Relationship between Gender Diversity on Boards and Firm's Performance - Case Study about ASEAN Banking Sector

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Abstract

By using the data collected from 70 largest banks in the ASEAN banking system in period from 2009 to 2013, the authors try to investigate the impacts of gender diversity in the board of managements (BOM) and board of directors (BOD) of corporate business on bank's performance in ASEAN banking system. Firm's performance is measured by return on assets (ROA) and return on equity (ROE). This analysis is done through descriptive statistics, correlation test and regression analysis. Research's result show that both percentages of women on board of managements have a significant and positive impact on firm's performance while percentage of women on boards of directors has a neutral effect on firm's performance in Malaysia. Besides, the results in this study is also relevant with total assets which is a control variable had positive impact on firms' performance. From these findings, this study also suggested that managerial and legislative efforts be balanced gender to more female candidates, on both board of director and top executive, order to gain better corporate governance.

Keywords: gender diversity, corporate governance, firm performance, ROA, ROE

1. Introduction

In recent years, an aspect of corporate governance is board diversity attracting many researchers and practical administrators all over the world. There are some differences remaining among prior result's researches because of the impact of the policies, cultures, economic environments, scale of the financial markets and the level of effectiveness of corporate governance among the countries of the developed and growing regions (Petrovic, 2008; Li & Harrison 2008; Veen & Elbertsen, 2008). Board diversity is still largely considered the best policy for corporate governance (Carter, Simkins and Simpson, 2003). Diversification in the governance structure shown on the following aspects: geography (local administrators – Foreigners), minority - majority shareholders, is also investigated in some aspects: gender, age qualification, ethnicity (Milliken and Martins, 1996).

Beside, board diversity is becoming the concern of researchers and governments. The relationship between gender diversity on the board of directors and the performance of businesses is also elaborated more and more. The issue of gender quotas (gender quota) was discussed by lawmakers in Belgium, Canada and Italy (Sealy, Singh and Vinnicombe, 2008).

There is a valuable lessons from previous researches in the past is that research results which are highly practical valuable need to cleave intimately with research background. ASEAN mainly consists of growing development countries in which the lowest rates of gender diversity (See report by Credit Suisse - Table 1). There is a wonder that how the gender structure influence firms' operation in ASEAN. That is one reason which promotes the implementation of this paper.

Table 1. Proportion of companies in each region split by number of women on the board

	Number of women on board				
% in each region	0	1	2	≥ 3	Total
North America	15.8	32.4	33.1	18.7	100
Europe	16.3	27.4	28.7	27.6	100
EMEA	34.7	26.0	20.0	19.3	100
Latin America	60.8	28.0	8.8	2.4	100
Developed Asia	68.0	19.8	9.4	2.8	100
Emerging Asia	72.1	15.8	7.3	4.8	100

Source: Credit Suisse.

Additionally, the establishment of an ASEAN Economic Community (AEC) in order to strengthen, support and promote the development of regional economy requires the studies of business need to be done on a large scale which is enough to create a best research results. In ASEAN area, to the best of our knowledge, there have been no researches which are conducted to analyze the impact of gender structure to business's performance. Therefore, the study "***Relationship between gender diversity on boards and firm's performance: case-study about ASEAN banking sector*** " was selected for researching. This study was based on an assessment of the differences in performance among banks in ASEAN countries including: Vietnam, Thailand, Malaysia and Indonesia. So, this technique is also best way to find out impact of gender diversity on firm's performance in general and company culture management style in particular.

The objectives of study aim to:

a. To study the level of gender diversity in board of directors and top executive of ASEAN banking sector.

b. To assess the impact of gender diversity on bank's performance, in case of ASEAN banking system.

Hypotheses follow as:

H_1: The proportion of female directors on board of management has positive impact on bank's performance.

H_2: The proportion of female directors on board executive of director has positive impact on bank's performance.

H_3: Board size has significant impact on bank's performance relationship.

