

The Impact of Aggressive Working Capital Management Policy on Firm's Value: A Mediating Effect of Company's Profitability

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Abstract This study investigates the mediating effect of the company's profitability on the link between the aggressive working capital management policy and the value of the firm. The study has been conducted to 158 non-financial firms which have managerial ownership and listed on the Indonesia Stock Exchange from 2012 to 2015. Results of this research show that aggressive working capital management policy in the form of aggressive financing policy has a negative and significant impact on profitability and firm's value, while, the aggressive investment policy has a positive and significant impact on profitability. However, the aggressive working capital management policy has no significant impact on the firm value. Profitability has a positive and significant effect on firm's value, and profitability able to mediate aggressive working capital management policy on the firm's value. Accordingly, to increase the company's market value on the non-financial firms which have managerial ownership, the manager has to increase profitability by optimizing investment on current asset and by adding the proportion of long-term financing in working capital. Finally, this study has also discussed some limitations and future research.

Keywords: aggressive investment policy, aggressive financing policy, profitability, value of the firm

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1. Introduction

Every company always needs working capital because working capital is needed to run the company's operational activities [1]. The amount of working capital which is provided by the company is highly related to management's attitude to profit and risk. Management's attitude in responding the trade-off between profitability and corporate risk. It will determine the optimum working capital required by the company. Prudent managers will apply conservative working capital financing policies, while optimistic managers will tend to use aggressive funding policies [2].

The manager's attitude can be the root of conflict of interest between managers and shareholders in the company. A shareholder wants the manager to make decisions which will increase the share value. Managers, instead, would prefer to expand the business and increase their salaries, which may not necessarily increase the share's value [3].

The manager's relationship with the shareholders in agency theory is described as the relationship between agent and principal. Managers have to make the best business decisions to maximize the wealth of their firm. However, shareholders cannot supervise all decisions and activities undertaken by the managers. It is a kind of threat to the shareholders if the manager will act for his own benefit, rather than maximizes the shareholders' value [3].

Accordingly, this is the basic problem in agency theory that is the conflict of interest between owners and managers. Agency problems arise when managers of the company pursue their own economic self-interest instead of the owners' interests. Managers are susceptible to human nature and may pursue their own economic agendas without any concern for maximizing the wealth of the shareholders. According to agency theory, conflicts between managers and shareholders can be reduced by aligning the interests of managers and shareholders. A manager who owns a company share means that the manager is a shareholder, so, the manager's decision can increase the value of the company, and decisions would be in harmony with the interests of the shareholders [4].

Working capital management has become one of the most important issues in the organizations, where many financial executives are struggling to identify the basic working capital drivers and an appropriate level of working capital [5]. Working capital management is important because of its effect on the firms' profitability and risk, and consequently on the firm's value. The efficiency of working capital management is a fundamental part of the overall corporate strategy in creating the shareholders' value. Firms try to keep an optimal level of working capital that maximizes their value [2,6,7].

The working capital policy is concerned with the process of determining the composition of a firm's current assets and current liabilities [8]. Working capital management

policy is the firm's way making an investment in their current assets which is known as working capital investment policy (AIP) and use short-term debt to finance firms' assets which is known as working capital financing policies [9]. There are three alternative working capital policies, including aggressive, moderate, and conservative working capital policy. Each policy involves risk-return trade-offs [10].

A firm may adopt an aggressive approach with the company holds a relatively small proportion of its total assets in the form current assets or uses a relatively high proportion of short-term debt. As a result, this policy will relate to a higher profitability and a higher risk. In selecting the working capital management policy, a firm's management has to evaluate the trade-off between expected return and risk. Accordingly, optimal working capital will occur when the balance between risk and efficiency is achieved [11].

