Leverage, Asymmetric Information, Firm Value, and Cash Holdings in Indonesia

Abstract

This research aimed to analyze the effect of leverage and asymmetry information on the firm value through cash holding as mediation variable. The populations of this research were all the firms which listed on the Indonesia Stock Exchange since 2012-2015. A sample of this research was saturated sample and census, consisted 56 firms related the population criteria. This research used secondary data from the firm financial report through path analysis method. This research showed that leverage had a negative effect on the cash holdings, asymmetric information had a negative effect on the firm value through cash holding, and cash holding had a negative effect on the firm value. With leverage and effect on cash, holding cannot affect the firm value, due to investor risk-averse, investor risk seeker, and neutral investor has their own point of view in assessing the company. Cash holdings can lead to asymmetric information that can lead to agency conflict that can affect a company’s performance, so that indirectly, with the existence of asymmetric information had an effect on the declining the firm value.

JEL Classifications: G32; G35


Abstrak


Kata Kunci: Leverage; Informasi Asimetri; Nilai Perusahaan; Cash Holdings

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Firm value is a company’s primary goal that can reflect the well-being of shareholders. Basically, the main goal of a company is to maximize the wealth and value of the company which means to maximize shareholder wealth (Drobetz & Grüninger, 2007). Thus, managers must provide positive signals so that corporate value does not decrease. Optimal capital structure can be one of the ways to maintain the firm value, because capital structure will determine best capital mix which used by company to meet the company operational needs so that the company does not bear high capital cost.

Determination of optimal capital structure that can increase firm value can be influenced by cash holdings. Cash holdings or cash available within the firm is one of the current assets instruments that managers can use to meet the managers interests beyond the shareholder’s needs, therefore it can worsen the conflicts between managers and shareholders. There are several theories in capital structure related to the firm’s cash holdings, namely Trade-off Theory, Pecking Order Theory, and Signaling Theory. To determining cash holdings, the firm must consider various factors, including the current situation and conditions, future prediction, internal and external environment of the firm so that the availability of cash to provide maximum benefits.

In the Trade-off theory, firms tend to use debt at some level, because it can bring in profits in tax savings. Therefore, the manager of will more consider to use the debt. Debt is the first obligation to be paid by the firm. When profit is more used to pay the debt, the retained earnings will be less, as well as cash holdings will decline. In addition, higher debt will lower the firm value, because according to the investor’s view, the risk will be higher. It is in accordance with the results of (Osazuwa & Che-Ahmad, 2016; Shah, 2011).

H1 : leverage has a significant effect on the firm’s cash holdings.

Asymmetry information that occurs within a company because one of party, either manager or investor has more or better information than the investor’s view, the risk will be higher. It is in accordance with the results of (Osazuwa & Che-Ahmad, 2016; Shah, 2011).

H1 : leverage has a significant effect on the firm’s cash holdings.

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H1 : leverage has a significant effect on the firm’s cash holdings.
other party. Thus, the parties associated with the company do not have the same information regarding the firm’s future prospects and risks. Managers usually have more and better information than the outside (investor) firm, because managers within the company so that more know anything concerning the needs of both the firm’s future prospects and risks. Based on the signaling theory, asymmetric information will cause the company to have difficulty in finding external funding. This is due to the asymmetry of information that will make creditors ask a higher rate of return on investment that they provide. Therefore, asymmetric information will make external financing more costly, which ultimately forces the company to withstand a high amount of cash.

\( H_2: \) asymmetry information has significant effect on the firm’s cash holdings.

Companies that have excessively high levels of debt, will give a bad signal to investors, because according to some investors, the company cannot meet the financing and operational costs. So that, firm are required to use debt. In addition, firm that has high debt value also has a higher risk. Therefore, the increased level of firm’s debt can reduce the firm value. It related with research result of (Osazuwa & Che-Ahmad, 2016) The results of the reverse research actually states that, when the company has a high debt level, it can give a positive signal to investors (Luo & Hachiya, 2014; Naseer & Naseem, 2015; Selçuk, 2015). This is because, according to investors, the firm believes it can meet its obligations in the future, which of course shows that the firm is confident of its future performance.