The paper consists of five sections. The first one is introduction following by part 2 - Literature Review of previous researches. After that, there are research methods and the regression analysis. Finally, the results and policy recommendations will be made.

2. Literature Review

This literature review explores the following theme of the research question: The impact of gender diversity on affect firm's performance. After a brief definition of corporate governance, we show a review of the literature in order to value the effect of gender diversity on boards of directors and top executive managers to firm's performance.

2.1 Definition of Corporate Governance

There are many different definitions of corporate governance. La Porta et al. (2000) consider corporate governance as a set of mechanisms in which outside investors protect themselves against problems arising from conflicts of interest from the managers and controlling shareholders. As highlighted by Pei Sai Fan (2004), "corporate governance is basically about putting in place the structure, processes and mechanisms by which business and affairs of the company are directed and managed in order to enhance the long term shareholder value through accountability of managers". Recently, corporate governance is considered to be vital to a firm's operation. According to McKinsey and Company (2002) the majority of investors comparing to pay a higher price for the companies standard of corporate governance. In addition, a high corporate governance index is also used as one of the key factors when evaluating the stock's price of the company (Berthelot, Morris and Morrill, 2010). In terms of corporate governance, Board of Directors which is representatives of shareholders makes mechanism and implements to ensure that their investments are protected and managed effectively (Brennan, 2010). Therefore, a given question is that to ensure the independence of the executive directors and also the effectiveness of the decision-making operation.

It is believed that good corporate governance is positively associated with board diversity (Carter, Simkins, and Simpson, 2003). Ownership diversity in terms of: private shareholders - state shareholders, the shareholders in other countries - foreign shareholders, has been used by some companies to improve the company's performance. In the other case, the diversification of the Executive Directors can be illustrated in the criteria of gender, age, race, minority groups (Milliken and Martin, 1996). In recent years, genders diversify in board of directors and top executive of corporate firms has received dramatic attention in academic literature and from various firms, as well as from government worldwide. In next part, authors introduce about relationship between gender diversity and firm's performance.

2.2 Previous Researches - Relationship between Gender Diversity and Firm's Performance

Perspective on the relationship between gender diversity in boards of directors and top management and firm's performance is contradictory.

In one sense, the results from previous studies showed that gender structure of the Board of directors and executive managers has a positive effect on the managing quality of the board of directors and the financial position of business (Campbell and Minguez - Vera, 2008). Profitability and financial position of enterprises is illustrated by some indices: ROA, ROE and ROS. In addition, Tobin's Q was also used to demonstrate the financial status of the business (Prihatiningtias, 2012). In the same vein, Kang, Ding and Charoenwong (2010) have found that investors generally

respond positively to the representation of women directors in Singaporean firms. Carter et al (2003) argued that the level of gender diversity on a board of directors is directly associated with shareholder value. Interestingly, the paper, is conducted by Haniffa and Hudaib (2006), which found that the female on top positions in management bends toward taking more risks which leads to better financial performance.

According to Calabro, Torchia and Huse (2011), the level of innovation of enterprises is enhanced by going from the minority of women in the board of directors. Moreover, the authors also found that the relationship between the number of women leaders and the level of innovation of enterprises is affected by the strategic requirements of the board of Directors. Several other studies indicated that the proportion of women in the board can, at least 30% affect both corporate governance and status of the business (Kans and Stengard, 2012).

On the other hand, the above findings are quite different from the results showed by Darmadi (2011). He found that the presence of women in top managers affected negatively on the performance of the business which based performance of ROA. Further authors also found that family businesses in Indonesia have female in the Board's business more than male. In one of opposite study, Prihatiningtias (2012) showed that the status of the business is affected both positive and negative by gender diversity. Dobbin and Jung (2011) concluded that gender diversity has a negative and neutral effect on performance. Similar results are found with Adams and Ferreira (2009) that find negative or no relation between gender diversity and firm performance.

According to Yaseer (2012) there is no considerable link between board gender diversity on firm performance in Pakistan.

