THE IMPACT OF INVESTMENT OPPORTUNITY SET AND COST OF EQUITY TOWARD FIRM VALUE MODERATED BY INFORMATION TECHNOLOGY GOVERNANCE

Diana Frederica*
Universitas Kristen Krida Wacana, Jakarta, Indonesia
e-mail: diana.frederica@ukrida.ac.id

Abstract
The aims of this study are to analyze whether the Investment Opportunity Set (IOS) that measured by Market to Book Value of Equity (MBVE) and the Cost of Equity (CoE) that measured by Ohlson (1995) influences Firm Value that proxied by Price Book Value (PBV), whether IT Governance can moderate the influence of IOS and CoE on Firm Value. The research sample was taken using a purposive sampling method with the type of banking industry listed on the IDX in 2011-2016. The total observation is 188 which consists of 39 companies. Data is processed using the Moderating Regression Analysis (MRA) with the SPSS program. The results are that Investment Opportunity Set has a positive influence on Firm Value, Cost of Equity has a negative influence on Firm Value, IT Governance weakens the influence of IOS on Firm Value, and IT Governance does not moderate the CoE of Firm Value.

Keywords: Investment Opportunity Set, Cost of Equity, IT Governance, Firm Value

JEL Classification: G30, G31

*Corresponding Author

INTRODUCTION

Rapid technological development is one of the uncertain environmental changes. The Otoritas Jasa Keuangan (OJK) notes that there are at least 80 banks that have tried to do digital banking services for their customers. Digital banking is a service provided to customers in the form of internet banking or mobile banking. Data from the OJK noted that investments made by banks in Indonesia for technology from September 2016 were only IDR 6.06 trillion, increasing to IDR 7.74 trillion as of September 2018.

Management is required to be able to adapt quickly to the environment and have the best company operations and investments can affect the value of the company that
is proxied from the share price depending on the conflict of interest between the agent and the principal. Hidayah (2015) and Soebyakto & Arsela (2017) state that company value is influenced by IOS. While Sun, et al (2014) prove that IOS does not affect the performance. CoE is the rate of return expected by investors as compensation for market risks faced and time value of money. If the returns or returns obtained by investors are high, they will be more than happy to invest their funds. As a result, the market will provide positive value for the company. On the other hand, what is the impact of digital banking which certainly requires large capital for investment in information technology? Previous research still has different results, namely Supit, et al (2015) prove that the company value is negatively affected by capital structure. However, the cost of equity does not influence the value of the company. Meanwhile, Septianto, et al (2017) prove that the capital structure does not influence the value of the company. Therefore, further research needs to be done specifically regarding the current conditions that have led to digital banking.

This research takes a sample of banking companies because banks are service industries that are heavily affected by technological developments. Therefore, the motivation of this study is to test and analyze whether IOS and CoE influence Firm Value and whether IT Governance can moderate the influence of IOS and CoE on Firm Value. The novelty in this study is to update the measurement of IT Governance using the content analysis method. Measurement of IT Governance was adopted from the research of Zhang, et al (2014). There are several measurements from Zhang, et al (2014) which cannot be adopted because they are not disclosed. The researcher added an indicator of the presence or absence of the head of the IT division because this position plays a role in supporting future IT needs and plans. Most banking organization structures in Indonesia have this position within the company. This research proves that there is a positive influence between IOS and Company Value while there is a negative influence of CoE on Firm Value. IT Governance can weaken the influence of IOS on Firm Value, while the influence of CoE on Corporate Values is not moderated by IT governance. The contribution of this research is that banking companies should pay attention to the management of future asset investments to provide the expected returns, to increase the value of the company. Banking also needs an optimal IT management role, so it can be useful in reducing the risk of future IT investments to increase the value of the company.

LITERATURE REVIEW

Agency Theory states that between principals and agents there is a conflict of interest because both want to increase their respective utilities Jensen and Meckling (1976). Managers holding company information that is not all voluntarily disclosed to investors. Managers have incentives or bonus contracts to maximize profits and increase stock prices. While investors, want to obtain information as appropriate for the guarantee of the funds invested.

Companies in making long-term investments have the opportunity for a conflict of interest between the principal and the agent. Principals want investments made by management to provide high returns. While the agent in managing the company also wants to look good to get a high bonus. Company value is influenced by the existence of information asymmetry over conflicts of interest. This is also related to the CoE, the
higher the information asymmetry, the higher the CoE. The existence of IT governance is expected to increase the influence of IOS on company value and the influence of the cost of equity on the value of the company.

