

# Determinants of Firm Value

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## ABSTRACT

**Purpose:** The purpose of this study was to examine the effect of gender diversity, intellectual capital, and corporate social responsibility on firm value using the perspective of Signalling Theory and Stakeholder Theory.

**Design/methodology/approach:** This study uses secondary data from annual financial report. The research sample consisted of 88 observations collected on companies that entered LQ45 between 2017 and 2020. To conduct a test of the study's hypothesis using the Ordinary Least Squares (OLS) method. Eviews 20 were used to test this research hypothesis.

**Findings:** The results of this study indicate that gender diversity and corporate social responsibility have a significant effect on firm value, but intellectual capital has no effect on firm value.

**Research limitations/implications:** The firm value will never cease to evolve to ensure the company's sustainability. Firm value serves as a standard for stakeholders when it comes to offering an overall assessment of the company. The more successful a business is in optimizing performance and paying attention to its internal and external environment, the higher the value. However, over the 2017-2020 period, the company's worth as assessed by PBV is likely to change. The increase and decrease in the firm's value are directly tied to the stock price; a high share price indicates a high firm value, and vice versa. Given these limits, it is proposed that future researchers study additional companies using a larger sample size and a longer time frame, as well as make observations using alternative proxies and include conditions on the firm's value before and during the COVID-19 period.

**Paper type:** is categorized as a research paper.

**Keyword:** Gender Diversity, Intellectual Capital, Corporate Social Responsibility, Firm Value

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## I. INTRODUCTION

Management desires that the company continue to grow on a periodic basis as a result of its strong financial performance and high firm value. According to Rismawati (2019), investor interest in a company is inspired by its high value, which has an effect on market confidence and the company's future prospects. The firm value can be determined by the price of its shares on the Stock Exchange. The higher the share price, the greater the company's value and the greater the wealth of its shareholders (Indrarini, 2019).

The Indonesia Stock Exchange (IDX) maintains a number of stock indices that serve as a benchmark for prospective investors. The most well-known indices in Indonesia are the IHGS (Job Stock Price Index) and LQ45. The most recent occurrence in Indonesia indicates that in 2020, the Composite Stock Price Index (IHGS), which serves as the capital market's reference index, experienced a significant loss of 20.56 %. Meanwhile, the LQ45 Index is composed of highly liquid constituent stocks, and the business outlook is capable of a more severe decline of 24.67 %. The rise and fall in stock prices will have an effect on the firm's value. The book value or Price to Book Value (PBV) of a company is used to estimate firm value. Between 2017 and 2020, the average LQ45 firm value, as estimated using the PBV (price to book value) ratio, increased and declined or fluctuated. In 2020, the average PBV declined by 4.27 percent compared to 2019. The highest average PBV was 6.34 in 2017. The greater the PBV, the more confident the market is in the company's prospects. However, actual evidence derived from historical data indicates that the value of these companies fluctuates.

This phenomenon is at the heart of this research because if a firm's value is low, it will have a negative effect on the company, which contradicts Signalling Theory. Brigham & Houston (2014) asserts that low-quality companies send a negative signal to investors regarding management's assessment of the company's prospects. This has a negative effect on the company because the company's low valuation causes investors' perceptions of the company to be less favorable, causing them to reconsider investing their capital in the company.

The firm does not run just for its own profit; it also benefits parties associated with the company's value, such as shareholders, management, and the community. According to stakeholder theory, all corporate activities are required to be in the best interests of stakeholders and to represent those interests in the financial statements (Guthrie et al., 2006). Stakeholder theory refers to a company's effort to maximize the value of the impacts of its actions while reducing losses. Stakeholders have a significant impact on the company's survival and sustainability. Every company that wants to earn a big profit must improve the value of the company; when the value of the business is high, many investors will automatically invest their capital. By examining this phenomenon, academics are encouraged to do research that examines a variety of variables that affect firm value.

Firm value can be influenced by several factors, including gender diversity Galbreath, (2018); Agyemang-Mintah & Schadewitz (2019); and Anna (2020), intellectual capital Berzkalne & Zelgalve (2014); Nimtrakoon (2015); and Kristina & Wiratmaja (2018), lastly corporate social responsibility Ding et al., (2016); Fatemi et al., (2018) and Puspitasari et al., (2019). However, numerous research on the factors affecting the value of the company continue to be conducted that are not supported by the parts of the firm's value.

This study aims to determine the effect of firm value on gender diversity, intellectual capital, and corporate social responsibility. Theoretically, this research contributes to improving understanding about the factors that contribute to a firm's value. In practice, this research can be used as a guide for stakeholders when deciding whether to invest in a particular company. The study's findings are designed to aid stakeholders in contributing information regarding the company's current state in terms of firm value.

