

Mediating Risk Taking on Relationship between Board Structure Determinants and Banks Financial Performance

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Abstract

This study examines the relevance of bank board structure determinants (board independence, board size and concentrated ownership) on financial performance and level risk taking. In addition, the role of risk taking investigated as mediator variable on relationship between these variables and financial performance. This research contributes to the empirical research, Using a sample of 37 Malaysian Islamic and conventional banks over 2005-2014. In This study, The relationship between board structure determinants with level of risk taking and financial performance tested by pooled ordinary least square (OLS), fixed effects model, and generalized method of moments (GMM), however the role of risk taking as mediator variable examined by Baron and Kenny approach and Sobel test. The results shows that board structure have positive and negative relationship with financial performance and level of risk taking respectively. Furthermore, the relationship between board independence and concentrated ownership with financial performance mediate by risk taking.

Keywords: corporate governance, banks financial performance, risk taking

1. Introduction

Board of directors is a central mechanism for corporate governance. According to empirical research board of directors play an important monitoring role. Researchers have uncovered the effectiveness of number of board of director's determinants. Adams and Ferreira (2007), compared board characteristics and incentives in financial firms and nonfinancial firms to address the question of how much blame the board of directors should shoulder for the failure. Boards of financial firms clearly share some responsibility for the crisis because it was their duty to oversee managers who led their banks to the brink of failure.

The recent global financial crisis 2007/2008 has received significant attentions by several academics and practitioners. They argue that corporate governance have resolved the conflict among related parties within the firm, and corporate governance aim not served properly to safeguard from stakeholders interest. Board of director play an important role in corporate governance. It provides strategic and leadership guidance, assessment of management, objective judgment and project selection for companies (Adams et al., 2008). Attention to the board of director increased recently by many scholars. Board of directors as fundamental internal mechanism have been mentioned in many literatures (Bhagat & Bolton, 2009; Jensen, 1993). However, according to the OECD (2004) and BCBS (2006) overseeing the manager actions and monitoring the risk policy and corporate strategy do by board of director. The board of director has been further categorized to size of board, board independence, board duality and board ownership.

Literature has shown the relationship between board structure determinants, such as; board independence, board size, and ownership concentration, and a firm's financial performance. However, it does not realize the particular role of risk-taking as a mediate variable on the relationship between board structure determinants and banks financial performance. In addition, most scholars have agreed that during recent financial crisis, the inability of risk management practices in financial firms contributed to fouled corporate governance. However, research discussion on the effect of corporate governance and risk management at during recent crisis still is limited (Li, 2009). This study examines the relationship between board structure determinants with financial performance and

risk taking respectively by controlling firm size (log of total asset), and then the role of risk taking investigated as mediator variable on relevance of bank board structure determinants and its financial performance.

This study fills the gap in the literature series by capturing the impact of risk taking on financial performance of banks in Malaysia. This study contributes to the continuing debate on corporate governance and financial performance by providing a timely and comprehensive investigation of Malaysian banks during the study period. This study provides useful guidelines for the corporate sectors, financial institutions, shareholders, depositors, and investors. The guidelines could assist firms to react effectively and efficiently during different economic conditions.

2. Literature Review and Hypotheses Development

2.1 Board Independence, Risk Taking and Performance

Regarding to the importance of board independence in firms, many study have been done and found different results. The proportion of non-executive directors in the boards shows that whether board is independence or not. The board is Independence when board members have not been employed by the company and they do not do a significant business with the company. Studies have found that firms with significantly higher percentage of independent directors performed better and could also reduce conflict between stakeholders (Beasley & Salterio, 2001; Black et al., 2006). In addition, Brickley et al. (1994) indicated positive relationship between board independence and stock market. On the contrary, there were empirical studies that showed negative relationship between director independence and firm performance (Fosberg, 1989; Hermalin & Weisbach, 1991; Lin, 1995). However, the firms with large number of shareholders and dispersed ownership, incentives to use resource for monitoring manager's function are not enough for individual non-significant shareholders. In this situation, independent board can play an important role to safeguard the interest of shareholders and keep proper board effectiveness (Ferrero-Ferrero et al., 2012).