Enterprises whose CEOs are female may get higher profits (Izgi et al, 2012). On the contrary, females acting as CEO are of the firm leads the firm toward lower performance because of the cultural conditions, less emotional stability and patience issues (Erhardt and Werbel, 2003). Another explanations of finance deterioration caused by females working on top of the firm that the belief of the society that women are disturbing, destructive, avoiding in taking risks and not well educated (Mirza, Mehmood, Andleeb and Ramzan, 2012).

Tacheva and Huse (2006) argued that female directors had influence on the effectiveness of the board. The authors suggested that two requirements of the board: financial control and service requirements are negatively affected by the number of women managers in the Board. The power of the female members of the Board differs primarily in different group work that they undertake. In addition, the participation of women and the proportion of female in the Board affect positively to the financial position of enterprises, but the number of them in the Board does not have similar result. However, the supervisors and lawmakers should levy policies in order to increase the participation of women in the Board of Directors (Oba and Fodio, 2013).

3. Sample and Methodology

3.1 Sample and Data Collection

This research is to investigate banks in ASEAN banking sector in four countries including: Vietnam, Thailand, Indonesia and Malaysia. The main-reason for this choice is the size of banks here does not differ significantly. Beside, similar business environment, in four countries, is of greater factors to minimize the other impact like as GDP, interest rate, inflation on the results obtained. The sample of this study is more than 100 banks for the period from 2009 – 2013. Database used in this study derived primarily from finance statement of banks and banks' annual reports which are publicly available documents that can be downloaded from the banks' website.

Country	Number of bank in sample
Vietnam	23
Malaysia	21
Thailand	12
Indonesia	14

3.2 Methodology

3.2.1 Dependent Variables

Bank's performance in this study is represented by ROA – return on assets and ROE – return on equity. ROA, a ratio of net income to total assets, gave an idea as to how efficient management is at using its assets to generate earnings. ROE, which is ratio of net income to total owner's equity, measures corporation profitability by revealing how much profit a company generates with the money shareholders have invested. These variables are used in previous research (Shrader, et al., 1997; Lehobo, 2011, Yasir Shafique et al., 2014).

3.2.2 Independent Variables

- Proportion of women directors on the board of directors to size of board of directors;
- Proportion of women on top executive to size of board of managements

In this research, above variables is used to measure gender diversity on bank.

3.2.3 Control Variable

- Size of board of directors;
- Size of board of management;
- Total bank's asset, logarithm;
- Age of board chairman;

3.2.4 Model Specification

The regression model to test the relationship between the gender diversity and bank's performance is as follows:

$$Y_{it} = \beta_0 + \beta_1 PWD_{it} + \beta_2 PWM_{it} + \beta_3 BS_{it} + \beta_4 BM_{it} + \beta_5 ln(TA)_{it} + \beta_6 AS_{it} + \beta_7 ACEO_{it} + e_{it}$$

Where:

Y: dependent variables: ROA, ROE

PWD: Percentage of women on board of directors

PWM: Percentage of women on board of managements

BS: size of board of directors

BM: size of board of managements

TA: total bank's asset, logarithm

AS: Age of board chairman

3.3 Descriptive Statistics

Through describing statistic data form the 70 larger banks in four countries, authors built below chart which illustrates the number and proportion of women participating on in the board of management and board of directors.

