ACCOUNTING, CORPORATE GOVERNANCE & BUSINESS ETHICS | RESEARCH ARTICLE

Islamic social reporting on value of the firm: Evidence from Indonesia Sharia Stock Index

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Abstract: The purpose of this study is to examine and analyze the intervening effect of Islamic Social Responsibility and capital structure on the relationship between profitability and firm value. This research is an explanatory research with a quantitative descriptive approach. The data used were obtained from annual reports of sampled firm as published on the Indonesia Stock Exchange (IDX) for the 2013–2018 period. 39 companies classified as basic and chemical industries and listed in the Indonesia Sharia Stock Index (ISSI) were sampled using the purposive sampling technique. The data were analyzed using Structural Equation Model (SEM) and Sobel test to analyze the indirect effect. The results show that profitability, ISR and capital structure have a positive significant effect on firm value. Profitability was found to have positive effect on ISR and negative affected the capital structure. A mediation test showed that ISR and capital structure does not mediate the effect of profitability on firm value.

Subjects: Economics; Finance; Corporate Finance; Business, Management and Accounting; Accounting

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PUBLIC INTEREST STATEMENT

Islamic Social Reporting (ISR) is a form of reporting on the social performance of Islamic institutions as a spiritual need for Islamic investors in terms of decision-making. This study expands the literature by examining the role of ISR and capital structure as variables that moderate the relationship between profitability and firm value, which is analyzed using the Structural Equation Model (SEM). This is done to determine and analyze whether the effect of profitability on firm value is stronger directly or through moderating variables. This study confirms that the effect of direct profitability is greater than through ISR and capital structure, meaning that investors tend to focus on company profitability. This study expands the literature related to Islamic Social Reporting by considering aspects of sharia which are still rarely applied by several sharia business institutions in Indonesia.
Keywords: capital structure; Islamic social reporting; profitability; sharia stock; value of the firm

1. Introduction

The Indonesian government is trying hard to grow the Indonesian economy by attracting more investors (kemenkeu.go.id, 2018). One of the most attractive investment for investors is sharia investment because it is capable in providing beneficial results for both parties. The Indonesia Stock Exchange (IDX) stated that the Indonesian Islamic capital market is one of the largest markets in the world. This is very possible considering that Indonesia has 264 million population and 87 percent of them are Muslims (Liputan6.com, 2019). Investors in the Islamic capital market, especially in Islamic stock instruments, experienced a significant increase in the last 5 years, namely with as many as 47.165 investors in February 2019. The IDX provides three Islamic indices that can be used as a reference in understanding the development. One of them is the Indonesian Sharia Stock Index (ISSI).

Consumer News and Business Channel (CNBC) Indonesia (2019) stated that the performance of Islamic stocks is incredibly positive, judging from the performance of ISSI whose rate of return is rank second after the Dow Jones Islamic Market Index. Table 1 shows that the performance of companies in ISSI show good prospects because there is an increasing trend from year to year. Moreover, ISSI continues to move towards the positive zone even though its movements are limited. Kontan.co.id (2018) stated that the top gainer of Islamic issuers is dominated by companies from basic and chemical industry sectors. IDX noted that the share of basic and chemical industry sectors has risen by 24.01%. IDX became the highest sector compared to other sectors during the period 2018–2019. Table 1 lists the market capitalization statistics in the Indonesia Sharia Stock Index since it was founded in 2011.

Companies showing good performances is an evidence that such firms can increase their value, which is a measure of objective value by the public. This contributes towards the companies survival. Firm value is a market indicator to measure the overall company assessment. The success in creating company value gives hope to the shareholders about greater company profits (Salvatore, 2011). Assessment of good or bad prospects can be seen from the indicators, one of which is the company's ability to generate profits. Profitability is a factor that can affect firm value. If the manager is able to manage the company well, it will generate large profits and have a positive impact on the stock price. Sabrin et al. (2016), Sucuahi and Cambarihan (2016), Tui et al. (2017), and Marsha and Murtaqi (2017) examined this and concluded that company profitability has a positive effect on firm value. On the other hand, studies by Hestinoviana and Handayani (2013) and Rizki et al. (2018) found no relationship.

| Year | ISSI Capital Market |
|------|---------------------|
| 2011 | 1,968,091,37        |
| 2012 | 2,451,334,37        |
| 2013 | 2,557,846,77        |
| 2014 | 2,946,892,79        |
| 2015 | 2,600,850,72        |
| 2016 | 3,170,056,08        |
| 2017 | 3,704,543,09        |
| 2018 | 3,666,688,31        |

Source: OJK (2019)
One of the efforts to increase profitability is to form a good corporate image by implementing accountability through Corporate Social Responsibility (CSR). In recent years, several Islamic economists have initiated a form of social performance reporting for Islamic business institutions called as Islamic Social Reporting (ISR). Islamic Social Reporting arises, because of limitations in conventional reporting that does not pay attention to sharia provisions. ISR can be used by Muslims as a consideration in making decisions. Besides, it can also be used by companies for fulfilling obligations to Allah SWT and the surrounding community (Haniffa, 2002). ISR is a measure of social performance for companies that have sharia effects in carrying out their social obligations to those concerned. ISR is a developed compilation of CSR standard items set by AAOIFI (Accounting and Auditing Organization for Islamic Financial Institutions), which was further established by researchers on CSR items to be reported by an Islamic entity (Sunarsih & Ferdiaynsoh, 2016).

Earlier studies revealed more about the application of ISR in Islamic banks. These were conducted by Maali et al. (2006), Kamla and Rammal (2013), Meutia and Febrianti (2017), and Zubairu et al. (2011). These studies tried to measure the extent that ISR is practiced by Islamic companies. According to (Othman & Thani, 2010), he application of ISR in the annual reports of selected companies is classified as minimal. A good ISR disclosure will provide a positive signal to the shareholders, which has an impact on increasing the company value. Ratri and Dewi (2017), and Cahya et al. (2017) stated that ISR disclosure has a positive effect on firm value, while Ani (2017) concluded that there exists no positive.

