

Do Young, Female, and Experienced Characteristics of Risk Oversight Committee Members Accommodate Bank Risk-Taking? Evidence from Indonesia

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Abstract: Although risk oversight committee has been mandatory for Indonesian banking industry since 2006, there has never been any inquiry trying to understand how the characteristics of risk oversight committee members may impact their tolerance towards bank management risk-taking. Specifically, this research is aimed to shed light on how young age, female, and risk management experience characteristics of each members affect their inclination towards accommodating bank risk-taking. The study uses panel data random effect regression for unique dataset of 27 banks from 2012-2016 and find that contrary to popular belief, increasing number of younger members reduce accommodation to bank risk-taking. Moreover, increasing female members composition is proven to rise bank risk-taking. These results are different with increasing proportion of risk management experienced committee members as they are proven to have no significant effect towards bank risk-taking behaviour. Additionally, sensitivity tests conducted using average age as young indicator and loosening risk management experience criteria by including previous risk oversight committee experience prove that these characteristics are not impacting bank risk-taking. However, presence of female members in risk oversight committee have significant impact on improving accommodation to bank risk-taking.

1 INTRODUCTION

The banking industry is a highly volatile industry in which failure of a bank could destroy the whole system simultaneously and unexpectedly (Talavera, Yin, & Zhang, 2018). Moreover, as the nature of banking is as intermediary institution between those who have excess money and in need of money (Undang-Undang No. 10/1998), banks are obliged to have high-quality governance. The enormous amount of public funds on its hand and high possibility on making global crisis due to the high interconnection makes the banking industry in need of exceptionally good bank governance (BCBS, 2015).

Banks are facing risks on daily basis (POJK 18/POJK.03/2016). The amount of risk taking, furthermore, is an important matter. Bank must manage the risk and reward opportunity cost of the industry (Haneeff, Rana, & Karim, 2012). In order to ensure executive risk management and risk-taking decisions, board of commissioner is obliged to create risk oversight committee (POJK 18/POJK.03/2016). Although the committee existence is obliged since

2006 (PBI No. 8/4/PBI/2006), there are still very limited research investigating risk oversight committee effectiveness and characteristics. Apart from the fact that most research limits itself to exclude financial industries (Battaglia & Gallo, 2015; M. Mayur & Saravanan, 2017). Andarini&Januarti (2012) expressed that previous research on board of commissioners' committees are only observing audit committee as well as nomination and remuneration committee. Subramaniam et al. (2009) infer that the phenomenon is due to the lack of empirical information regarding the characteristics of risk oversight committee and the fact that the committee is still relatively new.

Aiming to answer the said question, this research explores the relationship between gender, age, and risk management experienced members of banking risk oversight committee to their tolerance towards bank risk-taking. It is interesting to deeply explore this field as the inherent nature of younger age, female, and experienced characteristics to risk-taking previous research each contains conflicting views (Hirshleifer&Thakor, 1992; Serfling, 2014; Harris et

al, 2007; Adams & Funk, 2012; Eichner and Lachner, 2017; Garcia-Sanchez, Garcia-Meca & Cudrado Balles; 2017). Through unique hand-collected data of Indonesia conventional banks from 2012 to 2016, this paper is also filling the vacuum of knowledge on emerging country bank risk-taking behavior as most risk-taking studies in Asia are conducted in China and India (Battaglia & Gallo, 2015; Liang et al., 2013; Talavera et al., 2018). As far as it could be ascertained, this is the first study showing how young age, gender, and risk management experienced risk oversight committee member characteristics is relevant to bank risk-taking in a way consistent to bank highly regulated environment. This study would provide insights to regulators for an ideal composition of bank board; to investors so they could invest in banks with similar risk appetite; and to Board of Commissioner to pick the right candidates suiting bank risk-appetite.

2 LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

2.1 Risk-Taking

Risk-taking is the option on taking unsafe decision by the company among the pool of other possible decision. Risk-taking choices are made on the range of risk appetite or the extent an organization would like to take risk. Risk-lover organization tends to make many risky decisions while the risk averse organizations are less inclined to take risk.

