

Corporate Social Responsibility Moderated the Effect of Liquidity and Profitability on the Firm Value

Cahyani Nuswandari, Sunarto Sunarto, Afifatul Jannah
 Accounting Department, Economic & Business Faculty
 Stikubank University
 Semarang, Indonesia
 cahyani@edu.unisbank.ac.id, sunarto@edu.unisbank.ac.id

Ikromudin Ikromudin
 Management Department, Economic & Business Faculty
 Stikubank University
 Semarang, Indonesia

Abstract—This study aims to examine the effect of liquidity and profitability on firm value with corporate social responsibility as a moderating variable. The population of this study is a company that is included in the LQ_45 list since 2013 - 2016 with a population of 180 observations. The sampling technique uses purposive sampling with the authors of companies that are always registered in the LQ_45 period I and II for each year and not outliers. The sample of this study was 145 observations. The analysis technique used regression analysis with pure moderator interaction model. The results of the study show that liquidity has a significant negative effect on firm value; while profitability does not affect firm value; and CSR has a significant positive effect on firm value. CSR has no function to moderate the influence of liquidity on firm value; but proven to strengthen the influence of profitability on firm value. This result shows that CSR provides additional incremental information on the firm value.

Keywords—liquidity; profitability; corporate social responsibility; and the firm value

I. INTRODUCTION

Firm value is the value of equity from the rights of shareholders that aims to maximize the value generated by the company. Firm value is also the investor's perception of the company that is often associated with stock prices. Management has an obligation to increase firm value through three main activities: financing activities, investing activities, and operating activities [1]. Shareholders can conduct analysis through financial ratios, which are grouped into short term and long term financial ratios. There is a liquidity ratio on the short term ratios that indicates the company's ability to meet its short-term obligations.

Liquidity is the company's ability to meet its short-term obligation. Liquidity analysis focuses on the net working capital, namely the difference between current assets minus current liabilities; so that the commonly used ratio is the current ratio that compares current assets to current liabilities [1]. The liquidity ratio encourages most operating outcomes; on the other hand the company wants to accelerate the increase in profitability. Short-term liquidity and long-term solvency problems will lead to poor operating profitability [1]. When there is excessive liquidity, the working capital turnover is also slow, so that operational activities also decline. This decrease

in operational activity will subsequently have the effect of producing poor profitability, and then leads to a decrease in the firm value. The phenomenon also shows that there is an increasing liquidity tendency. This will have an impact on the declining turnover of the company's operational activities. High liquidity indeed shows that the company is trusted by short-term lenders, but also interferes with the company's operations in earning profits, and as a result firm value decreases. Moreover, for issuers included in the LQ45 list every semester an evaluation of their performance is carried out, especially stocks that are actively traded in the capital market. This group of companies is a major concern for shareholders through evaluating the active trading in the capital market. The price tends to increase, so the firm value increases as well. When the company's liquidity increases, it is assumed that the idle funds in the company are not effective in managing the company's operations, so that its performance decreases. However, the results of previous studies indicate that liquidity does not significantly affect the value of the company [2-4]. Based on the concepts and phenomena, hypothesis 1 (H1) can be formulated that liquidity has a negative effect on firm value.

Profitability ratios conceptually become a measure of company performance, so it is expected to have a positive impact on the value of the shareholders [1]. Profitability is a ratio that encourages (driven) the creation of firm value. Profitability shows the company's ability to generate profits for a certain period of time. Profitability is also used as a basis for measuring management performance related to compensation [5,6]. The agency relationship between management and shareholders; where the management expects compensation from the results of its performance, while the principal or shareholders expect an increase in prosperity [5]. The firm value reflects the value that can increase the welfare of the shareholders. Profitability measurement can use various types of ratios, but the profitability ratio which is the common measure of profitability of operations is return on assets (ROA) [1]. But the calculation of ROA involves the results of funding activities and operating activities, and total assets is the sum of operating assets and financial assets; so ROA is actually a mixed measurement. However, previous researchers also commonly use ROA as a measure of profitability, Nugroho [3] and Jallo [7] indicating that profitability has a positive effect on firm value. Conceptually it is also stated that the higher the profitability affect the higher firm value [1]. However, the

results of previous studies there are differences in research results. Some researchers show that profitability does not significantly affect firm value [4], in contrast to the results that profitability has a positive effect on firm value [7]. Based on the concept and previous research, so the second hypothesis (H2) can be formulated that Profitability has a positive effect on firm value.