The manager may be faced the difficulty in the financial decision policy, especially when they determine company's working capital policy. The high proportion of current assets may reduce the risk of liquidity which is associated with the opportunity cost of funds that may have been invested in long-term assets [8]. Most of the financial managers' time and efforts are allocated towards bringing non-optimal levels of current assets and liabilities back to optimal levels [5]. According to Ogundipe *et al* [12] Working capital management directly affects profitability and market valuation of firms. Therefore the company tries to maintain an optimal working capital to maximize the value of the company.

The impact of working capital management policies on firms' profitability and market value of the firms, especially in the companies that have managerial ownership, is highly important. There are only a few empirical studies that have been carried out to examine this relationship. This study investigates the potential relationship of aggressive working capital policies on profitability and the market value of the non-financial listed firms in Indonesia Stock Exchange. This study is expected to contribute to a better understanding of these working capital management policies and their impact on the firm's value. Moreover, this study also investigates the mediating effect of profitability, especially in the companies which have managerial ownership in emerging markets like Indonesia.

2. Literature Review

Working capital is a measure of both a company's efficiency and its short-term financial health and it will affect the company's performance and corporate value. The working capital policy concerns about the level current assets and proportion short-term debt to use in the financing of these assets [13]. This decision also involves the trade-offs between profitability and risk [14,15]. The working capital policy has two fundamental questions: (1) how the amount of the current assets should be owned by the company, and (2) how the current assets should be financed? Working capital management policy involves defining the working capital policy and the implementation of this policy in daily operations [8,16].

The working capital management policy will depend on the management's attitude towards risk and return [17,18]. A financial manager will deal with two situations. The first, using short-term funding resulted in high risk of repayment but it has a low funding cost, and the second, long-term funding leads to the low risk of repayment but it has a high funding cost. In connection with the use of short-term or long-term financing, there are three types of funding policy, including aggressive policy, conservative policy and hedging policy. The aggressive working capital policy is associated with higher return and higher risk while conservative working capital policies are concerned with the lower risk and return [1,18].

According to the theory of risk and return, an investment with higher risk will result in a higher return [18]. Risk-return has a trade-off in between profitability and liquidity. The firms with higher liquidity of working capital may have a lower risk than low profitability. The dilemma in working capital management policy is in achieving the desired trade-off between liquidity and profitability [14,19,20]. An aggressive working capital policy refers to the maintaining of the lower amount of working capital elements, which accompanied with a high risk of liquidity and a high return on working capital investment [19]. An aggressive working capital policy is connected with a low level of current assets as a percentage of total assets and a high level of current liabilities as a percentage of total liabilities [18]. All decisions of a financial manager are assumed to be geared to the maximization of shareholders wealth, and working capital decisions no exception. Accordingly, risk and return trade-off characterizes each working capital decision. The issue in this context is the way in managing working capital. The firm must take into consideration all the items in both accounts and try to balance the risk and return [21].

Profitability is the company's ability to generate earnings in certain periods, either in the form of operating profit and net income. Profit is a measurement of corporate performance. Accordingly, when the company has a high profit, it means that it has a better performance and vice versa. Profitability is a tool for analyzing the performance of management; profitability will describe the position of corporate profits. The investors in the capital market are very interested in the company's ability to generate and increase profits, it is an attraction for investors in buying and selling shares, therefore the management should be able to meet the targets that have been set. The company's profitability will be measured by using a variable return on assets ratio. This ratio calculates by comparing net income and total assets [10].

The Agency Theory which is proposed by Jensen and Meckling holds that the agency problems arise from conflicts of interest due to the different aims of stakeholders and managers [3]. Conflicts between management and shareholders usually refer to the agency costs. Thus, one way to mitigate agency problems is by giving the managers with the ownership rights through stock options program, so that, the decision of working capital management policy will harmony with the shareholder's interest in maximizing the value of the firm. This study investigates the impact of aggressive working capital on firm's value. The agency theory claims that when managers' interests are conformable with the shareholders', the managers will make optimal decisions those are harmony with the interests of the shareholders, so that, the financial decisions are expected to maximize the value of the firm [3].