## **II. LITERATURE REVIEW**

Gender Diversity is the diversity of gender characteristics in a company that is expected to be able to add positive value to investors in the company (Winasis & Yuyetta, 2017). Diversity of human resource structures in terms of race and gender mix is frequently viewed as critical for maximizing the company's valuable resources (Siciliano, 1996). The diversity of a company is required to optimize and improve company innovation. According to Kusumastuti et al. (2007), Women exhibit a greater degree of caution, avoid risks, and are more careful than men. This side causes women to be more deliberate in their decision-making. As a result, having women on boards of directors is claimed to assist in making more informed decisions and reducing risk.

Intellectual Capital (IC) is an intangible asset composed of knowledge and technical resources that is used to determine the amount of added value generated by a company via equity (VACA), labor (VAHU), and structural capital (STVA) (Ulm, 2017). Intellectual capital became a phenomenon in Indonesia following the publication of Financial Accounting Standard Guidelines (PSAK) no. 19 (revised 2019) on intangible assets (Intangible Assets) and international regulation under International Accounting Standard (IAS) 38 and International Financial Reporting Standard (IFRS) 3. PSAK no. 19 complies with this. Intangible assets are non-monetary assets that are identified but do not have a physical form and are held for use in the production or delivery of products or services, for renting to others, or for administrative purposes (Wijaya, 2017).

Corporate Social Responsibility (CSR) is one of management's commitments to attaining the company's long-term goals in order to increase the firm's value and to maintain a positive relationship with stakeholders (Fauziah, 2018). Additionally, Undang-undang No. 40 of 2007 and Peraturan Pemerintah No. 47 of 2012 of the Republic of Indonesia state that every company must prioritize social responsibility. Social costs will be incurred because of CSR efforts. As a result, corporate social responsibility is quantified in this study in terms of the social costs imposed by the corporation. Costs associated with CSR can be determined by the amount of funds allocated to the Community Development Program in the company's annual report (Camilia, 2016). CSR costs are calculated by comparing the costs incurred for CSR activities with net profit after tax.

### **A. Formulation of study objectives.**

#### **1. The Effect of Gender Diversity on Firm Value**

Gender diversity is one of the factors that effect firm value, as the more opportunities for women to hold senior management positions in a business, the better. Women dominate the executive ranks of businesses

because they are more cautious, averse to risk, more meticulous than men. This is based on signalling theory, which emphasizes the board of directors' monitoring of the company's external partners in order to provide transparency and encourage investors to believe and invest confidently. Numerous prior studies have investigated the influence of gender diversity on firm value, are: Syamsudin et al. (2017), Galbreath (2018) dan Anna (2020). The hypothesis in this study is:

H1 : Gender Diversity affects Firm Value in LQ45 companies listed on the IDX in 2017-2020.

## 2. The Influence of Intellectual Capital on Firm Value

Intellectual capital demonstrates a company's ability to publish its financial statements in a transparent manner, allowing investors to see how the company can manage its assets effectively in order to enhance value added (Kristina & Wiratmaja, 2018). Intellectual capital provides investors with a view of a company's prospects for stock price growth and market performance improvement. This is consistent with signalling theory, which emphasizes the relevance of information given by a corporation in influencing the investment decisions of third parties. Previous research has established the importance of intellectual capital in determining the firm value. Several previous studies are Berzkalne & Zelgalve (2014), Nuryaman (2015), Nimtrakoon (2015), Kristina & Wiratmaja (2018) explained that intellectual capital has a positive effect on firm value. The hypothesis in this study is:

H<sub>2</sub> : Intellectual Capital influences Firm Value in LQ45 companies listed on the IDX in 2017-2020.

## 3. The Effect of CSR on Firm Value

In the long-term, CSR is a manifestation of business care and how the firm fulfills its social and environmental responsibilities. Companies that incur costs for CSR activities will have a larger opportunity to increase firm value than companies that do not incur costs for CSR activities. (Yudharma et al., 2016). This is consistent with signalling theory, which emphasizes the importance of information issued by the company on investment decisions made by parties external to the company, and stakeholder theory, which emphasizes the importance of companies engaging in activities outside the company maximizing profits that create value for the company and its stakeholders. Research by Kim et al. (2018), Ding et al. (2016), Fatemi et al. (2018) and Puspitasari et al. (2019) stated that CSR has a positive and significant effect on firm value. The hypothesis in this study is:

H<sub>3</sub> : Corporate Social Responsibility Influences Firm Value in LQ45 companies listed on the IDX in 2017-2020