Stakeholder Theory states that a company is an entity that still has to provide benefits to stakeholders, not only operating for its benefit. All stakeholders have the same rights in obtaining information about company activities that can influence their decision making, even though they also have the right not to fully use the information.

Companies need to pay attention to the welfare of stakeholders. If the company's operations are not sustainable, then apart from the shareholders, management, employees, customers, and even the public, they will be harmed. The value of the company is determined by the performance of the company. Management as a manager is expected not to be opportunistic. This can be controlled by the existence of corporate governance. This research raises information technology governance which acts as a factor that can oversee investment in information technology or oversee the management of corporate capital to remain in line with company objectives and still be able to improve the welfare of stakeholders.

Company value is the investor's perception of the company's success which can be seen through the stock price. High corporate value can give confidence to the market that not only is the company's current performance good, but also the company's good prospects. Firm value is based on two elements, first, real assets that are assessed independently of the company's future investment opportunities and the second, real options (growth options) which are assessed based on the company's future investment decision choices (Myers, 1977). The company's ability to increase company value can be obtained from the selection of investment opportunity sets.

The value of the company can be measured using several measurements (Damodaran, 2012), namely: Price Earnings Ratio (PER), is a function of the expected changes in earnings ability in the future. PER is a comparison between market prices per share against EPS; Price to Book Ratio (PBV) is how much the market values the book value of a company's stock. The higher the PBV value, it means the market increasingly believes in the company's prospects going forward. PBV also shows how far a company can create company value relative to the amount of capital invested; Tobin’s Q is the current financial market estimate of the return value of every dollar incremental investment. Tobin’s Q is calculated by comparing the ratio of the market value of company shares to the book value of their equity.

Myers (1977) states that IOS is a combination of assets owned by the company and the selection of investments in the future with a positive NPV. Various alternative options for the company's investment in the future are indicated by the increase in the company's value on the results of the investment. IOS can be in the form of capital expenditures for the development of new products, expanding market reach, alternative restructuring costs of the company, favorable choice of accounting policies, and so forth. Gaver and Gaver (1993) states that IOS is a company value that is influenced by the amount of future expenditure, which is currently an investment option that is expected to provide a greater return.

There are three proxies that are often used in calculating IOS (Kallapur and Trombley, 1999), namely: (1) price-based proxies, this proxy depends heavily on stock prices, which are price-based based on the difference between assets and the company's market value; (2) Investment-based proxy, depends on the idea that activity has a
positive relationship between high-level investment and a series of corporate investment opportunities. Research and development is an investment that is expected to create further investment opportunities for the company; (3) proxy based on variants, depending on the idea that the increased variability of returns on basic assets causes an option to be more valuable.

The CoE is part of the cost of capital. Mangena, et al. (2010) states that the CoE is a discounted calculation of the company's shares imposed by market participants based on an estimate of the company's future cash flows to determine the current stock price. There are several measurement models for the cost of equity of Drake (2011), namely: (1) Dividend Valuation Model (DVM), stating that stock prices are determined by the present value of all future cash dividends, future dividends are discounted with the rate of return implied by equity; (2) Model of Determining Capital Asset Prices (CAPM) is the rate of return on compensation given on market risks faced and the time value of money expected by investors; (3) Price Earning Growth Model (PEG), PEG calculates the CoE by calculating the IRR of market expectations for future cash flows at current stock prices; (4) Ohlson's model, used to estimate the value of a company based on the book value of equity plus the cash value of abnormal income Utami (2005). The cost of equity capital is used to evaluate future cash flows which are calculated based on the discount rate used by investors. Cost of capital is related to the level of risk of the company, which is the variation in results. This result variation is measured by earnings per share.

