



## Attributes of islamic labels in increasing internal comprehensive strength

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### ABSTRACT

The objectivity of this study includes 3 (three) investigations, namely (1) the implications of Islamic label attributes on financial flexibility, (2) the impact of a combination of Islamic labels and capital structure conservatism on financial flexibility, and (3) the interaction of Islamic labels and cash holding on financial flexibility. By observing 225 companies during the period 2012 – 2021 and using the Generalized Method of Moment (GMM) analysis technique, the results of the study found that the attribute of the Islamic label contributed to financial flexibility. Examination of the impact of the combination of Islamic Label (IL) and capital structure conservatism on financial flexibility shows that IL capital structure conservatism does not contribute to an increase in financial flexibility. However, cash holding IL has the potential to become a source of financial flexibility.

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### 1. INTRODUCTION

Statistics on the capital structure of companies in Western countries show that many companies tend to maintain a low capital structure policy and even avoid debt financing. Empirical research reveals that for 5 (five) consecutive years, more than 100 companies listed on the NYSE have a zero debt ratio (Zeng and Hangzhou, 2011). These empirical results are in line with surveys conducted among CFOs in the US (Graham and Harvey, 2001; Jagannathan et al., 2011) and in Europe (Bancel and Mittoo, 2004; Brounen et al., 2004) which reported that most companies maintain conservative financial policies. It was also revealed that nearly 10% of public companies in the US had no debt and 30% maintained a zero leverage policy for five consecutive years (Strebulaev and Yang, 2013) (Strebulaev and Yang, 2013). Google and Microsoft are two examples of companies that adopt conservative policies (zero leverage). The two companies tend to have little or no debt (Meier et al., 2013). Overall, conservative policies tend to be adopted by companies with financial constraints (Devos et al., 2012).

On the other hand, other empirical research reports that not only in developing countries (Al-Najjar, 2013; Chen et al., 2015; Lei et al., 2018) but almost all over the world large companies tend to store their assets in cash in relatively large and increasing

proportions (Dittmar et al., 2003; Ferreira and Vilela, 2004; Bates et al., 2009). Apart from maintaining a low level of leverage, Microsoft and Google are companies that also maintain a high cash position (Meier et al., 2013).

Previous literature states that the tendency to adopt low leverage and high cash policies aims to obtain better financial flexibility (Bates et al., 2009; Byoun, 2011). Financial flexibility is related to internal comprehensive strength to reduce financial risk and utilize financial resources effectively in the face of dynamic environmental changes and various uncertainties (Zhao and Zhang, 2010). Referring to this terminology, in general financial flexibility is divided into 2 (two) landscapes, namely internal and external flexibility (Volberda, 1999). Internal flexibility is related to adaptability and external flexibility refers to the ability to influence the environment which ultimately reduces vulnerability (Volberda, 1999; Ghadiri, 2017; Bukvič, 2019).

The implications of the financial characteristics of the above financial flexibility have not been clearly justified, especially for Islamic Label (IL) companies in Indonesia. As far as observation, there are no studies that investigate financial characteristics or attributes and their implications for financial flexibility that specifically focus on Islamic Label (IL) companies. As understood, there are a number of differences between IL and nonIL. One of them, IL business operations involve a set of screening, namely qualitative (qualitative sector screening) and quantitative (quantitative financial screening) (Khatkhatay and Nisar, 2007; Derigs and Marzban, 2008; Rahman et al., 2010). Qualitative screening related to the annulization of companies with core activities involving elements of usury (interest), such as conventional banking or business activities that are harmful and illegal, such as tobacco, alcohol, gambling, life insurance, and production, packaging, and other processes related to the production of non-halal food (Obaidullah, 2005; Hussein, 2007). Quantitative screening or financial ratios (Naz et al., 2017) primarily involve regulation of the proportion of debt, which is set at a threshold between 30 – 40 percent of total equity (Derigs and Marzban, 2008; Bellalah et al., 2013). Meanwhile, other literature suggests that total outstanding debt may not exceed one-third of market capitalization (Elgari, 2002; Hussein and Omran, 2005) or total assets (El-Alaoui et al., 2018). In Indonesia, the Fatwa of the National Sharia Council No. 40/DSN-MUI/X/2003 stipulates that total debt to total assets is a maximum of 45%.

The application of debt levels at certain limits causes the financial structure of IL to be different from that of non-IL (Bhatt and Sultan, 2012; Adamsson et al., 2014). In a sense, IL's leverage ratio is lower (Farooq and Tbeur, 2013; Katper et al., 2015; Naz et al., 2017) or IL's capital structure is more conservative than non-IL's (Kutan et al., 2018; Cheong, 2021). However, adopting capital structure conservatism eliminates the opportunity to benefit from the use of debt and as a mechanism for agency problems (Graham and Harvey, 2001; Bessler et al., 2013; Bigelli et al., 2014). Previous literature shows that as a substitute for the level of leverage (John, 1993; Hakim et al., 2021), IL tends to accumulate cash (Alnori and Alqahtani, 2019; Bugshan et al., 2021), so that IL's cash holding level is higher than that of non-IL (Akguc and Al Rahahleh, 2018; Alnori and Alqahtani, 2019; Bugshan et al., 2021; Guizani and Abdalkrim, 2021). Such IL attributes (low leverage and high cash holding) allow IL to have financial flexibility that is no different from non-IL, although agency theory claims high cash ownership can trigger moral hazard behavior (Park and Jang, 2013; Narayan and Westerlund, 2014; Jibril and Shehu, 2015; Chen et al., 2016a; Zhang et al., 2016; Kadioglu et al., 2017; Lê, 2017) and the problem of tax disincentives (Chua, 2012).

