Credit Risk as an Intervening Variable in the Effect of Good Corporate Governance (GCG) Implementation on Banking Companies Performance (Study on Banking Companies Listing on BEI 2012-2016 Period)

I Made Gilang Candra Pradipta Rata¹, Ni Ketut Surasni², I Nyoman Nugraha AP³

¹ Master of Management Program, Mataram University, Majapahit Street No.62, Gomong, Selaparang, Mataram City, Nusa Tenggara Barat, 83115, Indonesia
² Faculty of Economics and Business, Mataram University, Majapahit Street No.62, Gomong, Selaparang, Mataram City, Nusa Tenggara Barat, 83115, Indonesia

Abstract: The phenomenon of economic crisis that occurred in 1997-1998 has led Indonesia to the worst financial crisis and banking performance. Several factors contributed to the Indonesia economic collapse such as extremely poor financial regulation, irregular banking practices were pervasive and high default loans ratio of the state banks. Inadequate enforcement of central bank regulations meant that rules were routinely violated with impunity. Some efforts have been made to improve banking sector performance and regain public trust, the implementation of corporate governance practices in banking industry being the main concerned of central bank. As for the purpose of this study was to determine whether GCG had an effect on banking performance through credit risk. The object was several banks which listed on IDX and participated in IICG survey during 2012-2016. By using purposive sampling, 7 bank samples were obtained and the statistic analysis was carried out using Path Analysis Method. The results of this study indicate: 1) GCG has negative effect on credit risk, 2) GCG has positive impact on company performance, 3) credit risk has negative impact on company performance and 4) credit risk was able being referred as an intervening variable in the effect of GCG on banking companies performance. The results of this study can be used as a tool for improving company management related to GCG implementation, credit risk and company performance.

Keywords: bank, GCG, NPL, ROE.

1. Introduction

The bank is an institution that functions as a financial intermediary between parties who have excess funds and those who are underfunded. As a financial institution that plays an important role in supporting the economy in Indonesia, banks face increasingly complex risks and challenges both internal and external. The existence of these risks and challenges needs to be carried out assessments related to the soundness of commercial banks in Indonesia. Assessment of the soundness level of commercial banks is regulated in Bank Indonesia Regulation (PBI) Number 8/4 / PBI / 2006 which regulates the implementation of GCG standards for commercial banks in Indonesia. A survey conducted by the Asian Corporate Governance Association (ACGA) shows that Indonesia still occupies the last place in terms of GCG implementation in 2016.

There are several factors that influence the bank's financial performance, one of the high risk of bad credit. Credit activities are very important for the banking sector because they have unwittingly become the backbone of key banking operations. Credit risk is a risk that arises as a result of a customer's failure to fulfill his obligations. NPL (net performing loan) is one indicator of measurement for credit risk. The higher this ratio, the worse is the quality of bank credit which causes the number of problem loans to increase and cause losses, whereas if the NPL is lower, the profit or profitability of the bank will increase (Puspitasari, 2009). Good GCG implementation can improve the risk management faced by the banking industry to be more effective and will have an impact on improving the company's performance in the form of profits to shareholders. Profitability is an important indicator for investors in assessing the performance of a company because it shows the company's ability to obtain profits and the rate of return that will be received by investors so that it can describe whether a
Conflict may be caused by the agent acting in accordance with those who receive the relations between parties who delegate certain decisions. According to Jensen and Meckling (in Kawatu, 2005) management of the company in an effort to balancing between profit and continuity can be achieved through good corporate governance. According to (Daniri & Achmad, 2005) implementation of GCG and credit risk management that will be difficult to effectively control the actions taken by management due to limited information. Therefore, the manager is obliged to give a signal about company information to the owner. The signal provided can be done through the disclosure of accounting information such as financial statements (Hanafi, 2004).