Another factor that can affect firm value is capital structure. Capital structure theory explains the funding policy in determining the ratio between debt and equity to maximize firm value (Ayunku & Timipre, 2019). Companies listed on the Islamic Stock Exchange must comply with several principles overseen by the OJK in collaboration with DSN MUI. The financial ratio of Islamic securities has a total debt based on the company’s interest compared to the total equity of less than 82% or 45%-55%. The positive influence between capital structure and firm value was identified by Ogbulu and Emeni (2012), Hoque et al. (2014), and Rizki et al. (2018). However, different results were revealed by Kodongo et al. (2015) and Nofrivul et al. (2017) who stated that capital structure has no effect on firm value.

Based on the explanation of each variable and the inconsistency of some of the research results stated above, this topic becomes necessary. The inconsistency of the results is thought to be caused by the variables that mediate the relationship between profitability and firm value. The existence of Islamic Social Reporting and capital structure used as intervening variables were not tested by most researchers. Companies with a high level of profitability tend to conduct high social responsibility disclosures and reduce the use of debt, thereby increasing the company value. Therefore, this research aims to examine the effect of these variables on firm value.

2. Literature review and hypotheses

Corporate finance theory aims to maximize firm value. Corporate finance arises due to company’s needs in financial reporting and accountability (Anwar, 2015). If the company enjoys large profits, the stock market value (owner’s funds) will increase rapidly, and at the same time, the company’s debt value (creditors’ funds) will not be affected. A stock value that hits the right index will measure the effectiveness of the company. It is often said that maximizing company value also means maximization shareholder wealth.

2.1. Firm value

Firm value is the investor’s view of the company, which is often associated with stock prices. Firm value can be measured by several ratios, one of them is via Tobin’s Q (Hoyt & Liebentberg, 2011). Several factors that influence firm value includes profitability, Corporate Social Responsibility (CSR), and capital structure. Profitability measures how well a company can generate profits from its operational processes that have been implemented to ensure the company’s survival in the future. The company’s ability to generate profits, or often called as profitability, can be measured by several indicators, among others are Return on Assets (ROA), Return on Equity (ROE), and Net Profit Margin (NPM) (Murniati, 2016).
2.2. Islamic social reporting

According to the theory of sharia companies, in the operation and performance of each commercial company, they carry a role and responsibility to Allah because they manage and use the resources that belong to Allah as the owner and creator of the entire universe. Therefore, being open to every aspect with good intentions to society is one way to worship Allah (Hussain et al., 2020). ISR is measuring companies’ social performance who have sharia securities in carrying out their social responsibilities to those concerned. A business that claims to comply with Sharia should be clearer about their role in society. An understanding of the concepts of accountability, social justice and ownership that are central to social relations is key to an Islamic perspective on social reporting (Maali et al., 2006). Therefore, there is a need for a special framework for reporting corporate social responsibility in accordance with Islamic principles. The ISR item has six indicators, namely investment and finance, product and services, employees, society, environment, and corporate governance (Haniffa, 2002).

2.3. Capital structure

a. Trade-Off Theory

The trade-off theory states that there is a positive relationship between capital structure and firm value with the assumption that tax returns are greater than the costs of financial pressure and agency costs. In addition, this theory also predicts that there is a positive relationship between capital structure and the level of profitability (Sudiani & Wiksuana, 2018).

   a. Agency Theory

Problems related to agency arise if the management prioritizes its interests over the shareholders' interests. In result, that agency costs arise, hence it must be minimized by disclosing the mechanism.

Capital structure can measure by several ratios, including Debt-to-Asset Ratio (DAR), Debt-to-Equity Ratio (DER), and Long-term Debt-to-Equity Ratio (L1DER) (Niar et al., 2018). Companies that have high profits tend to have more activities related to social responsibility, which hopefully will lead to an increase in the company value. Good company performance cannot be separated from the role of its managers in determining financial decisions, one of which is funding decisions (capital structure). The right funding decision will leads to an increase in its share prices and will increase the company value.

3. Hypotheses

Hypothesis 1 : Profitability, Islamic Social Reporting, and Capital Structure has a significant effect on firm value

Profitability is a description of management performance in managing the company. If managers are able to manage the company well, the costs incurred by the company will be smaller so that the profits will be greater. The company’s ability to generate profits increases, so the stock price will also increase. Amount of profit will affect value of the firm. Research conducted by Sabrin et al. (2016), Sucuahi and Cambarihan (2016), Marsha and Murtaqi (2017), and Tui et al. (2017) stated that company profitability has a positive effect on firm value. This study also supports the theory put forward by Modigliani and Miller that firm value is determined by the profit from the company’s assets.

Several studies have found that social disclosure will reflect the company’s image (Kolk, 2008). Disclosure of Islamic Social Reporting (ISR) can increase corporate value for Muslim stakeholders, because information that is in accordance with sharia principles will make a Muslim not hesitate to invest his funds. Research conducted by Ratri and Dewi (2017), Cahya et al. (2017), and Setiawan et al. (2019) found that ISR disclosure has a positive effect on firm value.
The tradeoff theory states that there is an optimal capital structure, namely a capital structure that can increase firm value, where it is achieved if the company is able to balance

the benefits of using debt with bankruptcy and agency costs, then any additional debt will increase company value. This is supported by research including Ogbulu and Emeni (2012), Hoque et al. (2014), and Andawasatya et al. (2017) showing that capital structure has a positive and significant effect on firm value.

Hypothesis 2 : Profitability has a significant effect on Islamic Social Reporting and Capital Structure

Companies with good financial performance have the financial ability to make decisions regarding their surrounding environment. The higher the level of company profitability, the greater the disclosure of social information (Anggraini, 2006). From an Islamic perspective, companies must provide full disclosure regardless of strengths or weaknesses. Research conducted by Othman et al. (2009), Arshad et al. (2012), Lestari (2013), Cahya et al. (2017), Wardani and Sari (2019), and Hussain et al. (2020) stated that profitability has a positive significance to affect the level of Islamic social reporting.