ITG is an integrated part of corporate governance. ITG implements relational structures, mechanisms, and processes in companies that enable businesses and information technology to carry out their responsibilities in supporting IT / business alignment and value creation for IT businesses (Grembergen and Haes, 2009). ITG determines mechanisms and procedures for creating and monitoring IT strategic decisions and explaining the distribution of IT responsibilities and decision-making rights among stakeholders (Taylor & Peterson, 2004). Whereas Weill & Ross (2004) defines ITG as a framework for accountability and decision rights in encouraging desired IT usage behavior. According to Grembergen and Haes (2005) defines ITG is the organizational capacity in determining the strategy and implementation of IT strategies and ensuring business and IT combinations implemented by IT management, executive management, and the board. Definition of ITG according to the IT Governance Institute (2009) is the organizational structure, processes, and responsibilities of the executive and the board of directors and several leaders in ensuring that information technology can maintain and expand organizational strategies and objectives.

Hypothesis Development

Hidayah (2015) and Soebyakto et al. (2017) document the results of research that there is a positive influence between IOS and firm value. Murwaningsari and Rachmawati (2017) prove that IOS influences conservatism. The bad value of the company depends on the market response. IOS is a company value which is currently an investment option that is expected to provide a greater return. This depends on the amount of future expenditure determined by management. If the company is wrong in deciding on an investment in the future, the return generated is not as expected or even suffers a loss. This affects the company's performance. When the company's performance is bad, the market response is bad, meaning that the company's value is
bad because it cannot provide certainty to investors on the company's business continuity. Thus, the hypothesis proposed in this study is:

**H1:** IOS has a positive influence on Firm Value

Supit et al. (2015) prove that capital structure has a negative influence on firm value. Weighted Average Cost of Capital gives the negative impact on Firm Value (Shadab and Sattar, 2015). Companies that can provide the information needed by investors properly will reduce the cost of equity because this good information can reduce information asymmetry. When information asymmetry is low, the risks faced are small, and the returns received are as expected, investors are prosperous, so the value of the company increases. Thus, the second hypothesis proposed in this study is:

**H2:** Cost of Equity has a negative influence on Firm Value

Zhang et al. (2014) prove that IT Governance influences on Firm Performance. IOS talking investment and long-term goals. Seeing the development of increasingly sophisticated technology, IT Governance is expected to be a control in making investments in information technology. This strengthens the IOS relationship to the company's value. Decision making on the company's long-term investment is supported by the expertise of executives, the board of directors and other leaders related to IT, so that the information needed in making investment decisions is relevant, unbiased, timely, easily available, complete, and as needed. When IT governance supports investment decision making, so that it produces high future returns, it attracts investors to invest their funds, so that the company's value will increase. Thus, the third hypothesis proposed in this study is:

**H3:** IT Governance strengthens the influence of IOS on Firm Value

Zhang et al. (2014) prove that IT Governance can improve company performance. IT Governance can also improve IT Capability, where good IT Capability will improve company performance. Investors expect companies to manage risk well so that they can provide high returns to investors. When stakeholders, especially investors, are satisfied with the firm's performance, this will increase the value of the company. Risk management is expected to be optimized with the presence of IT Governance. Thus, IT Governance can strengthen the relationship between the Cost of Equity to Firm Value. Thus, the fourth hypothesis proposed in this study is:

**H4:** IT Governance strengthens the influence of Cost of Equity on Firm Value

**METHODS**

This research is quantitative research that wants to test the causal relationship of IOS to Firm Value, Cost of Equity to Firm Value, and whether IT Governance can strengthen the relationship between IOS and CoE to Firm Value. The dimension of research time is pooling data. The unit of analysis is a banking company listed on the IDX. To test the causality of the hypothesis, where there are moderating variables, the analysis of the Moderating Regression Analysis (MRA) using the SPSS 22 program is used.

Firm Value is measured using the PBV formula (Damodaran, 2012) as follows: $PBV = \frac{\text{price per share}}{\text{book value per share}}$. IOS is measured using the MBVE formula (Kallapur and Trombley, 1999) which is mathematically formulated as follows (Myers,
Diana Frederica

1977): $MBVE = (\text{number of outstanding shares} \times \text{closing price})/\text{total equity}$. CoE return is measured using the Ohlson Model formula, 1995 (Gama, 2017) as follows: $r = (B_t + X_{t+1} - P_t)/(P_t)$. Where: $r$ is the cost of equity capital, $P_t$ is the stock price in period $t$, $B_t$ is the book value per share of period $t$, $X_{t+1}$ is profit per share in period $t + 1$. IT Governance is measured using the indicators used by Zhang et al. (2014) with several indicators that have been adjusted as follows:

<table>
<thead>
<tr>
<th>Table 1. Indicators of IT Governance</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Indicators</strong></td>
</tr>
<tr>
<td>Big4</td>
</tr>
<tr>
<td>INDBRD</td>
</tr>
<tr>
<td>CEFOIT</td>
</tr>
<tr>
<td>CITO</td>
</tr>
<tr>
<td>ITSTRCOMPT</td>
</tr>
<tr>
<td>KADIVIT</td>
</tr>
</tbody>
</table>

The researcher added the Head of the IT Division because its function as a support for IT-related needs and future IT plans was deemed necessary by researchers to become indicators of IT Governance.