There are various internal and external motivations underlying risk-taking behavior. Atkinson (1957) found that there are two chains of activities related to this: (1) acknowledging individual reasons for choosing an action compared to other actions and (2) measuring the implications of the treatment. He then argues that motives, expectations, and incentives determine the risk-taking action of an entity. Fan et al. (2016) add that competition motives, an external factor, does not increase the risk-taking behavior by banks. Reducing regulation in banking activities can increase competition and make the banking industry more stable.

Risk-taking behavior can have a positive and negative impact on the company. IFC (2012) explains that risk-taking can have a positive impact when (1) the company can perform good operational management so that cash inflows are higher than existing assets, (2) firms can manage risk-taking reinvestment with high profits and support corporate growth, and (3) company risk-appetite in accordance

with measured risk tolerance. However, excessive risk-taking behavior can lead companies to make uninformed decisions and result in large losses to stakeholders.

Acknowledging that bank main line of business is as an intermediary between those who have more money to those who does not, the amount of lending that banks give to certain type of customers becomes an area of concern (Dong et al., 2014; Skala & Weill, 2018). The collapses of banking industry rise as a result of higher non-performing loan (NPL) that further contributes to credit risk. Bank assets are mostly made up of loan while liabilities are deposit payable so the mismatch between both would cause greater credit risk (Waemustafa & Sukri, 2015). In other words, increasing share of non-performing loan may cause large losses in banks as higher gross NPL ratio is correlated to higher direct ex-post means of credit risk (Srairi, 2013). hat different age shows different tendency of behavior. These differences are often categorized into two: the older generation and the younger generation (Berger, Kick, & Schaeck, 2014; Ferrero-Ferrero, Fernández-Izquierdo, & Muñoz-Torres, 2015; Hertel, I.J.M. Van der Heijden, H. de Lange, & Deller, 2013; Menkhoff, Schmidt, & Brozynski, 2006; Talavera et al., 2018). One of the behavioral impacts of this age differences situations and become the focus in many researches are how age impacts someone to make decision.

2.2 Young Age

Aging are associated to neuromodulator changes for integration of information (Mata, Josef, Samanez-Larkin, & Hertwig, 2011; Mata, Schooler, & Rieskamp, 2011; Mata, von Helversen, & Rieskamp, 2010). Decline on cognitive ability such as memory may lead to older adult makes simpler decision and more error if information is combined. Moreover, motivational theories explain that aging leads to greater focus on emotional goals which leads to informational processing bias (Mather & Carstensen, 2005). These differences in anticipation are a potential system leading to differences on risk-taking decisions (Mata et al., 2011).

The younger generations are stereotyped of having different characteristics compared to the older generation. The older generation is found to be stricter, risk-averse, and less creative. This is due to the accumulative understanding that they obtain from longer life (Talavera et al., 2018). The younger generation, however, are often labelled to have 180 degrees differences from the older generation. They are viewed to be more adventurous, energetic, and

loves changes in technology (Mishra & Jhunjhunwala, 2013). These differences are also attributable to both generation different personal values that sparks intrageneration conflicts (Talavera et al., 2018).

Popular beliefs evidently find that the older generation is risk averse and young members have tendency to take more risk than those older. MacCrimmon & Wehrung (1990) self-assessed survey evidence shows that older executive takes lower risk as they are not into gambling behavior and have more understanding regarding many experiences in the past. This is different from younger member who take more risk as they have less knowledge so they take the risk anyway (Grable, 2000). Since prior research deeply considered that younger age has positive effect on manufacturing firm efficiency level, our first hypothesis is as followed:

H₁: Younger member proportion in Risk Oversight Committee is positively associated with bank risk-taking.

2.3 Female

Male and female are commonly perceived as having different traits. This regular perception has captivated many researchers to discover more regarding their differences. Male is associated with masculinity while female is associated with femininity. Bem (1977) defines masculinity as quality of being rational, independent, decisive, and analytical. On the other side, femininity includes being expressive, intuitive, sensitive, and warm.

