The Effect of Risk Management on Firm Value with Firm Performance as a Mediation (Study in Banking Industries Listed in IDX) for the year 2013-2017

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Abstract

This study aimed to analyze the influence of Credit Risk and Operational Risk on Firm Value with Firm Performance as a mediation variable. With purposive sampling method obtained data from 35 Banking firms in Indonesia are taken from the Indonesia Stock Exchange 2013-2017 period. Using Structural Equation Modeling with AMOS program found that the Credit Risk and Operational Risk have a negative influence on Firm Value, Credit Risk and Operational Risk have a negative influence on Firm Performance, and Firm Performance have a positive influence on Firm Value. As a mediation variable, Firm Performance strengthen the influence of Credit Risk and Operational Risk on Firm Value significantly .

Keywords: Firm Value, Firm Performance, Risk Management, Tobin's Q, ROA, NPL, CER

1. Introduction

In the current era of globalization, business competition in various industries in Indonesia is getting tighter. The financial sector industry is also inseparable from competition in Indonesia. One of Company that is engaged in finance is the banking sector which plays an important role in economic system and the needs of other companies for funding needs. This is due to the fact that financial companies are indeed the main area of their services to provide funding facilities for other companies (Kasmir, 2012:3). According to Bank Indonesia Regulation No. 13/23/PBI/2011 concerning the application of risk management for the Bank, the risk is the potential loss resulting from a certain event. Meanwhile, the risk of loss that occurs as a direct or indirect consequence of the risk event, the loss can be in the form of financial and non-financial. Banking also has the potential to face these risks. Problems that occur in banking institutions in Indonesia related to the implementation of risk management are the inconsistency in the application of risk management in banking institutions (Loayza, 2014; and Zaini, 2015). The inconsistent implementation of risk management has resulted in the unpreparedness of banking institutions to face the financial crisis, which weaken firm value of the company from the investors perspectives.

2. Literature Review

2.1. Agency Theory and Signaling Theory

As an agent of principle who has the authority to manage the company, the management has the advantage with respect to the detailed information of the company. In accordance with the expectations of the principle that the company has a good performance in order to increase the size of companies and also the hidden personal goals, management can utilizes information for published in the truth or not (Jensen and Mackling, 1976). Some of the measures taken to improve the companies' performance is by manage credit risk and operational risk, with the aim to give a good signal in the market so the market give a good reaction on the firm value (Ross, 1977).

2.2 Firm Value

The value of the company is result from investor perception of the company which resulted in stock prices in the market. According to the theory of signal that the financial statements is one means of informative that explains the extent to which performance of the company, which the market demand and firms' supply are interact (Keown, 2006). Because of that, the management will try to show great performance in the market so as to get a positive reaction from the market.

2.3 Firm Performance

In general, firn performance is the company's ability to generate profits or profits. To measure the profit level of a company, a profit ratio or profitability ratio is used. The use of profitability ratios can be done using a comparison of the components in the financial statements. The measurement results can be used as management evaluation tools. Companies that have high profitability will attract investors to invest in hopes of gaining high profits. This ratio is considered by prospective shareholders because it will affect stock prices.

2.4 Credit Risk
The Sustainable of the bank business is closely related to its productive assets, therefore bank management is required to always be able to monitor and analyze the quality of productive assets owned. The quality of earning assets shows the quality of assets in relation to the credit risk faced by banks due to the provision of credit and investment in bank funds. Productive assets that are assessed for quality include the planting of funds in both rupiah and foreign exchange, in the form of loans and securities (Siamat, 2005). Each bank's investment in earning assets is assessed for quality by determining the collectability level. Collectability can be interpreted as the state of repayment of principal, principal installments or loan interest by the customer as well as the level of possible return of funds invested in securities or other investments.

2.5 Operational Risk
Operational risk is a risk that arises due to the prevailing malfunction of the internal system, human error, system failure and external factors such as natural disasters, large demonstrations, etc. The source of the most extensive operational risk compared to other risks, in addition to being sourced from the above activities, also comes from operational activities and services, accounting, information technology systems, management information systems or human resource management systems. In general, operational risk is related to a number of problems that originate from the failure of a process or procedure. Operational risk is a risk that affects all business activities because it is an inherent matter in the implementation of a process or operational activity.

The purpose of this study is to examine the relationship between Credit Risk and Operational Risk to Firm Value with Firm Performance as Mediation Variabel on Banking Sector Listed in Indonsian Stock Exchange over the period of time (2013-2017). The study use Structural Equation Modelling as Tools Analysis on AMOS 16 Program.