Corporate Social Responsibility is the company's responsibility towards society can be measured by two approaches: the reputation index and content analysis [8]. The higher index or the deeper content revealed by the company shows the higher CSR value [8]. Corporate Social Responsibility (CSR) does not significantly affect firm value, and CSR cannot provide a meaningful contribution to firm value [7,9]. However, the other hand shows that CSR has a positive effect on firm value [10]. Referring to previous research and the phenomenon of companies in Indonesia, especially companies that entered the LQ45 list showed that the issuers were selected by the Indonesia Stock Exchange every semester were the best category companies. Previous research shows that CSR is not significant to excess value for companies in the worst category, but in companies the best category is proven that CSR has a positive influence on excess value [8]. Meanwhile, studies conducted by other researchers indicate that CSR is significantly positive effect on firm value [10]. Based on the concept and previous research, so the third hypothesis (H3) can be formulated that CSR disclosure has a positive effect on firm value.

Company liquidity is important to assess performance from the point of view of the company's ability to pay off short-term obligations. However, when the liquidity ratio increases, the operational activity turnover decreases. For example, when the value of inventories increases and is not followed by an increase in sales, the inventory is increasingly in the warehouse. This shows the inventory turnover is slower; Likewise, receivable turnover. The same for cash and cash equivalents accounts, when cash gets bigger, investment in operational working capital decreases, and results in decreased operational activities. This has an impact on poor profitability and will further reduce the firm value [1]. The decline in value due to the inefficient management of liquidity can be weakened by increasing CSR disclosures. But the company phenomenon that entered LQ45, its disclosure index declined (from 2013-2016). Based on the concept and the phenomenon, the fourth hypothesis (H4) can be formulated that CSR disclosures moderate the influence of liquidity on firm value.

Moderating CSR to the relationship between profitability and firm value also shows different results. Profitability is a measure of management performance in order to increase the welfare of shareholders and simultaneously increase compensation for management [5], so increasing profitability will increase firm value. The results of previous studies also show that profitability has a positive effect on firm value [3,7]. When a company can increase its profitability, the CSR will be expanded by its disclosure items. It is hoped that CSR disclosures will provide incremental information on the effect of profitability on firm value. The results of previous studies show that CSR moderates the effect of profitability on firm value [11]. The results of previous research shows that CSR

does not moderate the effect of profitability on firm value [12]; while the other hand shows that CSR functions to moderate the effect of profitability on firm value [11]. Based on the concept and previous research, so the fifth hypothesis (H5) can be formulated that CSR disclosures moderate the influence of profitability on firm value.

The phenomenon that occur in the Indonesian capital market, especially issuers that are listed on LQ45 since 2013-2016, had fluctuated regarding the firm value, liquidity, profitability and CSR as shown in the following table 1.

TABLE I. AVERAGE COMPANY PERFORMANCE LISTED IN LQ45 2013-2016

Variable	2013	2014	2015	2016	Average
Liquidity	2,84	2,24	2,52	2,59	2,55
Profitability	0,22	0,14	0,09	0,15	0,15
CSR	0,47	0,46	0,42	0,42	0,44
Firm Value	0,64	0,76	0,76	0,79	0,74

Based on table 1, it shows that increasing firm value is not necessarily followed by liquidity, profitability and CSR; even CSR disclosures tend to decrease. The different fluctuations of each variable encourage the writer to study more deeply about the variables predicted to affect firm value. It is also motivated by a research gap that occurs between relationships or the influence of variables on liquidity, profitability, and CSR on firm value.