\( H_3: \) leverage has significant effect on the firm value.

The firm that has the high asymmetry information between manager and shareholder will give the bad signal to the investor. This is because, investors will assume that the company is experiencing agency problems and the firm future cannot be justified. So that asymmetry information that occurs within a firm, can make the decreased firm value. This is supported by Clemons (2014) study which also stated that the existence of information gap between manager and investor can decrease firm value.

\( H_4: \) asymmetry information has significant effect on the firm value.

Khan, Kaleem, & Nazir(2012) stated that the firm value is reflected in its stock market value if the company has gone public. Each firm that has gone public has a goal to maximize the firm value where it serves as a success firm benchmark because with an increase in corporate value, will also increase shareholder wealth. All financial decisions concerning investment decisions, funding or capital decisions and cash holdings decisions are included in investment decisions, financing and corporate capital. More cash holdings owned, will increase the firm value, because cash holdings can help companies in unpredictable conditions (Isshaq et al., 2009; Wasiuzzaman, 2014).

\( H_5: \) cash holding has significant effect on the firm value.

Management’s decision try to keep the leverage ratio from growing higher refers to the packing order theory which stated that firms are more likely internal financing than external financing. Then firm will issue the safest securities first, the bonds are then followed by securities with the characteristics option, if not enough, the company will issue shares. Souissi, Mohsen, Khelif, & Hichem (2012) stated that a high leverage ratio led to a decrease in firm value. This is because the higher the leverage of a firm will give bad signal to shareholders so it will decrease the value of the company.

\( H_6: \) leverage has significant effect on the firm value through cash holdings.
When agents and principals attempt to maximize their utility, there is a strong reason to believe that agents will not always act best for the benefit of the principal (Rahmani, Rostami, Ghorbani, & Branch, 2015). This is because the agent has more information about the firm than the principal, because the agent is always in the firm. If the gap occurs continuously, it will result in agency problems and losses for the firm. So it can lower the firm value. 

H₇: asymmetry information has significant effect on the firm value through cash holdings.

METHODS

This research is a quantitative research using secondary data obtained from Indonesia Stock Exchange (BEI). The study populations were 144 firms listed on the Stock Exchange for the period 2012-2015. The sample of 56 firms determined by using saturated sampling method with firm criteria was not delisted during the study period 2012-2015 and did not have negative retained earnings during the study period 2012-2015.

Table 1. Research Sample Selected Process

<table>
<thead>
<tr>
<th>Description</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturing firm listed on BEI period 2012-2015.</td>
<td>144</td>
</tr>
<tr>
<td>Firms experiencing delisting during the study period</td>
<td>29</td>
</tr>
<tr>
<td>The firm had negative retained earnings during the study period</td>
<td>59</td>
</tr>
<tr>
<td>Number of companies sampled</td>
<td>56</td>
</tr>
</tbody>
</table>

Table 2. Operational Variables and Measurement Variables Definition

<table>
<thead>
<tr>
<th>Variable</th>
<th>Proxy</th>
<th>Measurement</th>
<th>References</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leverage (X₁): It is the company's ability to finance its assets using debt.</td>
<td>Debt Ratio)</td>
<td>DR = Debt Total / Total Aktiva</td>
<td>(Naseer &amp; Naseem, 2015; Selçuk, 2015)</td>
</tr>
<tr>
<td>Asymmetry Information (X₂): It is an unequal information shared by managers and shareholders.</td>
<td>Bid-ask Spread</td>
<td>BAS = HAt - HBt / (HAt + HBt)</td>
<td>(Clemons, 2014)</td>
</tr>
<tr>
<td>Cash Holdings (Y₁): Represents cash available within the company and can be used as an internal funding if external funding difficulties are encountered.</td>
<td>Cash Holdings</td>
<td>CH = Cash + cash equivalent / Asset Total</td>
<td>(Isshaq et al., 2009; Khan et al., 2012; Wasiuzzaman, 2014)</td>
</tr>
<tr>
<td>Firm Value (Y₂): It is the investor's perception of the firm</td>
<td>Firm Value</td>
<td>NP = MVS + D / TA</td>
<td>(Rahmani et al., 2015)</td>
</tr>
</tbody>
</table>