Starting from the implications of financial attributes or characteristics on financial flexibility and its impact, then to fill the lack of research the purpose of this study is to answer the questions: (1) does Islamic Label (IL) have higher financial flexibility; (2) does IL's capital structure conservatism contribute to higher financial flexibility; (3) does cash holding IL contribute to higher financial flexibility. The significance of the research results has implications for several things. First, it contributes to the financial flexibility

hypothesis, agency theory, pecking order theory, and adds evidence to previous research. Second, expand the study of Islamic finance.

The overall structure of this study consists of several parts. Section 2 discusses the literature review and hypothesis development. The research design which includes sample, indicator measurement, and research model is presented in Section 3. The empirical results are presented in Section 4, discussion and conclusions are described in Section 5

## 2. RESEARCH DESIGN

### Samples and Data

The research sample includes all companies that are consistently listed on the Indonesian Sharia Stock Index (ISSI) during the period 2012 to 2021. After eliminating financial companies, having incomplete data, financial reports in foreign currency, and companies that have experienced suspension, 227 companies that meet the research sample criteria are obtained. Thus, the total research observations were 2,270 observations. Data sources were obtained from the Indonesian Capital Market Directory (ICMD), financial and annual reports, company performance summaries, and the IDX Facts Book.

### Research Model

To test the research hypothesis, the formulation of this research model is stated as follows:

$$FF_{i,t} = \beta_0 + \beta_1 FF_{i,t-1} + \beta_2 IL_i + \sum \beta_3 Control_{i,t}$$

$$FF_{i,t} = \beta_0 + \beta_1 FF_{i,t-1} + \beta_2 IL_i + \beta_3 FC_{i,t} + \beta_4 IL * FC_{i,t} + \beta_5 IL * Cash_{i,t} + \sum \beta_6 Control_{i,t}$$

### Variables and Measurements

The variables in this study include Financial Flexibility (FF), Islamic Label (IL), Conservative Finance, and Cash Holding. The measurement specifications for each variable are as follows:

#### Financial Flexibility

In a number of empirical studies, financial flexibility is generally measured using 3 (three) approaches (Teng et al., 2021), namely the single indicator method, such as cash holding (Billett and Garfinkel, 2004; Riddick and Whited, 2009; Chen et al., 2013; Hoberg et al., 2014) or debt capacity (Billett et al., 2007; Marchica and Mura, 2010; Denis and McKeon, 2012), multiple indicator method (Zhang et al., 2020; Teng et al., 2021; Zhang et al., 2022) and multiindicator combination method (DeAngelo and DeAngelo, 2007; Zeng et al., 2013; Arslan-Ayaydin et al., 2014; He et al., 2020). Another alternative is using the ratio of retained earnings to total assets (Byoun, 2011; Alipour et al., 2015; Chandra et al., 2019). Because there are various approaches or there is no single proxy for measuring financial flexibility that is widely accepted (Teng et al., 2021; Zhang et al., 2022), this study uses Unused Debt Capacity (UDC) as a proxy for financial flexibility. The use of UDC as an indicator of financial flexibility refers to the hypothesis of financial flexibility and previous empirical research which argues that UDC is a factor closely related to (Hess and Immenkötter, 2014) and seen as the main source of financial flexibility (Marchica and Mura, 2010; DeAngelo et al., 2011; Denis and McKeon, 2012). UDC is mathematically formulated as follows:

$$UDC = Debt Capacity (DE) - Book Value (BVD) \dots \dots \dots 1$$

$$DC = \frac{0.715 * Receivables + 0.549 * Inventories + 0.535 * PPE}{Total Asset} \dots \dots \dots 2$$

$$BVD = \frac{Long Term Debt (LTD) + Long Portion of Current Debt (LCD)}{Total Asset} \dots \dots \dots 3$$

### Islamic Labels (IL)

IL is a dummy variable, value 1 if recorded in ISSI for 2 (two) assessment period and a value of 0 otherwise.

### Conservative Finance or Financial Conservatism (FC)

Conservative finances are measured referring to previous empirical research using the Non Positive Net Debt (NPND) indicator (Cui, 2020; Chipeta et al., 2021; Machokoto et al., 2021a). Value 1 if Book Value of Debt - Cash and vice versa, value 0 if Book Value of Debt - Cash.

### Cash Holdings

Cash ownership is measured by the ratio of cash and cash equivalents to total assets (Chua, 2012; Ghadiri, 2017).

### Control Variables

With reference to previous research, the control variable in the study This is measured by 3 (three) indicators namely, profitability (ROA), net profit growth rate (GREAT), and owner's equity growth rate (OEGR).

## 3. RESULTS

### Descriptive Statistics

The results of the descriptive analysis of all variables are illustrated in table 1 below:

Table 1. Descriptive Statistics

	UDC	IL	NPND	CASH	ROA	GREAT	OEGR
Mean	0.152915	0.750667	0.466667	0.100747	-0.593763	-0.947888	-0.181723
Median	0.165751	1.000000	0.000000	0.060275	0.032254	-0.023469	0.060338
Maximum	0.841965	1.000000	1.000000	1.205332	0.920997	2177.862	17.48571
Minimum	-2.215781	0.000000	0.000000	7.68E-05	-1396.863	-2704.989	-215.2236
Std. Dev.	0.259896	0.432723	0.498999	0.114425	29.44950	89.94299	6.750303

From table 1 it can be seen that the average value of Financial Flexibility (FF) proxied by Unused Debt Capacity (UDC) is 15.2915%. The average value of the Islamic Label (IL) is 75.0667%. While the average value of Financial Conservatism proxied by NPND (Non-Positive Net Debt) is 46.66667%, the average value of Cash and ROA are respectively 10.0747% and -59.3763%. Finally, the average value for the Growth Rate of Net Income proxied by GREAT is 94.7888% and the average value for the Growth Rate of Owner's Equity proxied by OEGR is -18.1723%.