Some studies on the effect of aggressive working capital policy on profitability and corporate value has been

done. For example, Puraghajan et al [22] investigated the impacts of aggressive working capital approach on the performance of listed companies in Tehran Stock Exchange and they have established that there is a significant negative relation between aggressive working capital and profitability. Some studies have provided conflicting results on the impact of aggressive working capital policy on profitability and firm's value. Wanguu examined the effect of aggressive working capital on profitability on non-financial firms listed at Nairobi Securities Exchange and found the significant and positive relationship between aggressive investment policy (AIP) and profitability and a significant negative relationship between aggressive financing policy (AFP) on profitability [23]. While Al-Shuburi found the significant negative relationship between AIP and AFP on profitability [19]. Moreover, Amiri found that there is no significant relationship between AIP, AFP and profitability [24]. Some researchers reported a positive impact of AFP on profitability [5,22], and other reported a negative impact of AFP on profitability [2,20,25].

Working capital management policy also influences a firm's value. Working capital management policy as a component of the general strategy is aiming at the increase of the market value of the firms [2,6,11]. Efficient the level of working capital management and it is one of the drivers for value creation [26]. Some researchers reported a negative impact of AFP on firm's value [9,12,25]. Some studies on the effect of working capital policy on profitability and corporate value have been done, but the existing research has not seen the impact of working capital policy decisions on profitability and value of the companies that have managerial ownership.

2.1. Conceptual Framework and Hypothesis

The aggressive working capital management policy refers to the maintaining a high short-term liabilities level and a low level of current assets compared to the total assets [27]. Working capital management policy can be measured by using aggressive financing policy and aggressive investment policy. A firm may adopt an aggressive financing policy in the form of high level of current liabilities as the percentage of total liabilities, or may also use the aggressive investment policy with a low level of current assets as a percentage of total assets of the firm. Aggressive financing policy and aggressive investment policy may have an effect on the profitability and the firms value, profitability might influence the firm value, and profitability may be able to mediate the link between the aggressive financing policy and the firm value. Moreover, the conceptual

framework of this study can be described as follows:

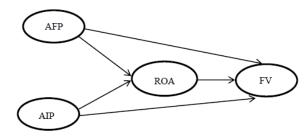


Figure 1. Conceptual Framework

Furthermore, from the literature above, we have developed some hypotheses, including

- H1: Aggressive financing policy has a significant effect on profitability.
- H2: Aggressive investment policy has a significant effect on profitability
- H3: Aggressive financing policy has a significant effect on firm value
- H4: Aggressive investment policy has a significant effect on firm value
 - H5: Profitability has a significant effect on firm value
- H6: Profitability able to mediate the influence of aggressive financing policy and aggressive investment policy on firm value.
- H7: Profitability able to mediate the influence of aggressive investment policy and aggressive investment policy on firm value.

3. Research Methodology

The samples of this study are the non-financial companies which have managerial ownership and listed on the Indonesia Stock Exchange (IDX) at the end of the year of 2012-2015. We collected the data from 158 companies and four years observation. After the outlier test, the data set became 588 firm-year observations. This study used the secondary data which is financial data from the financial statements of the companies. This study used descriptive and inferential analysis by using structural equation model by using WarpPLS to prove and examine the relationship between the four variables, with Sobel Test approach to test the mediation between variables [28]. This study basically aims to analyze the pattern of relationship among variables to determine the direct or indirect effect of a set of exogenous variables on the endogenous variables. Table 1 shows the indicators and operational definition of the variables:

Table 1. Operational Definition of Variables

Variables	Indicators	Measure	
Aggressive Working Capital	Aggressive Financing Policy (AFP)	$AIP = \frac{Total\ Current\ Assets}{Total\ Assets}$	
Management Policy	Aggressive Investment Policy (AIP)	$AFP = \frac{Total\ Current\ Liabilities}{Total\ Assets}$	
Profitability	Return on Asset (ROA)	$ROA = \frac{Net Income}{Total Assets}$	
Firm's Value	Value of the Firm (FV)	$Tobin's Q = \frac{Market Value of The Firm}{Book Value of Assets}$	