# III. METHODOLOGY

The population of this study is comprised of companies that are included in the LQ45 index, companies that publish audited annual financial statements, and companies that maintain comprehensive financial records on gender diversity, intellectual capital, and corporate social responsibility for a period of four years, namely 2017-2020, using a sample of 22 companies with a total of 88 observations. Ordinal Least Square (OLS) is used in this study to explain changes in independent variables collectively or individually. The regression model used in this study is:

$$PBV = \alpha + \beta_1 GD + \beta_2 IC + \beta_3 CSR + \varepsilon$$

where:

PBV = Firm Value

$\alpha$  = Constanta

$\beta_{1,2,3}$  = coefficient

GD = Gender Diversity

IC = Intellectual Capital

CSR = Corporate Social Responsibility

$\varepsilon$  = error

In this study, the dependent variable is firm value. Firm value is inextricably related to stock market value, as stock market prices reflect the true value of a company's assets. The firm value can be estimated using the Price Book Value (PBV). Price to Book Value indicates the extent to which a company can create value relative to the amount of capital invested. The greater the price to book value ratio, the more successful the company is at creating shareholder value. If the results of the PBV ratio calculation are  $Q < 1$ , the company's

shares are undervalued. These results show that the corporation has been unable to manage assets effectively, resulting in a limited growth potential for the investment. If  $Q > 1$ , the company's shares are overvalued, indicating that the company has managed its assets well enough to invest in growth.

While gender diversity, intellectual capital, and corporate social responsibility serve as independent factors. The company's diversity of gender characteristics is likely to generate positive value to investors Winasis & Yuyetta (2017). The percentage of women on a company's board of directors serves as a proxy for gender diversity. Where the percentage of women is calculated by dividing the number of female board members by the total number of board members in the company.

Intellectual capital is described as an intangible asset composed of knowledge and technological resources that is used to determine the amount of added value generated by a company. The more information and intellectual resources a company possesses, the greater its added value. Value added (VA) is impacted by 3 indicators that contribute to the formation of intellectual capital: equity (VACA), labor (VAHU), and structural capital (STVA) (Ulum et al., 2017).

How a company practices social responsibility is directly tied to its operations that influence the environment and the surrounding community, whether positive or negative. This study examines the company's commitment to CSR operations through the perspective of CSR costs, which are acquired from the annual report of the social responsibility section (Camilia, 2016). The measurement of social responsibility in this study refers to previous research Camilia (2016) and Kusuma & Aryani (2020) i.e. CSR costs are obtained from CSR costs incurred by the company divided by net profit after tax.

#### IV. RESULTS AND DISCUSSION

Between 2017 and 2020, the LQ45 Index had 88 observations that met the study's sample criteria for four years. The descriptive statistical data in Table 1 provide a general description of the research object.

Table 1. Descriptive statistics

Variable	Total	Mean	Median	Std. Deviation	Minimum	Maximum
PBV	88	0,764732	0,690735	0,728865	-0,592690	2,780576
GD	88	0,173576	0,167054	0,090071	0,000000	0,356675
IC	88	0,989127	1,078899	0,532916	-2,987479	1,710446
CSR	88	0,420622	0,414260	0,213098	-1,382730	1,067238

Source: created and completed by the author based on the material

Table 2. Multiple Regression Test Results

Variable	Coefficient	Std. Error	T-Statistic	Prob.
C	1.101232	0.145317	7.578127	0.0000
X1	-1.323008	0.567562	-2.331039	0.0230
X2	0.086391	0.069912	1.235722	0.2211
X3	-0.457201	0.144736	-3.158862	0.0024

<i>R-squared</i>	0.903137	<i>Mean dependent var</i>	0.764732
<i>Adjusted R-squared</i>	0.866237	<i>S.D. dependent var</i>	0.728865
<i>S.E. of regression</i>	0.266572	<i>Akaike info criterion</i>	0.427633
<i>Sum squared resid</i>	4.476813	<i>Schwarz criterion</i>	1.131422
<i>Log likelihood</i>	6.184131	<i>Hannan-Quinn criter.</i>	0.711172
<i>F-statistic</i>	24.47525	<i>Durbin-Watson stat</i>	1.556263
<i>Prob(F-statistic)</i>	0.000000		

Source: created and completed by the author based on the material

Table 2. The explanation of the regression above can be interpreted as follows:

$$PBV = 1,101232 - 1,323008_{GD} + 0,086391_{IC} - 0,457201_{CSR}$$

The constant coefficient value is 1.101232, which indicates that when the variables gender diversity, intellectual capital, and corporate social responsibility are included, the dependent variable for the firm value variable will decrease by 1.101232. The Adjusted R-Squared value of 0.866237 suggests that the independent variable can account for 86 % of the influence on the firm value variable, while the remaining 13.3 % is influenced by other factors. As can be observed from the regression findings above, the prob value (F-Statistic) (0.000000) < 0.05 indicates that the variables of gender diversity, intellectual capital, and corporate social responsibility all influence firm value collectively.