The results of previous studies still show mixed results related to the effect of GCG and credit risk on company performance. Research by (Iannotta, Giuliano, Noera, & Sironi, 2007) states that GCG has a positive effect on risk. This is supported by research (Permatasari & Novitasary, 2014) which states that GCG composite values have a positive effect on NPL. While research by (Ariestya & Ardiana, 2016) states that GCG implementation has a significant negative effect on credit risk of financial sector companies listed on the IDX. Research conducted by (Indael Kaaya & Dickson Pastory, 2013) that there is a positive and significant relationship between credit risk and performance. Research by (WPPW & Priyadi, 2013) states that the application of good corporate governance has proven to have a significant effect on the company's financial performance. Based on the explanation of the importance of the implementation of GCG and credit risk management that affect the performance of companies, especially banks, which are the driving forces of the country's economic growth, there are still research gaps from the results of earlier studies, so this research is still necessary. This study aims to check the effect of GCG on banking performance with credit risk as an intervening variable. The motivation of this research is the results of research on the relationship between GCG and inconsistent company performance, so that credit risk factors are thought to indirectly give a relationship between GCG and company performance.

2. Literature Review

2.1 Agency Theory

Agency theory suggests the relationship between the principal (owner) and agent (manager) in terms of management of the company, where the principal is the party who will delegate authority to the agent to manage the company. According to Jensen and Meckling (in Kawatu, 2009: 407), agency theory explains about contractual relations between parties who delegate certain decisions (principal / owner / shareholders) with those who receive the delegation (agent / management). The occurrence of a conflict may be caused by the agent acting in accordance with the interests of the principal, so that it will trigger agency costs.

2.2 Signaling Theory

According to Arifin (2005: 11) signal theory is a theory developed to find out the possibility that information related to the condition and prospects of the company in the future is more known by insiders than companies who are outsiders. Signal theory is an act of the company in providing signals to users of financial statements and to give instructions and information about management's perspective on the company's prospects. Signals can be classified into two, namely signals in the form of good news such as the performance of banking companies that continue to increase every year and bad news such as the performance of banking companies that continue to decline every year.

2.3 Asymmetry Information Theory

Asymmetry theory says the sides that related to the company do not have the same information about the prospects and risks of the company. Certain sides will have better information than others. Managers usually have better information than outsiders (investors) because it can be said that information asymmetry has occurred between the two parties. More information that is owned by the manager can trigger it to take actions that are in accordance with the wishes and interests of maximizing the new utility itself. While for investors it will be difficult to effectively control the actions taken by management due to limited information. Therefore, the manager is obliged to give a signal about company information to the owner. The signal provided can be done through the disclosure of accounting information such as financial statements (Hanafi, 2004).

2.4 Bank Definition

Law Number 10 of 1998 concerning changes to Law Number 7 of 1992 concerning banking, explained that banks are Business Entities that collect funds from the public in the form of deposits and distribute them to the public in the form of loans or other forms in order to improve the lives of many people. Banks must also continue to maintain their performance and maintain public trust given their duty that banks work with public funds deposited with banks on the basis of trust. From this understanding it can be concluded that the bank's business is always related to financial problems, namely raising funds, channeling funds, and providing other bank services.

2.5 Good Corporate Governance (GCG) Definition

Generally, good corporate governance (GCG) is a system and structure that has a better way in managing a company by increasing shareholder value to accommodate various stakeholders in the company (stakeholders), such as: creditors, suppliers, business associations, consumers, workers, the government, and wider society (Syakhroza, 2000) in (Indrayani, May, & Nurkholis, 2001). GCG which contains four important elements, namely justice,
transparency, accountability, and accountability, is expected to become a way to improve company performance.

2.6 Good Corporate Governance (GCG) Principle

(Effendi & Achmand, 2009) to realize the principles of GCG in a public company, then the principle of independence (independency), transparency and disclosure (transparency and disclosure), accountability (accountability) and responsibility (fairness) must be the main foundation for audit committee activities.

2.7 Corporate Governance Perception Index (CGPI) Definition

CGPI values can be calculated by summing the last values of the steps above. The results of the research program and ranking of the application of GCG to company participants by giving a score in accordance with the guidelines that have been made. CGPI ranking is divided into three categories based on reliable levels which can be explained according to the GCG implementation score presented in the following table:

<table>
<thead>
<tr>
<th>No</th>
<th>Stages</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>≥ 85 – 100</td>
<td>Very Reliable</td>
</tr>
<tr>
<td>2</td>
<td>≥ 70 - &lt; 85</td>
<td>Trusted</td>
</tr>
<tr>
<td>3</td>
<td>≥ 55 - &lt; 70</td>
<td>Less Reliable</td>
</tr>
</tbody>
</table>

