

# Factors Affecting Corporate Cash Holding of Financial Sector Companies (Non Bank) Listed in Indonesian Stock Exchange Period 2010 - 2015

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## ABSTRACT

**Objective** – The main purpose of this research is to examine the factors that affecting corporate cash holding of financial sector companies listed in Indonesian Stock Exchange period 2010 – 2015. Cash flow, leverage, cash flow volatility, profitability, growth opportunities, firm size, debt maturity, and dividend represent the independent variables in the research study. The proxy of corporate cash holding is cash and cash equivalent.

**Methodology / Technique** – This research used data from Bloomberg period 2010-2015 with purposive sampling method and panel data regression analysis has been conducted to determine the major factors affecting cash holding.

**Findings** – The results imply that growth opportunity, firm size, cash flow, and profitability of the firms has a positive significant effect while leverage show a negative significant effect on corporate cash holdings.

**Novelty** – This research is using data from Indonesian financial sector companies during period 2010-2015.

**Keywords** : Cash holding, Financial Sector, Indonesia

## INTRODUCTION

The 2008 financial crisis affecting both developing and developed countries is due to the company's failure to maintain its liquidity. It changed the company's view of the importance of maintaining liquidity. Companies in Indonesia try to reduce the liquidity risk by maintaining the company's liquidity level, which is maintaining cash holding level (Jinkar, 2013). In 2010, there was a significant enhancement on cash and cash equivalent of Indonesia companies due to financial crisis in 2008.

Some reasons for companies to hold cash are for transaction motives that aim to save the cost of conversion to cash, therefore if there is an emergency need the company can immediately fulfill it (Jinkar, 2013). In addition, according to Baskin (1987) and Haushalter et al.(2007), the company holds cash to meet its strategic objectives, so the company can quickly deploy funds to start the competition first and to avoid the risk of predators in the concentrated industry (in Jinkar, 2013). Meanwhile, according to John (1993) the company with high financial distress costs holding cash to reduce its financial difficulties (in Jinkar, 2013).

Holding a large amount of cash also has a disadvantage that is the loss of the company's opportunity to earn profits because the cash becomes an idle fund, which means that cash doesn't provide income (Marfuah & Zuhilmi, 2015). Therefore, managing the ideal cash of the firm has cultivated the attention from executives, analyst, and investors to cash holdings (William & Fauzi, 2013). According to Ferreira and Vilela (2004), a good level of liquidity is a trade-off between the costs and benefits of holding cash. The benefit of holding a certain amount of cash is to avoid the company from financial difficulties. In addition, holding company's cash can lower the cost of using external funds. Cash is the most liquid asset, so the company can also use its cash inventory when the situation is urgent. Marfuah and Zuhilmi (2015) stated that cash will be a buffer between retained earnings and

investment requirements, leaving the company with no standard for cash supply levels. Companies with high profits will tend to have high retained earnings, which will be used to finance their operations such as inventory. The rest of the retained earnings used to finance the operations of the enterprise will be deposited by the company in cash.

Shabbir, Hashmi, and Chaundary (2015), in his research on the factors that influence cash holding using variables such as firm size, profitability, debt structure, leverage, cash flow, cash flow volatility, liquidity, growth opportunities, and dividend payments. Based on the research, found that growth opportunity, cash flow, firm profitability, and cash flow volatility has a positive significant effect on cash holding company in Pakistan. In addition, firm size, leverage, and liquidity has a negative significant effect on cash holding companies in Pakistan. While debt maturity and dividend payout has no significant effect to cash holding company in Pakistan. In this research, researchers also use those variables to examine the factors that affect cash holding of non-banking companies listing on Indonesian Stock Exchange in 2010 - 2015.

## **LITERATURE REVIEW**

*Cash holding* is defined as cash held by the company as cash in hand or available for investment in physical assets and distributes them to investors. Cash is the most liquid asset and is a measure of the company's ability to pay its obligations on time (Gill and Shah, 2012). Cash holding is an important thing because it can maintain the liquidity of the company, so as to make the company able to pay off the obligations on time even if when the bad situation hit the business activities that run. To increase sales and profits, the company also needs to build cash supplies by ensuring that cash movements create a positive cash flow situation overall. Thus, cash can be said to be an important component that enables the company to survive and prosper. Cash can consist of cash on hand and funds deposited in the bank in the form of deposits and checking accounts (Adiprawiro, 2015).