NP = Market value of all outstanding shares = number of shares outstanding x stock price 
D = (Short-term debt - cash - accounts receivable - inventory) + long-term debt 
TA = Total aktiva
Data analysis method used in research is path analysis with equation as follows:

\[
\begin{align*}
Y_1 &= \alpha_1 + p_1 X_1 + p_2 X_2 + e_1 \\
Y_2 &= \alpha_1 + p_3 X_1 + p_4 X_2 + q Y_1 + e_2
\end{align*}
\]

Description:

\(X_1\): leverage
\(X_2\): asymmetry information
\(Y_1\): cash holdings
\(Y_2\): firm Value
\(p_1\): path coefficient between cash holdings and leverage variables
\(p_2\): path coefficient between cash holdings and information asymmetry variable
\(p_3\): path coefficient between firm value and leverage variable
\(p_4\): path coefficient between firm value and asymmetry information variable
\(q\): path coefficient between firm value and cash holdings variable
\(e_1\): variable of residual equation 1
\(e_2\): variable of residual equation 2

RESULTS

Descriptive statistics are presented based on the variables used in this study (Table 2).

Based on Table 3 it can be seen that in general the distribution of relative data does not spread except the variable cash holdings. While the leverage variable, asymmetry information, and firm value do not have wide data distribution because the standard deviation value is lower than the average. In the first equation analysis test the effect of leverage and asymmetric information on cash holdings. The results of the analysis can be seen in Table 3.

Based on Table 4, it can be seen that leverage has a significant negative effect on the company’s cash holdings, while the asymmetric information has no effect on the firm’s cash holdings (\(p <5\%\)).

<table>
<thead>
<tr>
<th>Variable</th>
<th>Min</th>
<th>Max</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Debt Ratio</td>
<td>0.029</td>
<td>1.052</td>
<td>0.409</td>
<td>0.184</td>
</tr>
<tr>
<td>Bid Ask Spread</td>
<td>-1.452</td>
<td>1.992</td>
<td>0.821</td>
<td>0.795</td>
</tr>
<tr>
<td>Cash Holdings</td>
<td>0.002</td>
<td>0.615</td>
<td>0.128</td>
<td>0.131</td>
</tr>
<tr>
<td>Firm Value</td>
<td>0.0003</td>
<td>1.773</td>
<td>0.299</td>
<td>0.238</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Variable</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>T-hit</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>0.253</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leverage</td>
<td>-0.420</td>
<td>-0.600</td>
<td>-8.251</td>
<td>0.000</td>
</tr>
<tr>
<td>Asymmetric</td>
<td>0.000</td>
<td>0.002</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Information</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adj R^2</td>
<td></td>
<td></td>
<td>0.320</td>
<td></td>
</tr>
<tr>
<td>F-hit</td>
<td></td>
<td></td>
<td>17.837</td>
<td></td>
</tr>
<tr>
<td>Sig F-hit</td>
<td></td>
<td></td>
<td>0.000</td>
<td></td>
</tr>
</tbody>
</table>
Based on the Table 5, it can be seen that cash holdings have a significant negative effect on firm value, while leverage and firm size have no effect on firm value (p <5%).

Based on Table 6, it can be seen that asymmetric information has a significant negative effect on firm value through cash holdings, while leverage has no effect on firm value through cash holdings (p <5%).

**DISCUSSION**

**The Effect of Leverage on Cash Holdings**

The results showed that leverage has a significant negative effect on cash holdings of manufacturing firms listed on the Indonesia Stock Exchange period 2012 to 2015. This result is in accordance with the research hypothesis and in accordance with the Trade-off Theory which states that the use of large debt will provide benefits to the firm, because interest paid by the firm is a shield tax for the firm. Therefore, companies will tend to use debt financing compared to internal funding companies, so the increasing amount of corporate debt, can reduce the amount of cash available in the company. In addition, the results of this study are also consistent with the results of the study Gill & Shah (2011); Wijaya et al. (2010); and Osazuwa & Che-Ahmad (2016) which stated that the company will increase the use of debt up to a certain level. This happens because it is considered to be profitable in tax savings. However, debt is the first obligation that must be fulfilled by the company. So, when the company gets the profit and debt used increasing, the remaining profit after fulfilling the debt will be less. So the cash holdings available in the company will decrease.