4. Results and Discussion

4.1. Summary Descriptive Statistics

Descriptive statistics were used for the delineation of statistical data, such as minimum, maximum, mean, and standard deviation. Table 2 describes them below:

Table 2. Summary Descriptive Statistics

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
AFP	588	,0001	,8300	,289541	,1784240
AIP	588	,0004	,9212	,480705	,2320417
ROA	588	-,7213	,3650	,057104	,0714125
FV	588	,0139	5,1214	,975319	,9343937

The result on Table 2 shows the average of ROA was 0,039 with standard deviation 0,0674, and the average of Tobin's q 1,534 with standard deviation 1,1296. The results also show that the aggressive investment policy (AIP) had a mean value of 0,4514, and std deviation 1,1296. The result also shows that the aggressive financing policy (AFP) had a mean value of 0,2940, and std deviation 0,1945. In addition, the result shows that leverage (DAR) and firm size (FS) had mean value of 0,478, and 14,6705, with standard deviation of 0,2397, and 1,5346.

4.2. Hypothesis Testing

4.2.1. Direct Effect

The path analysis shows the effect among the latent variables. The path analysis result is displayed in Figure 2.

The result for the direct effect values can be seen in Table 3.

Aggressive financing policy (AFP) has a negative and significant impact on the company profitability (ROA). Therefore the hypothesis 1 stating that Aggressive

financing policy the influence of profitability can be accepted. Increasing in the aggressive financing policy shows the increase in the short-term debt, so that, the cost of debt will be higher and it will reduce the profitability. Therefore, in the companies with managerial ownership, the increase in the short-term debt could reduce the company's profitability.

Aggressive investment policy (AIP) which has been measured by the total current asset to total asset, has a positive and significant impact on the company profitability (ROA). The positive coefficient of AIP indicates a negative relationship between the degree of aggressiveness of investment policy and return on assets. Thus, an increase in the aggressive investment policy shows an increase in the current assets, including cash, receivable and inventory. Therefore, in the companies with managerial ownership, the increase of the current assets has an impact on the increase of the company's profitability.

Aggressive financing policy has a positive and not significant impact on the company value. Increasing in the aggressive financing policy will affect the increase in the short-term debt, so, it would increase the company risk and reduce the firm value. Therefore in companies with managerial ownership, an increasing in the short-term debt will reduce the company's value. Furthermore, the aggressive investment policy has a positive but not significant impact on the firm's value. Profitability has a positive and significant impact on the companies value. Therefore in companies with managerial ownership, the increase of profitability will increase the value of the company.

Table 3. Hypotheses Testing Model WarpPLS

**			-
Direct Relationship	B-value	P-value	Conclusion
$AFP \rightarrow ROA$	-0,25	<0,01	Significant
$AIP \rightarrow ROA$	0,20	<0,01	Significant
$AFP \to FV$	-0,11	0,02	significant
$AIP \rightarrow FV$	0,08	0,08	Not significant
$ROA \rightarrow FV$	0,46	<0,01	Significant

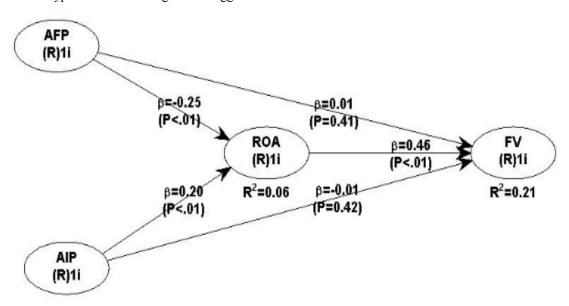


Figure 2. Ouput of Algorithm in the form of Path Diagram

4.2.2. Mediating Effect

The mediating effect of profitability to test the influence of agressive working capital management policy on firm value was examined according to [28] criteria in mediating test. Sobel equation is used to measure the indirect influence between mediating variable with dependent variable.