II. METHODS

The population of this study is the company that entered the LQ45 list on the Indonesia Stock Exchange 2013-2016 in periods I and II with a population of 180 observations. The sampling technique used was purposive sampling with the following criteria: In the same year the company still registered with LQ45. The criteria obtained the following sample: in 2013 there were 41 companies, in 2014 there were 40 companies, in 2015 there were 41 companies, and in 2016 there were 36 companies. Samples on criteria obtained 158 observations. Furthermore, normality tests were carried out, and there were 13 outliers of observations, so that a sample of 145 observations was obtained.

Variable measurement research is based on the concept and previous research. Variable firm value is measured based on price to book value (PBV) ratio. Penman states that PBV can be used as a measure of maximization of firm value by shareholders [1]. The higher PBV reflects the lower book value of net operating assets. Increased PBV also shows earnings growth for shareholders [1]. This measurement is also used by researchers [7,11].

The independent variables in this study consist of: liquidity and profitability. Referring to previous literature show that liquidity is the company's ability to meet its short-term obligations, the measurement of liquidity ratio is based on the ratio between current assets to current liabilities [1]. Profitability measurement also uses a common or common ratio that is return on assets (ROA) which is the ratio between

earnings after tax divided by total assets [1]. This ratio is also used by previous researchers [7].

Moderating variables using CSR are measured from the disclosure index [8]. Previous researchers also used the disclosure index which was calculated from the ratio between the total categories revealed by the company to 78 items of disclosure [9].

The analysis technique uses multiple regression with the following equation:

$$FV = a + b_1CR + b_2ROA + e_1 \quad (1)$$

$$FV = a + b_1CR + b_2ROA + b_3CSR + e_2 \quad (2)$$

$$FV = a + b_1CR + b_4CR_CSR + e_3 \quad (3)$$

$$FV = a + b_2ROA + b_5ROA_CSR + e_4 \quad (4)$$

$$FV = a + b_1CR + b_2ROA + b_4CR_CSR + b_5ROA_CSR + e_5 \quad (5)$$

Description:

- FV = Firm Value;
- CR = Current Ratio;
- ROA = Return on Assets;
- CSR = Corporate Social Responsibility;
- CR_CSR = Interaction of Current Ratio and Corporate Social Responsibility;
- ROA_CSR = Interaction of Return on Assets and Corporate Social Responsibility;

The normality test uses the skewness ratio and the kurtosis ratio; while the classical assumption test uses heteroscedasticity, multi collinearity, and autocorrelation tests [13]. Heteroscedasticity test using Glejser test, multi collinearity test using variance inflation factor (VIF), and autocorrelation test using Durbin-Watson test [13].

III. RESULTS AND DISCUSSION

The results of the residual normality test showed the results of the skewness ratio were 0.72 (obtained from 0.145 / 0.201) and the kurtosis ratio was -2.19 (obtained from -0.876 / 0.400). These results indicate that the residual is normal, because the skewness ratio is <1.96 and the kurtosis ratio is <3.00 [13]. The results of the heteroscedasticity test showed that all independent variables were not significant to absolute residuals, each of which had a significance of 0.241; 0.533; 0.223; and 0.343. The multi collinearity test results show that each independent variable has a VIF value of less than 10 with a VIF value of 1.089; 2,585; 1,047; and 2,739. Similarly, the results of the autocorrelation test showed the DW number was 2.133. At N = 150 with k = 4 the value of dl is 1.571 and du is 1.679, so that 4 - du = 2.231. Thus the number of DW of 2.133 lies between 1.679 and 2.231 (1.679 < 2.133 < 2.231), so it is concluded that the model is free from autocorrelation symptoms.

Model test results and hypothesis testing are shown in table 2.