The research does not consistent with research Ambarwati & Hikmah (2014) which states that the existence of leverage only affects the closed firm, but in the open firm leverage cannot give effect, especially in the size of the firm’s cash. Firm
owned cash has a strong connection to agency conflict and leverage is considered to minimize the conflict. In fact, increased leverage can also increase the chances of an agency conflict, as it may be that the firm’s debt funds are being used for some things that are not right by the manager.

The level of leverage and cash holdings held by the firm varies, because each firm has different considerations. Firms with high leverage rates, more consider the benefits in tax savings. While firms with low leverage, more consider the risk borne when having high debt, so the firm prefers internal funding by increasing the firm’s cash holdings. However, the use of leverage may incur a fixed cost whose amount depends on the amount of loan received by the firm. The firm has an obligation to always meet the fixed costs. The term leverage is usually used to describe a firm’s ability to use assets or funds that have a fixed cost to increase the income level for the firm owner (Gill & Shah, 2011). Thus, the main purpose of a firm using leverage is to increase its profits (Jiang et al., 2011). However, the earned profit must be paid in advance for the firm’s debt costs.

The Effect of Asymmetry Information on the Cash Holdings

The results showed that asymmetry information was not significant to cash holdings of manufacturing firms listed on Indonesia Stock Exchange period 2012 to 2015. It means, asymmetry information has no effect in increasing or decreasing the firm’s cash holdings. The results are not in accordance with the hypothesis of research and not in accordance with the statement Signaling Theory, namely the existence of asymmetry information can lead to markets and investors do not believe in the firm’s information so as to make the cost of external funding to be expensive. This is because markets, investors and creditors are asking for a higher rate of return on their investments. Therefore, the company will have difficulty in obtaining external funding, so the firm must save the cash holdings in larger amounts for internal funding.

The results also inconsistent with research Rahmani et al. (2015) which stated there was positive relationship between information asymmetry with the availability of cash in the firm, when information asymmetry within a firm increases then the gap between owner and manager is higher. It can increase market distrust of the firm so that the firm will have difficulty in obtaining external funding and consequently the firm will increase its cash to finance the firm. The ownership structure of a firm can be positive and negative, because every firm applying proprietary structure that is different (Yendrawati, Agung, & Nugroho, 2012). The presence of concentrated ownership (controlled by a single possession) that will limit managers to manage. If efficient earnings management, the ownership power concentrated on one owner will improve the cash management of a company, but if the cash management of the company is opportunistic then a high ownership strike will reduce the cash management efficiency (negatively related). Asymmetric information is heavily dependent on the ownership structure of a firm, therefore asymmetric information has no significant effect on the amount of cash held by the company.

Asymmetry information that occurs within a firm can lead to possible agency problems between managers and investors. The agency theory implies the existence of asymmetric information that occurs between the agent (manager) and principal (owner). If both parties are those who seek to maximize their utility, then there is a strong reason to believe that managers do not always act best for the owners of the firm, so the occurrence of asymmetric information can lead to agency problems within a firm.

The Effect of Leverage on the Firm Value

The result of the research showed that leverage has no significant effect to the value of manu-
facturing companies listed in Indonesia Stock Exchange period 2012 to 2015. It means, leverage cannot increase or decrease firm value. The results of this study are not in accordance with the research hypothesis and not in accordance with the theory of Signaling, which states that firms with high debt levels will give a bad signal to investors, because the firms is considered not able to meet the needs of funding and operating costs. High levels of debt can also increase the risk of the firms, which can lower the value of the firms. The results of this study were also inconsistent with the study Luo & Hachiya (2014) and Selcuk (2015) which supported the Signaling Theory. Besides, Meythi(2013) shows that leverage is the best proxy in assessing a company, because it can measure the ability of the firm’s assets in repaying the debt it has.

