cash holdings. Both of static order theory and pecking order theory supports those researches. Free cash flow theory relationship prediction for investment opportunity and firm's cash holdings are less supported from prior researches. Thus, it is expected that sales growth will positively affect firm's cash holdings. Therefore the hypothesis alternative will be formulated as follow:

H_{A4} = Sales growth will positively affect firm's cash holdings

5. Cash From Operations and Firm's Cash Holdings

Static trade off theory predicts the inverse relationship of cash from operations and firm's cash holdings. Cash from operations is viewed as the cash substitute. High cash inflow from operations might persuade the managers to hold less cash. If cash inflow from operating activities is low, the firms should retain more cash. Different with static trade off theory, pecking order theory predicts there is positive effect of cash flow from operations to firm's cash holdings. If the cash inflow from operations is high, the cash holdings will be high too. Pecking order theory argues that if all variables are controlled, high cash inflow from operation might boost the firm's cash holdings.

According to prior researches, most of the results find that there is positive relationship of cash flow from operations to firm's cash holdings. Those results are consistent with the pecking order theory. Thus, it is expected that cash from operations will positively affect firm's cash holdings. Therefore the hypothesis alternative will be formulated as follow:

H_{A5} = Cash from operations will positively affect firm's cash holdings

6. Firm Age and Firm's Cash Holdings

Static trade off theory predicts that older firms will have greater access to capital market and can hold less cash compared to younger firms. Oler & Picconi (2014) added firm age as an additional explanatory variable for cash holdings determinant. It is expected that older firms have greater access to capital markets and therefore need less cash. Younger firms will need more cash for growing its business and operations. Older firms will not need much cash for growing because older firms tend to stop growing in certain stage. There are just few researchers that include firm age variable to be cash holdings determinant.

According to prior researches, most of the results find that there is negative effect of firm age to firm's cash holdings. Those results are consistent with the static trade off theory. Thus, it is expected that firm age will negatively affect firm's cash holdings. Therefore the hypothesis alternative will be formulated as follow:

H_{A6} = Firm age will negatively affect firm's cash holdings

III. RESEARCH METHODOLOGY

This research population is all Indonesian listed manufacturing firms in Indonesian Stock Exchange (IDX) for the period 2006 until 2014. Period of research which is 2006 – 2014 is chosen because it will give the recent evidence or recent condition and situation. 9 years firm's observations are enough to give the strong evidence for finding firm's cash holdings determination. Manufacturing industry is chosen because this research just wants to focus in one industry. There are lots of listed manufacturing firms in Indonesia compare to other industry. The population of this research which is

Indonesian listed manufacturing firms is filtered with some criteria. The processes of selecting the samples are described as follow:

Table 3.1
Sample Selection

Criteria	Firms	Financial Reports	Total
Indonesian listed manufacturing firms in 2014	142	9	1278
Manufacturing firms which are not listed consistently from 2006 – 2014	(30)	9	(270)
Financial report is not expressed in Indonesian Rupiah currency	(22)	9	(198)
The reporting period of financial report is not one year and it does not end at December 31	(4)	9	(36)
The financial report is not published consecutively since 2006 until 2014.	(1)	9	(9)
The firm changes the industry sector during 2006 – 2014	(1)	9	(9)
TOTAL SAMPLES	84	9	756

The method in collecting the data is by the secondary data. All financial reports, performance reports, and additional data of Indonesian listed manufacturing firms can be found easily. The data can be taken from Kantor Bursa Efek Indonesia in Yogyakarta and it can be downloaded from the Indonesian Stock Exchange (IDX) website which is www.idx.co.id. First, the collection of data can be done by filtering the Indonesian listed manufacturing firms by matching the firms with the established criteria. After the firms are filtered, the process of measurement and calculation of variables can be started. Next, there can be performed classical assumption test and the hypothesis testing.

Dependent Variable

The dependent variable in this research is firm's cash holdings.

$$\text{CASH} = \frac{\text{Cash and Cash Equivalents}}{\text{Total Assets} - \text{Cash and Cash Equivalents}}$$

Independent Variables

Firm size

Firm size is measured as natural log of total assets.