Previous research has identified female positive relationship towards higher monitoring role that reduces agency costs. This might be caused by "offspring risk hypothesis" that explains how woman may see more risks than man as they see it as a way to keep safe any offspring under their supervision. Here, the understanding of more risks might cause the female to be more protective (Sila, Gonzalez, & Hagedorff, 2015). The finding is supported by Harris, Jenkins, & Glaser (2006) research which found that female is generally less risk averse than male.

Skala & Weill (2018) found that female board member, specifically CEO, presence is associated with lower risk. Here, the Swedish women-led banks are obtaining higher capital to asset ratio and capital adequacy while the credit risk does not change. As there is no problem on lower asset quality here as compared to male-led banks, the attributable different on capital preferences are linked to higher female risk aversion. The finding on how higher female proportion leads to lower risk-taking is supported by various literature (Buccioli & Miniaci, 2011; Dong, Meng, Firth, & Hou, 2014; Sun & Liu,

2014). Higher proportion of female board are found to significantly reduce risk-taking in China (Dong et al., 2014) and higher proportion of female audit committee members lead to increasing oversight of bank management risk. Through various investment game, Charness & Gneezy (2012) claims to find strong evidence regarding gender differences in risk-taking. They found that woman is much more financially risk averse than men. Therefore, in regards with the risk oversight committee member proportion, this research proposes the following hypothesis:

H₂: Female member proportion in Risk Oversight Committee is negatively associated with bank risk-taking

2.4 Experience

Experience is a direct contact or observation regarding a phenomenon. Lejarraga, Hertwig, & Gonzalez (2012) find proof that people tend to make decisions based on experience that makes rare events having less impact than deserved as compared with their objective probabilities. A direct experience in one field causes one understand more about the field compared to those who does not. This also affects the familiarity regarding the tasks and knowledge on how to improve it.

Huckman & Upton (2009) stated that the cumulative production experience, or learning curve, plays a central role in organizational and individual learning. They further found that organization and individual are developing and innovating routines to decipher today's problem because of their past experience.

Eichler & Lahner (2017) and Menkhoff, Schmelting, & Schmidt (2013) has proven that previous career experience influence one attitude when seeing certain phenomenon in the present. This intangible inclination is proven to be similar for individuals from similar background. While Menkhoff et al (2013) further expresses that experienced manager has lower willingness to take risk as they are less overconfident to the situation as compared to the inexperienced ones, Koudijs & Voth (2016) expresses that general personal experiences may contribute to risk-taking in various way. This is also due to whether the experience is positive or negative (Schneider et al., 2016).

This study aims to find out whether direct bank risk management experience. The bank risk management related experience can be defined as those who have worked in bank-related risk management division (including the compliance division, director of the bank, vice president of the bank, vice director of finance, and risk management committee). This research offers following hypothesis:

H₃: Bank risk management experienced member proportion in Risk Oversight Committee is negatively associated to bank risk-taking

study, bank that does not undergo extreme trouble (eg. liquidity shot from government), and bank with complete data as needed by the research.

3 METHODOLOGY

3.1 Research Models

The research first model, as described in Equation 3.1, aims to test the research hypothesis of whether the young age, female, and risk management experienced members have a significant effect on bank risk-taking. The control variables for this equation are bank size, total asset growth, loan to deposit ratio, and return on asset. is described in Equation 3.1.

Equation 3.1. Research Main Model

$$RISK\ TAKING_{i,t} = \beta_0 + \beta_1 YOUNG_{i,t} + \beta_2 FEMALE_{i,t} + \beta_3 EXPER_{i,t} + \beta_4 BANK\ SIZE_{i,t} + \beta_5 ASSET\ GROWTH_{i,t} + \beta_6 LDR_{i,t} + \beta_7 ROA_{i,t} + \varepsilon_{i,t}$$

