

# The Impact of Investment, Debt, Macroeconomics and Diversification Strategy on the Influence of Cash Management on Firm Value

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**Abstract:** The management must allocate cash on a level that could maximize the wealth and marginal benefits of cash holding. The company with flexible financing when facing a negative shock could avoid financing difficulties and could provide funds for investment purposes when the shareholders and cash allocation strategy, which balanced the cost opportunity to invest, arose. Cash management is reinforced by investment policies, debt policies, stable macroeconomic conditions, and an appropriate diversification strategy. Good cash management will increase company value. The purpose of this paper is to explain the effect of cash management on firm value and to analysis moderate factor investment, debt, macroeconomics, diversification.

## 1 INTRODUCTION

Cash is a highly liquid asset and can be utilized immediately to fulfill the requirements of the company's activities. The cash is cash included in the current assets category. The optimal cash holdings are cash that must be maintained by the company, thus not become a surplus or deficiency, and a predetermined limit should provide it. Cash holdings are cash required to fulfill daily operational activities, and it can also be used for several things, i.e., to be distributed to the shareholders in the form of cash dividends, to buyback the required share, and for other sudden requirements. Cash can be defined as a set that can be likened with cash and assets that will be immediately turned into cash, such as financial receivables and securities that will mature soon (Gill and Shah, 2012). The studies of cash have been an important part of the financial literature since cash holdings may increase or decrease the firm value.

Along with rapid and diversity business development, the business growth and development process needs options on sufficient cash or a high level of financial flexibility. Financial managers are expected to have flexible financial policy priorities and handling financial distress issues. Several studies find that the amount of cash ranges from 8% to 10.5% (Kim, et.al, 1998; Opler, et.al, 1999; Foley, et.al, 2007; D'Mello, et.al, 2008; Bigelli and Sancez, 2012). The amount of cash in several ASEAN countries, including Thailand, Indonesia, Philippines, Singapore, and Malaysia, is 12% from 2001 to 2005

(Da Cruze, 2015). In Indonesia, the ratio of cash holdings on assets for non-financial companies from 2001 to 2018 ranges from 7.0% to 9.1% (Kristanto et al., 2019). The business internationalization, integration of financial market, hyper-competitive, and business growth opportunities require financial flexibility to be able to join the competition successfully.

In theoretical and empirical studies, cash remains a controversy, in which the use of large cash will also bring large benefits and capital costs. Empirical studies generate mixed findings, both for its effects on firm value and the interaction of various factors contributing to the relationship between cash and firm value. Keynes (1936) states that there are three motives of the company to hold cash, namely: the transaction motive, anticipation motive, and speculation motive. Several empirical studies find a positive relationship of cash and firm value (Pinkowitz et al., 2003; Saddur 2006; Fresard 2010, Kalcheva and Lins, 2007; Loncan, TR, and Caldeira, JF, 2014, Tingting Zhou, 2014).

Various empirical studies find evidence of a negative relationship between cash and firm value. The companies with high financial liquidity, large cash tend to have large overinvestment, opportunism problems, agency problems, private benefit, and cost of capital as well. A number of empirical studies find a negative relationship of cash and firm value (Luo and Hachiya, 2005; Oler and Waegelien, 2011; Huang et al., 2013; Anabestani and Shourvarzi, 2014; Abushammala and Sulaiman, 2014; Tingting

Zhou, 2014; Yahyazadeh et al., 2014; Yueh-ErJi et al., 2012). The relationship may be positive or negative based on the type of the company and different settings as well (Amman et al., 2011; Dittmar and Mahrt-Smith, 2007; Drobetz et al., 2010, Tong, 2011).

The increase in debt will increase the interest expense that must be borne by the company. If the use of debt is used for investment with a positive NPV, then the value of the company will increase (Husnan, 2012; Hanafi, 2014). The high investment will increase agency problems and also decrease the value of the company in the long run (Kristanto et al., 2019). Operational conditions are not only influenced by internal conditions or the ability to manage working capital from within the company but also influenced by external conditions, macroeconomic conditions such as interest rates, inflation, GDP, currency exchange rates, and other external conditions (Lay, 2012; Nguyen and Ngo, 2014; Carvajal, 2015; Hanafi, 2016) Diversification strategies can increase cash receipts but can also decrease cash (Harford et al., 2008)

This paper investigates the effect of cash and firm value. To analysis the moderate factor in the effect of cash and firm value. The prediction of moderating factors is investment policy, debt policy, macroeconomics, and diversification strategy. The remainder of the paper is organized as follows. Section 1 introduction. Section 2 presents the literature and hypothesis development. Estimation method. Section 3 or conclusion.

