Shariah Compliance and Corporate Cash Holdings

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Abstract. This study investigates the influence of Shariah compliance status, firm size, profitability, net working capital, leverage, operating cash flow, and capital expenditure on cash holding. Using a sample of 68 firms in non-cyclical consumer companies listed on the Indonesia Stock from 2017 to 2021. This paper applied panel data regression to estimate the results. The results show that shariah compliance status, profitability, net working capital, leverage, operating cash flow, and capital expenditure have a significant effect on firms' cash holding decisions, and firm size does not have a significant impact on the level of cash holdings. This study contributes to the literature on the factors determining corporate cash holdings. The findings may be useful for regulators, investors, and financial managers.

Keywords: Capital Expenditure, Cash Holding, Firm Size, Leverage, Net Working Capital, Profitability, Operating Cash Flow, Shariah Compliance.

1. Introduction

Cash is the most liquid asset among other company assets. Cash itself has an important role in a company. Cash is needed not only to fund the company's day-to-day operations but also to fund investments. Cash that is in the company is called cash holding. Cash holding can be defined as cash in hand or cash that companies can use to invest in physical assets (property, factories, equipment) and distribute to investors [1] [2]. A company may have several tangible assets or receivables, but if the cash in the company runs out, it can lead to bankruptcy or the disappearance of valuable growth opportunities. Therefore, companies are keen to withhold a certain amount of cash to protect themselves from temporary liquidity shortages when paying or investing. The cash owned by the company can be directly used to support the company's operational activities. Cash holding as cash is needed to meet all company needs so that the company's operational activities continue to run, such as buying inventory, paying debts, funding company operations, and others [3]

The global crisis that occurred in the United States in 2008 quickly spread and attacked other countries, including Indonesia. In general, this financial crisis was caused by the company's inability to maintain its liquidity. With this incident, companies must know the importance of maintaining company liquidity. In addition, we are currently being faced with the COVID-19 pandemic. So that the company does not experience liquidity difficulties or the ability to fulfill its obligations. One of the efforts that companies can make to avoid liquidity risks and maintain liquidity is to manage cash holdings and determine the optimal level of cash holdings that the company must own. The company must maintain the cash holding optimally so as not to experience shortages

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or advantages and to be available at the limit that the company has set [4]. Therefore, companies need to know what factors can affect the level of cash holding of a company.

Three influential theories explain the decisions of corporate cash holdings, including trade-off theory [5], pecking order theory [6], [7]. According to the trade-off theory, the company sets a cash holding target that balances the gains and losses of holding liquid assets. The theory of pecking orders, which is based on the asymmetry of information, states that the target cash holding should not exist and that companies should rely on internal funds as their first source of financing, followed by debt and equity. Finally, the theory of free cash flow states that company managers have an incentive to hold more cash to increase their control over assets and gain discretionary power [8][9][10][11][12].

In the past decade, Islamic finance has received much attention from stock market participants. Surpassing conventional financial markets, Islamic finance is one of the fastest-growing sectors in the global financial industry. The Global Islamic Economic Report noted that the value of Islamic financial assets increased by 13.9 percent in 2019. In addition, Islamic finance in Indonesia also grew positively in line with the increasing global trend (https://fiskal.kemenkeu.go.id/). The still-growing Islamic corporate finance literature, which does not investigate Shariah-compliant firms' cash holdings decisions6, reports that Shariah-compliant firms are subject to multiple restrictions to maintain this status [13] [1][14]. Since 2012, Indonesia has been moving forward in the Islamic investment market by introducing Sharia-compliant indices. The index consists of companies listed on the Indonesia Stock Exchange that meet qualitative (halal principles in business operations) and quantitative (financial ratios or measures) criteria. The linkage between Islamic Shariah compliance and corporate cash holdings has yet to be empirically explored. In this study, we sought to discover whether Shariah compliance altered firms' cash holding levels.