Other studies indicate that the presence on independent directors may actually harm performance whereby it may be that they do not bring the requisite skill to the job. Agrawal and Knoeber (1996) and Yermack (1996) found a negative relationship between presence of independent directors and firm performance. In this regard risky behaviour of directors is considerable. Pathan (2009) and Ferrero-Ferrero et al. (2012) investigate the relationship between board composition and corporate risk taking and found a negative relationship between these two variables. Whilst, Phatan (2009) expected that shareholders have preferences for assuming high level of risk taking, inversely they found negative relationship between them. According to the both positive and negative relationships between board independence with firm performance and risk taking is difficult to establish a hypothesis. Nonetheless following Ferrero-Ferrero et al. (2012) the study will test the following hypotheses:

H_{1a}: There is a positive relationship between board independence and financial performance of bank.

H_{1b}: There is a negative relationship between board independence and level of risk taking.

2.2 Board Size, Risk Taking and Performance

The optimum size of a governance boards is not mentioned in the companies' law. The company's law in India specifies the minimum board size as three persons for private company and five person for a public company. Jensen (1993), mentioned that large board size may cause problem for the chief executive officer (CEO) to control. Additionally, he indicated that firm performance could be improved through small board size. Some studies showed negative relationship between board size and performance (Anderson et al., 2004; Garg, 2007). In contrast, Brown and Caylor (2004) indicated that firms with board size between 6 and 15 had good performance. However, Linck et al. (2008) mentioned that smaller boards are not necessarily better than larger boards. Regarding to above evidence one might expect that larger board minimize the performance and gives excessive control to the managers. Pathan (2009) and Minton et al. (2011) investigate the relationship between board size and level of risk taking. They found a significant relationship between them, whereby that larger board can mitigate the level of risk taking in a firm. Another study, which recently examines the relationship between the board size of European banks and its risk, also found a negative relationship between them (Kryvko, 2012). According to the previous studies which commonly show a negative relationship between board size and level of risk taking, therefore this study will test the following hypothesis.

H_{2a}: There is a significant relationship between board size and financial performance of bank.

H_{2b}: There is a negative relationship between board size and level of risk taking.

2.3 Ownership Structure, Risk Taking and Performance

The effect of ownership structure on firm performance has been examined by many studies. Number of studies have been investigated the relationship between degree of insider ownership and firm performance, and found a nonlinear relation between them (Hermalin & Weisbach, 1991; Shleifer & Vishny, 1986). However, the above researchers indicate that the level of insider ownership has different relation with performance, whereby some range of insider ownership has a positive relationship with performance and other range is as a negative relationship with performance. Consequently, their finding supports the view that corporate performance does not always have positive relationship with insider ownership. In contrast, Cho (1998), Xu and Wang (1999), Claessens and Djankov (1999) and Alimehmeti and Paletta (2012) found positive and significant relationship between ownership structure and firm performance. In the other study McConnell and Servaes (1990) mentioned that the relationship between insider ownership and performance is not linear, but they found that insider ownership always have positive effect on firm performance. Borisova et al. (2012) investigated the impact of government ownership structure on corporate governance. Their finding showed that government ownership is related with lower governance quality and it is negatively influence the firm's corporate governance.

Several empirical and theoretical studies have attempted to investigate the characteristic of bank risk taking. According to agency problem, interest conflicts between shareholders and managers have impact on risk taking behaviour (Jensen & Meckling, 1976). Theory predicts that shareholders with diversified portfolio have incentive to enhance bank risk after collecting funds of bondholders and depositors whereas managers are risk –averse in protecting their position and personal benefits (Esty, 1998). However, the agency problem may be mitigated in firms with concentrated ownership structure, as controlling shareholders have strong incentives to monitor managers, and even replace them in the case of poor performance (Franks et al., 2001). Thus, risk taking is expected to be more pronounced in firms with concentrated ownership than in firms with dispersed ownership structure. However, A current study examined the impact of ownership structure on risk taking in the banking industry, and demonstrated that different categories of shareholders have different risk-taking behaviours (Srairi, 2013).

Saunders et al. (1990), indicated that owner controlled banks display higher risk-taking behaviour than banks controlled by managers with small shareholdings. Laeven and Levine (2009) argued that diversified owners (owners who do not have a large fraction of their personal wealth invested in the bank) tend to advocate for more bank risk taking than debt holders and non-shareholder managers. As in any limited liability firm, diversified owners have incentives to increase bank risk after collecting funds from bondholders and depositors (Esty, 1998). From this perspective, banks with ownership structures that empower diversified owners take more risk than banks with owners who play a more subdued governance role. According to Esty (1998) finding which shows that firms with concentrated ownership, engaged to more risky behaviour, this study will test the following hypotheses:

H_{3a}: There is a significant relationship between ownership concentration and firm performance.

H_{3b}: There is a significant relationship between ownership concentration and level of risk taking.