### Correlation Between Variables

Table 2. below is the result of the correlation analysis of all variables, as follows:

Table 2. Correlation Between Variables

Covariance Analysis: Spearman rank-order

Sample: 2012 2021

Included observations: 2250

Correlation Probability	UDC	IL	NPND	CASH	ROA	GREAT	OEGR
UDC	1.000000						
	-----						
IL	0.247879	1.000000					
	0.0000	-----					

NPND	0.493198 0.0000	0.158147 0.0000	1.000000 -----				
CASH	0.050855 0.0158	0.199843 0.0000	0.455133 0.0000	1.000000 -----			
ROA	0.200930 0.0000	0.246337 0.0000	0.269560 0.0000	0.422010 0.0000	1.000000 -----		
GREAT	0.056883 0.0070	0.099226 0.0000	0.033773 0.1093	0.136597 0.0000	0.344404 0.0000	1.000000 -----	
OEGR	0.072921 0.0005	0.104460 0.0000	0.104427 0.0000	0.245380 0.0000	0.597285 0.0000	0.289975 0.0000	1.000000 -----

From table 2 it can be seen that UDC has a positive relationship with IL, NPND, Cash, ROA, GREAT, OEGR. Conversely, UDC has a negative relationship with Size (Ln TA) and Sales. Meanwhile, IL has a positive correlation with all variables (NPND, Cash, ROA, GREAT, OEGR, Size (Ln TA), and Sales). Financial Conservatism proxied by NPND has a positive correlation with Cash, ROA, GREAT, OEGR and vice versa has a negative correlation with Size (Ln TA) and Sales. While other variables include Cash, ROA, GREAT, and OEGR each of which has a positive correlation.

GMM EGLS (cross-section random effects) is used because it accommodates cross-sectional data correlations and time series or idiosyncratic error term conditions that are correlated serially.

GMM results will be more efficient if the right instrument data (VT) is used. So that one of the obstacles in using GMM is choosing VT which can represent such an independent variable, but/so it is not related to the dependent variable.

#### Relationship between IL and Financial Flexibility

The statistical results of the linkage of IL and Financial Flexibility are illustrated in table 3 below:

Table 3. Islamic Label (IL) and Financial Flexibility (FF)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
UDC(-1)	0.688584	0.078255	8.799185	0.0000
C	-0.031067	0.007293	-4.259844	0.0000
IL	0.069261	0.024565	2.819538	0.0049
GREAT	6.71E-05	3.70E-05	1.814642	0.0697
OEGR	-0.000130	0.000264	-0.494236	0.6212
Effects Specification				
			S.D.	Rho
Cross-section random			0.000000	0.0000
Idiosyncratic random			0.144669	1.0000
Weighted Statistics				
Root MSE	0.154074	R-squared	0.656864	
Mean dependent var	0.146202	Adjusted R-squared	0.656185	
S.D. dependent var	0.263090	S.E. of regression	0.154265	
Sum squared resid	48.07116	Durbin-Watson stat	1.314686	
J-statistic	1.68E-25	Instrument rank	5	

Unweighted Statistics			
R-squared	0.656864	Mean dependent var	0.146202
Sum squared resid	48.07116	Durbin-Watson stat	1.314686
Dependent Variable: UDC			
Method: Panel GMM EGLS (Cross-section random effects)			
Sample (adjusted): 2013 2021			
Periods included: 9			
Cross-sections included: 225			
Total panel (balanced) observations: 2025			
2SLS instrument weighting matrix			
Swamy and Arora estimator of component variances			
White period standard errors & covariance (d.f. corrected)			
Instrument specification: C IL-1 GREAT-1 OEGR-1 ROA-1			
Constant added to instrument list			

From Table 3. above it can be seen that there is a significant positive relationship between IL and Financial Flexibility proxied by Unused Debt Capacity (UDC). The results of the analysis show that IL has a significant positive relationship with Financial Flexibility at the p-value level  $\square$  0.05 with a coefficient ( $\alpha$ ) of 0.069261. These statistical results support hypothesis 1, which indicates that the IL attribute can contribute to higher financial flexibility.

The control variable Net Profit Growth Rate proxied by GREAT was found to have a significant positive effect on UDC at the p-value level 10%, and conversely the Growth Rate of Owner's Equity proxied by OEGR had no effect on UDC. The ability to explain all variables is 65.6185%.

#### IL\*Capital Structure Conservatism and IL\*Cash Holding on Financial Flexibility

Another objective of this study is to investigate (1) the effect of the combination of IL and capital structure conservatism on financial flexibility, and (2) the interaction effect of IL and cash on financial flexibility so that it can be seen whether IL's capital structure which is considered conservative and cash owned can be a source of financial flexibility and ultimately contribute to higher financial flexibility. The statistical results of the interaction of IL and conservative finance on financial flexibility are illustrated in table 4 below:

Table 4. Interaction Effects

Variable	Coefficient	Std. Error	t-Statistic	Prob.	
UDC(-1)	0.688584	0.078255	8.799185	0.0000	
C	-0.031067	0.007293	-4.259844	0.0000	
IL	0.069261	0.024565	2.819538	0.0049	
GREAT	6.71E-05	3.70E-05	1.814642	0.0697	
OEGR	-0.000130	0.000264	-0.494236	0.6212	
Effects Specification				S.D.	Rho
Cross-section random				0.000000	0.0000
Idiosyncratic random				0.144669	1.0000
Weighted Statistics					

Root MSE	0.154074	R-squared	0.656864
Mean dependent var	0.146202	Adjusted R-squared	0.656185
S.D. dependent var	0.263090	S.E. of regression	0.154265
Sum squared resid	48.07116	Durbin-Watson stat	1.314686
J-statistic	1.68E-25	Instrument rank	5

## Unweighted Statistics

R-squared	0.656864	Mean dependent var	0.146202
Sum squared resid	48.07116	Durbin-Watson stat	1.314686