Conceptual framework below explains the relationship model which explain that NPL and CER have direct influence on Tobin's Q and have indirect influence through ROA. In the framework, there are three pathways of influence as follow :
1. The direct influence of exogenous variables (NPL and CER) on endogenous variables (Tobin's Q) without going through mediator variable.
2. The influence of mediator variables (ROA) on endogenous variable (Tobin's Q).
3. The influences of exogenous variables (NPL and CER) on endogenous variables (Tobin's Q) through the mediator variables (ROA).

3. Method and Data
The design of causal research has been used in this study, which the strength of relationships and influence among variables will be measured either directly or indirectly. Exogenous variables (NPL and CER), mediator variables (ROA) and endogenous variable (Tobin's Q) using one indicator each. Thus the overall study design includes 4 indicators in the initial model as shown above (see figure 1). Using secondary data of 28 samples out of 35 Bank listed at the end of December 2018 as the population, this research applied quantitative. The existing influences are studied simultaneously using Structural Equation Model (SEM). Sequences of analysis are presented in (figure 1)

Using the stages of modeling and analysis of structural equations into 7 steps, namely:
1. Development of a theoretical model;
2. Arrange path diagrams;
3. Change the path diagram into a structural equation;
4. Selecting the input matrix for data analysis;
5. Assess model identification
6. Assessing Goodness-of-Fit Criteria;

Figure 1 : hypothesis framework
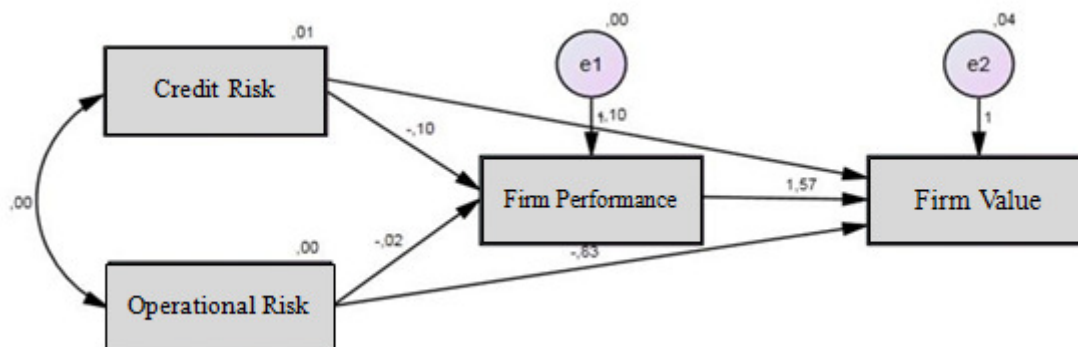
In this step an evaluation of the suitability of the model is carried out by examining the suitability of the model through a review of the various Goodness-of-Fit criteria, the order of which is

Goodness of Fit Index	Cut Off Value
Chi Square	Expected Small
Significance Probability	> 0,05
RMSEA	< 0,10
NFI	> 0,90
RFI	> 0,90
TLI	> 0,90
CFI	> 0,90

Source : Ghozali (2009)

4. Results and Discussion
4.1 Descriptive Analysis

Variables	Mean	Minimum	Maximum	Std. Dev
Tobin's Q	1,0752	0,7494	1,9259	0,1928
ROA	0,0195	0,0009	0,542	0,0115
NPL	0,0225	0,0000	0,0854	0,0135
CER	0,8209	0,3328	0,9904	0,1085

Source : Analysis Result on SPSS 21

Tobin's Q has a minimum value of 0,7494 and a maximum of 1,9259 while the mean value was 1,0752 smaller than the value of a standard deviation of 1,1928 which explains that the mean value can not be used to represent data Tobin's Q.

ROA has a minimum value of 0,0009 and a maximum of 0,542 while the mean value was 0,0195 and 0.0115 standard deviations which explains that the average ROA in Banking Indonesia has been quite good.

NPL has a minimum value of 0,0000 and a maximum of 0,0854 while the mean value was 0,0225 and 0.0135 standard deviations which explains that the average NPL in Indonesia has been mitigate well.

CER has a minimum value of 0,3328 and a maximum of 0,9904 while the mean value was 0,8209 and 0.1085 standard deviations which explains that the average CER in Indonesia has well organized with revenue.