2.4 Mediator Variable (Risk Taking)

Risk taking is defined in the literature as engagement in behaviours associated with some probability of undesirable results or it refers to the tendency to engage in behaviours that have the potential to be harmful or dangerous (Beyth-Marom & Fischhoff, 1997; Furby & Beyth-Marom, 1992; Irwin Jr, 1993). Risk taking is one of the most relevant factor determining firm performance in investment decision (Wiklund & Shepherd, 2003). Literature on the relationship between risk taking and financial performance is still in infancy. Investigating the firm risk taking and its impact on financial performance are critical issues for managers. During recent years, bank risk taking and its determinants has been widely discussed, whereby numerous study attempts to explain risk taking behaviour of financial regulators, policy makers and researchers (Sharma, 2012). Behaviours of financial intermediaries is central in economics and finance since controlling the risk taking in banking relates to protection of financial systems and depositors as a whole (García-Marco & Robles-Fernández, 2008). In addition, as recent financial crisis, which has been associated to the excessive bank risk taking rise the attention to this topic.

Risk taking in banking industry has attempted to investigate in theoretical and empirical literature, according to the agency problem (theory), the conflict between managers and shareholders effect risk taking behaviour (Jensen & Meckling, 1976). According to this theory, risk-averse managers, where shareholders using a diversified stock portfolio, have incentive to raise bank risk taking after amassing depositor and funds. Based on this theory this study tested the following hypotheses:

H₄: The relationship between board structure determinants and banks financial performance is mediated by risk

taking.

2.5 Control Variable (Firm Size)

Researchers have shown that the relationship between large firm and performance is considerable. Arguments indicate that firm size contributed to the higher performance. Larger firms are more interested to use big scale of economics (Serrasqueiro & Nunes, 2008; Singh & Whittington, 1975). According to Serrasqueiro (2008) size of firm for finance and accounting researchers is a fundamental variable in investigating company performance. In addition, Yang and Chen (2009) mentioned that large size of firm has less problem in obtaining usage of credit for investment and has good source of human capital. In contrast, small size of firm has specific attribute which can modulate the handicaps attributed to their particular smallness. They suffer from agency problem not considerable and characterized by more adaptable non-hierarchical constructions, which can be proper organizational sort with adjusting business environment. Serrasqueiro and Nunes (2008), indicated that larger company size can allow greater strategic diversification and greater companies have a more probability of taking advantage of scale economics and greater possibility renegotiation with client and supplier. Furthermore, large firms have considerable ability to face with competition.

3. Data, Variables Definitions and Econometric Model

This study utilizes panel data techniques due to the nature of data that involves the combination of cross-sections and time series, and is based on the number of banks across a 10 year period, data collected from annual reports of Malaysian banks from 2005 to 2014. By using panel data analysis, the degree of freedom can be increased and its lead to efficient estimates (Antoniou et al., 2008). Table 1 shows the variables and their description in this study.

Table 1. Variables, description and measurement

Variables	Description	Measurement
ROA	Return on Asset	Net income/total asset
ROE	Return on Equity	Net income/total equity
BIND	Board Independence	Number of independent non-executive directors in a board
BSIZE	Board Size	Number of directors in a board
OWNcon	Ownership Concentration	equity percentage participation by the largest shareholder
RT	Risk Taking	Z-Score = $\frac{\text{return on asset (ROA)} + \text{capital asset ratio (CAR)}}{\sigma \text{ asset return}}$ Capital asset ratio (CAR) = equity/asset
PSIZE	Firm Size	Natural log of total asset

There are two objectives in this study which are; (a) to investigate, whether there is significant relationship between board structure determinants with banks financial performance and level of risk taking. (b) To investigate the role of risk taking as mediator variables on relationship between board structure determinants and financial performance. This research use appropriate and advanced dynamic panel data estimators to estimate the study objectives. Using techniques including pooled ordinary least square (OLS) and fixed effect estimators (Byoun, 2008; Fama & French, 2002). However, it is well established in the econometrics literature that these methods provide biased estimators in dynamic panel data model (Wooldridge, 2010) simply put they may produce estimated speeds of adjustment that are unreliable, thus potentially leading to misleading evidence for the financial performance. However, this study adopts the (Arellano & Bond, 1998) generalized method of moments (GMM) estimators to improve the consistency and efficiency of the dependent and independent variables. GMM model based on Sargan test and serial correlation tested given by AR1 and AR2 criteria of selection. For investigating the models which estimated by GMM to test the serial correlation AR1 should be negative and significant. The AR2 is the test for serial correlation in the first differenced residual under the null of no serial correlation. However, based on Arellano and Bond, AR2 should be insignificant. In addition, the current study to test the validity of the instruments used in the GMM applied the Sargan test. The Sargan test is a test for over-identifying restrictions or determines if the residuals are correlated with the instruments variables. The validity of the instrument variables should not be rejected by Sargan test.