Dependent Variable: UDC  
Method: Panel GMM EGLS  
(Cross-section random effects)  
Sample (adjusted): 2013 2021  
Periods included: 9  
Cross-sections included: 225  
Total panel (balanced)  
observations: 2025  
2SLS instrument weighting  
matrix  
Swamy and Arora estimator of  
component variances  
White period standard errors  
& covariance (d.f. corrected)  
Instrument specification: C IL-  
1 GREAT-1 OEGR-1 ROA-1  
Constant added to instrument  
list

From table 4 it can be seen that the interaction of IL with conservative finance proxied by a significant Net Positive Net Debt (NPND) at the p-value level 0.05 with a coefficient value of -0.293350. These statistical results indicate that IL's capital structure conservatism tends to be unable to act as a source of financial flexibility. One of the arguments for this finding relates to the establishment of a relatively high level of leverage by the Sharia Securities Council (DES), thus opening up opportunities for companies to take advantage of external funding. Based on data processing, the average value of company leverage as measured by the ratio of book value of debt to equity is 0.401088, the maximum value is 112.4421, the minimum value is -81.6103, and the standard deviation is 3.128578. Based on the maximum and minimum values, the average ideal leverage value is  $1/2 (112.4421 + (-81.6103)) = 15.41592$  and the ideal standard deviation value is  $1/6 (112.4421 - (-81.6103)) = 32.34207$  thus, the category of high leverage is if the leverage is  $\square 15.41592 + 32.34207 = 47.75799$  and low leverage if  $\square 15.41592 - 32.34207 = -16.92615$ . Referring to the leverage value category, the average leverage value (0.401088) tends to approach the high category. Relatively high corporate leverage indicates that corporate liabilities tend to be high. This condition makes the company financially inflexible. Thus, hypothesis 2 is rejected. The results of this study do not support the financial flexibility hypothesis which states that low leverage attributes (capital structure conservatism) can help companies become financially flexible (Marchica and Mura, 2010).

In table 3 it can also be seen that the interaction of IL and cash is significant at the p-value level  $\square 0.05$  with a coefficient value of 0.289928. These statistical results indicate that IL tends to reserve cash as a source of financial flexibility, so that cash owned enables companies to be financially flexible and ultimately contributes to higher financial flexibility. Thus, hypothesis 3 is accepted.

Implications and contributions of this research. First, from the point of view of managerial implications, the findings of the positive effect of IL on financial flexibility

(hypothesis 1) can be used as a consideration for issuers to switch and consistently become Islamic Label (IL) companies. Investors can invest in Islamic Label companies, because the financial flexibility they have as IL companies will have a positive impact on performance. Second, the significance of the interaction of IL and cash on financial flexibility (hypothesis 3) contributes to the financial flexibility hypothesis and supports previous empirical research (Bolton and Scharfstein, 1990; Opler et al., 1999; Almeida et al., 2004;

Billett and Garfinkel, 2004; Faulkender and Wang, 2006; Acharya et al., 2007; Dittmar and Mahrt-Smith, 2007; Haushalter et al., 2007; Kalcheva and Lins, 2007; Harford et al., 2008; Riddick and Whited, 2009; Fresard, 2010).

#### 4. CONCLUSION

Starting from the implications of financial attributes or characteristics on financial flexibility and its impact, then to fill the lack of research the purpose of this study has answered, that (1) Islamic Label (IL) has higher financial flexibility; (2) IL capital structure conservatism contributes to higher financial flexibility; (3) IL cash holding has a contribution to higher financial flexibility. The significance of the research results has several implications. First, it contributes to the financial flexibility hypothesis, agency theory, pecking order theory, and adds evidence to previous research. Second, it expands the study of Islamic finance.

Furthermore, it can be concluded that this study found Islamic label attributes contribute to financial flexibility. Testing the impact of the combination of Islamic Label (IL) and capital structure conservatism on financial flexibility shows IL capital structure conservatism does not contribute to increasing financial flexibility. However, cash holding IL is a potential source of financial flexibility.

#### REFERENCES

- Acharya, V. V., H. Almeida, dan M. Campello. 2007. "Is cash negative debt? A hedging perspective on corporate financial policies". *Journal of Financial Intermediation*, Vol. 16, No. 4, hlm: 515-554.
- Adamsson, H., K. Bouslah, dan A. Hoepner. 2014. "An Islamic equity premium puzzle". *SSRN Electronic Journal*, Vol., No., hlm.
- Akguc, S., dan N. Al Rahahleh. 2018. "Effect of shariah compliance on operating performance: evidence from GCC countries". *Emerging Markets Finance and Trade*, Vol. 54, No. 12, hlm: 2874-2896.
- Akinsomi, O., S. E. Ong, M. F. Ibrahim, dan G. Newell. 2015. "Does Being Islamic or Shariah-compliant affect Capital Structure? Evidence from Real-estate Firms in the Gulf Cooperation Council States". *Evidence from Real-estate Firms in the Gulf Cooperation Council States (June 4, 2015)*, Vol., No., hlm.
- Al-Najjar, B. 2013. "The financial determinants of corporate cash holdings: Evidence from some emerging markets". *International business review*, Vol. 22, No. 1, hlm: 77-88.
- Al-Slehat, Z. A. F. 2019. "The impact of the financial flexibility on the performance: An empirical study on a sample of Jordanian services sector firms in period (2010– 2017)". *Int. J. Bus. Manag*, Vol. 14, No., hlm: 1-11.
- Alipour, M., M. F. S. Mohammadi, dan H. Derakhshan. 2015. "Determinants of capital structure: an empirical study of firms in Iran". *International Journal of Law and Management*, Vol., No., hlm.
- Almeida, H., M. Campello, dan M. S. Weisbach. 2004. "The cash flow sensitivity of cash". *The Journal of Finance*, Vol. 59, No. 4, hlm: 1777-1804.
- Alnori, F., dan F. Alqahtani. 2019. "Capital structure and speed of adjustment in non-financial firms: Does sharia compliance matter? Evidence from Saudi Arabia". *Emerging Markets Review*, Vol. 39, No., hlm: 50-67.
- Anderson, R. W., dan A. Carverhill. 2012. "Corporate liquidity and capital structure". *The Review of Financial Studies*, Vol. 25, No. 3, hlm: 797-837.