Firm Size, measured using the log of Total Asset (Zhang et al., 2014). Firm Age, calculated based on the number of years the company is listed on the IDX (Zhang et al., 2014). ROE measured by comparing net income after tax to shareholder equity. CAR, measured by dividing total capital by risk-weighted assets. NPL, measured by the ratio of non-performing loans to total loans that are profitable by the shares of each bank in a syndicated loan.

The type of data in this study is secondary data, namely the annual report for the 2011-2016 period. The sample was taken using the purposive sampling method as follows: Banking companies listed on the IDX in 2011-2016 and have complete data related to the ratios used.

The regression model equations in this study are as follows:

$$FV = \beta_0 + \beta_1 \text{IOS} + \beta_2 \text{CoE} + \beta_3 \text{IOS}^{*}\text{ITG} + \beta_4 \text{CoE}^{*}\text{ITG} + \beta_5 \text{Size} + \beta_6 \text{Age} + \beta_7 \text{ROE} + \beta_8 \text{CAR} + \beta_9 \text{NPL} + \epsilon$$

Note: $FV$: Firm Value, $\text{IOS}$: Investment Opportunity Set, $\text{CoE}$: Cost of Equity, $\text{ITG}$: Information Technology Governance, $\text{Size}$: Firm Size, $\text{Age}$: Firm Age, $\text{ROE}$: Return on Equity, $\text{CAR}$: Capital Adequacy Ratio, $\text{NPL}$: Non-Performing Loan.

RESULTS

The type of data in this study is secondary data from companies listed on the IDX. Data is obtained from annual reports with the observation period of 2011-2016. The company to be sampled is banking. The reason for taking the banking sector in this research is the advancement of information technology which has the most impact on the banking world, that banks must provide fast and safe services for their customers.
The population in this study are companies listed on the IDX. The sampling method was purposive sampling with the following criteria:
1. Banking companies listed on the IDX in the 2011-2016 period.
2. Banking companies have complete data related to the ratio used.

The following are presented descriptive statistics of the variables used:

<table>
<thead>
<tr>
<th>Variable</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>FV</td>
<td>0.05</td>
<td>46.25</td>
<td>1.5262</td>
<td>3.39874</td>
</tr>
<tr>
<td>IOS</td>
<td>0.09</td>
<td>44.38</td>
<td>1.9985</td>
<td>3.43885</td>
</tr>
<tr>
<td>CoE</td>
<td>-98.33</td>
<td>299.32</td>
<td>-1.8801</td>
<td>34.31785</td>
</tr>
<tr>
<td>ITG</td>
<td>1.17</td>
<td>1.00</td>
<td>5.595</td>
<td>34.18796</td>
</tr>
<tr>
<td>Size</td>
<td>12.28</td>
<td>15.02</td>
<td>13.5207</td>
<td>7.3278</td>
</tr>
<tr>
<td>Age</td>
<td>1.00</td>
<td>34.00</td>
<td>11.7553</td>
<td>8.07874</td>
</tr>
<tr>
<td>ROE</td>
<td>-83.79</td>
<td>42.49</td>
<td>10.7913</td>
<td>15.02968</td>
</tr>
<tr>
<td>CAR</td>
<td>6.82</td>
<td>46.49</td>
<td>17.7138</td>
<td>5.00898</td>
</tr>
<tr>
<td>NPL</td>
<td>0.00</td>
<td>16.05</td>
<td>2.3609</td>
<td>2.12831</td>
</tr>
</tbody>
</table>