Here, risk-taking is proxied by gross NPL which is common to be used in bank risk-taking literature (Skala, 2018; Berger et al., 2009). Meanwhile, the research obtained proportion for younger members in the committee by obtaining median from the whole sample in order to get objective relative younger and older age of risk oversight committee members, researcher first collect data of all age for the whole sample. Once obtained, the research puts '1' for members with the age equal and lower than median while puts '0' for those who are older. Meanwhile, the calculation of gender is straightforward using dummy and then proportionate it to total committee members. As this research would like to find the impact of direct bank risk management expertise to risk-taking, this study accommodates the definition of experts in Aebi (2012) and Ghafran & O'Sullivan (2017) to the risk management context. Specifically, this research defines bank risk management expertise as those who have worked in bank-related risk management division (including the compliance division, director of the bank, vice president of the bank, vice director of finance, and risk management committee below the board of director).

3.2 Population and Sample

Sample selection is done using non-probability and purposive sampling method. The information regarding these banks are hand-collectedly obtained from every bank annual report. The classifications are general bank listed in the Indonesian Stock Exchange during the year 2012 - 2016, bank which published complete annual report, bank that does not undergo corporate action (eg. merger) during the period of

4 RESULT AND DISCUSSION

4.1 Descriptive Statistics Analysis

The total observation in the study is 135 observations as the samples are twenty-seven banks during the period of five years. The panel variable is bank names and the time variable is year with delta of one year. Furthermore, the pool of data is strongly balanced, meaning that there is no empty data point in the dataset used on this research. The table detailing descriptive statistics could be seen on Appendix A.

As for YOUNG, this research approaches the characteristics by first finding the median age in the whole risk oversight committee member to know the comparatively relative older and younger individuals. The study found that the median of the whole sample which is 59 years old. This means that those above 59 is considered as 'older' and those below or equal to 59 is considered as 'younger'. The proportion of younger members compared to the whole committee in each bank-year is then computed manually. Moreover, the minimum proportion is zero and the maximum proportion is one meaning that there are banks which prefer complete older or younger committee members. Overall, there are eight bank-year with zero younger members proportions and ten bank-year which have all of its members being young.

Here, the mean proportion of FEMALE member in risk oversight committee is 13.46% with the median of zero as most banks does not have risk oversight committee. Female is non-existent in eighty-one bank-year risk oversight committee.

Risk management experience (EXPER) aims to explain the proportion of risk oversight committee members who have directly worked in banking risk management divisions. The data has shown that the average proportion of risk oversight committee members which has directly managed banking risk management is 22.82%. The minimum proportion of this trait is zero which consists of eleven banks. Conversely, the maximum proportion is one in 62 banks which means that some bank-year picks members with previous experience of direct risk management exposure in the field.

4.2 Statistical Tests

Testing panel data regression models through Chow Test, Breusch Pagan, Lagrange Multiplier and

Hausman test concludes that the best regression model for this research is the random effect model. Meanwhile, the classic assumption tests results show that the research model is free from the problem of normality, autocorrelation and heteroscedasticity. Centering for variable LDR and BANK SIZE treats the multicollinearity problem. The results of the random effect regression testing in this research are described in **Appendix B**. Additionally, the research also includes sensitivity testing towards bank risk-taking using committee average age as alternative proxy of young, loosening definition of experience by including of overseeing committee experience, and existence of woman in the committee which is not attached in the paper due to page limitation.

4.3 Main Model Analysis

4.3.1 Impact of Increasing Young Age Proportion to Risk-Taking

As for the relationship between the proportion of younger risk oversight committee members (YOUNG) and bank risk-taking, **Appendix B** shows that the relationship is inverse. The relationship is negative and significant at $\alpha = 5\%$. This association rejects the research second hypothesis which is regarding how increasing younger risk oversight committee member proportion is expected to increase bank risk-taking. The relationship could be due to the fact that the median and mode age of the whole risk oversight committee is 59 while the mean age is 58.4. The definition of relatively 'younger' risk oversight committee could not be directly attributed to the definition of young by previous researches as the previous studies considered 'young' at the year much younger than 59 years old. This is confirmed by Mata et al. (2011) which conducts literature review on impact of aging to risky choice. Mata et al. found that literatures are justifying 'young' at the age range of 18 to 35 years old while considering 'old' at 65 to 85 years old. In other words, the median of 59 years old clearly shows that the risk oversight committee members are skewed to the 'old' criteria. The research has shed light on how Indonesian risk oversight committee is coming from people from overall the same generation.