## 2 LITERATURE REVIEW

In the management of current assets, the company encounters a fundamental trade-off between working capital (liquidity) and profit (profitability) resulted. The working capital is needed to run the business, and the bigger the working capital, the smaller the risks for fund deficiency, thereby lowering the operating risks of the company. Nonetheless, holding working capital requires costs. For instance, if the inventory is overly big, the company will have assets that will yield zero or negative returns, in case the costs for saving and damage are high. In addition, the company must obtain capital to purchase assets, such as inventory, and this capital has costs. Thus profits might decrease due to surplus in assets (inventory, accounts receivable, or even cash). Thereby, there is pressure to hold working capital at a sufficient minimum amount in order to support smooth business operations (Brigham & Houston, 2001; Hanafi, 2014).

The management of working capital is one of the significant matters when it comes to discussing liquidity and profitability issues (Eljelly, 2004) that involve decisions on the amount and composition of current assets as well as the funding. The larger the proportion of current assets, the smaller the risks for running out of cash. In the opinion of Raheman and Nasr (2007), in order to reach the optimal management of working capital, the company's managers must be able to control the trade-off between maximizing the profitability and accuracy of the liquidity. The optimal working capital management is expected to contribute positively towards the creation of firm value (Howorth & Westhead, 2003).

Cash is the most liquid form of assets that are commonly used right away to meet the financial obligations of the company. Due to its illiquid nature, cash provides the lowest benefit. Therefore, the main problem of cash is to provide adequate cash; hence the liquidity won't be hampered (Husnan 2011, Hanafi, 2014). The cash management using Boumol model (1952) identifies that cash requirement should have balance; hence it does not become too high or too low or employing a model similar to inventory. Meanwhile, the cash management with Miller and Orr model uses the determination of the upper and lower limit of cash balance.

The theme cash initially becomes an object of study in the academic field proposed by Keynes (1936). The cash studies are later developed with various approaches, such as agency problem (Jensen & Meckling, 1986; Jensen, 1986), liquidity level, trade-off theory (Miller and Orr, 1966; Opler et al. 1999), pecking order theory (Ferreira and Vilela, 2004), agency theory approach (Bates, Kahle and Stulz, 2009).

## 3 HYPOTHESIS DEVELOPMENT

Damodaran (2006) also explains that the function and goal of the company are to maximize the firm value, associated with three financial decisions of the company, namely investment, financing, and dividend decisions. In the science of finance and managerial, Opler, Pinkowitz, Stulz and Williamson (1999) and also intuition model by Miller and Orr (1996) use cash management model by comparing the benefits and costs of cash holding to identify the optimal level of the company liquidity (trade-off model). Pecking order theory reveals that the optimum level of the amount of corporate cash has manager preferences functions by using internal resources to reduce transaction costs and asymmetric information. The study related to cost-benefit and

liquidity, having a positive impact on company performance, was undertaken by Pinkowitz et al. (2003), Fresard (2010). The empirical studies find a positive relationship between cash holdings and firm values, Kalcheva and Lins, 2007; Loncan, TR and Caldeira, JF, 2014, Zhou Tingting, 2014). Several studies in various countries, such as USA, Taiwan, Malaysia, Australia, Sweden, Pakistan were conducted by Smith (2014), Rashid (2014), Al Dhamari and Kun Ismail (2014), Darush Y and Ohman (2014), Azmat (2014), Tae-nyun Kim (2013), Huang et al. (2014), Calendro (2015). The research results conducted by those researchers indicate that the cash holdings of the company have a positive relationship with the firm value in various sizes or proxy. Companies should allocate the cash holding of the company at a normal rate, in which at the level, the cash holding is used to maximize the wealth of the shareholders, and not only to maximize the wealth of the managers, management, or controlling shareholders. The cash holdings which are beyond normal or excess cash should be used for the investments having positive NPV.