Hypothesis research results (H1) shows that gender diversity has a negative and statistically significant effect on firm value. This is because women continue to be underrepresented on the boards of directors of firms. The adverse effect of gender diversity is caused by the presence of gender stereotypes within the company, which results in a negative market reaction. The significant effect of gender diversity on corporate value is backed by signalling theory. When companies provide opportunities for women to lead, investors assume that the company has fostered independence, transparency, and fairness within the company. This is in line with Agyemang-Mintah & Schadewitz (2019); Galbreath (2018); and Anna (2020). However, this study contradicts Hassan & Marimuthu (2016) and Kristina & Wiratmaja (2018) shows that gender diversity is not positively related to firm value.

Hypothesis research results (H2) The association between intellectual capital variables has a positive but insignificant effect on firm value, as demonstrated in this study. The findings of this study contradict the signalling theory's assertion that knowledge information is the most appropriate and significant resource for adding value to a company. This research does not support fully leveraging the company's potential. This may occur as a result of investors focusing exclusively on one of the three components of intellectual capital, namely VACA (capital employed). The findings of this study indicate that the market (potential investors) does not value enterprises with high intellectual capital values more highly. One of the reasons is that there is no standard for quantifying intellectual capital, which means that the market has been unable to appropriately value the company's intellectual capital (Widarjo, 2011). This is in line with Girma (2017); Hatane et al., (2019) dan Sasongko et al., (2019). However, this study contradicts Nuryaman (2015), Arini & Musdholifah (2018) and Berzkalne & Zelgalve (2014) shows that intellectual capital is negatively related to firm value.

Hypothesis research results (H3) The relationship between corporate social responsibility variables and firm value is demonstrated in this study to be positive and significant. The findings of this study corroborate the stakeholder theory, which enables businesses to comprehend and manage their stakeholder environment successfully. Additionally, it supports the signalling theory, which states that firms can steal stakeholders' attention in a variety of ways. One way is if increased CSR disclosure becomes a positive signal for the company, and stakeholders support any policy adopted by the company to boost firm value. Companies that engage in CSR activities will be deemed capable of contributing to the community and accountable for their actions, including their impact on the surrounding environment. The research is in line with Berzkalne &

Zelgalve (2014); Ding et al., (2016); Fatemi et al., (2018) and Puspitasari et al., (2019) which states that corporate social responsibility affects firm value. But contrary to research Crisóstomo et al. (2011), Sasongko et al. (2019) dan Vira & Wirakusuma (2019) which states that corporate social responsibility has no effect on firm value.

## V. CONCLUSION

The firm value will never stop analyzing developments to maintain the company's sustainability. In delivering an overall company assessment, stakeholders use firm value as a standard. The better the value, the more successful the company is at maximizing performance and paying attention to the company's internal and external conditions. However, the company's worth as assessed by PBV tends to fluctuate during the 2017-2020 period. The increase and decline in the firm's value is strongly tied to the stock price; a high share price implies a high firm value, and vice versa. This study has limitations, such as the fact that the companies used only focus on companies that enter LQ45 with observations between 2017 and 2020, which is still a small sample size. Regarding these constraints, it is suggested that future study include measurements for calculating the value of the company using various proxies, as well as conditions for how the firm's value before and during the covid period could affect the practice of firm value. Furthermore, it can include independent variables that affect the value of other companies, as well as control variables such as profitability. Finally, further academics might compare the value of Indonesian enterprises to the value of companies in other developed countries.