4.2 Goodness of Fit Test

Goodness of Fit Index	Cut Off Value	Value	Result
Chi Square	Diharapkan Kecil	4,439	Goodness of Fit
Significance Probability	> 0,05	0,000	Marginal Fit
RMSEA	< 0,10	0,013	Goodness of Fit
NFI	> 0,90	0,913	Goodness of Fit
RFI	> 0,90	0,950	Goodness of Fit
TLI	> 0,90	0,837	Marginal Fit
CFI	> 0,90	0,946	Goodness of Fit

Source : *Analysis Result on Amos 16*

From the result above conclude that this study is suitable with Goodness of Fit test criteria, so the data could be moved to hypotesis test.

4.3 Hypotesis Analysis
Direct Effect

H	Hypotesis	Estimate	P Value	Decision	Influance
H1a	There is negative Influence of Credit Risk (NPL) on Firm Performance (ROA)	-0,103	0,000	*Accept Ha*	*Significant*
H2a	There is negative Influence of Operational Risk (CER) on Firm Performance (ROA)	-0,025	0,000	*Accept Ha*	*Significant*
H3a	There is negative Influence of Credit Risk (NPL) on Firm Value (Tobin's Q)	-0,110	0,002	*Accept Ha*	*Significant*
H4a	There is negative Influence of Operational Risk (CER) on Firm Value (Tobin's Q)	-0,829	0,000	*Accept Ha*	*Significant*
H5a	There is positive Influence of Firm Performance (ROA)on Firm Value (Tobin's Q)	1,571	0,005	*Accept Ha*	*Significant*

Source : *Analysis Result on AMOS 16*

Significant path coefficients indicate the magnitude of the direct effect of NPL, CER and ROA as follows:
1. NPL has direct influence on ROA by -0,103. This means that 1 unit increase in NPL is expected to decrease ROA by -0,103 unit, ceteris paribus,
2. CER has direct influence on ROA by -0,025. This means that 1 unit increase in CER is expected to decrease ROA by -0,025 unit, ceteris paribus,
3. NPL has direct influence on Tobin's Q by -0,110. This means that 1 unit increase in NPL is expected to decrease Tobin's Q by -0,110 unit, ceteris paribus,
4. CER has direct influence on Tobin's Q by -0,829. This means that 1 unit increase in CER is expected to decrease Tobin's Q by -0,829 unit, ceteris paribus,
5. ROA has direct influence on Tobin's Q by 1,571. This means that 1 unit increase in ROA is expected to increase Tobin's Q by 1,571 unit, ceteris paribus,

Indirect Effect

H	Hypotesis	Estimate	P Value	Decision	Influance
H6a	There is negative indirect Influance of credit risk (NPL) on Firm Value (Tobin's Q) through firm performance (ROA)	-0,012	0,000	*Accept Ha*	*Significant*
H7a	There is negative indirect Influance of operational risk (CER) on Firm Value (Tobin's Q) through firm performance (ROA)	-0,032	0,000	*Accept Ha*	*Significant*

Source : *Analysis Result on AMOS 16*

Significant path coefficients indicate the magnitude of the indirect effect of NPL and CER as follows:
1. NPL has indirect influence on Tobin's Q through ROA by -0,012. This means that 1 unit increase in NPL is expected to decrease Tobin's Q through ROA by -0,012 unit, ceteris paribus,
2. CER has indirect influence on Tobin's Q through ROA by -0,032. This means that 1 unit increase in CER is expected to decrease Tobin's Q through ROA by -0,032 unit, ceteris paribus,

5. Conclusions, Limitations and Suggestions
5.1 Conclusions
Based on the discussion of the results of hypothesis test that Credit Risk and Operational Risk has a negative influence on firm value, where the company's risk management activities in mitigate risk that might arise in the future get a bad response from investors. Unlike with firm performance that result a positive influence on firm value, mean good performance of company make value added on the firm value. Furthermore, firm performance can moderate influence of credit risk and operational risk to firm value. Where in implementing risk management, risk committee must be able to set the maximum risk limit that can be tolerated, so that it doesn't reduce firm performance and firm value in the perspectives of investors.

5.2 Limitations and Suggestions
Total observation period is only 5 years so it is not strong enough to generalize the results, it would be better if the observations were made longer for future research so that the result will be more robust in confirming the theory and previous research. The Object of study is limited to Banking Industry that listed in IDX, so for future research could use all Bank either listed or notlisted in IDX.

This study only use 2 variabel to describe financial management risk, for future research could use other variable that could represent financial risk management like debt structure, market risk, liquidity risk, etc. for future research could added some intervening variable like Earnings Management or Tax Planning, to find the

effect of it's variable.

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