Primary needs are the most basic needs for humans. In modern times, human needs are increasingly varied. This is reflected in the needs of the community that are increasing and developing. Therefore, the object of this study is a company in the non-cyclical consumer sector listed on the Indonesia Stock Exchange. Non-cyclical consumer companies themselves are primary goods companies that produce and distribute services or goods sold to consumers and are non-cyclical or, in other words, are primary goods whose demand for goods and services is not affected by economic growth (https://www.idx.co.id). Non-cyclical consumer companies consist of several subsectors, such as food and staples retail, food and beverages, tobacco, and non-durable household products. In addition, the decision to use consumer companies is non-cyclical because the consumer sector as a whole has performed well from 2009 to 2019. Although, in the past two years, it has experienced a decline due to the COVID-19 pandemic. To find out the developments during this pandemic, using several variables such as shariah compliance, firm size, profitability, net working capital, leverage, operating cash flow, and capital expenditure, which have an impact on the cash holdings [15] [16][17]

2 Literature Review

2.1 Theoretical models of corporate cash holdings

Three influential theories explain firms' cash holding decisions, including trade-off theory [5], pecking order theory [6], and free cash flow theory [7]. According to trade-off theory, companies aim to hold cash to balance the advantages and disadvantages of holding current assets. The pecking order theory, based on information asymmetry, suggests that there should be no target cash holdings and that companies should rely on internal funding as the main funding source, followed by debt and equity Owners. Finally, the free cash flow theory asserts that business managers are incentivized to hold more cash to increase their ability to control assets and gain decision power.

2.2 Shariah screening guidelines

The standards of the Shariah Index are governed by the Indonesia Stock Exchange Supervision Decree promulgated in 2012. There are two conditions to be selected as a Shariah firm in Indonesia. The first condition is that the Sharia company should stay away from activities prohibited by Islam (haram). Haram activities include interest-based lending (riba), gambling (maiser), alcohol production and distribution (khamar), cultivation and processing of haram products, trading in violation of Shari'a law, and undue risks such as insurance and derivatives. It includes taking (gharar) and trading by bribery (risywah). A second requirement for Shariah shares is that the financial ratios of the shares must meet some criteria. The first requirement is that the ratio of interest-based debt (riba) to total assets must not exceed 45%. The second criterion is that interest income or non-halal income should not exceed 10% of total income (http://idxislamic.idx.co.id/)

2.3 Corporate financial decisions and Shariah compliance

Shariah-compliant companies have fewer external funding channels than non-shariah-compliant companies due to the restrictions imposed by Sharia compliance status that apply to their financial and investment decisions [13]. Sharia compliance has a positive effect on the company's cash holding level. This is because companies operating within the scope of Sharia law and regulation face external financing constraints so that the company has large cash reserves so that the company's operational activities continue to run effectively and efficiently [15]

2.4 Cash holding adjustment speed

Cash holding can also be influenced by firm size. Large firms are often more diversified, so increased firm size is generally associated with lower direct bankruptcy costs [8]. In addition, large companies face reduced external funding costs due to economies of scale arising from the significant fixed cost component of the cost of issuing securities. Previous studies found that firm size has a positive influence on cash holding [18]. The different result says that firm size does not affect cash holding [19]. The research found that firm size has a negative influence on cash holding [15]

Profitability can affect cash holding, as higher profitability could make greater cash to a company. Previous research has found that profitability had a positive effect on cash holding [15]. Previous research found that profitability does not affect cash holding [20]. However, it is different from the research that says that profitability has a negative influence on cash holding [4].

Net working capital is a substitute for cash and is negatively associated with cash holdings [8]. According to the transaction cost motive, companies with sufficient liquid assets may not have to use the capital market to raise funds when they are short of cash [21]. This says that net working capital has a positive effect on cash holding [4], but previous research found that net working capital has a negative effect on cash holding [15]. Different result that net working capital does not affect cash holding [22]

Higher corporate leverage coincides with the problem of high financial difficulties. For this reason, companies with higher leverage are expected to have more cash. In addition, when companies have better access to the debt market, they have less need to store cash reserves. Previous research found that leverage does not affect cash holding [19]. Then, further research stated that leverage positively affects cash holding[23]. This contrasts with the research, which states that leverage negatively affects cash holding [15].

According to the pecking order theory, companies with high cash flow are expected to have more cash. Previous studies found that cash flow has a positive influence on cash holding [15]. The research found that cash flow has a negative influence on cash holding [18]. The different result says that cash flow does not affect cash holding [19].

Capital expenditure is the ratio of net investment expenditures to total assets. Higher capital spending is likely to lead to a low level of cash [10]. Previous studies found that capital expenditure has a negative influence on cash holding [15]. The different result says that capital expenditure has a positive influence on cash holding [24]. Then, the research found that capital expenditure does not affect cash holding [25].