Companies with a high rate of return tend to use a relatively small proportion of debt. This is because with a high rate of return the need for funds is generated internally from retained earnings (Brigham & Houston, 2001). This shows that there is an influence between profitability and capital structure based on the fact that companies that have a high level of profitability will reduce dependence on outsiders. Several studies conducted by Mohammadzadeh et al. (2013), Karbasi Yazdi and Mohammadzadeh (2017), and Andawasatya et al. (2017) show that profitability has a negative and significant effect on capital structure.

Hypothesis 3 : Islamic Social Reporting and Capital Structure mediates the relationship between profitability and firm value

The attention of investors now is not only focused on profit oriented, but on the importance of implementing CSR as part of their business strategy. Sharia-based companies must carry out social responsibility based on sharia principles that have been developed in such a way as to become an ISR which contains adjustments to the CSR standard items set by AAOIFI. Companies that have high profits tend to do more forms of social responsibility, which hopefully will lead to an increase in company value. Research conducted by Cahya et al. (2017) and Ratri and Dewi (2017) states that ISR disclosure can mediate the effect of financial and environmental performance on firm value.

Companies that have succeeded in obtaining large profits and financial managers are able to manage these profits through the right financial decisions will be responded positively by investors, thereby increasing company value (Wahyudi & Pawestri, 2006). Good company performance cannot be separated from the role of managers in generating profits and determining financial decisions, one of them are funding decisions (capital structure). High profitability and the right funding decisions will be able to increase share prices which will have an impact on increasing company value. Based on this description, it can be said that profitability affects firm value through capital structure, which is supported by research by Chen and Chen (2011), and Andawasatya et al. (2017).

The thinking framework is prepared based on literature review and relevant research results. The conceptual framework of this research can be seen in Figure 1.
4. Methodology

This research is an explanatory research with a quantitative approach. This study used 43 companies listed on the Indonesia Stock Exchange (IDX) classified as basic industry and chemical sectors. The sample is selected by purposive sampling method with specific criteria, and obtained 39 companies to be sampled, because 3 companies were delisted and 1 company merged with other companies. The data is obtained from a secondary data source, the IDX publications collected by documentation techniques. The operational definition of the variables are as follow:

a. Firm Value

Value of the firm is an investor’s assessment that is often associated with stock prices (Harmono, 2014). Firm value is reflected by Tobin’s Q (Dang et al 2020).

\[ \text{Tobin’s Q} = \frac{EMV + D}{EBV + D} \]

\( EMV \) = Equity Market Value (closing price x number of shares outstanding). \( EBV \) = Equity Book Value (total assets—total liabilities). \( D \) = book value of total debt

a. Islamic Social Reporting

ISR is an extension of social reporting related to spiritual perspectives (Haniffa, 2002). This information disclosure consists of 6 indicators indicated as follows:

(1) Finance and Investment, measured by items of sources of funds for investment activities and limited financing of usury and gharar, the amount and distribution of zakat, and items that disclose organizational policies.

(2) Products and Services, with items disclosed regarding the halal status of the product and product explanation services, the existence of consumer complaints, handling complaints and customer service, customer satisfaction surveys.

(3) Employees, the item to be disclosed is the company’s concern for the welfare of employees in accordance with Islamic principles through worker characteristics, education, training, equality of opportunity and worship activities.
(4) Community Involvement, the items disclosed are closely related to the Islamic principle society through alms, waqf, qardul hasan, and charity activities that can ease the burden on society.

(5) Environment, the items disclosed are in the form of activities and the amount of funds spent by the company for environmental activities, such as environmental conservation, Go Green, and environmental policies.

(6) Corporate Governance, Items disclosed are in the form of company progress in managing the organization with the presence of commissioners, directors, Sharia Management Board, organizational structure and disclosures related to illegal transactions and prevention of corruption in the company.

Of the six aspects, the disclosure is measured by scoring 0-1.

a. Profitability

Profitability is the company’s ability to generate profits using company resources.

(1) Return on Asset (ROA)

ROA describes the extent to which the company’s assets can generate profits expressed as percentage (%).

\[ ROA = \frac{\text{Earning After Taxes}}{\text{Total Asset}} \times 100\% \]

(1) Return on Equity (ROE)

ROE is a measure of income available to the company owners on the capital invested in the company expressed as percentage (%).

\[ ROE = \frac{\text{Earning After Taxes}}{\text{Total Equity}} \times 100\% \]

(1) Net Profit Margin (NPM)

NPM measures a company’s ability to generate profits using sales achieved and is expressed as percentage (%).

\[ NPM = \frac{\text{Earning After Taxes}}{\text{Sales}} \times 100\% \]

a. Capital Structure

The capital structure is an illustration of the proportion of the company’s financial resources in financing a company.

(1) Debt to Asset Ratio (DAR)

DAR is the company’s ability to fulfill its obligations to pay debts with assets owned.

\[ DAR = \frac{\text{Total Debt}}{\text{Total Asset}} \]

(1) Debt to Equity Ratio (DER)

DER is the company’s ability to fulfill its obligations to pay debt with its own capital.
**DER** = \( \frac{\text{Total Debt}}{\text{Total Equity}} \)

(1) Long Term Debt to Equity Ratio (LtDER)

LtDER aims to measure how much each rupiah of the own capital is used as collateral for long-term debt.

\[ LtDER = \frac{\text{Longterm Debt}}{\text{Equity}} \]

The data analysis method in this research is quantitative analysis conducted using the Structural Equation Model (SEM) with AMOS 21 Program. SEM can be described as an analysis that combines factor analysis, structural model and path analysis methods. According to Ghozali (2014), SEM is a combination of separate statistical methods, namely factor analysis and simultaneous equation modeling. There are two main methods of SEM: Component-based methods or Variance-based, namely least squares method (PLS-SEM) and Covariance-based method (CB-SEM). This study uses CB-SEM, which is a multivariate analysis, which assumes that the data must conform to a normal distribution, with a minimum sample size and more accurate estimates (Gio, 2019). SEM describes a series of relationships that are built between several exogenous variables and several endogenous variables that form factors or constructs built from several indicators that are measured directly. The structural equations model are described as follows:

\[ \text{Profitability} = \lambda_1 \text{ROA} + \lambda_2 \text{ROE} + \lambda_3 \text{NPM} + \delta \]

Where FI = Finance & Investment. PS = Product & Services. Em = Employees. CI = Community Involvement. En = Environment. CG = Corporate Governance. DAR = Debt Asset Ratio. DER = Debt Equity Ratio. LtDER = Long-term Debt Equity Ratio. ISR = Islamic Social Reporting.