TABLE II. MODEL TEST RESULTS AND HYPOTHESIS TEST

Variable	Model 1	Model 2	Model 3	Model 4	Model 5
<i>Constant</i>	0,661***	0,511***	0,687***	0,655***	0,690***
CR					
coefficients	-0,377	-0,418	-0,497		0,184
t-value	-4,413	-4,991	-2,348		0,683
sig.	0,000***	-	0,020*		0,496
ROA					
coefficients	0,113	0,086		-0,540	-0,651
t-value	1,321	1,036		-3,403	-3,300
sig.	0,189	0,302		0,001***	0,001***
CSR					
coefficients		0,253			
t-value		3,234			
sig.		0,002**			
CR_CSR					
coefficients			0,176		-0,581
t-value			0,834		-2,148
sig.			0,406		0,033*
ROA_CSR					
coefficients				0,585	0,855
t-value				3,688	4,286
sig.				0,000***	0,000***
F-value	9,836	10,480	9,246	6,893	10,368
Sig.	0,000***	0,000***	0,000***	0,001***	0,000***
R_square	0,122	0,182	0,115	0,088	0,229
Incremental R ²		0,060	-0,067	-0,027	0,141

Description: ***: significant at the level of 0.001
 **: significant at 0.01 level
 *: significant at the 0.05 level

Based on the results of the test shows that in Model 1 which is the original model with an independent variable liquidity (CR) and Profitability (ROA) obtained results that liquidity has a negative effect on the significant firm value at the level of 0.001. These results indicate that hypothesis 1 (H1) is accepted. Whereas profitability proved to be insignificant to firm value; thus hypothesis 2 (H2) which states that profitability has a positive effect on firm value, is rejected.

In Model 2, adding the CSR variable as an independent variable shows that CSR has a positive effect on the firm's significant value at the 0.01 level. These results prove that hypothesis 3 (H3) is accepted.

In Model 3 testing was conducted to determine whether CSR function moderates the influence of liquidity on the value of the company or not moderate. Test results show that liquidity and CSR interactions (CR_CSR) proved insignificant. These results are inconsistent with the hypothesis that CSR moderate the effect of liquidity on firm value; thus the 4th hypothesis (H4) is rejected. This result is in accordance with the argument that the increasing liquidity shows that the company is less efficient in regulating working capital turnover, resulting in a decrease in company performance and leading to poor performance [1].

Model 4 examines CSR moderation on the relationship between profitability and firm value. The results of the test show that the interaction of profitability and CSR (ROA_CSR) has proven significant at the level of 0.001 and has a positive sign. In Model 2 shows that profitability is also positive but not significant. So CSR functions to moderate, especially the

function of strengthening the effect of profitability on firm value; thus hypothesis 5 (H5) is accepted.

Model 5 determine the CSR ability in moderating variable liquidity and profitability to the firm value together. In this model, CSR is not included as an independent variable that affects firm value; with the argument that in the moderating model with the pure moderator type, moderator variables are not included in the model. Tipe of moderator model distinguished the moderator type into two types: pure and quasi moderator; where the moderator variable is denoted by 'z' while the independent variable is denoted by 'x' [14].

The test results on Model 5 indicate that CSR incrementally provides additional information firm value. Statistically, it also shows that moderating CSR on the effect of liquidity and profitability on firm value is 22.9%; with incremental information addition of 14.1%. The results of this study contradict to previous research which shows that CSR cannot provide a meaningful contribution to firm value [7].

IV. CONCLUSION

Based on the test results it can be concluded that liquidity has a negative influence on firm value; while profitability is not statistically significant effect on firm value even though the test results show a positive sign. Corporate social responsibility is proven to have a positive effect on firm value. CSR is proven not to moderate the influence of liquidity on firm value; but CSR has been proven to strengthen the influence of profitability on firm value. The test results also show that CSR provides additional incremental information on firm value. The insignificance of profitability towards firm value is likely to be a measurement of profitability based on ROA. Penman stated that profitability that can be used to measure sustainable profit growth is net operating income (NOI) on net operating assets (NOA) [1]; so it is recommended for future research, it is better to use measurements that are core income based on income derived from the company's main activities.