- Arslan-Ayaydin, Ö., C. Florackis, dan A. Ozkan. 2014. "Financial flexibility, corporate investment and performance: evidence from financial crises". *Review of Quantitative Finance and Accounting*, Vol. 42, No. 2, hlm: 211-250.
- Arslan, Ö., C. Florackis, dan A. Ozkan. 2006. "The role of cash holdings in reducing investment-cash flow sensitivity: Evidence from a financial crisis period in an emerging market". *Emerging Markets Review*, Vol. 7, No. 4, hlm: 320-338.
- Arslana, Ö., C. Florackisb, dan A. Ozkanc. 2011. "Financial Flexibility, Corporate Investment and Performance". *Applied Economics*, Vol. 44, No., hlm: 177-187.
- Bancel, F., dan U. R. Mittoo. 2004. "Cross-country determinants of capital structure choice: a survey of European firms". *Financial management*, Vol., No., hlm: 103-132.
- Bates, T. W., K. M. Kahle, dan R. M. Stulz. 2009. "Why do US firms hold so much more cash than they used to?". *The Journal of Finance*, Vol. 64, No. 5, hlm: 1985-2021.
- Bellalah, M., A. A. Rehman, dan O. Masood. 2013. *Syariah Compliant Screening Practices*. THEMA (THéorie Economique, Modélisation et Applications), Université de ....
- Bessler, W., W. Drobetz, R. Haller, dan I. Meier. 2013. "The international zero-leverage phenomenon". *Journal of Corporate Finance*, Vol. 23, No., hlm: 196-221.
- Bhatt, V., dan J. Sultan. 2012. "Leverage risk, financial crisis, and stock returns: A comparison among Islamic, conventional, and socially responsible stocks". *Islamic Economic Studies*, Vol. 20, No. 1, hlm.
- Bigelli, M., J. F. Martín-Ugedo, dan F. J. Sánchez-Vidal. 2014. "Financial conservatism of private firms". *Journal of Business Research*, Vol. 67, No. 11, hlm: 2419-2427.
- Billett, M. T., dan J. A. Garfinkel. 2004. "Financial flexibility and the cost of external finance for US bank holding companies". *Journal of money, credit and banking*, Vol., No., hlm: 827-852.
- Billett, M. T., T. H. D. King, dan D. C. Mauer. 2007. "Growth opportunities and the choice of leverage, debt maturity, and covenants". *The Journal of Finance*, Vol. 62, No. 2, hlm: 697-730.
- Bolton, P., dan D. S. Scharfstein. 1990. "A theory of predation based on agency problems in financial contracting". *The American economic review*, Vol., No., hlm: 93-106.
- Brounen, D., A. De Jong, dan K. Koedijk. 2004. "Corporate finance in Europe: Confronting theory with practice". *Financial management*, Vol., No., hlm: 71-101.
- Bugshan, A., F. Alnori, dan W. Bakry. 2021. "Shariah compliance and corporate cash holdings". *Research in International Business and Finance*, Vol. 56, No., hlm: 101383.
- Bukvič, V. Year. "Financial flexibility as one of the key factors that influence firm investment ability". Artikel dipresentasikan pada *8th International Conference An Enterprise Odyssey: Saving the Sinking Ship through Human Capital*, Faculty of Economics & Business, di.
- Byoun, S. 2008. "How and when do firms adjust their capital structures toward targets?". *The Journal of Finance*, Vol. 63, No. 6, hlm: 3069-3096.
- . 2011. "Financial flexibility and capital structure decision". *Available at SSRN 1108850*, Vol., No., hlm.
- Campbell, J. Y., J. Hilscher, dan J. Szilagyi. 2008. "In search of distress risk". *The Journal of Finance*, Vol. 63, No. 6, hlm: 2899-2939.
- Campello, M. 2003. "Capital structure and product markets interactions: evidence from business cycles". *Journal of financial Economics*, Vol. 68, No. 3, hlm: 353-378.
- Campello, M., J. R. Graham, dan C. R. Harvey. 2010. "The real effects of financial constraints: Evidence from a financial crisis". *Journal of financial Economics*, Vol. 97, No. 3, hlm: 470-487.
- Chandra, T., A. Junaedi, E. Wijaya, dan S. Chandra. 2019. "The Co-Determinant of Capital Structure and Profitability Based on the Supply Chain Strategy: Evidence from Manufacturing Sector in Indonesia". *International Journal of Supply Chain Management*, Vol. 8, No. 6, hlm: 705-717.
- Chen, T., J. Harford, dan C. Lin. 2013. "Financial Flexibility and Corporate Cash Policy". Vol., No., hlm.
- Chen, X., Y. Sun, dan X. Xu. 2016a. "Free cash flow, over-investment and corporate governance in China". *Pacific-Basin Finance Journal*, Vol. 37, No. C, hlm: 81-103.
- Chen, Y., P. Y. Dou, S. G. Rhee, C. Truong, dan M. Veeraraghavan. 2015. "National culture and corporate cash holdings around the world". *Journal of Banking & Finance*, Vol. 50, No., hlm: 1-18.
- Chen, Y., Z. Murgulov, S. G. Rhee, dan M. Veeraraghavan. 2016b. "Religious beliefs and local government financing, investment, and cash holding decisions". *Journal of Empirical Finance*, Vol. 38, No., hlm: 258-271.