The indirect effect is that the intervening variables are tested by a procedure developed by Sobel (1982) or better known as the Sobel Test. The Sobel test is done by testing the intensity of indirect effects through ISR and capital structure. The Sobel test formula is as follows:

\[ S_{ab} = \sqrt{b^2S_a^2 + a^2S_b^2 + S_a^2S_b^2} \]

Sob = Sobel Test. a = raw (unstandardized) regression coefficient for the association between X and mediator. Sa = standard error of a. b = raw coefficient for the association between the mediator and Y. Sb = standard error of b.

This study uses additional analysis, namely a robustness test. (Robustness test) is used to test the validity of the research results. The Robust test will test the exogenous variable firm value by replacing the proxy Tobin’s Q with Price Book Value (PBV), the goal is when calculated with a different approach whether the results will remain consistent on exogenous variables against endogenous variables.

5. Research analysis and discussion of findings

5.1. SEM assumption test

(1) Example of Adequacy

The total number of firms sampled for this study are 39 companies with 152 data. For a study to meet the Maximum Likelihood (ML) method with the assumption that normality is met, a study must have a minimum of 100–200 samples. Hence, the sample of this study is declared as sufficient.

(1) Normality test
The result of the normality test of the data shows that the value of C.R is not more than ±2.58. So, the data is normally distributed (Byrne, 2001). The results of normality testing in this study can be seen in Table 2.

Table 2. Output normality test

| Variabel                  | Min  | Max  | Skew | C.R  | Kurtosis | C.R  |
|---------------------------|------|------|------|------|----------|------|
| Tobin’s Q                 | 0.09 | 2.01 | 0.825| 4.154| −0.076   | −0.192|
| Finance & Investment      | 0    | 1    | 0    | 0    | −2.000   | −5.033|
| Product & Services        | 0    | 1    | −0.137| −1.887| −1.859   | −4.680|
| Employees                 | 0    | 1    | −0.239| −1.201| −1.943   | −4.890|
| Community Involvement     | 0    | 1    | 0.053| 0.265| −1.997   | −5.026|
| Environment               | 0    | 1    | −0.132| −0.664| −1.983   | −4.989|
| Corporate Governance      | 0    | 1    | 0.265| 1.336| −1.930   | −4.856|
| DAR                       | 0.13 | 65.55| 0.495| 2.492| −1.186   | −2.985|
| DER                       | 0.01 | 1.60 | 0.646| 3.249| −0.291   | −0.732|
| LIDER                     | 0.90 | 67.41| 1.264| 6.362| 0.927    | 2.333|
| ROA                       | −11.10| 14.90| −0.010| −0.048| 0.471    | 1.186|
| ROE                       | −11.50| 28.90| 0.253| 1.273| 0.743    | 1.870|
| NPM                       | −10.03| 23.67| 0.320| 1.611| 0.936    | 2.356|
| Multivariate              |      |      |      |      | 0.512    | 0.160|

The result of the normality test of the data shows that the value of C.R is not more than ±2.58. So, the data is normally distributed (Byrne, 2001). The results of normality testing in this study can be seen in Table 2.

(1) Outliers Test

In the outlier’s test, the result shows that the data are free from outliers, both at the univariate and the multivariate levels. The results of the univariate outliers test in this study can be seen in Table 3.

Table 3. Output outliers test

| Zscore (ROA)   | N    | Minimum | Maximum |
|----------------|------|---------|---------|
| −2,51,518      | 152  | 2,67,296|
| Zscore (ROE)   | 152  | −2,65,926| 2,87,279|
| Zscore (NPM)   | 152  | −2,63,830| 2,66,116|
| Zscore (DAR)   | 152  | −1,05955| 2,03485|
| Zscore (DER)   | 152  | −1,44,756| 2,66,344|
| Zscore (LIDER) | 152  | −1,13,271| 2,91,863|
| Zscore (TOBINSQ)| 152 | −1,56,757| 2,81,694|
| Zscore (Financial&Investment) | 152 | −0,99,671| 0,99,671|
| Zscore (Product&Service) | 152 | −1,20,086| 0,82,726|
| Zscore (Employees) | 152 | −1,12,264| 0,88,490|
| Zscore (Community Involvement) | 152 | −0,97,081| 1,02329|
| Zscore (Environment) | 152 | −1,06458| 0,93,315|
| Zscore (Corporate Governance) | 152 | −0,87,315| 1,13,774|
| Valid N (listwisse) | 152 |        |         |
5.2. Data analysis

(1) Goodness of Fit

In the model testing, several suitability indices are used to measure the suitability of the research model being developed. Based on the analysis completed by AMOS, the results are shown in Table 4.

| GOF Index          | Result  | Cut off Value | Evaluation |
|--------------------|---------|---------------|------------|
| Chi-square         | 79,967  | 80,2321       | Good Fit   |
| Significancy probability | 0.052   | ≥ 0.05        | Good Fit   |
| RMSEA              | 0.045   | ≤ 0.08        | Good Fit   |
| GFI                | 0.925   | ≥ 0.90        | Good Fit   |
| AGFI               | 0.888   | ≥ 0.90        | Marginal Fit|
| CMIN/DF            | 1.311   | ≤ 2.00        | Good Fit   |
| TLI                | 0.970   | ≥ 0.90        | Good Fit   |
| CFI                | 0.976   | ≥ 0.90        | Good Fit   |

Source: AMOS data processing

It concludes that this research model is accepted because it meets the Goodness of Fit criteria.