**Hypothesis 1. Cash has a positive effect on firm value.**

The company's investment decisions are much affected by investment opportunities that are profitable or expected to be positive NPV. With predictions of profitable investment, the management will commonly conduct investments by arguments to maximize the wealth of the company's owners and having managerial motivation. The benefits of having cash reserves, sufficient cash holdings are related to risks and avoid the existence of underinvestment. Following the free cash flow hypothesis developed by Jensen (1986), a variety of empirical studies have found the relationship between free cash flow, overinvestment, and decreased performance. From the study, it is found that companies having cash surplus and free cash flow tend to make an excessive investment (Dechow et al. 2005), and even when the company faces lower investment opportunities (Opler et al. 1999). Other

researchers also find that companies having a large amount of cash are likely to make acquisitions that will be followed by a decrease in operating performance (Harford 1999). Lau and Block (2012) also find that the operating performance of the companies in the future will be lower in companies doing investment spending, and this negative relationship is going stronger if there is abundant free cash flow.

If there is a profitable investment opportunity, the management will invest. If the company does not have financial constraints, and there is ease of access to capital markets, the company will find it easier to adjust to its financing. The companies that are not

constrained by financial or funding will demonstrate high firm value (Fama and French, 1992). The companies that have difficulties in financing to make profitable investments are generally using or more depending on internal funding, i.e., cash flow and cash holdings. Companies with limited access conditions, to avoid themselves from underinvestment, and for improved performance generally have great cash holdings (Han and Qiu, 2007).

**Hypothesis 2. Investment policy strengthens the effect of cash on firm value.**

Financing mix describes the company in making decisions regarding funding, whether to use short-term debt, long-term debt, or equity. The funding includes short-term and long-term funds, in which the short-term is defined as the funding less than a year or less than one business cycle, while the long term is more than one business period (Hanafi and Halim, 2009).

Debt represents the corporate governance mechanism, where it affects the business efficiency and generally affects the success of the company (Jensen, 2000; Mahrt-Smith, 2005). Debt has advantages, particularly in tax savings or tax-deductibility of financial expense, to improve managerial discipline, and to minimize the costs caused by asymmetric information. In addition to those advantages, debts also have costs, namely the increasing probability of bankruptcy, managers' opportunism, and the majority of shareholders by substituting the costs on creditors and reduced financial flexibility.

Graham and Harvey (2001) identify the potential effects of debt using opportunism problems of managers and financial flexibility, which will tend to interact with cash holdings of the company. Debt has a complementary role in the company's liquidity. The companies with a large debt level will

Increase the conflict of interest among the managers, shareholders, and creditors, which is preceded by the opportunism behavior of the usage of the company's liquidity. Increased debt will bring forth agency problems and have negative implications for the cash holdings. The companies with a large debt level will increase the financial distress and possibilities of bankruptcy, thus the cash holding to be more careful and efficient. Debt will give a positive signal of the benefits of cash holdings usage to increase the company's value.

During company growth, the cash holdings are increasing; thus, the needs for debt funding tend to shift the internal funding. If the growth of the company is highly at risk, it will increase financial distress implying on debt reduction (Frank and Goyal, 2009). Guney et al. (2007) reveal substitution effects between debt and liquidity. During debt at a low level,

it will bring negative effects on the liquidity, while debt at a huge level positively affects liquidity. The research by Faulkender and Wang (2006) shows that at the high debt level, the company's liquidity will decline. The cash holding has a tendency affecting the firm value and interacting with the capital structure.

**Hypothesis 3. Debt policy strengthens the effect of cash on firm value.**

Datta et al. (1991) imply that diversification as the level of diversification (degree of diversification) concerning the breadth of the level where the company diversifies itself into different businesses, products, or markets. Bettis & Mahajan (1985) define that level of business diversification is diversified types of businesses, either related or unrelated. Meanwhile, Ramanujam & Varadarani (1990) define diversification as the company's entry into the line of new business activities via internal business development and acquisitions.

The company chooses to conduct diversification in facing fierce competition and increasingly rapid market growth, as triggered by revolution and globalization. David (2003) asserts that the development of a new business that is different from the existing business and involving several investments is called diversification. When a company chooses to diversify its operations from one into several industries, it is implied that it is conducting strategies to incorporate level (Hitt et al., 2011: 158-159). The company conducting diversification has a goal to expand its business by opening several business units or new subsidiaries, both in the already-existed similar business line (related) and in the different business units with core business (unrelated).