3 Data Description and Methodology

3.1 Data sources and sample

The object in this study used consumer non-cyclical companies listed on the Indonesia Stock Exchange (IDX) with a sample of 68 companies in the 2017-2021 period. The data is obtained from secondary data published on each company's website, the official website of the IDX (https://www.idx.co.id), and https://emiten.kontan.co.id.

3.2 Methodology

The panel data regression models are as follows:

$$CashTA_{i,t} = \beta_0 + \beta_1 Shariah_{i,t} + \beta_2 Size_{i,t} + \beta_3 Prof_{i,t} + \beta_4 NWC_{i,t} + \beta_5 LEV_{i,t} + \beta_6 OCFi,t + \beta_7 Capex_{i,t} + \varepsilon_{i,t}$$

The calculation of each variable can be seen in the following table:

Table 1. Measurement and expected signs for the independent variables.

Variables	Code	Description	Expected sign
		Dependent variable	
Cash holding	CashTA	The ratio of cash and equivalents to total assets	
		Independent variables	
Shariah-compliant	Shariah	A dummy variable used as an indicator of the Shariah status of the firm: it takes the value of 1 if the firm is Shariah compliant using the ISSI index and 0 otherwise	+
Firm size	Size	Natural logarithm of total assets	-
Profitability	Prof	Net income divided by total assets	+
Net working capital	NWC	The ratio of current assets minus current liabilities divided by net total assets	+
Leverage	Lev	Total liabilities divided by total assets	-
Operating cash flow	OCF	Operating cash flow divided by total assets	+
Capital expenditure	Capex	Capital expenditure divided by total assets	-

Source: Bugshan et al., (2021)

3 Results and Discussion

a. Descriptive Statistics

Table 2. shows descriptive statistics of variables of conventional companies (not Sharia-compliant) and Shariah companies. The average cash holding in Sharia-compliant companies is lower (0.095) compared to the average cash holding in conventional companies (0.1008). In addition, the average value for firm size, profitability, net working capital, and operating cash flow is higher in Sharia-compliant companies.

Table 2. Descriptive statistics of variables of conventional companies.

Variable	Shariah-compliant firm			
	Mean	Min.	Max.	Std.Dev
CashTA	0,10081	0,00033	0,53212	0,09895
Size	24,7138	14,5984	32,8203	5,75262
Prof	0,04007	-2,64099	0,60716	0,21832
NWC	0,19708	-2,48035	1,47523	0,37217
Lev	0,46631	0,00681	2,89987	0,31274
OCF	0,08445	-0,19966	0,41982	0,10691
Capex	0,04057	0,29747	0,00036	0,03934

Variable	Non-shariah compliant firm			
	Mean	Min.	Max.	Std.Dev
CashTA	0,09588	0,00049	0,63231	0,14362

Size	23,0417	14,7358	31,6030	5,65305
Prof	23,0417	-0,58252	0,52670	0,14546
NWC	0,12982	-1,59828	2,15308	0,56906
Lev	0,63489	0,14632	1,92534	0,29019
OCF	0,08323	-0,29225	0,53050	0,13193
Capex	0,04137	0,00042	0,46557	0,05494

Source: Eviews 9.0 panel data regression output

b. Regression Results

Table 3. T test results.

Variable	**Dependent Variables**		
	Cash Holding		
	Coefficient	**Probability**	**Conclusion**
Constant	-0.036338	-	-
Shariah	0.021565	0,0609	Significant Positive
Firm Size	0.000332	0,7880	Insignificant
Profitability	-0.030392	0,0948	Significant Negative
NWC	0.237082	0,0000	Significant Positive
Leverage	0.121097	0,0000	Significant Positive
OCF	0.207982	0,0000	Significant Positive
Capex	-0.181110	0,0248	Significant Negative

Source: Eviews 9.0 panel data regression output

Table 3 shows that Shariah compliance has a significant positive effect on the 10% rate on cash holdings. Firm size is not significant in explaining the cash holdings. Profitability was negatively affected, with a significant rate of 10%. Net working capital, leverage, and operating cash flow have a positive effect with a significant rate of 1%. Moreover, capital expenditure has a negative effect with a significant rate of 5%.

This study found a positive coefficient for shariah compliance, which is significant at 10% against cash holdings. This research is in line with Bugshan et al. (2021) and Guizani & Abdalkrim (2021), which stated that there is a positive and significant influence between Shariah compliant and cash holding. This is because the low supply of external financing in Islamic companies is more financially constrained and faces a higher risk of bankruptcy. Therefore, they are required to keep large amounts of internal funds as a way to hedge against future uncertainties. In addition, Islamic companies are charged higher transaction fees as they face a lower supply of external financing. Therefore, they tend to raise more cash to meet their financing needs.