(1) Hypothesis testing

a. Direct Effect

Decision making to test the hypothesis in this study uses the results of data analysis from the direct influence between variables which can be seen in the evaluation of parameter estimates in Table 5 below.

| Table 5. Direct effect |
|------------------------|
| Estimate   | SE     | CR     | P      | Decision |
| CS ← P     | -0.428 | 0.268  | -3.320 | ***      | Accept   |
| ISR ← P    | 0.454  | 0.006  | 4.685  | ***      | Accept   |
| FV ← P     | 0.280  | 0.009  | 2.635  | 0.008    | Accept   |
| FV ← CS    | 0.343  | 0.005  | 3.018  | 0.003    | Accept   |
| FV ← ISR   | 0.206  | 0.135  | 2.029  | 0.042    | Accept   |

CS = Capital Structure. P = Profitability. ISR = Islamic Social Reporting. FV = Firm Value

The direct effect test uses an assumed standard p-value level of 0.05 to test the hypothesis. Based on Table 5, the proposed hypothesis has a p-value of lower than 0.050 compared to the direct consequences. Thus hypothesis 1 and hypothesis 2 are accepted.

a. In-Direct Effect

One of the weaknesses of AMOS is that it does not indicate the significance level of its indirect effect. So, to test the indirect effect, this study used the Sobel test. According to Ghozali (2014),
Table 6: Indirect effect

|                | T-Statistic | Std.error | p-value | Decision |
|----------------|-------------|-----------|---------|----------|
| P → ISR → FV   | 1.52,561,574 | 0.0613    | 0.127   | Reject   |
| P → CS → FV    | −1,965,823  | 0.0919    | 0.110   | Reject   |

testing the mediation hypothesis can be done with a procedure developed by Sobel (1982), namely the Sobel test. The test results can be seen in Table 6 below.

CS = Capital Structure. P = Profitability. ISR = Islamic Social Reporting. FV = Firm Value

Table 6 shows the results of Sobel test to see the indirect effect between profitability and firm value through the intervening variables. The results show that ISR and capital structure do not mediate the relationship between profitability and firm value. This is indicated by the p-value that is greater than 0.05, which means the variables are not significant. Thus, hypothesis 3 is rejected.

6. Robustness test

This study uses an additional test to assess the durability of the main results with an analytical tool called the Robusnes test. Based on Sabrin et al. (2016) and Siregar et al. (2018), Price Book Value (PBV) is used as an alternative measurement to assess firm value. The results of the Robustness test using the PBV variable can be seen in Table 7.

Table 7: Robustness test results with PBV to measure firm value

|                | Tobins’Q Estimate | P Decision | PBV Estimate | P Decision |
|----------------|-------------------|------------|--------------|------------|
| CS + P         | −0.428            | 0.000      | Accept       | −0.869     | 0.000      | Accept     |
| ISR + P        | 0.454             | 0.000      | Accept       | 0.028      | 0.000      | Accept     |
| PBV + P        | 0.280             | 0.008      | Accept       | 0.027      | 0.047      | Accept     |
| PBV + CS       | 0.343             | 0.003      | Accept       | 0.015      | 0.038      | Accept     |
| PBV + ISR      | 0.206             | 0.042      | Accept       | 0.493      | 0.026      | Accept     |
| P → ISR → FV   | -                 | 0.127      | Reject       | -          | 0.044      | Accept     |
| P → CS → FV    | -                 | 0.110      | Reject       | -          | 0.846      | Reject     |

Overall, the robustness checks suggest that the main results are robust. Based on the test results, it is obtained consistent results when firm value is proxies by Tobins’ Q and PBV. This result again confirms the result that profitability, ISR, and capital structure still has significant direct effect on firm value.

6.1. Discussion of findings

High profitability indicates that the company’s management is managing its resources well. This indicates that the firm is in an advantageous position and this provides a positive signal for the investors. Companies with high profitability will attract investors with positive effects on the value of the company shares (Fajaria & Isnalita, 2018). Furthermore, this will have an impact on increasing the company’s Tobin’s Q value, which means that the company value is also high. The result of this study strengthens the evidence that profitability has a positive effect on firm value (Chen & Chen, 2011).
A higher ISR disclosure will increase firm value (Lidyah et al., 2019). This proves that ISR is an important factor in increasing firm value. Companies with more ISR disclosures will be assessed positively by the surrounding community because they have responsible and have concern for the surrounding environment, and participate in protecting the environment. In addition, companies with high ISR disclosures are considered to be able to pay more attention to the company’s prospects. So, investors will have a positive assessment and it will have an impact on increasing company value.

Under the capital structure theory, companies tend to determine financial policies related to capital structure with the aim of optimizing firm value. Additional debt is usually done when the company is developing its business, so that it can increase the stock price and firm value. This is in accordance with Modigliani and Miller’s theory which states that the capital structure is not optimal and additional debt will increase firm value. The trade-off theory also explains that the benefits of increasing debt are still greater than the sacrifices that occur. So, the benefits of using debt can directly increase the value of the firm.

Profitability is one of the variables that is quite influential in increasing ISR disclosure. High profitability will provide an opportunity for the management to make disclosures to principals regarding the broadening the social responsibility program. High profitability makes companies to have more freedom and flexible in implementing the ISR disclosure. Disclosure of social responsibility will thus be followed with financial costs. Thus, companies with high profitability will be able to overcome these costs. This result supports previous findings that indicates company does not operate to fulfill its own interests. The result also to provide benefits for its stakeholders. The company must be willing to provide full disclosure of their responsibility, whether the experiences ends with a gain or a loss. This shows that profitability affects the value of the firm (Arshad et al., 2012; Cahya et al., 2017; Othman et al., 2009).

A company that has a high level of profitability shows that the company can finance its operational activities independently and reduce the need of getting external funding. This result supports the Pecking Order theory which states that every company tends to use retained earnings as their first funding option. Companies with a high level of profitability will tend to have a low capital structure because they have smaller debt and greater use of their own capital. This means that profitability has an influence on a company’s capital structure. This results supports findings of earlier studies Andawasaty et al. (2017), Yazdi and Mohammadian (2017), and Mohammadzadeh et al. (2013).