- Cheong, C. W. 2021. "Risk, resilience, and Shariah-compliance". *Research in International Business and Finance*, Vol. 55, No., hlm: 101313.
- Chipeta, C., N. Aftab, dan M. Machokoto. 2021. "The implications of financial conservatism for African firms". *Finance Research Letters*, Vol. 42, No., hlm: 101926.
- Chua, S. H. 2012. "Cash holdings, Capital structure and Financial flexibility", University of Nottingham.
- Cui, W. 2020. "Is debt conservatism the solution to financial constraints? An empirical analysis of Japanese firms". *Applied Economics*, Vol. 52, No. 23, hlm: 2526-2543.
- Cuong, L. K., K. Shimizu, dan W. Cui. 2021. "The determinants of negative net leverage policy: New evidence from Japan". *Economic Modelling*, Vol. 97, No., hlm: 449-460.
- Dang, V. A. 2013. "An empirical analysis of zero-leverage firms: New evidence from the UK". *International Review of Financial Analysis*, Vol. 30, No., hlm: 189-202.
- DeAngelo, H., dan L. DeAngelo. 2007. "Capital structure, payout policy, and financial flexibility". *Marshall school of business working paper no. FBE*, Vol., No., hlm: 0206.
- DeAngelo, H., L. DeAngelo, dan T. M. Whited. 2011. "Capital structure dynamics and transitory debt". *Journal of financial Economics*, Vol. 99, No. 2, hlm: 235-261.
- Denis, D. J. 2011. "Financial flexibility and corporate liquidity". *Journal of Corporate Finance*, Vol. 17, No. 3, hlm: 667-674.
- Denis, D. J., dan S. B. McKeon. 2012. "Debt financing and financial flexibility evidence from proactive leverage increases". *The Review of Financial Studies*, Vol. 25, No. 6, hlm: 1897-1929.
- Denis, D. J., dan V. Sibilkov. 2009. "Financial constraints, investment, and the value of cash holdings". *The Review of Financial Studies*, Vol. 23, No. 1, hlm: 247-269.
- Derigs, U., dan S. Marzban. 2008. "Review and analysis of current Shariah-compliant equity screening practices". *International Journal of Islamic and Middle Eastern Finance and Management*, Vol. 1, No. 4, hlm: 285-303.
- Devos, E., U. Dhillon, M. Jagannathan, dan S. Krishnamurthy. 2012. "Why are firms unlevered?". *Journal of Corporate Finance*, Vol. 18, No. 3, hlm: 664-682.
- Dittmar, A., dan J. Mahrt-Smith. 2007. "Corporate governance and the value of cash holdings". *Journal of financial Economics*, Vol. 83, No. 3, hlm: 599-634.
- Dittmar, A., J. Mahrt-Smith, dan H. Servaes. 2003. "International corporate governance and corporate cash holdings". *Journal of Financial and Quantitative Analysis*, Vol. 38, No. 1, hlm: 111-133.
- El-Alaoui, A. O., O. I. Bacha, M. Masih, dan M. Asutay. 2018. "Does low leverage minimise the impact of financial shocks? New optimisation strategies using Islamic stock screening for European portfolios". *Journal of International Financial Markets, Institutions and Money*, Vol. 57, No., hlm: 160-184.
- Elgari, M. A. Year. "Purification of islamic equity funds: Methodology and Shariah foundation". Artikel dipresentasikan pada *Proceedings of the Fourth Harvard University Forum on Islamic Finance. Harvard University, Cambridge, MA*, di.
- Farooq, O., dan O. Tbeur. 2013. "Dividend policies of shariah-compliant and non-shariahcompliant firms: evidence from the MENA region". *International Journal of Economics and Business Research*, Vol. 6, No. 2, hlm: 158-172.
- Faulkender, M., dan R. Wang. 2006. "Corporate financial policy and the value of cash". *The Journal of Finance*, Vol. 61, No. 4, hlm: 1957-1990.
- Ferreira, M. A., dan A. S. Vilela. 2004. "Why do firms hold cash? Evidence from EMU countries". *European Financial Management*, Vol. 10, No. 2, hlm: 295-319.
- Forte, G., dan F. Miglietta. 2011. "A comparison of socially responsible and Islamic equity investments". Vol., No., hlm.
- Fresard, L. 2010. "Financial strength and product market behavior: The real effects of corporate cash holdings". *The Journal of Finance*, Vol. 65, No. 3, hlm: 1097-1122.
- Gamba, A., dan A. Triantis. 2008. "The value of financial flexibility". *The Journal of Finance*, Vol. 63, No. 5, hlm: 2263-2296.
- Ghadiri, M. 2017. "To study the relationship between financial flexibility with investment and auditor tenure". *Kuwait Chapter of the Arabian Journal of Business and Management Review*, Vol. 6, No. 5, hlm: 26.
- Girard, E. C., dan M. K. Hassan. 2008. "Is there a cost to faith-based investing: Evidence from FTSE Islamic indices". *The Journal of Investing*, Vol. 17, No. 4, hlm: 112-121.
- Graham, J. R., dan C. R. Harvey. 2001. "The theory and practice of corporate finance: Evidence from the field". *Journal of financial Economics*, Vol. 60, No. 2-3, hlm: 187243.