According to Ross, Westerfield, and Jordan (2013), the motive of holding cash can be divided into 3 categories, as follows:

- Speculative Motive  
Speculative motives are the need for cash holdings to take advantage of opportunities that may arise in the future, such as possible increases in purchases, interest rates, and at international companies there are favorable fluctuations in exchange rates.
- Precautionary Motive  
Holding cash is required as a financial reserve in case it is needed for unexpected purposes. For example, when a company incurs certain losses and must cover such losses immediately.
- Transaction Motive  
The need for holding cash related to the transaction comes from the cash outflow and the cash inflow. Payment activities include payment of wages and salaries, accounts payable, taxes, and dividends. While cash for the company can be obtained from the sale of company products, asset sales, and new funding.

*Trade-Off Theory* states that the cash holding company is managed by considering the boundary between cost and benefit (cost and benefit) obtained in holding cash. The right decision in managing cash holding will be consistent with the company's goal of maximizing corporate value (Marfuah & Zuhilmi, 2015).

According to Ferreira and Vilela (2004), based on trade-off theory related to cash holding, a good level of liquidity is a trade-off between the costs and benefits of holding cash. The most visible benefit of withholding some cash is to avoid the company from financial difficulties, lower the cost of using external funds, and in urgent situations companies can use cash as the most liquid asset.

*In Pecking Order Theory*, it is said that there is a sequence of sources of funding in decision making financing company. When a company needs funding for investment financing, the company will choose to use the most inexpensive funding, which is internal funding. If the need for investment is

not sufficiently funded from internal funding, then the company will use external financing from debt as the second source of funding, and equity as the last funding source (Jinkar, 2013).

According to Marfuah and Zuhilmi (2015), in Pecking Order Theory cash will be a buffer between the retained earnings and the investment needs of the company. Based on this theory, firms do not have a standard for cash supply levels. Companies with high profits will tend to have high retained earnings, which will be used to finance their operations such as inventory. The rest of the retained earnings used to finance the operations of the enterprise will then be deposited by the company in cash.

*Cash flow* is significantly affect companies to hold larger level of cash as a source of internal generated fund (Shabbir, Hashmi, & Chaudary, 2016). It is expected that cash flow has a positive effect to companies' cash holding, because companies with higher cash flow will not depend on external funding (Jinkar, 2013).

*Debt maturity* also influences the level of cash holdings because the use of more short-term debt forces the company to renew it on periodic basis, and it puts pressure on the company to hold higher amount of cash in case of repayment or insolvency (Shabbir, Hashmi, & Chaudary, 2016). It is expected that debt maturity has a negative effect to company's cash holding

*Dividend payout* also affects the cash holding level. Companies that pay dividend will have lower cash holding than companies that doesn't pay dividend. So, it is expected that dividend payout has a negative effect on company's cash holding (Ferreira & Vilela, 2004).

*Firm size* is one of important factors affecting cash holding. Small companies that face greater growth opportunities and higher business risks need to hold large amount of cash as the costs incurred for smaller firms to enter the capital market are greater than large companies (Ferreira & Vilela, 2004). It's expected that firm size has a negative effect on company's cash holding.

*Growth opportunity* also needs to determine the level of cash holding. If the company has faster growth opportunity, companies will need greater funds for its expansion so firms have to hold higher levels of investment in current assets (Shabbir, Hashmi, & Chaudary, 2016). Kim, Mauer, & Sherman (1998) said that growth opportunity has a positive effect on company's cash holding.

*Leverage* implies the proportion of debt in capital structure. The research of Ferreira & Vilela (2004) shows that leverage has a negative effect on company's cash holding. It's because companies with higher level of leverage have the ability to get external funding easier and cheaper, so companies can reduce the amount of its cash holding.