The direct effect of profitability on firm value is greater than the indirect effect through disclosure of ISR. In other words, ISR cannot mediate the effect of profitability and the value of the firm. This result supports the finding of Nohong et al. (2019). The company value will continue to increase as the company’s profitability gets higher, and investors do not pay attention to the ISR disclosure. This may happen because every companies are bounded by Law Number 40 of 2007 which stated that companies must carry out social responsibility. Hence, investors believe that the companies are obliged to implement ISR if they do not want to be penalized. Investors will focus more on the level of profitability to decide on their investment.

Companies with high profits will tend to use their retained earnings in financing their operational activities so that the use of debt is relatively small. This shows that the higher the profitability, the lower the amount of debts in the company’s capital structure will be. Based on the relationship between profitability and firm value, it implies that a higher the level of company’s profitability means that the company has a good ability to generate profits. Companies with high profitability tend to be in demand by investors because they are considered as capable in generating large returns, and in result they have a direct impact on increasing company value. Results of this study indicates that profitability has a direct effect on firm value. This direct effect is greater than the indirect effect through the capital structure. Hence, it can be concluded that capital structure does not mediate the effect of profitability on firm value (Ngatemin, 2018).
7. Conclusion

Based on the research conducted on basic and chemical industrial companies listed on the Indonesian Sharia Stock Index, it can be concluded that companies that have the ability to generate high profits will attract investors to buy their stocks. In result, these companies will have a higher company value. Thus, the level of profitability has a positive effect on firm value. Another consideration for investors to choose an investment is to see the company’s image. If a company carries its social responsibility well, the company are more likely to pay attention to the company’s future prospects. Islamic Social Reporting administered by the company will increase the value of the company. Large companies do not mean that they are free from debt. Any additional debt incurred during business expansion will increase the company value if the capital structure is not optimal. High profits provide opportunities for the management to make disclosures to principals related to social responsibility programs broadly, meaning that profitability affects Islamic Social Reporting.

Profitability also affects the capital structure because a company with a high level of profitability tends to finance its operational activities independently so its capital structure is getting lower. In result, the mediation test in this study was rejected because Islamic Social Reporting and capital structure proved to be unable to mediate the effect between profitability and firm value. Potential investors who are going to invest are advised to consider some factors, such as the company’s ability to generate profits, how much social disclosure it has made and the proportion of debt the company has to ensure that the value of the invested company is high and it is profitable.  

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References
Andawasatya, R., Indrawati, N. K., & Aisjah, S. (2017). The effect of growth opportunity, profitability, firm size to firm value through capital structure (study at manufacturing companies listed on the Indonesian stock exchange). Imperial Journal of Interdisciplinary Research, 3(2), 1887–1894. http://www.onlinejournal.in/IJIRV3I2/325.pdf
Anggraini, F. R. R. (2006). Disclosure of social information and the factors that affect the disclosure of social information in annual financial reports (Empirical study on companies listed on the Jakarta Stock Exchange). Simposium Nasional Akuntansi, 9, 23–26.  https://repository.usd.ac.id/32801/1/4747_K-AKPM-24.pdf
Ani, S. M. (2017). Corporate governance and its role in the effect of Islamic Social Reporting (ISR) on the firm value. International Conference on Business, Economics and Social Sciences (ICBESS) Proceeding, Yogyakarta, 1079–1090.
Anwar, M. (2015). Manajemen Keuangan Bisnis. Universitas Terbuka, Jakarta. Retrieved from http://repository.ut.ac.id/3831/2/AABIA333-M1.pdf
Arshad, R., Othman, S., & Othman, R. (2012). Islamic corporate social responsibility, corporate reputation and performance. World Academy of Science, Engineering and Technology, 64(4), 1070–1074. doi.org/10.5281/zenodo.1074857
Ayunku, P. E., & Timijire, E. T. (2019). Ownership structure on the value of firms in Nigeria. International Journal of Scientific and Research Publications, 9(8), 738–749. http://dx.doi.org/10.29322/IJSRP.9.09.2019.p3939
Brigham, F. & Houston, J. (2001). Fundamentals of Financial Management (Issue 8, Book 2). Jakarta: Salemba Empat
Byrne, B. M. 2001. Structural Equation Modeling with AMOS: Basic, Concepts, Application, and Programming. Lawrence Erlbaum Associates, Inc. United States of America
Cahya, B. T., Nuruddin, A., & Ikhsan, A. (2017). Islamic social reporting: From the perspectives of corporate governance strength, media exposure and the characteristics of Sharia based companies in Indonesia and its impact on firm value. IOSR Journal Of Humanities And Social Science (IOSR-JHSS), 22(5), 71–78. https://doi.org/10.9790/0837-2205107178
Chen, L.-J., & Chen, S.-Y. (2011). The influence of profitability on firm value with capital structure as the mediator and firm size and industry as moderators. Investment Management and Financial Innovations, 8 (3), 121–129. https://businessperspectives.org/images/pdf/applications/publishing/templates/article/assets/a210/imfi_en_2011_03_Chen.pdf
Dang, H. N., Nguyen, T. T. C., & Tran, D. M. (2020). The Impact of Earnings Quality on Firm Value: The case
of Vietnam. The Journal of Asian Finance, Economics, and Business, 7(3), 63–72. doi:10.13106/jfeb.2020. vol7.no3.63

Fajiano, A. Z., & Isanlola, I. (2018). The effect of profitability, liquidity, leverage and firm growth of firm value with its dividend policy as a moderating variable. International Journal of Managerial Studies and Research (IJMSR), 6(10), 55–69. https://doi.org/10.20431/i2349-0349.0610005

Ghazali, I. (2018). Structural Equation Modelling, Metode Alternatif dengan Partial Least Square (PLS). Edisi 4. Badan Penerbit Universitas Diponegoro.