This study used three equations, i.e. OLS, Fixed effect and GMM equations. Therefore the first, second and third hypotheses tested by following models:

$$p_{it} = \alpha + \beta_1 Bind + \beta_2 Bsize + \beta_3 OWNcon + \beta_4 SIZE + \varepsilon_{it} \quad (1)$$

$$RT_{it} = \alpha + \beta_1 Bind + \beta_2 Bsize + \beta_3 OWNcon + \varepsilon_{it} \quad (2)$$

OLS, Equations (1) & (2)

$$p_{it} = \alpha + \beta_1 Bind + \beta_2 Bsize + \beta_3 OWNcon + \beta_4 SIZE + \mu_i + \varepsilon_{it} \quad (3)$$

$$RT_{it} = \alpha + \beta_1 Bind + \beta_2 Bsize + \beta_3 OWNcon + \mu_i + \varepsilon_{it} \quad (4)$$

Fixed Effect, Equations (3) & (4)

$$\Delta p_{it} = (1 - \lambda)Y + \beta_1 Bind + \beta_2 Bsize + \beta_3 OWNcon + \beta_4 SIZE + \mu_i + \mu_t + \varepsilon_{it} \quad (5)$$

$$\Delta RT_{it} = (1 - \lambda)Y + \beta_1 Bind + \beta_2 Bsize + \beta_3 OWNcon + \mu_i + \mu_t + \varepsilon_{it} \quad (6)$$

GMM, Equations (5) & (6)

Where: P = Financial Performance (Return On Asset (ROA), Return On Equity(ROE)); RT= Risk Taking; Size = Log of Asset; α = Intercept; β = Slope of Independent Variables; Bind = Board Independence; Bsize =Board Size; OWNcon = Ownership Concentration; SIZE= Log of total asset; ε = error term; μ_i =Firm-fixed effects; μ_t = Firm invariant time specific effects.

In addition, the hypothesis related to mediator variable tested by following models. In this study, the standard procedure of Baron and Kenny (1986) used to analyse the mediating effects of risk taking on the association between corporate governance and banks financial performance. It is explained with the following instrument:

At the first step, Y as dependent variable is regressed on X as independent variable, $Y = \alpha_0 + \beta_1 X + \varepsilon$. At second step, M as mediator variable is regressed on X as independent variable, $M = \alpha_0 + \beta_2 X + \varepsilon$. At final step, Y as dependent variable is regressed on X as independent variable and M as mediator simultaneously, $Y = \alpha_0 + \beta_3 M + \beta_4 X + \varepsilon$ in this study, Y stands for firm performance and regressed on risk taking and corporate governance simultaneously. In addition, the Sobel test is also used to test whether a mediator variable significantly carries the influence of independent variables to dependent variables. It returned to both one-tailed and two tailed probability values (Sobel, 1990).

4. Descriptive Statistics

Table 2 shows the summary of descriptive statistics of dependent and independent variables.

Table 2. Summary of descriptive statistics

Variables	N	Minimum	Maximum	Mean	Std. Deviation
ROE	365				
ROA	365	0.790	24.6	12.16	5.148
Bind	365	0.125	2.65	1.01	0.546
Bsize	365	2.0	7.0	4.25	1.079
OWNcon	365	5.0	12.0	8.56	1.498
RT	365	16.46	56.76	31.29	10.036
SIZE	365	0.024	2.76	1.153	0.571
ValidN (listwise)	365	6.5720	7.99	7.40	0.241

ROA= Return on Assets; ROE= Return on Equity; Bind=Board Independence; Bsize= Board Size; OWNcon= Ownership Concentration; RT= Risk Taking; SIZE= Log of Total Asset.