Source: CGPI report, 2016

2.8 Credit Risk Definition

In this study, the ratio of Non Performing Loans (NPL) was used to show the ability of bank management in managing non-performing loans channeled by the bank. According to Kasmir (2009: 228) Credit Risk Ratio is a ratio used to measure the risk of loans channeled by comparing the value of bad credit with the total amount of credit that has been channeled. The higher the NPL ratio, the greater the operational costs that have the potential to cause losses because it erodes the level of profit / profitability and affects the soundness of the bank. The formula for calculating the NPL ratio are:

\[ \text{NPL} = (\text{Non-Performing Loans})/(\text{Total Credit}) \times 100\% \]

2.9 Company Performance Definition

Performance is the work achievement that has been achieved by the company in a certain period. Robertson (2002) in (Mahmudi, 2007) explains that performance measurement is a process of evaluating the progress of work towards achieving predetermined goals. The higher the company's performance, the higher the level of achievement of the company's goals. (Bastian, Indra, & Suhardjono, 2006) suggest that a company's financial performance can be measured using profitability ratios consisting of: ROA and ROE. ROA is a ratio used to measure the ability of bank management to obtain profits by utilizing the total assets owned and ROE is used to measure the ability of banks to obtain net profits using their own capital. Here's the formula for calculating the ROE ratio:

\[ \text{ROE} = \frac{(\text{Earning after tax})}{(\text{Total Equity})} \times 100\% \]

2.10 Previous Research

Research by Permatasari and Novitasary (2014) on “The Effect of Implementation of Good Corporate Governance on Capital and Banking Performance in Indonesia: Risk Management as an Intervening Variable”. The purpose of this study was to determine the effect of GCG implementation on credit risk, bank capital, and banking performance in Indonesia. GCG implementation is measured by the composite value of GCG which is the result of the bank's self-assessment. Credit risk is measured by Non Performing Loans (NPL). Bank capital is measured by the Capital Adequacy Ratio (CAR) and bank performance is measured by Return on Equity (ROE). The sample used in the study was in the form of unbalanced panel data, from 119 banks during 2006-2012. The analysis technique used in this study is path analysis. The results showed that GCG had an effect on credit risk. GCG and credit risk had no effect on bank capital, GCG had no effect on performance, but credit risk had an effect on performance. Thus credit risk can be an intervening variable between GCG and bank performance.

3. Research Methodology

The type of research used in this study uses an associative quantitative approach. According to Sugiyono (2013: 37), associative research is research that the purpose to determine the relationship between two or more variables. The population in this study were all financial sector companies listed on the Indonesia Stock Exchange and included in survey participants by the Indonesian Institute for Corporate Governance (IICG). The scale used is scoring, the higher the credit risk, GCG had no effect on performance. The variables that will be examined in this study are Good Corporate Governance (X1) as an independent variable, credit risk (X2) as a variable intervening and company performance (Y1) as the dependent variable.

3.1 Variable Operational Description

1) Good Corporate Governance (GCG)

The variable used to measure GCG is the Corporate Governance Perception Index (CGPI). CGPI is the result of ranking the implementation of good corporate governance in public companies and state-owned enterprises in Indonesia conducted by the Indonesian Institute for Corporate Governance (IICG). The scale used is scoring, the higher the scoring given the better and vice versa.

2) Credit Risk

This variable is represented by the Non Performing Loan (NPL), which is the ratio between the total non-performing
loans and the total loans provided by the bank to the debtor. Referring to SEBI Number 5/21/2003 the parameters that used in measuring the application of credit risk management are NPL.

3) Company Performance
This variable is measured by using Return on Equity (ROE) which is the ability of companies to use their capital to make a profit. ROE shows the rate of return given by the bank to shareholders. The higher the ROE, the better the bank's condition. However, the lower the ROE, the worse the condition of the bank concerned.

Testing the hypothesis in this study uses the path analysis model with the SPSS 23 program for windows to process the data. Path Analysis is used to analyze the pattern of relationships between variables to find out the direct or indirect effects of a set of independent variables (exogenous) on the dependent variable (endogenous) (Riduwan and Kuncoro, 2010: 2). Path coefficient is an individual regression coefficient, standardized regression coefficient is regression coefficient calculated from a database that has been set in a standard number or Z-score (data set with an average value = 0 and standard deviation = 1). Standardize path coefficient is used to explain the effect instead of predicting the independent variable on the dependent variable. In the SPSS program in the regression analysis menu, path coefficient is indicated by the output coefficient or Beta value (Riduwan and Kuncoro, 2010: 116). If there is a simple flow diagram containing one element of the relationship between the independent variable and the dependent variable, then the path coefficient will be the same as the simple correlation coefficient r.