This research in accordance with Wijaya & Wardani(2017) which states that leverage does not directly affect the value of the firm. However, the greater the debt or leverage of an enterprise can decrease the value of the firm if other factors that can affect the value of the firm decreases, for example leverage can affect investment decisions and result in the firm can decide on adverse investment decisions.

Leverage is a term used to describe a firm’s ability to increase the level of income for a firm owner (Gill & Shah, 2011). Increased leverage can increase the uncertainty of return that will be obtained by the company. However, at the same time leverage can also increase the return earned. This is related to the saying that high risk, high return. While the value of the firm is the perception of investors to the firm. Firm value reflects the price investors are willing to pay for the firm. Thus, investors will judge the firm with the best of all aspects of the firm. However, every investor has a different tendency. There are three types of investors: risk averse, risk seeker, and risk neutral. Risk averse investors do not like risk, and tend to avoid risky investments. Investors like this prefer bonds compared to stocks, especially government bonds. If risk averse investors choose to invest in stock will also choose companies that tend not to have volatility and have a low return. Conversely, risk seeker investors will do the opposite, provided higher returns are earned. Among them are neutral investors who do not avoid risk but also do not like risk. Therefore, the level of leverage cannot affect the value of the firm, because the value of the firm will depend on the point of view of investors in assessing the firm.

The Effect of Asymmetry information to the Firm Value

The results showed that asymmetry information has not significant effect to the value of manufacturing firm listed on Indonesia Stock Exchange period 2012 to 2015. This result is did not in accordance with the research hypothesis and did not in accordance with the Theory of Signaling which states the existence of information asymmetry between managers and firm owners can cause problems agency within the company. Agency issues can give a bad signal to the company, because the company is considered enable to work professionally. So that the asymmetry information can reduced the firm value. In addition, the results of the study were also inconsistent with the study Clemons (2014); Rahmani et al.(2015) which stated that asymmetric information that occurs in a firm can give a bad signal to investors. Thus, investors will assume that the firm is experiencing agency problems and the firm’s future cannot be accounted. Therefore, when there was asymmetry information on a firm, can reduce the firm value. Nyoman & Werastuti(2014) stated that directly asymmetric information does not affect the firm value, because investor does not emphasize the existence of information gaps that occur in a firm. This is because investors will get voluntary reports from companies that include financial and non-financial data, financial and non-financial data analysis, information about managers and firm stakeholders, and firm background.
The results of the research description showed that most sample firms tend to have asymmetric information between managers and their owners. However, all sample firms are firms that have gone public and are required to regularly provide company financial statements for the public each period, so that the information asymmetry cannot affect the firm value. Public firm is a firm that has decided to sell its shares to the public and ready to be assessed by the public openly. Firms go public have the ease in raising capital in the future, because the disclosure of financial information owned. In addition, the market value of go public companies is known.

The Effect of Cash Holdings on the Firm Value

The results show that cash holdings have a negative significance to the value of manufacturing companies listed on the Indonesia Stock Exchange period 2012 to 2015. The results of this study are in accordance with the research hypothesis and in accordance with the results of research stating that the availability of cash in the company can be an opportunity to be abused by managers companies to meet their needs in the company, such as buying air conditioners, cars and things that are not useful and not needed by the firm (Luo & Hachiya, 2014). It will affect the occurrence of agency issues between managers and shareholders, so that it can also affect the firm value. Thus, the existence of cash holdings can lower the firm value. This research used go public manufacturing company as research sample. These firms of course have access to markets, investors and creditors more easily than non-public firms. Thus, the sample firm will gain easier market confidence, so the sample firms have no trouble financing from external and internal. This makes the availability of cash in the firm does not important.