Studies on diversification and its effect on firm value are still being debated, whether the diversification can bring benefits or even bring negative impacts on the firm value. The studies suggesting that diversification increases the firm value: 1) the increase in profitability is higher on average for companies conducting related diversification compared to the non-diversified companies (Amit and Livnat, 1988; Rumelt, 1974; Aisjah, 2009). 2) the diversification done by the company does not decrease the firm value (Gomes & Livdan, 2004). 3) the interaction of the diversification effects on technology diversity (Miller, 2004, 2006). 4) the presence of international diversification does not destroy the firm value (Santos et al., 2008). 5) the diversification has positive effects on the performance of companies in Indonesia (Chakrabarti et al., 2007).

Duchin (2010) researched the company's cash holdings and the relationship with the diversification of company divisions. This research reveals that companies with a diversified division have lower cash

holdings compared to those having no diversified divisions. Duchin (2010) also mentions that there is a relationship between financial difficulty and its relationship with corporate governance and its relationship with an investment opportunity if it is associated with company diversification and the company cash holdings. The significant diversification has implications on the company management, where it will give rise to costs trade-off and benefits, as well as the effects on the number of cash holdings of the company.

**Hypothesis 4. Diversification strengthens the effect of cash on firm value.**

The advantage of cash holding is very relevant in a particular period in which the macroeconomic conditions are fairly well. In fact, when using external funding, many companies need high costs or difficult to pay due to constrained access to capital markets or because of the economic crisis. Companies tend to raise cash holding when access to the capital markets is difficult or when there is an economic recession (Adjei, 2011).

Economic conditions would influence the implication of the amount of companies' cash holding. Risks arise because of uncertainty. The company faced a lot of uncertainties and led to the emergence of the risk. Changes in the interest rate can cause the company to face two types of risk, namely: a) the risk of changes in the level of income, which is net income (investment result minus costs), changes or reduces than expected, b) the risk of changes in market value due to changes in interest rates. And so do the changes in currency exchange rates against the currencies of other countries. The currency of a country is a reflection of the economic conditions of a country. If the economy of a country improves, then the country's currency tends to rise against the currencies of other countries (Hanafi, 2014).

Some research in various countries indicate that macroeconomic conditions influence the performance of the company or the company's stock price (Kim Hiang Liow, Muhammad Faisal Ibrahim, and Huang Qiong, 2005; Anthony Kyereboah-Coleman and Kwame F. Agyire-Tettey, 2008); Catalina Granda Carvajal, 2015; Tho Nguyen and Ngo Chau, 2014; Hassan Tanha, Michael Dempsey, and Terrence Hallahan, 2014). Research by Adjei (2011) found out that the company's performance significantly decreases at the start of the economic crisis. Large-scale companies undergo declining performance and tend to have a low cash holding and high short-term debt. The company can be stated to have limitations in funding or company operations that highly depend on external funding. Cash holding facilitates companies in the liquidity or the company's position and reduces the likelihood of bankruptcy

during the crisis. At the time of the financial crisis, the company experiences a decline in cash flow, and the company provides payment for investment projects with a cash reserve and is likely to add debt or issuing new shares to maintain the equilibrium of business. Research by Faulkender (2006), Acharya (2007), Denis and Sibilkov (2010), Fresard (2010) Duchin (2010) found that there is a negative correlation between the economic crisis and external funding that reduces the company's investment and low cash holding company.

**Hypothesis 5: Macroeconomics to moderating the effect of cash on firm value.**

## 4 CONCLUSIONS

In theoretical and empirical studies, cash remains a controversy, in which the use of large cash will also bring large benefits and capital costs. At the theoretical level, the positive effects of cash and anticipation motives. Cash in the view of the contemporary has strategic value and is important for the company. The policy in determining the amount of cash holding in the company may affect the firm value (Opler et al., 1999; Power & Baker, 2010). The sufficient cash will give the flexibility to avoid the costs emerging from the underinvestment.

The company with sufficient funding will be capable of facing funding shock, avoiding financial difficulties, and providing funds for investment needs in the event of investment opportunities. Studies in several countries yield mixed findings on the relationship between cash and firm values. It is indicated that the relationship between cash and increased firm value is affected by numerous important variables, namely, investment policy, debt policy, macroeconomics, and strategies diversification of the company.

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