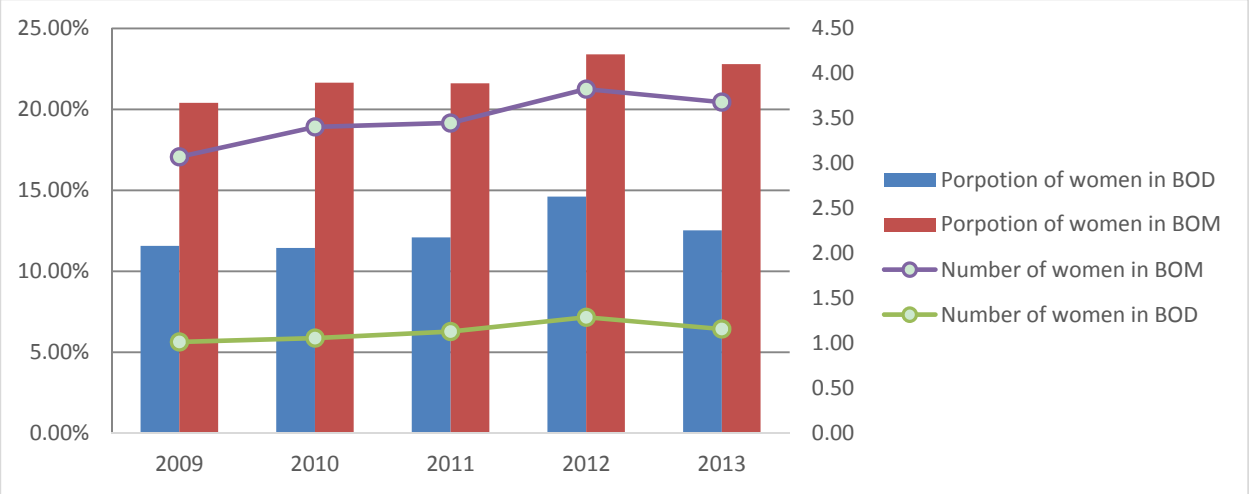

Chart 1. Number and proportion of women on BOM, BOD

Source: Research team calculated

It can be seen from the chart that in the period 2009 - 2013, the average number and the percentage of female participation in the board of managements is increasing continuously and greater than the average for the whole period section. In 2009, the percentage of women participating in the board of directors was 11.58% and the board of management was 20.41%, by 2013 these proportions were 12.53% and 22.80%, respectively.

Table 2. Describe statistics of gender diversity's variable

	N	Mean	Maximum	Minimum	Std. Deviation
PWM	350	0.218533	1.000000	0.000000	0.165372
PWD	350	0.122761	0.600000	0.000000	0.121516

The standard deviations of the ratio of women participating in board of management and board of directors are closed to the average value, which indicates the degree of gender diversity. Gender diversity was also reflected in the rate of female participation in the board of management ranged from 0% - 100%, the ratio of the board of directors reached a maximum level of 60%. (See Table 2).

Table 3. Describe statistics of gender diversity's variable in 4 countries

	Vietnam	**Thailand**	**Indonesia**	**Malaysia**
Number of women in BOD	**0.974**	**2.10**	**0.400**	**1.019**
	(1.063)	(1.287)	(0.584)	(0.940)
Number of women in BOM	**2.183**	**3.700**	**1.300**	**2.17**
	(1.620)	(3.321)	(1.239)	(1.614)
PWD	**13.515%**	**16.71%**	**6.877%**	**11.049%**
	(14.563%)	(9.616%)	(9.864%)	(10.641%)
PWM	**25.56%**	**25.50%**	**14.274%**	**19.694%**
	(19.79%)	(15.947%)	(14.362%)	(11.860%)

Notes: Std. Deviation in parentheses

From the Table 3 which demonstrates the number and the proportion of women participating in the board of managements and the board of directors for the period 2009 - 2013 in four countries, it can be seen as the difference of proportion in gender diversity on boards of these countries. The differences derived from the characteristics of the banking operations of each country. Besides that, culture is also a substantial part affecting these proportions. (Ruth Mateos de Cabo, Ricardo Gimeno Nogués, Maria J. Nieto, 2009, p.24).

Table 4. Describe statistics of firm's performance variables (ROA, ROE)

	N	Mean	Maximum	Minimum	Std. Deviation
ROA	350	0.040612	0.325188	-0.251869	0.063443
ROE	350	0.113665	0.531864	-0.945261	0.096224

Table 4 which describes two indices used to reflect banks' performance that in the period 2009 - 2013, ROA and ROE of 70 banks were 4.0612% and 11.3665%, respectively. The standard deviation of ROA was greater than the average value, but not for ROE. This result denoted that the volatility of ROA was greater than this in ROE in the sample.