Moreover, the fact that increasing number of young members are inversely related to risk-taking is also attributable to the reputational and career concerns (Serfling, 2014; Holstrom, 1999; Hirshleifer&Thankor, 1992). The young members can be replaced more easily and received less tolerance from the labor market for faultiness (Hirshleifer&Thankor, 1992). The harsh truth deters initial inclination towards risk and make the younger

members more inclined to the consensus to avoid market punishment.

A sensitivity test conducted to know whether relative age proportion is the right measure by calculating the mean age of a board which is a common way to measure 'young' find that using average age has no significant result to risk-taking. In other words, the main model (**Appendix B**) is proven to be robust.

4.3.2 Impact of Increasing Female Proportion to Risk-Taking

According to **Appendix B** regression with panel data, increasing number of female members in the risk oversight committee (FEMALE) is found to increase bank risk-taking approxied by Non-Performing Loan over Total Loan. The relationship is positive and significant at 1% significance point. The discovery of this relationship rejects the research second hypothesis which is how increasing proportion of female in the risk oversight committee is expected to decrease bank risk-taking and is contrary to many various previous literature (Buccioli & Miniaci, 2011; Dong et al., 2014; Harris et al., 2006; Skala & Weill, 2018; Sun & Liu, 2014). As this negative result is significant at $\alpha = 1\%$, it is worth exploring why the result differs with common believes. The prominent role of female is also shown in additional test which shows that the mere existence of woman supports committee accommodation to bank risk-taking.

There are various possible reasons on why higher proportion of female leads to more risk-taking. Berger et al., (2014) found that increasing number of women in the board leads to higher portfolio risk. Berger argues that most of the previous research that claims women are risk averse investigate woman in lower-position. Berger argues that the higher-positioned women are different and they are risk-takers. The findings are further supported by Adams, Funk, Barber, Ho, &Odean (2012). They found that woman is carelessly more risk-loving than man although they are still having higher benevolence trait. Woman are, moreover, found to be more risk-taking as they care less about power perception from other people compared to the male counterpart.

Women have to understand the context of decisions they make and comfortable to the environment in order to pursue higher risk-taking behavior. When women are familiar to the context of decision, various evidence shows that they are more risk-loving (Miller &Ubeda, 2011; Johnson and Powell, 1994; Levin et al., 1988). The environmental context fit into this decision as woman have to be in a condition where there are no excessive stereotypical perceptions on what woman risk-taking should be.

This is due to the fact that woman underlying risk-taking behavior is found to be greatly influenced by the general view from the society (Ball et al., 2011).

4.3.3 Impact of Increasing Experienced Proportion to Risk-Taking

This research expects to find the positive or negative relationship between increasing proportion of risk-management experienced (EXPER) member in risk oversight committee to bank risk-taking. As can be seen on **Appendix B**, the negative association strengthens Menkhoff et al. (2013) argument that existence of direct experience in related field results on lower risk-taking behavior. This means that the members are less overconfident towards the surrounding situations and take more precaution as they are already familiar regarding the field volatility (Huckman & Upton, 2009). This condition might result on higher skepticism on risk management experienced members that allow them to not be easily convinced by optimistic high-risk action that bank management may propose.

It is inferred that the insignificant relationship might be due to the fact that this research handcollect data for members who have direct banking risk management experience. Meaning that the ones counted as having risk management experience got to obtain experience in the banking industry risk management division. This means that those indirectly learn about risk management but never practice risk management or risk management practitioners that is not originated from banking industry does not count as risk management experienced members in this research. In other words, this may mean that board of commissioner select other factors, such age and gender, as more important thing of consideration than direct bank risk management experience as risk management expertise could also be obtained in other industries or through certification. The finding suggests that even though the existence of member with risk management expertise in the bank risk oversight committee is compulsory, banking sector specific risk management experience is not significant in affecting risk-taking. The finding is further strengthened by sensitivity test 2 (Table 4.4.) which loosen the definition of bank risk management to include previous risk oversight committee experience also found the same result.