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- Agyemang-Mintah, P., & Schadewitz, H. (2019). Gender diversity and firm value: evidence from UK financial institutions. *International Journal of Accounting and Information Management*.  
<https://doi.org/10.1108/IJAIM-06-2017-0073>
- Anna, Y. D. (2020). 2020 Board Gender Diversity , Sustainability Disclosure and Firm Value : Evidence in Indonesia. 23(1), 156–162.
- Berzkalne, I., & Zelgalve, E. (2014). Intellectual Capital and Company Value. *Procedia - Social and Behavioral Sciences*. <https://doi.org/10.1016/j.sbspro.2013.12.934>
- Brigham, E. F., & Houston, J. F. (2014). *Dasar-Dasar Manajemen Keuangan Edisi 11 Buku 1*. In Salemba Empat Jakarta.
- Camilia, I. (2016). Pengaruh Kinerja Lingkungan dan Biaya Lingkungan Terhadap Kinerja Keuangan Perusahaan Manufaktur. *Journal of Chemical Information and Modeling*.
- Ding, D. K., Ferreira, C., & Wongchoti, U. (2016). Does it pay to be different? Relative CSR and its impact on firm value. *International Review of Financial Analysis*. <https://doi.org/10.1016/j.irfa.2016.06.013>
- Fatemi, A., Glaum, M., & Kaiser, S. (2018). ESG performance and firm value: The moderating role of disclosure. *Global Finance Journal*. <https://doi.org/10.1016/j.gfj.2017.03.001>
- Fauziah, F. E. (2018). Diversitas Gender dan Nilai Perusahaan dengan Corporate Social Responsibility sebagai Variabel Intervening. *Media Ekonomi Dan Manajemen*. <https://doi.org/10.24856/mem.v33i2.668>
- Galbreath, J. (2018). Is Board Gender Diversity Linked to Financial Performance? The Mediating Mechanism of CSR. *Business and Society*. <https://doi.org/10.1177/0007650316647967>
- Guthrie, J., Petty, R., & Ricceri, F. (2006). The voluntary reporting of intellectual capital: Comparing evidence from Hong Kong and Australia. *Journal of Intellectual Capital*.  
<https://doi.org/10.1108/14691930610661890>
- Kim, W. S., Park, K., & Lee, S. H. (2018). Corporate social responsibility, ownership structure, and firm value: Evidence from Korea. *Sustainability (Switzerland)*. <https://doi.org/10.3390/su10072497>
- Kristina, I. G. A. R., & Wiratmaja, I. D. N. (2018). Pengaruh Board Diversity dan Intellectual Capital pada Nilai Perusahaan. *E-Jurnal Akuntansi*. <https://doi.org/10.24843/eja.2018.v22.i03.p25>
- Kusuma, A. A., & Aryani, Y. A. (2020). Corporate Social Responsibility dan Kinerja Perusahaan (Studi pada Perusahaan Manufaktur yang Listing di BEI Tahun 2016-2017). *Jurnal Akuntansi Dan Bisnis*, 20(1).  
<https://doi.org/10.20961/jab.v20i1.406>
- Nimtrakoon, S. (2015). The relationship between intellectual capital, firms' market value and financial performance: Empirical evidence from the ASEAN. *Journal of Intellectual Capital*.  
<https://doi.org/10.1108/JIC-09-2014-0104>
- Nuryaman. (2015). The Influence of Intellectual Capital on The Firm's Value with The Financial Performance as Intervening Variable. *Procedia - Social and Behavioral Sciences*.

<https://doi.org/10.1016/j.sbspro.2015.11.037>

Pengaruh Board Diversity Terhadap Nilai Perusahaan Dalam Perspektif Corporate Governance. (2007). Jurnal Akuntansi Dan Keuangan. <https://doi.org/10.9744/jak.9.2.pp.88-98>

Puspitasari, I., Irawati, D., Prasaja, M. G., & Baraba, R. (2019). Corporate Social Responsibility (CSR) and Firm Value: The role of investor sentiment in green companies listed on the IDX.

<https://doi.org/10.2991/icobame-18.2019.6>

Syamsudin, S., Setiany, E., & Sajidah, S. (2017). Gender diversity and firm value: A study on boards of public manufacturing firms in Indonesia. Problems and Perspectives in Management.

[https://doi.org/10.21511/ppm.15\(3-1\).2017.11](https://doi.org/10.21511/ppm.15(3-1).2017.11)

Ulum, I., Ghozali, I., & Purwanto, A. (2014). Intellectual Capital Performance of Indonesian Banking Sector: A Modified VAIC (M-VAIC) Perspective. Asian Journal of Finance & Accounting.

<https://doi.org/10.5296/ajfa.v6i2.5246>

Winasis, S. E., & Yuyetta, E. N. A. (2017). Pengaruh Gender Diversity Eksekutif terhadap Nilai Perusahaan, Tax Avoidance sebagai Variabel Intervening : Studi Kasus pada Perusahaan Pertambangan yang Terdaftar Di BEI Tahun 2012-2015. Diponegoro Journal of Accounting.

Yudharma et al, A. S. (2016). Pengaruh Biaya Corporate Social Responsibility Terhadap Kinerja Keuangan dan Nilai Perusahaan. DeReMa Jurnal Manajemen Vol., 11(2).