Based on the table above, it shows that the amount of data in the study (N) is 188 observations, that is based on sample criteria (purposive sampling), then obtained 39 companies with 6 periods. The average sample company has a year-end stock price that is higher than its book value because the average value is greater than 1. The average sample company has an asset investment that provides good returns with an average value of 1.9985. The average sample company requires an equity cost of 1.88% as a return for investors who have invested their funds into the sample company. The average sample company has met the IT Governance criteria of 56%. The average sample company has a total asset value that is not much different. The sample company is taken from the age of the company 1 year to 34 years registered on the IDX with an average age of the sample company is 12 years, has long been a public company. There are sample companies that experience losses in the study period. This is indicated by the negative ROE value. However, the average sample company has good equity management. Viewed from a positive average. The sample companies have good ability in providing funds to overcome the possible risk of losses. There are sample companies that have a low level of non-performing loans, seen from the minimum value of very small NPLs and the average sample company has a ratio of non-high non-performing loans even though some samples have a ratio of up to 16.05.
The following table presents the results of hypothesis testing:

<table>
<thead>
<tr>
<th>Variables</th>
<th>Prediction</th>
<th>Coefficients</th>
<th>Significants</th>
<th>Collinearity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Tolerance</td>
</tr>
<tr>
<td>C</td>
<td>-</td>
<td>-4.443</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IOS</td>
<td>+</td>
<td>1.685</td>
<td>0.000***</td>
<td>0.811</td>
</tr>
<tr>
<td>CoE</td>
<td>-</td>
<td>-0.170</td>
<td>0.038**</td>
<td>0.760</td>
</tr>
<tr>
<td>ITG</td>
<td>+</td>
<td>4.417</td>
<td>0.000***</td>
<td>0.645</td>
</tr>
<tr>
<td>Size</td>
<td>+</td>
<td>0.270</td>
<td>0.108</td>
<td>0.481</td>
</tr>
<tr>
<td>Age</td>
<td>+</td>
<td>-0.023</td>
<td>0.095*</td>
<td>0.600</td>
</tr>
<tr>
<td>ROE</td>
<td>+</td>
<td>-0.017</td>
<td>0.035**</td>
<td>0.489</td>
</tr>
<tr>
<td>CAR</td>
<td>+</td>
<td>-0.041</td>
<td>0.022**</td>
<td>0.924</td>
</tr>
<tr>
<td>NPL</td>
<td>-</td>
<td>-0.018</td>
<td>0.722</td>
<td>0.658</td>
</tr>
<tr>
<td>IOS*ITG</td>
<td>+</td>
<td>-2.312</td>
<td>0.000***</td>
<td></td>
</tr>
<tr>
<td>CoE*ITG</td>
<td>+</td>
<td>0.013</td>
<td>0.289</td>
<td></td>
</tr>
</tbody>
</table>

R² 0.892
Adj R² 0.886
F-statistic 146,589
Prob (F-stat) 0.000
Kolmogorov v Smirnov 0.00
Observation 188

*Signifikan pada level 10%, **Signifikan pada level 5%, ***Signifikan pada level 1%.


The data in this study have been tested for classical assumptions. The residual value is not normally distributed, but the data has been above 100 observations. Data does not occur multlinearity, but some variables are not homogeneous. Based on table 4.4, the value of Adj R2 of 0.886 means that variations in the Firm Value variable can be explained by Investment Opportunity Set variables, Cost of Equity, IT Governance, Firm Size, Firm Age, ROE, CAR, and NPL and interactions between IOS * ITG and CoE * ITG is 88.6% while the remaining 11.4% is explained by other variables outside of this study. F statistical probability value of 0.00 is smaller than 0.05, then the regression model is declared feasible to predict the influence of the Investment Opportunity Set, Cost of Equity and IT Governance variables on Firm Value.

DISCUSSION

IOS variable has a coefficient value of 1.685 with a significance of 0.000 <0.01, meaning that the investment opportunity set has a positive influence on Firm Value at a significant level of 1%, H1 is accepted. Looking at the current trend, the banking industry invests heavily in investment (IT) technology, namely investment in financial
applications (towards digital banking). Investment in technology aims to improve services to consumers so that financial transactions can be made easier and faster.

Competition between banks is getting tougher, especially large banks also began to use artificial intelligence for routine jobs in banking. Service to customers through digital banking is expected to increase user satisfaction. When customers are satisfied, they will be loyal to the bank so that it can increase the value of the company. Likewise, with investors, they get good company performance projections, so investors are also loyal in investing their funds. Company value increases, reflected in stock price movements. This research is supported by the results of the research of Hidayah (2015) and Soebyakto et al. (2017) who documented the results of research that there is a positive influence between IOS and company value.