In this study there is an intervening variable, namely credit risk. Testing the mediation hypothesis can be done with the Sobel Test procedure. The sobel test is done by testing the strength of the indirect effect of the independent variable (X) on the dependent variable (Y) through the intervening variable (M). The indirect effect of X to Y through M is calculated by multiplying line X - M (a) with line M - Y (b) or ab. So the coefficient ab = (c-c') where c is the effect of X on Y without controlling M, while c' is the coefficient of influence of X on Y after controlling M. Standard error coefficients a and b are written with Sa and Sb, the amount of standard error of influence indirect (indirect effect) Sat is calculated by the formula below:

\[
Sat = \sqrt{(b^2 \times \sqrt{a^2 + \frac{S_a^2}{2}} + \sqrt{b^2 + \frac{S_b^2}{2}} - \frac{S_{ab}}{2})^2}
\]

Information:

a = Regression coefficient from independent variable (X) to mediator variable (M).

sa = standard error from a.

b = Regression coefficient from mediator variable (M) to dependent variable (Y)

sb = standard error from b

To test the significance of indirect effects, we need to calculate the value of t from the coefficient with the following formula:

\[t = \frac{ab}{Sat}\]

The t-count value is compared with the t-table value and if the t-count value is greater with a significance level of 0.05, it can be concluded that there is a mediating effect (Ghozali, 2016)

4. Result
4.1 Path Analysis
Path analysis is a development of correlation analysis built from path diagrams hypothesized to explain the mechanism of causal relationships between variables by describing the correlation coefficients into direct and indirect influences (Yamin and Kurniawan, 2011: 151). This analysis can also be said as a linear regression analysis with standardized variables. This path analysis model, Good Corporate Governance (X1) is used as an independent variable and credit risk (X2) is used as an intervening variable, while company performance (Y1) is used as the dependent variable. Table 3 and Table 4 present the results of path analysis of the study.

Based on the results of stage 1 regression testing, the SPSS output results in the standardized beta value of GCG in equation (1) - 0.579 and significant at 0.000 (<0.05), which means that GCG has a negative effect and is significant to Credit Risk (NPL). Standardized coefficient value beta - 0.579 is the value of path or path P1. So, the function of the analysis equation for the path for as follows: Y1 = -0.579X1 + e

Based on the results of stage 2 regression testing, the results of the SPSS regression equation (2) the standardized beta value for GCG is 0.262 and significant at 0.026 (<0.05), which means that GCG has a positive and significant effect on company performance (ROE). The standardized beta coefficient value for GCG of 0.262 is the value of path or path P2. While the standardized beta value for Credit Risk (NPL) is -0.677 and significant at 0.000 (<0.05), which means that NPL has a negative and significant effect on ROE. The standardized beta coefficient for NPL of -0.677 is the value of path or path P3. So, the function of the analysis equation for the path formed is as follows: Y2 = 0.262X1 + -0.677X2

The standard error values are as follows.

\[\text{Pe1} = \sqrt{(1-R^2)}\]
\[\text{Pe1} = \sqrt{(1-0.336)} = 0.814\]
\[\text{Pe2} = \sqrt{(1-R^2)}\]
\[\text{Pe2} = \sqrt{(1-0.732)} = 0.517\]

Based on the calculation results, the value of Pe1 (Pe1) is 0.814 (81.4 persen) which means that 81.4 percent of the variation in credit risk variables cannot be explained by the Good Corporate Governance variable, while the value of e2 (Pe2) is 0.517 (51.7 persen) which means that 51.7 percent of the variation in performance variables cannot be explained by the variables of Good Corporate Governance and credit risk.