*Profitability* which is measured by return on equity (ROE) also affects the company's cash holding. A profitable company would have relatively strong cash flow from its operating activities (Shabbir, Hashmi, & Chaudary, 2016). It's expected that profitability has a positive effect on company's cash holding.

## **METHOD**

The technique of data analysis in this research are (1) Sort the sample based on the criteria; (2) Collect and calculate the annual data of cash and cash equivalent, cash flow, cash flow volatility, debt maturity, dividend payout, firm size, growth opportunity, leverage, and profitability from Bloomberg; (3) Choose the best model of panel data regression consisting of common effect model, fixed effect model, and random effect model using Chow Test and Hausman Test; (4) Performing feasibility tests of the three regression models using BLUE (Best Linear Unbiased Estimator) test such as Normality Test, Multicollinearity Test, Heteroscedasticity Test, and Autocorrelation Test for common effect model; (5) Performing the t-statistic test and F-statistic test, then interpret the results of the regression test.

The sample selection in this research is based on the purpose of the sample research (purposive sampling) that is the research using samples of financial companies (non bank) listed on Indonesia Stock Exchange during 2010-2015. The number of samples that can be used in this research is 11 financial (non bank) listed companies in Indonesia, they are Adira Finance (ADMF), Buana Finance (BBLD), BFI Finance (BFIN), Clipan Finance (CFIN), Kresna Investama (KREN), Mandala Multifinance (MFIN), Panin Sekuritas (PANS), Sinar Mas Multiartha (SMMA), Trimegah Sekuritas (TRIM), Verena Multi Finance (VRNA) and Wahana Ottomitra (WOMF). These companies are companies that report their financial statements consistently during 2010 – 2015, and has never delisted from Indonesia Stock Exchange (IDX).

The dependent variable in this research is cash holding of the company. Cash holding is defined as cash and cash equivalent over total assets. Cash and cash equivalent is the most liquid asset in the company to interpret the companies' liquidity, such as cash on hand, cash in bank, unrestricted time deposit and short term investment (Sugiono and Untung, 2008). Cash flow, debt maturity, dividend payout, firm size, growth opportunity, leverage, and profitability are independent variables used in this research.

Cash flow is measured as earnings before interest and taxes (EBIT) minus interest, taxes and common dividend and add back depreciation and amortization, then divided by total assets. Debt maturity is measured as current liabilities over total liabilities. The proxy of dividend payout is dividend payout ratio of the company. Firm size is defined as the natural logarithm of the company's total assets. The market-to-book value of total assets is used as a proxy for a company's growth opportunity. The leverage is measured as total debt divided by total assets. Return on equity (ROE) is used to measure the profitability of companies.

The econometric model in this research relates to panel data regression. The regression model is as follows:

$$CSH_{i,t} = \alpha_0 + \beta_1 CFL_{i,t} + \beta_2 DMT_{i,t} + \beta_3 DPO_{i,t} + \beta_4 FSZ_{i,t} + \beta_5 GTH_{i,t} + \beta_6 LEV_{i,t} + \beta_7 PFT_{i,t} + \varepsilon_{i,t}$$

Where:

- $\alpha$  = Constanta
- $\beta$  = Beta
- CSH = Cash Holding
- CFL = Cash Flow
- DMT = Debt Maturity
- DPO = Dividend Payout
- FSZ = Firm Size
- GTH = Growth Opportunity
- LEV = Leverage
- PFT = Profitability
- $\varepsilon$  = Error

## FINDINGS

### - Descriptive Statistic

	Mean	Median	Max	Min	Std. Dev.
Cash Holding	0.073197	0.040473	0.364339	0.002683	0.075869
Cash Flow	0.039319	0.039036	0.130670	-0.23684	0.045466
Debt Maturity	-0.0967	0.979678	1.000000	-15.966	3.521092
Dividend Payout	0.214401	0.046824	1.581532	0.000000	0.314643
Firm Size	12.57784	12.56627	13.75418	11.68868	0.553534
Growth Opportunity	1.358604	1.045935	11.51609	0.623393	1.351166

Leverage	0.460203	0.518676	0.855190	2.19E-05	0.273348
Profitability	0.131988	0.135300	0.386825	-0.52571	0.124288

Table 1. Descriptive Statistic

- *Chow Test*

Likelihood test is used to determine the common effect model or fixed effect model method that is most appropriate to use in estimating panel data. Table 2 below shows the result of Chow Test.