Aggressive financing policy significantly affects the firm value through profitability. The Sobel test is 4,742, which is greater than 1.96 (negative and significant). It means that profitability has significant intervening role in the influence of aggressive financing policy on firm value. Therefore the hypothesis 6 stating that profitability mediates the influence of Aggressive financing policy towards firm value can be accepted. The implementation of the aggressive financing policy may encourage the profitability and thus increase the firm value through increasing profitability.

Aggressive investment policy significantly affects the firm value through profitability. The Sobel test is 2,842, which is greater than 1.96 (positive and significant). It means that profitability has significant intervening role in the influence of aggressive investment policy on firm value. Therefore the hypothesis 7 stating that profitability mediates the influence of aggressive investment policy towards firm value can be accepted. The implementation of the aggressive investment policy may encourage the profitability and thus increase the firm value through increasing profitability.

4.3. Discussion

Aggressive financing policy has a negative and significant impact on profitability and firms value. Therefore more aggressive the financing policy, that vields negative return on assets and firms value. This study indicates that the more short-term debt used by the company, the lower of the company's profitability. This study indicates that the more short-term debt used by the company would have an impact on the lower the company's profitability and the decline in corporate value. The finding consistent with the studies of Afza, Javid, Vahid, and Wanguu, Vahid, Javid [2,15,23,25], who established a significant negative relationship between aggressive financing policy (AFP) profitability. The finding inconsistent with the studies of Kungu and Mwangi [14,29], who established a significant positive relationship between aggressive financing policy (AFP) on profitability. However, this finding is not in line with Amiri [24], who found no significant relationship between the aggressive financing policy and ROA.

Aggressive investment policy (AIP) has a positive and significant effect on profitability (ROA) but it has no significant effect on the firms' value. The positive coefficient of AIP indicates a positive relationship between the degree of aggressiveness of investment policy and return on assets. Therefore, the increase in the current assets will increase the profitability but it has no significant impact on the value of the company. The findings are similar to Wanguu [23], who established a significant positive relationship between aggressive investment policy (AIP) on profitability

The aggressive working capital management policy undertaken in the non-financial firms which have managerial ownership has no direct effect on the value of the company, however, it has an indirect impact on the firm value with profitability as the mediating variable. Therefore, in the companies which have managerial ownership, the working capital policy tends to be conservative, where the use of more current assets and reduce the use of current liabilities will increase the profitability and it will have an impact on the increase of company value. Hence, in the companies with managerial ownership, the working capital policy is conservative, where the more use of current assets and the less use of current liabilities will increase the profitability and it will result in an increase of the corporate value. So that, the increase of liquidity will increase the profitability and would have an impact on the increase of company value. Result of this study are not in accordance with the riskreturn trade-off in between profitability and liquidity, which states that if the company high liquidity in working capital policy, the company will have a lower risk and lower profitability [18].

5. Conclusion

This study has proven the role of profitability in mediating the influence of aggressive working capital management policies on corporate value. This is showed by the direct influence of aggressive financing policy and aggressive investing policy on the value of firms that are lower than indirect influence through profitability as the mediator. Aggressive financing policy has a negative effect on profitability, while aggressive investment policy has a positive effect on profitability. This shows that companies tend to be careful in managing working capital. Therefore, working capital management policies for nonfinancial companies with managerial ownership tend to use more current assets and reduce the use of short-term debt. An increase in short-term debt and a decrease in current assets will decrease profitability and will result in a decline in the value of the firm, in contrast to the decrease of short-term debt and the increase in current assets will increase profitability and ultimately will result in an increase in corporate value. However, this study has some limitations. For example, the study period is limited, sample data has been selected from 158 non-financial firms with managerial ownership. Therefore, this study has generalization problems. Thus, the authors recommend future research to be done in a wider area, such as Southeast Asia to obtain more accurate and precise findings. In addition, future studies can be conducted within a longitudinal time frame to create better generalization findings. Finally, this study can be extended to other variables, such as macroeconomic factors.

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