5. Empirical Results

5.1 Multicollinearity and Homoscedasticity Test

Variable inflation factors (VIF) and tolerance test have been used to check multicollinearity problem among independent variables. According to Table 3, VIF and tolerance values were less than 10 and more than 0.10 respectively which shows that there is no multicollinearity problem among independent variables. However, to test the equal variance of dependent variable (homoscedasticity), Breusch-Pagan or Cook-Weisberg test was applied (Breusch & Pagan, 1979), Table4. This table presents that there is no Heteroscedasticity problem in variance of independent variable. Therefore the model regressed by using ordinary least squares regression (OLS). However,

with regards to the endogeneity problem that may exists between corporate governance, risk taking and financial performance in the banking industry (Bhagat & Bolton, 2009; Cornett et al., 2009) study regressed the models by fixed effect and generalized method of moments (GMM).

Table 3. VIF and tolerance test

Variable	ROE		ROA		Risk Taking	
	VIF	Tolerance	VIF	Tolerance	VIF	Tolerance
Bind	1.80	0.554	1.84	0.542	1.80	0.554
Bsize	1.86	0.538	1.80	0.556	1.79	0.557
OWNcon	1.07	0.935	1.11	0.898	1.10	0.990
SIZE	1.12	0.893	1.07	0.930		
Mean VIF	1.46		1.46		1.54	

Table 4. Heteroscedastisity test

Breusch-Pagan or Cook-Weisberg test		
H ₀ = the variance of the residuals is Constant; Reject H ₀ if p-value is significant		
ROE	ROA	Risk Taking
Chi2(1) = 0.18	Chi2(1) = 28.39	Chi2(1) = 0.18
Prob > chi2 = 0.6714	Prob > chi2 = 0.430	Prob > chi2 = 0.6699

*The result shows that p-values are insignificant therefor the variance of these residuals is homoscedastic.

5.2 Regression Analysis

5.2.1 Board Structure Determinants and Financial Performance

To test the whether there is a relationship between board structure determinants with firm financial performance and level of risk taking this study regressed the models by OLS, FE and GMM, the results presented in Table 5. With respect to board structure determinants (board independence (Bind), board size (Bsize), and concentrated ownership (OWNcon)) of the board we observed a significant and positive relationship between these variables and firm financial performance, consequently hypotheses H1a, H3a are supported. These results are consistence with findings of (Alimehmeti & Paletta, 2012; Beasley & Salterio, 2001; Black et al., 2006). However, according to the positive relationship between Bsize and financial performance the hypothesis of H_{2a} is rejected.

Table 5. The result of OLS, fixed effect and GMM regression to investigate the effect of board structure determinants on firm financial performance

Variables	Applying OLS		Fixed effect		GMM	
	ROE	ROA	ROE	ROA	ROE	ROA
Bind	0.977**	0.437*	0.603*	0.025*	0.395*	0.019**
Bsize	0.355*	0.212*	0.515	0.046	0.419**	0.028*
OWNcon	0.061*	0.075**	0.268**	0.132*	0.183**	0.144**
SIZE	6.058**	0.411**	3.107	0.075	2.64**	0.647**
CONs	-28.97	-2.162				
AR(1) test					-0.0010	-0.0046
AR(2) test					0.4551	0.2189
Sargan test					0.8846	0.5815
R-squared	0.1705	0.0500	0.0193	0.0159		
F-Value (Sig. F)	18.04(0.0000)	4.62(0.0012)	5.87(0.000)	13.89(0.000)		

The AR1 and AR2 p-value for both ROE and ROA are significant, and insignificant respectively. However, Sargan test is more than 0.2. These results shows that the instruments used in investigating the panel dynamic data are appropriate; N= 356 (number of observations); **Significant at p 0.01, *significant at 0.05.

5.2.2 Board Structure Determinants and Level of Risk Taking

In addition, the results of table 6, indicates that the Bind and OWNcon relation with level of risk taking is statistically significant, supporting hypotheses H1b and H3b. the reason which supporting negative relationship between Bind and level of risk taking may be, independent directors by providing good information helps to board directors be more sensitive to regulatory compliance and so avoid any default by being more prudent and conservative. This result is consistent with conclusion of (Ferrero-Ferrero et al., 2012; Pathan, 2009). In contrast, we don't find support the idea that large board can decrease the level of risk taking in Malaysian banks, thus we reject hypothesis H2b.

Table 6. The result of OLS, fixed effect and GMM regression to investigate the effect of board structure determinants on level of risk taking

Methods	Applying OLS	Fixed effect	GMM
Variables	Risk Taking	Risk Taking	Risk Taking
Bind	-0.1279**	-0.1579**	-0.0354**
Bsize	-0.0057	-0.0138	-0.1310
OWNcon	-0.0115**	-0.0128**	-0.0385**
CONS	0.2887		
AR(1) test			-0.0196
AR(2) test			0.4509
Sargan test			0.5597
R-squared	0.1008	0.0207	
F-Value (Sig. F)	13.15 (0.0000)	19.79 (0.000)	

N= 356 (number of observations); **Significant at p 0.01, *significant at 0.05.