4.2 Direct and Indirect Effect
The amount of direct effect and indirect effect and the total effect between variables based on the path analysis model

Volume 8 Issue 1, January 2019
www.ijsr.net
Licensed Under Creative Commons Attribution CC BY
can be seen in the following table. The results of these calculations show that the indirect effect obtained a number of results of 0.392. This number means the effect of GCG on company performance (ROE) through credit risk (NPL) of 0.392. This shows that the credit risk variable acts as an intermediary in the relationship between GCG and company performance. So it can be concluded that the credit risk variable is needed to mediate the presence of GCG variables and company performance. The summary table of calculation of effect is as follows:

The feasibility test model (model fit) is carried out before testing the hypothesis. If the results of the F test are significant, it means that the two independent variables simultaneously affect the dependent variable and the model used is considered feasible. The F-count value of 16.675 and 43.761, while the significant value of the F test for the two equations above is equal to 0.000 which is smaller than 0.05. This indicates that the independent variables have an effect simultaneously on the dependent variable at the 5 percent significance level, so that this model is considered feasible to test and prove the hypothesis can be done.

4.3 Hypothesis test results (t test)

The results of the t statistical test (hypothesis test) show the influence of each variable independently in explaining the variation of the dependent variable. Partial testing results of each independent variable on the dependent variable can be shown as follows:

**Good Corporate Governance (GCG) effect to Credit Risk**

GCG has tcount = -4.083 where tcount<ttable is tcount = -4.083 <ttable = 2.035, while P1 for the Good Corporate Governance variable is -0.579 with a significance level of 0.000 less than 0.05. This shows that H1 is accepted, which means that Good Corporate Governance has a negative effect on credit risk.

**Good Corporate Governance (GCG) effect to company performance**

GCG on company performance has tcount = 2.333 where tcount> t table is tcount = 2.333 > t table = 2.037, while P2 value for Good Corporate Governance variable is 0.262 with significance level 0.026 smaller than 0.05. This shows that H2 is accepted, which means that Good Corporate Governance has a positive effect on performance.

**Credit Risk effect to Company Performance**

Credit risk has tcount = -6.029 where tcount<ttable is tcount = -6.029 <ttable = 2.037, while the P3 value for the credit risk variable is 0.000 less than 0.05. This shows that H3 is accepted, which means that credit risk has a negative effect on performance.

4.4 Sobel Test Result

To test the significance of credit risk as a mediator variable in the relationship between variables good corporate governance and company performance, the Sobel Test is used (Ghozali, 2016). The Sobel Test is formulated as follows:

$$Z = \frac{R_{GCG ightarrow performance} \cdot R_{performance ightarrow credit risk}}{\sqrt{V_{GCG ightarrow performance} \cdot V_{performance ightarrow credit risk}}}$$

Based on the calculation above, the Z value is 3.350. After obtaining the value of Z, the next calculation is assisted by using Microsoft Excel software. Then the results are as follows:

**Table 2: Sobel Test Result**

<table>
<thead>
<tr>
<th>Sobel</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Z</td>
<td>3.35026612</td>
</tr>
<tr>
<td>Normdist Z</td>
<td>0.999595981</td>
</tr>
<tr>
<td>Sig.</td>
<td>0.000404019</td>
</tr>
</tbody>
</table>

From the table it can be seen that the Z value is 3.350 where this value is greater than the specified value 1.96 (absolute Z value) with a significance level of 0.000404019. This shows that the credit risk variable is able to mediate the relationship between GCG and company performance.

5. Discussion

5.1 Good Corporate Governance (GCG) Effect to Credit Risk

The value of P1 for the Good Corporate Governance variable is -0.579 with a significance level of 0.000 smaller than 0.05. This shows that H1 is accepted, which means that Good Corporate Governance has a negative effect on credit risk. This condition illustrates that the higher the Good Corporate Governance of a company, the lower the credit risk that is owned.

Some studies have found that GCG has an effect on the implementation of a bank's credit risk as the research conducted by Setiawaty (2016) shows that a significance level of 0.006 is smaller than 0.05. This shows that H0 is rejected and H1 is accepted, which means that the implementation of GCG affects the NPL of financial sector companies listed on the IDX, with $\beta$ of -0.559. This indicates that the implementation of GCG has a significant negative effect on the credit risk of financial sector companies listed on the IDX. The same is the case with the results of Permatasari and Novitasari (2014), Iannotta, et al (2007), Laeven and Levine (2009). The study concluded that the GCG mechanism was able to play a role in increasing risk taking so that bank credit risk would also improve.