4. Empirical Results

4.1 Correlation Matrix

Table 5. Summarization of correlation matrix (Detail at Appendix 1)

	Positive	Negative	Neutral	Country
Relationship between PWD and ROA	✓			Thailand
Relationship between PWD and ROE			✓	
Relationship between PWM and ROA		✓		Vietnam
Relationship between PWM and ROE	✓			Vietnam
Relationship between BD and ROA	✓			Thailand, Indonesia
Relationship between BD and ROE	✓			Vietnam, Indonesia, Malaysia
Relationship between BM and ROA	✓	✓		Vietnam, Indonesia
Relationship between BM and ROE	✓			Malaysia, Indonesia, Vietnam
Relationship between TA and ROA	✓	✓		Vietnam, Thailand, Indonesia
Relationship between TA and ROE	✓			Vietnam, Thailand, Malaysia

The table indicates results correlation test relationship between variables of gender diversity and bank's performance with supporting by SPSS.20 software. It is obvious from the results that findings link between gender diversity and bank's performance in four countries is the significant difference. From Table 1, it can be seen that two independent variables measured board's size have positive correlation with the performance of the banks. It however contradicts the finding of Schnake et al (2006) whose paper shows that the larger the board, the poorer the financial performance of the firm. Besides, the positive correlation between gender diversity and performance is found only in Thailand and Vietnam, which mean if we increase the proportion of women on banks board, the financial performance of the banks like ROA and ROE will improve. This result is a relevant with the findings of Smith and Verner (2006), Oba V.C and Fordio M.I (2013). On others, correlation matrix shown that total assets of banks have both positive and negative impact on ROA, but it is only positive correlation with ROE.

4.2 Regression Analysis

Regression analysis will be done by using Eview.6 software and SPSS.20 that are not only user friendly software but can handle huge data.

Checking the suitableness level of the model, the result is that probability of F-statistic less than 0.05 and probability of Hauman Test higher than 0.05, which mean the model is suitable. The OLS regression model is detailed in Table 5.

Table 6. Regression analysis

	Vietnam		**Indonesia**		**Thailand**		**Malaysia**	
Variables	**ROA**	**ROE**	**ROA**	**ROE**	**ROA**	**ROE**	**ROA**	**ROE**
Constant	**0.059935** **(4.3616)***	**-0.256757** **(-2.1824)****	**-0.091329** **(-4.8454)***	**-0.567251** **(-3.8550)***	**-0.037675** **(-4.4666)***	**-0.987641** **(-3.3705)***	0.153841 (1.6438)	0.152616 (1.6488)
PWD	-0.006223 (-1.1983)	-0.050935 (-1.1322)	-0.004632 (3.6841)	-0.024355 (-0.5432)	**0.015159** **(1.8457)*****	0.370281 (1.2978)	0.0152 (0.241)	0.068791 (0.9335)
PWM	**0.009565** **(2.3926)****	**0.071799** **(2.0825)****	**0.022501** **(3.6841)***	**0.227941** **(4.9463)***	**0.010455** **(1.7773)*****	0.108427 (0.5306)	0.074123 (1.0188)	0.017407 (0.2718)
BD	0.000774 (1.6460)	0.004602 (1.1102)	0.000161 (0.2862)	-0.003610 (-0.8676)	0.000579 (1.414726)	-0.012555 (-0.8832)	0.003311 (0.7350)	0.002084 (0.4579)
BM	0.000113 (0.3728)	0.004602 (0.4681)	0.000355 (0.9349)	0.000974 (0.3424)	**-0.000240** **(-2.0122)****	-0.004917 (-1.1872)	0.001309 (0.5981)	0.001464 (0.6742)
Ln(TA)	**-0.003792** **(-4.319)***	**0.012901** **(1.6996)*****	**0.005487** **(5.0019)***	**0.037646** **(4.4604)***	**0.002535** **(2.8784)***	**0.101545** **(3.3191)***	**0.007880** **(1.8091)*****	**0.008337** **(1.8827)*****
AS	**0.000243** **(2.4520)****	**0.001763** **(2.0348)****	-	-	6.19E-0.5 (0.6666)	-0.002087 (-0.647131)	**-0.002658** **(-2.77)***	**-0.002644** **(-2.8221)***
Observations	115	115	60	60	70	70	105	105
R-squared	0.222936	0.175346	0.448165	0.452066	0.362582	0.206798	0.134455	0.136378
Prob (F-statistic)	0.000106	0.001690	0.000004	0.000003	0.000055	0.019907	0.025145	0.023104
Correlated Random Effects - Hauman Test								
Chi_Sq. Statistic	10.4726	13.3451	9.571111	6.372707	17.322808	4.701326	10.838557	9.811518
Prob.	0.1061	0.0739	0.0883	0.2716	0.082	0.5827	0.0935	0.1328