- Guizani, M. 2019. "Sharia-compliance and investment-cash flow sensitivity in oil rich countries". *Review of Behavioral Finance*, Vol., No., hlm.
- Guizani, M., dan G. Abdalkrim. 2021. "Does Shariah compliance affect corporate cash holdings and cash adjustment dynamics? Evidence from Malaysia". *Pacific Accounting Review*, Vol., No., hlm.
- Hakim, M. S., C. L. Liu, dan A. Kunaifi. 2021. "Cash Holdings in Shariah-Compliant Firms". *Theoretical Economics Letters*, Vol. 11, No. 1, hlm: 47-55.
- Harford, J., S. A. Mansi, dan W. F. Maxwell. 2008. "Corporate governance and firm cash holdings in the US". *Journal of financial Economics*, Vol. 87, No. 3, hlm: 535-555.
- Harford, J., W. Mikkelsen, dan M. M. Partch. 2003. "The effect of cash reserves on corporate investment and performance in industry downturns". *Unpublished working paper*, Vol., No., hlm.
- Haushalter, D., S. Klasa, dan W. F. Maxwell. 2007. "The influence of product market dynamics on a firm's cash holdings and hedging behavior". *Journal of financial Economics*, Vol. 84, No. 3, hlm: 797-825.
- He, P., Y. Sun, Y. Zhang, dan T. Li. 2020. "COVID-19's impact on stock prices across different sectors—An event study based on the Chinese stock market". *Emerging Markets Finance and Trade*, Vol. 56, No. 10, hlm: 2198-2212.
- Hess, D., dan P. Immenkötter. 2014. "How much is too much? Debt Capacity and Financial Flexibility". *Debt Capacity and Financial Flexibility (March 2014)*, Vol., No., hlm.
- Hoberg, G., G. Phillips, dan N. Prabhala. 2014. "Product market threats, payouts, and financial flexibility". *The Journal of Finance*, Vol. 69, No. 1, hlm: 293-324.
- Huang, Z., W. Li, dan W. Gao. 2017. "Why do firms choose zero-leverage policy? Evidence from China". *Applied Economics*, Vol. 49, No. 28, hlm: 2736-2748.
- Hussein, K., dan M. Omran. 2005. "Ethical investment revisited: evidence from Dow Jones Islamic indexes". *The Journal of Investing*, Vol. 14, No. 3, hlm: 105-126.
- Hussein, K. A. 2007. "Islamic investment: evidence from Dow Jones and FTSE indices". *Islamic Economics and Finance*, Vol. 387, No., hlm.
- Jagannathan, R., I. Meier, dan V. Tarhan. 2011. *The cross-section of hurdle rates for capital budgeting: an empirical analysis of survey data*. National Bureau of Economic Research.
- Jensen, M. C. 1986. "Agency costs of free cash flow, corporate finance, and takeovers". *The American economic review*, Vol. 76, No. 2, hlm: 323-329.
- Jibril, I. Y., dan U. H. Shehu. 2015. "Free cash flow, Growth opportunity and performance of nigerian quoted food, Tobacco & beverages firms". Vol., No., hlm.
- John, T. A. 1993. "Accounting measures of corporate liquidity, leverage, and costs of financial distress". *Financial management*, Vol., No., hlm: 91-100.
- Kadioglu, E., S. Kilic, dan E. A. Yilmaz. 2017. "Testing the relationship between free cash flow and company performance in Borsa Istanbul". *International Business Research*, Vol. 10, No. 5, hlm: 148-158.
- Kalcheva, I., dan K. V. Lins. 2007. "International evidence on cash holdings and expected managerial agency problems". *The Review of Financial Studies*, Vol. 20, No. 4, hlm: 1087-1112.
- Katper, N. K., A. Madun, dan K. B. S. Syed. 2015. "Does Shariah compliance lead to managerial trustworthiness? Evidence from empirical analysis of capital structure of shariah and non-shariah firms in Pakistan". *Journal of Applied Economic Sciences*, Vol. 10, No. 7, hlm: 1028-1045.
- Khatkhatay, M. H., dan S. Nisar. 2007. "Shariah compliant equity investments: An assessment of current screening norms". *Islamic Economic Studies*, Vol. 15, No. 1, hlm.
- Kutan, A. M., I. Naz, dan S. M. A. Shah. 2018. "Are top managers important for firm performance and idiosyncratic risk? Evidence from sharia vs non-sharia-compliant firms in the UK and Pakistan". *The World Economy*, Vol. 41, No. 3, hlm: 763-780.
- Lê, L. H. 2017. "Free cashflow and firm performance: Evidence from sectoral levels for Vietnamese listed firms". Vol., No., hlm.
- Leary, M. T., dan M. R. Roberts. 2005. "Do firms rebalance their capital structures?". *The Journal of Finance*, Vol. 60, No. 6, hlm: 2575-2619.
- Lei, J., J. Qiu, dan C. Wan. 2018. "Asset tangibility, cash holdings, and financial development". *Journal of Corporate Finance*, Vol. 50, No., hlm: 223-242.
- Lins, K. V., H. Servaes, dan P. Tufano. 2010. "What drives corporate liquidity? An international survey of cash holdings and lines of credit". *Journal of financial Economics*, Vol. 98, No. 1, hlm: 160-176.