	Statistic	d.f	Prob.
Cross-section F	4.088903	(10,48)	0.0004
Cross-section Chi-square	40.66839	10	0.0000

Table 2. Chow Test

In this test the hypothesis is as follows:

$H_0$  : Common Effect Model

$H_1$  : Fixed Effect Model

Significance Level = 5%

a.  $H_0$  is accepted if the probability value of cross section  $F > 5\%$

b.  $H_0$  is rejected if the probability value of cross section  $F < 5\%$

Based on the result of Chow Test, fixed effect model is appropriate to use in estimating panel data.

- *Hausman Test*

Hausman test is used to determine the fixed effect model or random effect model method that is most appropriate to use in estimating panel data. Table 3 below shows the result of Hausman Test.

	Chi-Sq. Statistic	Chi-Sq.d.f	Prob.
Cross-section random	8.191796	7	0.316

Table 3. Hausman Test

In this test the hypothesis is as follows:

$H_0$  : Random Effect Model

$H_1$  : Fixed Effect Model

Significance Level = 5%

a.  $H_0$  is accepted if the probability value of cross section  $F > 5\%$

b.  $H_0$  is rejected if the probability value of cross section  $F < 5\%$

Based on the result of Hausman Test, fixed effect model is the most appropriate model to use in estimating panel data.

- *Fixed Effect Model*

Variables	Coefficient	Std. Error	t-Statistic	Prob.
C	1.109512	0.752125	1.47517	0.1467
Cash Flow	-0.81505	0.361046	-2.257472	0.0286
Debt Maturity	0.005231	0.003401	1.538101	0.1306
Dividend Payout	-0.076781	0.039406	-1.948479	0.0572
Firm Size	-0.080752	0.062417	-1.293752	0.2019
Growth Opportunity	0.007481	0.006335	1.180914	0.2435
Leverage	-0.013961	0.103795	-0.134508	0.8936
Profitability	0.186716	0.1441	1.295744	0.2013
F-statistic	7.758863			
Prob (F-Statistic)	0.000000			

Table 4. Panel Regression

t-statistic test (partial test) aims to see the effect of independent variables individually to the dependent variable. F-statistic test conducted to determine whether all independent variables together affect the independent variables. t-statistic test and F-statistic test with significance level  $\alpha = 0,05$ . The coefficients given in the table shows the effect of independent variables upon dependent variables. Positive value in coefficient implies that the independent variable has a positive effect on cash holdings. The negative value in coefficient implies that the independent variable has a negative effect on cash holdings. If the probability value (p) is smaller than 0,05 ( $\alpha$ ), it means the independent variable has significant effect on cash holding. But, if the probability value (p) is greater than 0,05 ( $\alpha$ ), it means the independent variable has no significant effect on cash holding.

## **DISCUSSION**

This section provides the regression analysis. Panel data regression has been used to conduct the analysis.

Cash flow has a negative significant effect to companies' cash holding. Cash flow can be seen as a cash substitute. Companies can use their cash flow as a source of company's liquidity to finance their investment. It means, the addition of cash flow to financial companies is used to finance their investments such as consumer financing. Therefore, when company's cash flow is increasing, the cash holding will decrease. So cash flow would have a negative effect on cash holding (Saddour, 2006).

The other variables: debt maturity, dividend payout, firm size, growth opportunity, leverage and profitability has no significant effect to cash holding.

## **CONCLUSION**

The main objective of this study was to examine the factors that affecting corporate cash holding of financial sector companies listed in Indonesian Stock Exchange period 2010 – 2015. The result suggests that only cash flow has a negative significant effect to companies' cash holding.

It is recommended that the future research can use more specific measurements about financial sector, such as consumer financing and total of finance leases because the main source of income of non-bank financial companies comes from both of those things. The future research should also consider to extend the period of observation and use other types of companies.

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