Notes: t-Statistic in parentheses

(*), (**), (***): Significant at 1%, 5%, 10% level.

Table 6 reveals that with the confidence level of 90% which show that three predictor variables affecting to banks' performance includes proportion of women in boards of managements, total assets and age of chairman in Vietnam, Indonesia, Thailand. This result tends to support the findings of Man and Kong (2011), Burke (2000), Oba V.C and Fordio M.I (2013) and Carter et al (2003) that the presence of women management and firm performance are

interrelated. However, this variables have no statistical significant in Malaysia. This findings at least show some similarities with evidences revealed form finding of Zainal et al (2013). (Note 1)

Likewise, in three countries including Vietnam, Indonesia and Thailand, significance at the 10% level, the proportion of women on boards of management has a positive statistical significant impact on banks' performance. This finds support in the research of Smith and Verner (2006), Oba V.C and Fordio M.I (2013) who found that the proportion of women in top executive directors tends to have positive effects on firm financial performance.

Board size had no tangible impact on performance, which is a relevant with results of Oba V.C and Fordio M.I (2013). This conflicts with the finding of Schnake et al (2006), shows that the larger on the board the poorer the finance performance of the firm.

In addition, this research found that total assets had also significant and positive impact on firms' profitability index.

Coefficients - 1

Model		**ROA C PWM (1)**	
Countries	**Vietnam**	**Thailand**	**Indonesia**
PWM	0.008241	0.010055	0.018919
Adjusted R-squared	0.026252	0.024523	0.080572
Prob (F-statisic)	0.045930	0.036512	0.015901

Coefficients - 2

Model		**ROE C PWM (2)**	
Countries	Vietnam	Thailand	Indonesia
PWM	0.059030		0.212176
Adjusted R-squared	0.015478		0.213478
Prob (F-statisic)	0.047493		0.000120

In Vietnam, Adjusted-R^2 of model (1) and (2) are 0.026 and 0.015, respectively, which suggests that only 2.6% and 1.5% of ROA and ROE are explained by the proportion of women on board of management? In same way, this rate of explanation is relevant with Indonesia equal 8.06% and 21.34%.

5. Conclusions and Policy Recommendations

The objective of this paper was to assess boards' gender diversity and how it influences banks' performance. The presumption in many previous researches was that gender diversity is of greater importance for the firms' performance. The findings of this study show that the proportion of women on boards of management and total banks' assets have a positive significant on the firm's performance in three countries including Vietnam, Indonesia, Thailand. This implied that when women participate in bank's boards lead to archive higher than profitability. The difference in result of Malaysia, at least, revealed with Zainal et al (2013) whose paper found that women on board of director has negative impact on firm profitability. This can be explained by difference in culture, economic background, bank's size.

From these findings, the researcher proposes policy recommendations to enhance efficiency of corporate governance of the banking system in ASEAN.