4.3.4 Other Factors Impacting the Relationship between Risk Oversight Committee Characteristics and Bank Risk-Taking

The other factors impacting the relationship between the committee characteristics and bank risk-taking are the control variables, consisting of bank size, total asset growth, loan to deposit ratio, and return on asset. The relationship between bank size and bank risk-taking is positive and significant consistent with Bhagat, Bolton, & Lu (2015). The larger the bank size, as proxied by total asset, the more leverage it could bear and the more trustworthy it gets from the stakeholders. As the bank would like to keep their position as one of the largest in the industry, these banks may take to be able to earn more.

Total asset growth shows the result of bank strategy year by year. Here, asset growth has an inverse relationship with bank risk-taking and this is significant at $\alpha = 1\%$. The condition infers that lower asset growth results in higher risk-taking. When bank strategy results in lower asset growth, bank would then prefer to take more risk to try to obtain more growth.

The correlation between loan to deposit ratio is not significant. This is contrary to Skala (2018) which found that the correlation of LDR to risk-taking is positive and significant. This means that the risk-taking decisions bank conducts and overseen by the risk oversight committee does not look at the amount of loan to deposit ratio and rather look at other factors.

Return on asset relationship to bank risk-taking is negative and significant at $\alpha = 5\%$. This result is consistent with Srairi (2013) and Affan (2014) finding on return on asset also display a strong negative association to credit risk. This shows that banks with lower profitability is aiming to take more risk to save and improve its position.

5 CONCLUSIONS

5.1 Conclusions

This research is aimed to understand the unexplored realm of risk oversight committee characteristics and its tendency to tolerate bank management risk-taking behavior. The characteristics that are specifically explored here are young, female, and risk-management experience. This research uses random effect panel data estimator and use novel dataset on 27 banks from 2012 - 2016. The model has a F-test significance at 1% implying that the model is highly reliable in explaining bank risk-taking.

This study has found that increasing proportion of young risk oversight committee members decreases committee accommodation towards bank risk-taking. This is due to the fact that risk oversight committee members are relatively old and not suitable to risk-taking literature's definition of young. The median age of the risk oversight committee member is 59 and the average age is 58.3 which could be defined as old age. Although the findings are contrary to the hypothesis, previous study suggests that the difference might also be due to the reputation and bargaining power of members inside the committee. Younger manager is proven to deter on making mistakes as they face less career safety as they have less reputation and face higher pressure from the labor market. Sensitivity test conducted shows that average age which is believed as measurement of young committee, as opposed to proportion of young age members, is not significant to impact bank risk-taking.

On the other hand, increasing proportion of female risk oversight committee members increases the committee accommodation towards bank risk-taking behavior. The result is contrary to the hypothesis as well as the popular belief that women are risk-averse and that they are less inclined to make change. Woman in the higher position, like risk oversight committee members, are expected to take different decision than most woman and these decisions are very likely to be accommodating risky behavior. Moreover, it is understood that in woman's nature that if a woman is familiar with the context of a decision and the environment support woman to do, woman is more inclined to take on risks. Sensitivity test conducted shows that the existence of at least one woman in the risk oversight committee impacts bank risk-taking behavior accommodation positively. This means that female existence in the committee plays a strong role in Indonesia's bank risk-taking tolerance.

Moreover, risk management experienced risk oversight committee members have negative impact to bank risk-taking behavior. However, the relationship is not significant. The result is negative as more experienced members have more work experience which make them more aware of risk consequence. Moreover, they are also more sceptical and less overconfident when presented by bank management opportunistic plan. Reasoning for insignificant result could be from the data limitation which depends on each bank annual report that might not report the risk management experience. Furthermore, the result could also be influenced by the fact that board of commissioner select other factors, such age and gender, as more important thing of consideration than direct bank risk management experience as risk management expertise could also be obtained in other industries or through

certification. Sensitivity test conducted when loosen the risk management experience criteria to include members who have been risk oversight committee in the previous years have shown the result of not significant. The finding enhances understanding that characteristics other than experience are considered more important to impact bank risk-taking in Indonesia.