5.2 Credit Risk Effect to Company Performance

The P3 value for the credit risk variable is -0.677 with a significance level of 0.000 less than 0.05. This shows that H3 is accepted, which means that credit risk has a negative effect on performance. This condition illustrates that the higher the credit risk possessed, the lower the company's performance. Signal theory explains the importance of credit risk in influencing company value as a result of the performance of
banking companies related to the quality of loans that have been channeled. The greater the credit value channeled, the greater the potential interest income that will be obtained so that the banking performance will be good in the eyes of investors.

The research conducted by Setiawaty (2016) found that credit risk negatively affected banking performance. This result concludes that credit risk proxied by a low composite NPL value indicates that banks have carried out good risk management so as to improve banking performance. This result is in line with the results of the research of Permatasari and Novitasary (2014), Lestari (2013), Nusantara (2009), Andersen (2008), Collier (2006) which shows that risk management especially credit risk can improve company performance.

5.3 Credit Risk Effect to Company Performance

The P3 value for the credit risk variable is -0.677 with a significance level of 0.000 less than 0.05. This shows that H3 is accepted, which means that credit risk has a negative effect on performance. This condition illustrates that the higher the credit risk possessed, the lower the company's performance. Signal theory explains the importance of credit risk in influencing company value as a result of the performance of banking companies related to the quality of loans that have been channeled. The greater the credit value channeled, the greater the potential interest income that will be obtained so that the banking performance will be good in the eyes of investors.

The research conducted by Setiawaty (2016) found that credit risk negatively affected banking performance. This result concludes that credit risk proxied by a low composite NPL value indicates that banks have carried out good risk management so as to improve banking performance. This result is in line with the results of the research of Permatasari and Novitasary (2014), Lestari (2013), Nusantara (2009), Andersen (2008), Collier (2006) which shows that risk management especially credit risk can improve company performance.

5.4 Good Corporate Governance (GCG) effect to Company Performance through Credit Risk

Based on the results shown in this study, the indirect effect of Good Corporate Governance (GCG) on Company Performance through Credit Risk is 0.392, where the direct effect is 0.262. Then from that the comparison of indirect effects and direct effects is 0.392 > 0.262, so it can be stated that credit risk can function as a partial intervening variable in the effect of Good Corporate Governance (GCG) on Performance in banking companies.

The results of this study are in line with the research of Setiawaty (2016) wherein the results of his research indicate an indirect effect of GCG on performance. According to research conducted by Ratna (2017), it was shown that GCG had an indirectly significant effect on ROE through NPL with a significance value of 0.026 > 0.05 with the sobel test.

With good corporate governance, banks can reduce the credit risk ratio so that bank performance can increase. According to Greuning (2011), good corporate governance has been proven to improve operational performance and reduce the risk of financial difficulties and can also positively affect investors' perceptions to channel their funds.

6. Conclusion

Based on the results of research on 7 banking companies described in the previous chapter, regarding the influence of the variables of Good Corporate Governance (GCG) on Banking Performance through Credit Risk, it can be concluded as follows:

6.1 Good Corporate Governance (GCG) has a negative effect on credit risk.

This condition illustrates that the higher the Good Corporate Governance (GCG) of a company, the lower the credit risk that is owned.

6.2 Good Corporate Governance (GCG) has a positive effect on company performance.

This can be interpreted that the better GCG performance, the level of trust from customers and investors shows a positive response. With good corporate governance, companies can work more effectively and prevent significant errors in company strategies to achieve company goals

6.3 Credit risk has a negative effect on company performance.

It can be interpreted that the smaller the credit risk ratio, the better the performance of the bank. In other words, the bank has demonstrated management's ability to manage problem loans, so that it does not erode profits from the bank itself

6.4 Credit risk is able to mediate the influence of good corporate governance (GCG) on company performance

It can be interpreted that good corporate governance can enable banks to reduce credit risk ratios so that bank performance can increase.

References


Volume 8 Issue 1, January 2019

www.ijsr.net
Licensed Under Creative Commons Attribution CC BY

Paper ID: ART20194604 10.21275/ART20194604 1440

Author Profile
I Made Gilang Candra Pradipta received the B.S. degrees in Architecture Engineering from Brawijaya University in 2010. He stayed in Mataram-Indonesia, for work in one of the largest bank in Indonesia dan he continued his master's degree in management at Mataram University, Indonesia.