Net working capital

Net working capital is measured as follow:

$$\text{NWC} = \frac{\text{Net Current Assets} - \text{Cash\&CashEquivalent}}{\text{Total Assets} - \text{Cash\&Cash Equivalent}}$$

Dividend payment

Dividend payment is represented by dividend dummy. Dummy variable for firms that currently pay dividend is equal to 1 and 0 for firms that do not pay dividend.

Sales growth

Sales growth is measured as follow:

$$\text{Sales Growth} = \frac{\text{Current Net Sales} - \text{Prior Year Net Sales}}{\text{Prior Year Net Sales}}$$

Cash from operations

Cash from operations is measured as follow:

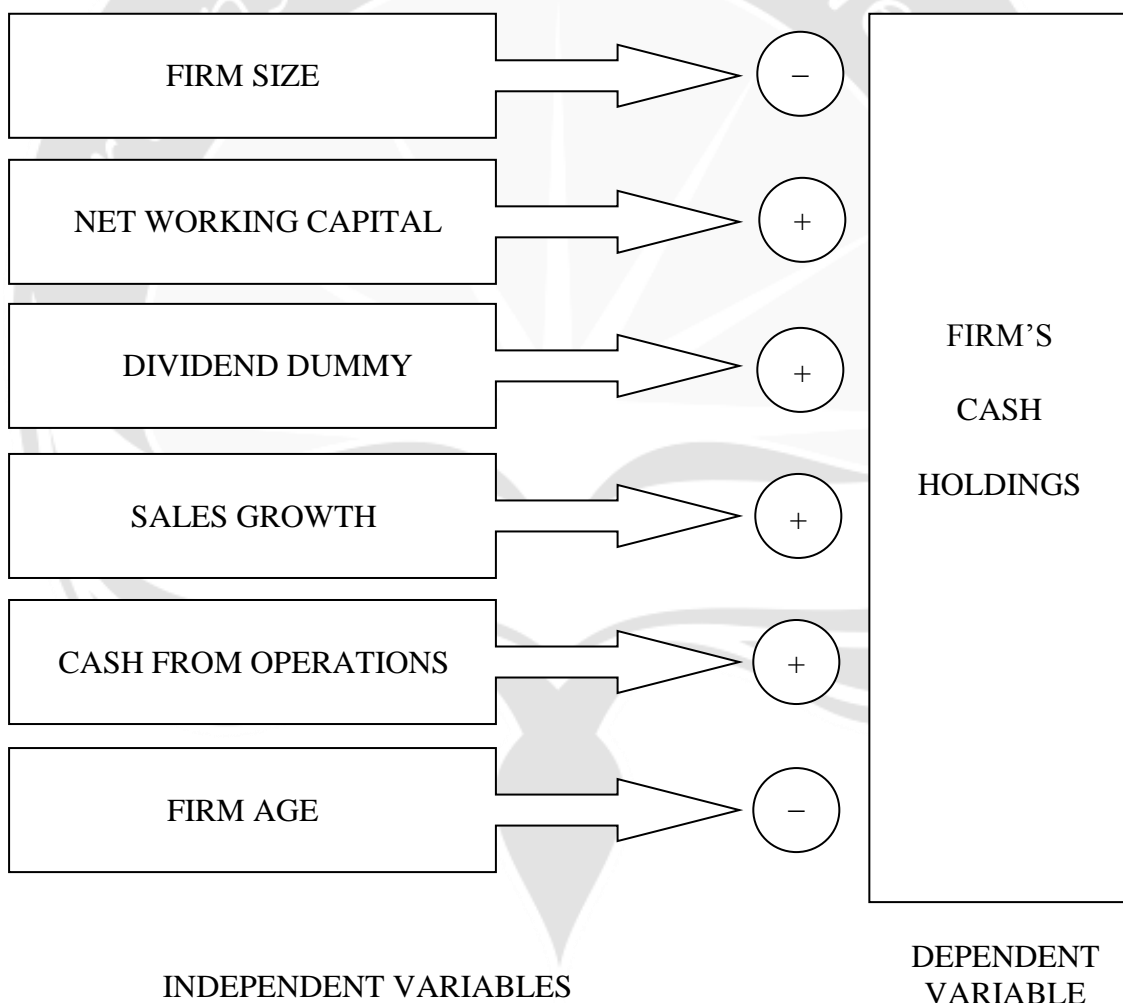
$$\text{CFO} = \frac{\text{Cash Flow From Operation}}{\text{Total Assets} - \text{Cash\&Cash Equivalents}}$$