Gio, P. U. (2019). Covariance-Based Structural Equation Modeling (CB-SEM) with STATCAL. STATCAL, 10–12. https://osf.io/preprints/narix/vxy6b/

Hanflfla, R. (2002). Social reporting disclosure: An Islamic perspective. Indonesia Management & Accounting Research, 12(2), 128–146. https://www.researchgate.net/publication/288822915_Social_Responsibility_Disclosure_AnIslamic_Perspective

Harmono, (2014). Manajemen Keuangan: Berbasis Balance Scorecard Edisi Pertama. Bumi Aksara.

Hestinoviana, V. S., & Handayani, S. R. (2013). The influence of profitability, solvability, asset growth, and sales growth toward firm value (empirical study on mining companies which listed on Indonesia stock exchange). Jurnal Administrasi Bisnis, 4(1), 1–11. http://administrasibisnis.studentjournal.uib.ac.id/index.php/jab/article/view/169

Hoque, J., Hassain, A., & Hassain, K. (2014). Impact of capital structure policy on value of the firm—A study on some selected corporate manufacturing firms under Dhaka stock exchange. Ecoforum Journal, 3(2), 77–84. http://ecoforumjournal.rinl.org/index.php/eco/article/download/64/71

Hoyt, R. E., & Liebenberg, A. P. (2011). The value of enterprise risk management. The Journal of Risk and Insurance, 78(4), 795–822. https://doi.org/10.1111/j.1539-6975.2011.01413.x

Hussain, A., Khan, M., Rehman, A., Zada, S. S., Malik, S., Khattak, A., & Khan, H. (2020). Determinants of Islamic social reporting in Islamic banks of Pakistan. International Journal of Law and Management, 63(1), 1–15. https://doi.org/10.1108/IJLMA-022020-0060

Kamla, R., & Rammal, H. G. (2013). Social reporting by Islamic banks: Does social justice matter?. Accounting, Auditing & Accountability Journal, 26(6), 911–945. https://doi.org/10.1108/AAAJ-03-2013-1268

Karbasi Yazdi, H., & Mohammadian, M. (2017). Effect of profitability indices on the capital structure of listed companies in Tehran stock exchange. Advances in Mathematical Finance and Applications, 2(3), 1–11. doi:10.22034/AMFA.2017.533085

kemenkeu.go.id. (2018). Berinvestasi Membangun Indonesia. Media Keuangan, Vol XIII No. 129.

Kodongo, O., Mokokeli-Mokoteli, T., & Maina, L. N. (2015). Capital structure, profitability and firm value: Panel evidence of listed firms in Kenya. African Finance Journal, 17(1), 1–20. https://mpra.ub.uni-muenchen.de/57116/1/MPRA_paper_57116.pdf

Kolk, A. (2008). Sustainability, accountability and corporate governance: Exploring multinationals’ reporting practices. Business Strategy and the Environment, 17(1), 1–15. https://doi.org/10.1002/bse.511

Kontan.co.id. (2018). Naik tettinggi, saham sektor industri dasar dan kimia terimbas sentimen positif. https://investasi.kontan.co.id/news/naik-tettinggi-saham-sektorindustri-dasar-dan-kimia-terimbas-sentimen-positif

Lestari, P. (2013). Determinants of Islamic social reporting in syariah banks: Case of Indonesia. International Journal of Business and Management Invention, 2(10), 28–34. http://ijbmi.papers/Vol(2)10/Version-1/D02101028034.pdf

Lidyah, R., Amir, A., Yacob, S., & Rahayu, S. (2019). The effect of board of director, board of commissioner and audit committee on value of firm to Islamic social reporting as a mediating variable. Journal of Business Studies and Management Review, 2(1), 82–87. https://doi.org/10.22437/jbsm.v2i17.7214

Liputan6.com. (2019). Potensi Pasar Modal Syariah Indonesia Terbesar di Dunia. https://www.liputan6.com/bisnis/read/3919639/potensi-pasar-modal-syariah-indonesiaterbesar-di-dunia

Maali, B., Casson, P., & Napier, C. (2006). Social reporting by Islamic banks. Abacus, 42(2), 266–289. https://doi.org/10.1111/j.1467-6281.2006.00200.x

Marsha, N., & Murtoq, I. (2017). The effect of financial ratios on firm value in the food and beverage sector of the IDX. Journal of Business and Management, 6(2), 214–226. https://journal.sbm.itb.ac.id/index.php/jbmn/article/download/2155/1127

Meutia, T., & Febrianti, D. (2017). Islamic social reporting in Islamic banking: Stakeholders’ perspective. Paper presented at the 5th SBSI Web of conferences. https://doi.org/10.5151/sbsconf/20173412001

Mohammadzadeh, M., Rahimi, F., Rahimi, F., Aarabi, S. M., & Solamzadeh, J. (2013). The effect of capital structure on the profitability of pharmaceutical companies in the case of Iran. Iranian Journal of Pharmaceutical Research: JIPR, 12(3), 573–577. https://www.researchgate.net/publication/258703766

Murniati, S. (2016). Effect of capital structure, company size and profitability on the stock price offload and beverage companies listed on the Indonesia stock exchange. Information Management and Business Review, 8(1), 23–29. https://doi.org/10.22610/imbr.v8i1.1192

Ngatemin, E., A., Moksum, A., Erina & Siroujilizam. (2018). Effects of institutional ownership and profitability to firm value with the capital structure as intervening variable (Empirical study at company tourism industry sector listed in Indonesia). International Journal of Civil Engineering and Technology (IJCIET), 9(5), 1305–1320. http://www.iaome.com/jciet/issues/ossp?JType=1JCIET&VType=9&IType=5

Niar, H., Abdul Rahman Mus, H., H., Mursalm, H. M. M. (2017). The effect of profitability and firm value in the manufacturing sector of firms in Indonesia. International Journal of Art and Humanities, 23(1), 149–162.