- Machokoto, M., G. Areneke, dan D. Nyangara. 2021a. "Financial conservatism, firm value and international business risk: Evidence from emerging economies around the global financial crisis". *International Journal of Finance & Economics*, Vol. 26, No. 3, hlm: 4590-4608.
- Machokoto, M., C. Chipeta, N. Aftab, dan G. Areneke. 2021b. "The financial conservatism of firms in emerging economies". *Research in International Business and Finance*, Vol. 58, No., hlm: 101483.
- Mahmood, Y., M. F. Rizwan, dan A. Rashid. 2018. "Exploring the relationship between financial distress, financial flexibility, and firm performance: empirical evidence from Pakistan stock Exchange". *NICE Research Journal*, Vol., No., hlm: 1-16.
- Marchica, M. T., dan R. Mura. 2010. "Financial flexibility, investment ability, and firm value: evidence from firms with spare debt capacity". *Financial management*, Vol. 39, No. 4, hlm: 1339-1365.
- Meier, I., Y. Bozec, dan C. Laurin. 2013. "Financial flexibility and the performance during the recent financial crisis". *International journal of commerce and Management*, Vol., No., hlm.
- Modigliani, F., dan M. H. Miller. 1958. "The cost of capital, corporation finance and the theory of investment". *The American*, Vol. 1, No., hlm: 3.
- Musse, O. S. H., F. M. Nor, dan A. M. Ahmed. 2021. "The Effect of Islamic Leverage on Shariah-Compliant Firm's Performance: Empirical Evidence From Bursa Malaysia". *International Journal of Business and Economy*, Vol. 3, No. 1, hlm: 85-97.
- Myers, S. C. 1977. "Determinants of corporate borrowing". *Journal of financial Economics*, Vol. 5, No. 2, hlm: 147-175.
- Narayan, P. K., dan J. Westerlund. 2014. "Does cash flow predict returns?". *International Review of Financial Analysis*, Vol. 35, No., hlm: 230-236.
- Naz, I., S. M. A. Shah, dan A. M. Kutan. 2017. "Do managers of sharia-compliant firms have distinctive financial styles?". *Journal of International Financial Markets, Institutions and Money*, Vol. 46, No., hlm: 174-187.
- Obaidullah, M. 2005. "Islamic financial services". Vol., No., hlm.
- Ohlson, J. A. 1980. "Financial ratios and the probabilistic prediction of bankruptcy". *Journal of Accounting Research*, Vol., No., hlm: 109-131.
- Opler, T., L. Pinkowitz, R. Stulz, dan R. Williamson. 1999. "The determinants and implications of corporate cash holdings". *Journal of financial Economics*, Vol. 52, No. 1, hlm: 3-46.
- Park, K., dan S. S. Jang. 2013. "Capital structure, free cash flow, diversification and firm performance: A holistic analysis". *International Journal of Hospitality Management*, Vol. 33, No., hlm: 51-63.
- Pok, W. C. 2012. "Analysis of Syariah quantitative screening norms among Malaysia Syariah-compliant stocks". Vol., No., hlm.
- Qoyum, A., M. R. P. Sakti, H. M. T. Thaker, dan R. U. AlHashfi. 2021. "Does the Islamic Label Indicate Good Environmental, Social, and Governance (ESG) Performance? Evidence from Sharia-Compliant Firms in Indonesia and Malaysia". *Borsa Istanbul Review*, Vol., No., hlm.
- Rahman, A. A., M. A. Yahya, dan M. H. M. Nasir. 2010. "Islamic norms for stock screening". *International Journal of Islamic and Middle Eastern Finance and Management*, Vol., No., hlm.
- Rapp, M. S., T. Schmid, dan D. Urban. 2014. "The value of financial flexibility and corporate financial policy". *Journal of Corporate Finance*, Vol. 29, No., hlm: 288-302.
- Riddick, L. A., dan T. M. Whited. 2009. "The corporate propensity to save". *The Journal of Finance*, Vol. 64, No. 4, hlm: 1729-1766.
- Shanmugam, B., dan Z. R. Zahari. 2009. A primer on Islamic finance: Research Foundation of CFA Institute Charlottesville, VA.
- Shumway, T. 2001. "Forecasting bankruptcy more accurately: A simple hazard model". *The journal of Business*, Vol. 74, No. 1, hlm: 101-124.
- Simutin, M. 2010. "Excess cash and stock returns". *Financial management*, Vol. 39, No. 3, hlm: 1197-1222.
- Soenen, L. 2003. "Cash Holdings: A Mixed Blessing?". *AFP exchange*, Vol. 23, No. 5, hlm: 54-57.
- Strebulaev, I. A., dan B. Yang. 2013. "The mystery of zero-leverage firms". *Journal of financial Economics*, Vol. 109, No. 1, hlm: 1-23.
- Teng, X., B.-G. Chang, dan K.-S. Wu. 2021. "The Role of Financial Flexibility on Enterprise Sustainable Development during the COVID-19 Crisis—A Consideration of Tangible Assets". *Sustainability*, Vol. 13, No. 3, hlm: 1245.
- Volberda, H. W. 1999. *Building the flexible firm: How to remain competitive*: Oxford university press.
- Xie, X., dan J. Zhao. 2020. "Analysis of the Influence of Financial Flexibility on Enterprises".

- Open Journal of Business and Management*, Vol. 8, No. 04, hlm: 1917.
- Yanti, Y., E. Sastra, dan T. B. Kurniawan. Year. "The Impact of Financial Flexibility and Business Risk on Capital Structure with Firm Size as a Moderating Variable". Artikel dipresentasikan pada *Tenth International Conference on Entrepreneurship and Business Management 2021 (ICEBM 2021)*, di.
- Yildirim, R., M. Masih, dan O. I. Bacha. 2018. "Determinants of capital structure: evidence from Shari'ah compliant and non-compliant firms". *Pacific-Basin Finance Journal*, Vol. 51, No., hlm: 198-219.
- Zeng, A.-m., dan P. Hangzhou. Year. "Financial Conservatism and Firms' Financing and Investment Behaviors During the Global Financial Crisis". Artikel dipresentasikan pada *2011 International Conference on Economics and Finance Research*, di.
- Zeng, A., C. Zhang, dan Z. Wei. 2013. "The impact of financial crisis, financial flexible reserves and corporate investment behavior: empirical evidence from Chinese listed companies". *Management World*, Vol. 4, No., hlm: 107-120.
- Zhang, D., H. Cao, D. G. Dickinson, dan A. M. Kutan. 2016. "Free cash flows and overinvestment: Further evidence from Chinese energy firms". *Energy Economics*, Vol. 58, No., hlm: 116-124.
- Zhang, H., Z. Zhang, dan E. Steklova. 2020. "Do Companies Need Financial Flexibility for Sustainable Development?". *Sustainability*, Vol. 12, No. 5, hlm: 1811.
- Zhang, X., B.-G. Chang, dan K.-S. Wu. 2022. "COVID-19 Shock, Financial Flexibility, and Hotels' Performance Nexus". *Frontiers in Public Health*, Vol. 10, No., hlm.
- Zhao, H., dan D. Zhang. 2010. "Research on the Original Attributes of Corporate Financial flexibility". *Accounting Research*, Vol. 6, No., hlm: 62-69.