Firm age

Firm age is measured as follow:

$$\text{Ln}(\text{Fiscal Year} - (\text{Year included in idx} + 1))$$

FIGURE 3.1
Research Model



Before conducting hypothesis testing, classical assumption test should be performed. Classical assumption test is useful to know whether the data used meet the requirements for hypothesis testing which use multiple regression analysis in this research. Classical assumption tests are also used for confirm that the regression model is unbiased and reliable. After perform all classical assumption tests, multiple regression analysis can be performed.

The dependent variable which is firm's cash holdings will be tested to several independent variables. Those independent variables are firm size, net working capital, dividend dummy, sales growth, cash from operations, and last firm age. This research is seeking for the determinant of firm's cash holdings. Following the prior researchers the regression equation is described as follow:

$$\text{CASH} = \alpha + \beta_1\text{SIZE} + \beta_2\text{NWC} + \beta_3\text{DIVDUMM} + \beta_4\text{SALES} + \beta_5\text{CFO} + \beta_6\text{AGE} + \varepsilon$$

The explanation of the regression equation is as follow:

CASH	= Firm's cash holdings
α	= Constant
SIZE	= Firm size
$\beta_1, \beta_2, \beta_3, \beta_4, \beta_5, \beta_6$	= Coefficients
NWC	= Net working capital
DIVDUMM	= Dividend dummy for dividend payment
SALES	= Sales growth
CFO	= Cash from operations
AGE	= Firm age
ε	= Residual error

By using the confidence level of 90% or the significant level of 10%, the decision criteria are described as follow:

1. H_{A1} will be accepted if β_1 is negative and significant value < 0.10 ,
2. H_{A2} will be accepted if β_2 is positive and significant value < 0.10 ,
3. H_{A3} will be accepted if β_3 is positive and significant value < 0.10 ,
4. H_{A4} will be accepted if β_4 is positive and significant value < 0.10 ,
5. H_{A5} will be accepted if β_5 is positive and significant value < 0.10 ,
6. H_{A6} will be accepted if β_6 is negative and significant value < 0.10 .

IV. DATA ANALYSIS AND DISCUSSION

Table 4.6
Regression Results
Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.534 ^a	.285	.279	.55870

a. Predictors: (Constant), AGE, SALES, NWC, CFO, SIZE, DIVDUMM

b. Dependent Variable: LgCASH

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	93.251	6	15.542	49.789	.000 ^b
	Residual	233.801	749	.312		
	Total	327.052	755			

a. Dependent Variable: LgCASH

b. Predictors: (Constant), AGE, SALES, NWC, CFO, SIZE, DIVDUMM

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	
	B	Std. Error	Beta			
1	(Constant)	-1.424	.390		-3.650	.000
	SIZE	-.023	.015	-.056	-1.550	.122
	NWC	.317	.076	.139	4.167	.000
	DIVDUMM	.328	.049	.249	6.717	.000
	SALES	.096	.057	.053	1.698	.090
	CFO	1.252	.135	.311	9.281	.000
	AGE	.153	.057	.090	2.690	.007

a. Dependent Variable: LgCASH

From the regression result, the adjusted R^2 is 27.9% which means that lgCASH can be affected or explained for 27.9% by all independent variables (SIZE, NWC, DIVDUMM, SALES, CFO, and AGE), and the rest 72.1% is affected by other variables outside this research. The significant value of F-score is 0.000 which is less than 0.10 means that the model is a fit regression model. SIZE, NWC, DIVDUMM, SALES, CFO, and AGE simultaneously affect lgCASH. The constant of LgCASH shows negative value of -1.424, it means that if all the independent variables values are equal to zero, cash holdings will be decreased by 1.424.