Nofriwul, Subrato, B., & Djumahir, M. (2017). Corporate governance, ownership structure, capital structure and firm value: Studies on the Indonesia stock exchange. Issuer. International Journal of Business, Economics and Law, 12(2), 5–11. http://ijbdl.com/wp-content/uploads/2017/05/K10_214.pdf

Nohang, M., Sobarsyah, M., Sanusi, A., Handayani, S. K., Otolwu, N. I., Bon, A. T. (2019). Islamic social reporting disclosure and firm value: Empirical study of firms listed in Jakarta Islamic index. Proceedings of the International Conference on Industrial Engineering and Operations Management Pilsen, Czech Republic, 2485–2494.

Ogbulu, O. M., & Emeni, F. K. (2012). Capital structure and firm value: Empirical evidence from Nigeria. International Journal of Business and Social Science, 3(19), 252–261. http://www.ijbssnet.com/journals/Vol_3_No 19_October_2012/29.pdf

OJK. (2019). Statistik Saham Syariah-Februari 2019. https://www.ojk.go.id/id/kanal/syariah/data-da-
Othman, R., & Thani, A. M. (2010). Islamic social reporting of listed companies in Malaysia. *International Business & Economics Research Journal (IBER)*, 9(4), 135–144. https://doi.org/10.19030/iber.v9i4.561

Othman, R., Thani, A. M., & Ghani, E. K. (2009). Determinants of Islamic social reporting among top Shariah-approved companies in Bursa Malaysia. *Research Journal of International Studies*, 12(12), 4–20. http://ieela.stiemj.ac.id/wp-content/uploads/Islamic-social-reporting-Kel6.pdf

Ratri, R. F., & Dewi, M. (2017). The effect of financial performance and environmental performance on firm value with Islamic social reporting (ISR) disclosure as intervening variable in companies listed at Jakarta Islamic Index (JII). *Paper presented at the SHS Web of Conferences.*

Rizki, Z. W., Mohammad, D., Mangesti, R. S. (2018). The effect of profitability, liquidity on capital structure and firm value: A study of property and real estate companies listed on Indonesia stock exchange in 2013–2015. *Eurasia: Economics & Business, 2(8), 34–41.* https://doi.org/10.18551/economics.2018-02

Sabrin, A., Sarita, B., Tokdir, D., & Sujono, C. (2016). The effect of profitability on firm value in manufacturing company at Indonesia stock exchange. *The International Journal of Engineering and Science, 5*(10), 81–89. https://www.researchgate.net/publication/338158702

Salvatore, D. (2011). *Managerial economics in a global economy.* Oxford University Press.

Sethiawan, I., Swandari, F., & Dewi, D. M. (2019). The effect of Islamic Social Reporting (ISR) Disclosure on firm value with financial performance as a moderating variable. *JWM (Jurnal Wawasan Manajemen), 6*(2), 168–186. https://doi.org/10.20527/jwm.v6i2.150

Siregar, I. F., Roehkudin, R., & Purwant, L. (2018). Firm value predictor and the role of corporate social responsibility. *Journal of Finance and Banking, 22*(3), 475–485. https://doi.org/10.26905/jkdp.v22i3.1804

Sobel, M. E. (1982). *Asymptotic Confidence Intervals for Indirect Effects in Structural Equation Models.* Sociological methodology, 13, 290–312. https://doi.org/10.2307/270723

Sucuati, W., & Cambarihan, J. M. (2016). Influence of profitability to the firm value of diversified companies in the Philippines. *Accounting and Finance Research, 5*(2), 149–153. https://doi.org/10.5430/afv.sv5n2p149

Sudiani, N., & Wiksuan, I. G. (2018). Capital structure, investment opportunity set, dividend policy and profitability as a firm value determinants. *Russian Journal of Agricultural and Socio-Economic Sciences, 81*(9), 259–267. https://doi.org/10.18551/jaos.2018-09.30

Sunarsh, U., & Ferdiansyah, F. (2016). Determinants of the Islamic social reporting disclosure. *Al-Iqtishad: Jurnal Ilmu Ekonomi Syariah, 9*(1), 69–80. https://doi.org/10.15408/oiq.v9i1.3771

Tui, S., Nurmajumuddin, M., SufrI, M., & Nirwana, A. (2017). Determinants of profitability and firm value: Evidence from Indonesian banks. *IRI-International Journal of Management & Social Sciences, 7*(1), 84–95. http://dx.doi.org/10.22034/AMFA.2017.533085

Wahyudi, U., & Pawiastri, H. P. (2006). Implications of ownership structure on firm value: With financial decisions as an intervening variable. *Simposium Nasional Akuntansi, 9*, 1–25. http://blog.umy.ac.id/ervin/files/2012/06/K-AKPM-17.pdf

Wardani, M. K., & Sari, D. D. (2019). Disclosure of Islamic social reporting in sharia banks: Case of Indonesia and Malaysia. *Journal of Finance and Islamic Banking, 1*(2), 105–120. https://doi.org/10.22515/jfib.v1i2.1495

Yazdi, H. K., & Mohammadian, M. (2017). Effect of profitability indices on the capital structure of listed companies in Tehran stock exchange. *Advances in Mathematical Finance and Applications, 2*(3), 1–11. doi: 10.22034/AMFA.2017.533085

Zubairu, U. M., Sokariyau, O. B., & Dauda, C. K. (2011). Social reporting practices of Islamic banks in Saudi Arabia. *International Journal of Business and Social Science, 2*(23), 193205. http://www.ijbsnet.com/journals/ Vol_2_No_23_Special_Issue_December_2011/23.pdf

statistik/sahamsyariah/Pages/StatistikSaham-Syariah—-Februari-2019.aspx https://www.ojk.go.id/id/kanal/syariah/data-dan-statistik/saham-syariah/Documents/Pages/Statistik-Saham-Syariah—-Februari-2019/Statistik%20Saham-2019%20Februari.pdf

Sobri, M., & Hadi, S. (2006). *Statistik Saham Syariah*. Jakarta: Pustaka Bumi. (2010). Statistik Saham Syariah. Jakarta: Pustaka Bumi. (2010). Statistik Saham Syariah. Jakarta: Pustaka Bumi.