CoE variable has a coefficient value of -0.170 with a significance of 0.038 <0.05, meaning that CoE has a negative influence on Firm Value at a significance level of 5%, H2 is accepted. Current technological developments and trends that lead to digital banking have caused the banking industry to invest heavily in technology. This requires large capital, of course with high risk and high return expectations. This study supports that the existence of good risk management, then the cost of equity is low, will increase the value of the company.

Low costs reflect that investors get the information they need, well. This decreases the existence of information asymmetry. Therefore, the stock price increases, the value of the company increases. This result is supported by the research of Supit et al. (2015) which proves that capital structure has a negative influence on firm value.

The IOS * ITG variable has a coefficient value of -2.312 with a significance of 0.000 <0.01, meaning that IT Governance weakens the influence of IOS on Firm Value at a significant level of 1%, H3 is rejected because the direction of influence is not following the direction of the hypothesis. Banking decisions in making long-term investments turned out to be not reinforced by the existence of corporate governance in the field of information technology. This is allegedly caused by the organizational structure related to IT division directors and heads as well as the experience of directors related to information technology has not been one hundred percent contributing to the development of investment banking. Investment in information technology is still in the starting stage, not all sample companies make large investments in technology so that IT Governance does not play a role in increasing the influence of IOS on company value. The results of this study do not support Zhang et al. (2014) which proves that IT Governance influence company performance.

CoE * ITG variable has a coefficient value of 0.013 with a significance of 0.289 > 0.05, meaning that IT Governance does not moderate the influence of CoE on Firm Value, hypothesis 4 is rejected. It is suspected that other business risks affect the operations of the sample company. Business risks can come from within the company, or outside the company. The competition in the banking industry is getting tougher with the trend towards digital banking. Companies that do not adapt quickly, become a separate risk for losing the competition with other banking companies. Companies need to think about the right strategy in maintaining a competitive and sustainable company. At present, the company's business risk has not been dominated by information technology, so the role of IT Governance does not influence the company's investment risk.

Investors want the funds they invest can support the company's operations to the maximum to provide returns as expected. Poor performance, it will be difficult to
provide high returns to investors. If the welfare of investors is threatened, then they will withdraw their funds so that it has an impact on the decline in stock prices. The cost of equity speaks long-term, so this will also affect the value of the company. These results do not support the study of Zhang et al. (2014) which proves that IT Governance can improve company performance and Supit et al. (2015) prove that capital structure has a negative influence on firm value.

CONCLUSIONS

The results of this study can be concluded that: (1) Investment Opportunity Set has a positive influence on firm value (H1 accepted); (2) Cost of Equity has a negative influence on firm value (H2 is accepted); (3) IT Governance weakens the negative influence of investment opportunity set on firm value (H3 is rejected, because the direction of influence is different from the hypothesis); (4) IT Governance cannot moderate the negative influence of cost of equity on firm value (H4 is rejected).

The results of this study have implications for the development of particular theories regarding the positive influence of IOS on firm value and the negative influence of cost of equity on firm value. This study also provides evidence that IT Governance can weaken the influence of IOS on firm value.

This study provides practical implications for banking companies in increasing the firm value should pay attention to investment management and equity to provide the expected returns. In addition to the practical implications for banking companies, this research also has implications for the government in determining policies related to the application of information technology to banks. By looking at the conditions of technological developments that need to be utilized to improve service to consumers and also improve the welfare of stakeholders, it is necessary to have a policy from the government for all banks to improve their IT Governance. However, government policy on this matter is not too strict because IT Governance weakens the influence of IOS on the value of the company.

The limitation in this study is that the sample is only the banking industry where banks have industry characteristics that are different from other industries, so the results of the study cannot be generalized to other types of industries. Therefore, for further research, it is necessary to test samples other than banking, such as the manufacturing industry, especially whether this industry needs the application of IT Governance to increase the value of their companies. Further research can also be investigated whether IT Governance can be mediation in increasing company value.

Another limitation is the measurement used to measure IT Governance variables. This measurement can be further developed, not just whether the company has positions related to information technology or not. But even further, is the positioning functioning properly. Does IT Governance work? Also, research can also be carried out using survey methods using questionnaires and deep interviews for measuring IT Governance.

REFERENCE