5.2.3 Mediating of Risk Taking on Relationship between Board Structure Determinants and Banks Financial Performance

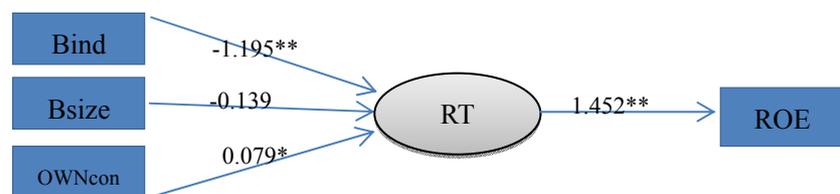


Figure1. Mediating risk taking on board structure determinants and ROE

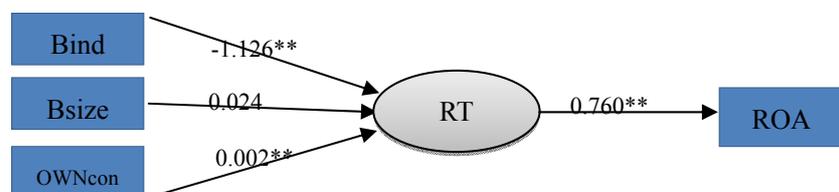


Figure 2. Mediating risk taking on board structure determinants and ROA

To test the role of risk taking is a mediator variable, firstly, current study applied the approach of Baron and Kenny (1986). as shown in Figure 1 and Figure 2, the relationship between Bind and OWNcon with firm financial performance (ROA, ROE) mediated by risk taking, supporting the hypothesis H4. The same results happen by Sobel test Table 7 and Table8. Findings related to the mediating effect of risk taking on relationship between Bsize and financial performance revealed that Bsize is individually value relevant to the financial performance but it is not value relevant to financial performance through the mediation of risk taking. Finding suggest that OWNcon have impact to bank performance which is support (Micco et al., 2007) findings. The result also is consistent with,

(Laeven & Levine, 2009) who argued that the relationship between ownership structure and banks financial performance influence by another variable. According to the mediating effect of risk taking on the significant relevance between Bind and OWNcon with banks financial performance, the partial mediation is accord. Interaction effect indicates that the independent board with more concentrated ownership reduces bank risk taking, and thus improves the financial performance.

Table 7. Sobel test results (ROE)

Sobel test	coefficient	Standard error	One-tailed probability	Two-tailed probability	P-value
Bind-RT-ROE	1.195	0.3286	0.0080	0.0160	Sig
	1.542	0.4801			
Bsize-RT-ROE	0.139	0.2305	0.276	0.5531	Non-sig
	1.542	0.4801			
OWNcon-RT-ROE	0.079	0.0264	0.0143	0.0286	Sig
	1.5423	0.4801			

Table 8. Sobel test results (ROA)

Sobel test	coefficient	Standard error	One-tailed probability	Two-tailed probability	P-value
Bind-RT-ROA	0.0058	0.0028	0.0349	0.0400	sig
	0.7608	0.0352			
Bsize-RT-ROA	0.0006	0.0257	0.4893	0.9787	No-sig
	0.7608	0.0352			
OWNcon-RT-ROA	0.0051	0.0029	0.0403	0.0806	sig
	0.7608	0.0352			

6. Conclusion

The effectiveness of corporate governance in the banking industry has received considerable attentions by researchers, managers, academic and regulators. However, few empirical researches have investigated the effect of board structure determinants on banks financial performance through the effect of risk taking.

This study examines the effect of board independence, board size and concentrated ownership on level of risk taking and banks financial performance. In addition, study found the role of risk taking as mediator variable on relationship between board structure determinants and banks financial performance. The finding of this study in related to board structure determinants and financial performance indicated that board independence, board size and concentrated ownership have significant relationship with financial performance (ROE, ROA). In addition, we find the evidence that board independence and ownership structure have negative relationship with level of risk taking, but we do not find any relationship between board size and level of risk taking. However, study finds that risk taking play as mediator variable on relationship between board independence and concentrated ownership. It shows that the board of directors with large independent directors and more concentrated ownership effects firm financial performance through risk taking. Finally, we find that the relationship between board size and financial performance not mediated by risk taking. Furthermore, this study finds evidence that firm size has significant impact on banks financial performance.

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