A high profitability ratio shows that the company's performance is getting better, so the return rate will be even greater. High profitability will support the company's opportunity to invest so that the company can save cash (Ridha et al., 2019). Based on the pecking order theory, cash is part of net working capital. When cash increases, net working capital will also increase. This is because, in certain conditions (crises), it is not easy to convert current assets into cash, so the company's managers will create cash reserves to maintain its liquidity. The trade-off theory states that high leverage exposes companies to financial hardship and bankruptcy. Thus, when the company has high leverage, it has a prudential motive to withhold more money to prevent or avoid bankruptcy [25].

Based on the pecking order theory, the company will hold a large amount of cash when it has a high cash flow. Companies with high cash flow are expected to hold large amounts of cash due to the tendency of companies to use internal funding compared to external funding. When the company's operating cash flow is high, the company uses it to finance profitable new projects, pay debts, pay dividends, and finally collect cash[26]. Thus, the high cash flow increases the company's cash holding [27]. Meanwhile, based on the theory of free cash flow, cash flow within the company can affect the amount of company cash and is also used in the company's operational activities. Therefore, high cash flow indicates that the company can manage the company's incoming and outgoing cash flows well. According to the trade-off theory, capital investment reflects financial difficulties [10]. Therefore, companies with high capital investment will face higher costs of financial difficulties in the capital market. In their efforts to avoid these high transaction fees, such companies often hold more cash [28].

In contrast, capital expenditures usually result in the creation or increase of new assets that can be pledged by the company, thereby increasing the company's borrowing capacity [29]. As a result, companies that have increased access to loans will save less cash. Other variables, such as company size, are not significant in explaining the cash holding of non-cyclical consumer companies. However, most studies elsewhere find this variable to be significant.

4 Conclusion

Cash holding in companies is a major topic in accounting and finance and has attracted great debate among academics. However, the ongoing discussions still need to adequately address the behavior of cash holding in developing countries. The data collected from 68 non-cyclical consumer sector companies listed on the IDX came from 2017 to 2021. The results obtained in this study are consistent with the evidence in the literature holding the company's treasury available. Seven variables—Shariah compliant, firm size, profitability, net working capital, leverage, operating cash flow, and capital expenditure—were tested to ascertain whether they had significant explanatory power at the company's cash holding level. These findings show that shariah compliance, net working capital, leverage, and operating cash flow negatively affect the cash holding of non-cyclical consumer companies. In contrast, profitability and capital expenditure have a negative influence. The company's size was not found to have a significant impact on the cash holding of non-cyclical consumer companies.

The research also has practical implications for companies. Holding large amounts of cash can provide various benefits for the company, one of which is to finance unexpected expenses. However, holding excessive cash also has a downside, namely the loss of the company's opportunity to make a profit because the cash that is only stored will not provide income. So that the financial manager must manage the cash holding in the company so that there are no shortages or advantages. Financial managers are expected to maintain the level of profitability in order to maintain the availability of cash holdings to remain optimal. Financial managers are also expected to maintain the level of net working capital. In the event of an economic shock, current assets and cash can be a savior for the company to avoid bankruptcy, and the company's cash holding level is maintained.

On the other hand, financial managers are expected to be able to manage the level of leverage so that cash holding is in an optimal position. In addition, high operating cash flow can increase the availability of cash holding within the company. Capital expenditure itself is a reduction for cash holdings because companies that have more capital expenditure can create more assets that can be used as collateral for the company in debt.

Several recommendations may result from this study. First, policymakers and regulators should further develop the Shariah bond (sukuk) market and increase the supply of external funding sources available to Shariah-compliant companies because Shariah-compliant companies face more restrictions related to external funding. Secondly, managers must effectively manage the liquidity and working capital of the company and remain alert to the credit crisis and the deterioration of economic conditions that limit the availability of funds. This can put Islamic companies at greater risk of bankruptcy than non-shariah companies. Furthermore, standard-setting organizations and bankers should make greater collective efforts to facilitate and standardize the procedure for issuing shariah-compliant financial products so that they do not face systematic competitive losses in the market. Finally, since the Islamic corporate financial literature is still developing, future research should study the financial determinants of Sharia-compliant corporate cash holdings.

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