The Effect of Leverage on the Firm Value through Cash Holdings

The results showed that leverage has no significant effect on the value of the company through cash holdings of manufacturing companies listed on the Indonesia Stock Exchange period 2012 to 2015. The results of this study are not in accordance with the research hypothesis and inconsistent with research (Souissi & Khelif, 2012), which stated that the higher the leverage or the debt level of a firm can provide higher risks and require the firm to meet its debt, thereby reducing the retained earnings and cash holdings held by the firm. Firms that have a small reserve of cash will have difficulty in case of unwanted conditions and the firm needs cash. Especially when the firm has large leverage amounts, due to increased leverage in line with the increased risk to be borne by firm. Thus, lower cash holdings due to increased leverage can lower firm value. The results are in accordance with the study Akben Selçuk(2015); Naseer & Naseem(2015) which stated that for some investors companies that have high leverage levels reflect a positive signal, because the firm is considered to have confidence in its performance in the future. Therefore, some of these investors will not see any cash availability owned by the firm. Firms use leverage to improve the ability for make profit. Therefore, in leverage firm can also be interpreted as a lever, but to leverage the financial burden in the firm. Leverage describes a firm’s ability to use its fixed assets to increase the return rate for its shareholders. The increasing leverage will increase the uncertainty of the return received, as the risks are also increased. Firm value is an investor’s perspective in assessing a company. Therefore, the leverage and its effect on cash holdings cannot affect the firm value, because risk averse investors, risk seeker investors, and neutral investors will have their own point of view in assessing the firm.

The Effect of Asymmetry Information on the Firm Value through Cash Holdings.

The results showed that asymmetry information had a negative significant effect on firm value through cash holdings of manufacturing companies
listed on Indonesia Stock Exchange period 2012 to 2015. The results of this study are in accordance with the research hypothesis and agency theory which stated that the existence of asymmetry information is the information gap owned by managers and shareholders. This gap is because managers understand more about the company than the investor/shareholder, because the manager is a party in the firm. It can lead to agency issues between managers and shareholders, so that had effect in firm value.

The research in accordance with Rahmani et al. (2015) showed that asymmetric information directly has no significant effect on cash holding and firm value. This is because both of them cannot explain the information asymmetry that occurs within firm. However, asymmetry information has a significant effect on firm value through cash holdings. This is because the asymmetry information is related to cash holdings. Asymmetry information that occurs can be a source of agency problems in a firm. The different information access can make managers make transactions that only benefit themselves without thinking of other shareholders. Abundant cash holdings can also be an opportunity for agency problems, when managers do not use the cash as they should be. For example, managers tend to use the cash to shop for luxury goods that can be used for themselves rather than to pay dividends or make other investments. Thus, cash holdings can trigger the asymmetric information that can eventually lead to agency problems that can affect the performance of the firm, so, the asymmetric information affect the decline in firm value indirectly.

CONCLUSION AND SUGGESTIONS

Conclusion

Based on the results of hypothesis testing and analysis can be taken several conclusions as follows.

The results showed that leverage has a significant negative effect on cash holdings. Asymmetry information has no significant effect on cash holdings. The results showed that cash holdings had a negative significant effect on firm value. While leverage and asymmetry information has no significant effect on firm value. The results showed that asymmetric information had a negative significant effect on firm value through cash holdings. While leverage does not significantly affect the firm value through cash holdings.

Suggestions

Firms are expected to understand the information from the research results and understand the factors that can be used as a basis in making decisions that can affect the firm value.

This study was conducted over a period of 4 years. In that period it tends to be short to be able to implement and generalize all economic conditions in the long term. Thus it is necessary to do research with longer time. This research uses the sample of the whole manufacturing company without looking at the sub-sector of the category, so that the results of research can not show for each sub-sector, so it is necessary to do research by considering the sub-sector. The results showed that there are some independent variables that do not affect the dependent variable and mediation, so the next researcher is suggested to consider the use of other variables that can prove its influence on the dependent and mediation, so that the research result can be used as information material which is able to show the effect of cash holdings and firm value.

Investors can pay attention to the firm’s cash holdings, because when the company has cash holdings and it has difficulty in paying its obligations, the company will use the cash to fulfill it.
REFERENCES