5.2 Suggestions for Future Research

The research is limited to the usage of sample on national conventional banks from 2012 to 2016. The data obtained, moreover, are solely due to each bank annual report. There might have been information, such as risk management experience that the members experience but not written in the annual report, that might have not been captured in this research. The research also limits its risk-taking proxy to the non-performing loan ratio which specifically measures bank credit risk. Lastly, demographic data regarding gender is limited to whether the person is male or female

Based on the limitations of the study, we can conclude some suggestions for further research including increasing the scope of the research, conduct more exploratory research in the field of risk oversight committee, employ other risk-taking, and conduct more rigorous research on demographic data such as specific educational backgrounds or previous experiences.

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APPENDIX

Appendix A: Descriptive Statistics

Variable	Mean	Std. Dev.	Min	Max	Median
RISK-TAKING	0.0245	0.0156	0.0014	0.0824	0.0233
YOUNG	0.5164	0.2463	0.0000	1.0000	0.5000
FEMALE	0.1347	0.1747	0.0000	0.6667	0.0000
EXPER	0.2282	0.2706	0.0000	1.0000	0.2000
BANK SIZE (in billion Rupiah)	158,233	0.2300	2,541	1,038.706	69,703
ASSETGROWTH	0.1538	0.1355	-0.2926	0.675678	0.1470
LDR	0.8485	0.1144	0.5239	1.133	0.8639
ROA	0.0178	0.0181	-0.1115	0.0515	0.0176
Number of observation: 135					
RISK-TAKING = Ratio of non-performing loan to total loan, YOUNG = Proportion of younger members in risk oversight committee, FEMALE = Proportion of female members in risk oversight committee, EXPER = Proportion of risk management experienced members in risk oversight committee, BANK SIZE = natural logarithm of total asset at book value, ASSET GROWTH = $(Total\ Asset_t - Total\ Asset_{t-1}) / Total\ Asset_{t-1}$, LDR = Ratio of total loan to total deposit, ROA = Ratio of net income to average total asset					

Appendix B: Regression Result of Research Main Model

$$RISK\ TAKING_{i,t} = \beta_0 + \beta_1 YOUNG_{i,t} + \beta_2 FEMALE_{i,t} + \beta_3 EXPER_{i,t} + \beta_4 BANK\ SIZE_{i,t} + \beta_5 ASSET\ GROWTH_{i,t} + \beta_6 LDR_{i,t} + \beta_7 ROA_{i,t} + \varepsilon_{i,t}$$

Variables	Exp. Sign	Coef.	z	P> z
CONS		0.0451***	13.61	0.0000
YOUNG	+	-0.0062**	-1.69	0.0438
FEMALE	-	0.0161***	2.86	0.0020
EXPER	-	-0.0008	-0.18	0.4375
ASSET GROWTH	-	-0.0338***	-4.55	0.0000
BANK SIZE	-	0.0026**	2.20	0.0140
ROA	-	-0.7690***	-8.77	0.0000
LDR	-	-0.0001	-0.78	0.1595
R² within		0.7193		
Prob>chi²		0.0000		
Number of observation: 135				
<p>RISK-TAKING = Ratio of non-performing loan to total loan, YOUNG = Proportion of younger members in risk oversight committee, FEMALE = Proportion of female members in risk oversight committee, EXPER = Proportion of risk management experienced members in risk oversight committee, BANK SIZE = natural logarithm of total asset at book value, ASSET GROWTH = $(Total\ Asset_t - Total\ Asset_{t-1}) / Total\ Asset_{t-1}$, LDR = Ratio of total loan to total deposit, ROA = Ratio of net income to average total asset</p>				
*** significant at $\alpha = 1\%$; ** significant at $\alpha = 5\%$; * significant at $\alpha = 10\%$				