ACKNOWLEDGMENT

The researchers would like to acknowledge the Institution of Research and Community Service in Stikubank University that supported this research.

REFERENCES

- [1] H.S. Penman, *Financial Analysis Statement and Security Valuation*. New York: Mc Graw Hill. Fifth Edition, 2013.
- [2] Casmira, *Pengaruh Return on Asset, Rasio Likuiditas, Rasio Solvabilitas terhadap Nilai Perusahaan dengan Corporate Social Responsibility (CSR) sebagai variabel moderating*. Yogyakarta: Universitas Negeri Yogyakarta, 2016.
- [3] Nugroho, "Pengaruh Profitabilitas, Likuiditas, dan Leverage terhadap Nilai Perusahaan (studi pada perusahaan sektor manufaktur di BEI periode 2008-2011)," *Journal of University Muhammadiyah Surakarta* 2012.
- [4] M. Nurhayati, "Profitabilitas, Likuiditas, dan Ukuran Perusahaan pengaruhnya terhadap Kebijakan Dividen dan Nilai Perusahaan sektor non jasa," *Jurnal Keuangan dan Bisnis*, 2013.
- [5] R.A. Lambert, "Contracting Theory and Accounting," *Journal of Accounting & Economics*, vol. 32, no. 3 – 87, 2001.
- [6] Sunarto, "Teori Keagenan Dan Manajemen Laba," *Kajian Akuntansi*, vol. 1, no. 1, pp. 13-28, 2009.
- [7] A. Jallo, A.R. Mus, Mursalim, and Suryanti, "Effect of Corporate Social Responsibility, Good Corporate Governance and Ownership Structure on Financial Performance and Firm Value: A Study in Jakarta Islamic Index," *IOSR Journal of Business and Management (IOSR-JBM)*, vol. 19, no. 11, pp 64-75, 2017.
- [8] R.A. Wood, and P.L. Cochran, "Corporate Social Responsibility and Financial Performance," *The Academy of Management Journal*, vol. 27, no. 1, pp. 42-56, 1984.
- [9] M. Nurhayati, and H. Medyawati, "Analisis Pengaruh Kinerja Keuangan, Good Corporate Governance dan Corporate Social Responsibility terhadap Nilai Perusahaan yang terdaftar dalam LQ45 pada Tahun 2009-2011," *Jurusan Akuntansi, Fakultas Ekonomi, Universitas Gunadarma Jakarta*, 2012.
- [10] N.A. Mutmainah, "Pengaruh Kinerja Keuangan terhadap Nilai Perusahaan dengan Pengungkapan Corporate Social Responsibility dan Struktur Good Corporate Governance sebagai variabel Pemoderasi," *Semarang: Diponegoro Journal of Accounting*, 2012.
- [11] R.W. Erdiyanti, *Pengaruh kinerja keuangan terhadap nilai perusahaan dengan Corporate Social Responsibility dan Good Governance sebagai variabel pemoderasi (studi pada perusahaan manufaktur periode 2010-2014)*. UMY, Yogyakarta: Universitas Muhammadiyah Yogyakarta, 2015.
- [12] M.L. Hadianto, *Analisis Pengaruh Kinerja Keuangan terhadap Nilai Perusahaan dengan Pengungkapan CSR dan GCG sebagai variabel pemoderasi*. Semarang: Universitas Diponegoro, 2013.
- [13] D.N. Gujarati, *Basic Econometrics*. Fourth Edition, International Edition. United States of America: McGraw-Hill Higher Education, 2003.
- [14] S. Sharma, R.M. Duran and O.G. Arie, "Identification and Analysis of Moderator Variables," *Journal of Marketing Research*, vol. XVIII, pp. 291-300, 1981.