Based on the result of multiple regression analysis, the regression equation of this research is:

$$\text{LgCASH} = -1.424 - 0.023\text{SIZE} + 0.317\text{NWC} + 0.328\text{DIVDUMM} + 0.096\text{SALES} + 1.252\text{CFO} + 0.153\text{AGE}$$

The regression result shows that four hypotheses are statistically proven and two hypotheses are statistically rejected. There are six hypotheses in this research. The four hypotheses alternatives that are accepted are H_{A2} , H_{A3} , H_{A4} , and H_{A5} . Two hypotheses alternatives that are rejected from this research are H_{A1} and H_{A6} . This research found that net working capital, dividend dummy, sales growth, and cash from operations have significant effect to firm's cash holdings. Net working capital, dividend dummy, sales growth, and cash from operations have positive impact to firm's cash holdings. Firm size and firm age are not significant affect firm's cash holdings in Indonesia.

There are two hypotheses that are rejected by the result. First, H_{A1} about the relationship between firm size and cash holdings is rejected. The independent variable which is SIZE does not affect firm's cash holding. From this research, firm size is insignificant factor for firm's cash holdings. Second, H_{A6} about the relationship between firm age and cash holdings is rejected. The independent variable which is AGE is not significantly affecting firm's cash holding because the coefficient sign is different with the formulated hypothesis. Formulated hypothesis related to firm age (H_{A6}) said

the relationship of firm age to cash holdings is negative. The result shows the relationship of firm age to firm's cash holdings is positive.

V. CONCLUSION

Conclusions

This research is aimed to find evidences relate to the determinant of firm's cash holdings. This research used 84 Indonesian listed manufacturing firms from the year 2006 until 2014. Therefore, there are 756 firm-year observations. The research tests 6 independent variables with 1 dependent variable. Multiple regression analysis is used for the hypothesis testing. The results found that there are significant relationships of net working capital, dividend payment, sales growth, and cash from operation to firm's cash holdings. There are insignificant effects of firm size and firm age to firm's cash holdings. So, it can be concluded that:

1. Firm size has insignificant effect to firm's cash holdings in Indonesia. This result may be caused by the limitations in economies of scale that are often called diseconomies of scale. Diseconomies of scale explain after reaching a certain size, it becomes increasingly expensive to manage a gigantic organization. So, huge firms also need to hold more cash. Conglomeration or the type of business combination also can affect the relationship between firm size and firm's cash holdings.
2. Net working capital significantly affects firm's cash holdings. The effect is positive. Net working capital is representation of non-cash liquid assets. This research gives evidence that cash holdings and non-cash liquid assets are parts of total assets, so they move inline in same directions.
3. Dividend payment significantly affects firm's cash holdings. Firms that currently pay dividend need more cash distributed to shareholders for precautionary motive purpose.
4. Sales growth is significant factor for firm's cash holdings in Indonesia. Sales growth is representation of growth and investment opportunity.
5. Cash from operations are significant determinant of firm's cash holdings. It is consistent with pecking order theory. Firms with high cash inflow from operations will retain more cash compared to firms with small amount of cash inflow from operations.
6. Firm age is not significant factor for firm's cash holdings. From this research, the result shows that older firms have more cash compared to younger firms. That might because older firms can generate more cash compared to younger firms.

Implication

This research can be used by potential investors to assess the firm's liquidity. Cash holding is a part of firm's liquidity. From this research, it is found that increasing in net working capital, sales growth, and cash from operations will boost firm's cash holdings. Dividend paying firms also hold

more cash because they are reluctant to cut dividend. Cash is not a direct measurement of firm's performance, but cash can be assurance for firm's daily business. By knowing what factors that may affect the firm's cash holdings, potential investor might have additional considerations to selecting investment.

Limitation and Suggestion

The population of this research is Indonesian manufacturing firms. Future researchers can expand the scope of population. In the future, the population can be all Indonesian listed firms, not just only manufacturing firms. From this research, there are six factors that are tested the effect to firm's cash holdings. Future research can add more variables, like capital expenditure, leverage, and corporate governance. In addition, the measurements of several variables can be changed in the next research. Firm size and firm age do not significantly affect firm's cash holdings in Indonesian manufacturing firms. Future research may change the measurement of firm size by change it to the natural log of total sales. The measurement of firm age can be diversified by grouping the age of firms in several stages not just only two groups which are younger and older. Firm age may be classified in introduction, growth, mature, shake-out, and decline stage.

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