The female segment of top management and board of executive director around the globe is moderate, specifically in developing economies, in general. In particular, with research samples, the participant of women on boards of management and boards of top executive directors is about a one on average. So, managerial and legislative efforts are balanced gender to more female candidates, on both board sand top executive, orders to gain better corporate governance.

5.1 Limitations and Further Study

Even though the authors have tried to collect data as fully and accurately as possible, one of the limitations of this study lies in the fact that conclusions and analysis are made based on collected data that, in some aspects, is not really comprehensive. However, conclusions and recommendations have been given on a scientific basis, which is good reference for further researches of restructuring banking system in ASEAN. Further research should be conducted by including more variables and by large sample size.

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Note

Note 1. By using data from top 300 Malaysian public listed over a five – year period from year 2005 to 2009. Zainal et al (2013) found that firm with women director tend to have more directors sit on the board, greater proportion of Malay director and family director on board, and less profitability, than firms without women director.

Appendix 1

Correlation test in Vietnam

		ROA	ROE	BD	BM	PWD	PWM	AS	TA
ROA	**Pearson Correlation**	1							
	SIG.(2TAILED)								
ROE	**Pearson Correlation**	.559**	1						
	SIG.(2TAILED)	.000							
BD	**Pearson Correlation**	.005	.277**	1					
	SIG.(2TAILED)	.958	.003						
BM	**Pearson Correlation**	**-.187***	**.265****	.323**	1				
	SIG.(2TAILED)	**.045**	**.004**	.000					
PWD	**Pearson Correlation**	-.096	-.111	-.108	-.086	1			
	SIG.(2TAILED)	.307	.238	.252	.362				
PWM	**Pearson Correlation**	**.210***	.123	-.229*	-.249	.045	1		
	SIG.(2TAILED)	**.024**	.191	.014	.091	.634			
AS	**Pearson Correlation**	**.190***	**.284****	.312**	.025	-.008	-.031	1	
	SIG.(2TAILED)	**.042**	**.002**	.001	.792	.935	.742		
TA	**Pearson Correlation**	**-.194***	**.357****	.323**	.387**	.144	-.155	.306**	1
	SIG.(2TAILED)	**.038**	**.000**	.000	.000	.124	.099	.001	

**. Correlation is significant at 0.01 level (2-tailed)

*. Correlation is significant at 0.05 level (2-tailed)

Correlation test in Thailand

		ROA	ROE	BD	BM	PWD	PWM	AS	TA
ROA	Pearson Correlation	1							
	SIG.(2TAILED)								
ROE	Pearson Correlation	.839**	1						
	SIG.(2TAILED)	.000							
BD	Pearson Correlation	**.304***	.158	1					
	SIG.(2TAILED)	**.011**	.192						
BM	Pearson Correlation	-.086	.005	.100	1				
	SIG.(2TAILED)	.479	.967	.412					
PWD	Pearson Correlation	**.242***	.132	-.058	-.075	1			
	SIG.(2TAILED)	**.043**	.276	.632	.539				
PWM	Pearson Correlation	.011	.021	-.470**	.314**	.239*	1		
	SIG.(2TAILED)	.930	.865	.000	.008	.046			
AS	Pearson Correlation	**.373****	.182	.402**	-.148	.212	-.200	1	
	SIG.(2TAILED)	**.001**	.131	.001	.222	.079	.097		
TA	Pearson Correlation	**.383****	.383	.530**	.196	-.102	-.055	.351**	1
	SIG.(2TAILED)	**.001**	.001	.000	.105	.403	.653	.003	

**. Correlation is significant at 0.01 level (2-tailed)

*. Correlation is significant at 0.05 level (2-tailed)

Correlation test in Indonesia

		ROA	ROE	BD	BM	PWD	PWM	AS	TA
ROA	Pearson Correlation SIG.(2TAILED)	1							
ROE	Pearson Correlation SIG.(2TAILED)	.796** .000	1						
BD	Pearson Correlation SIG.(2TAILED)	**.481**** **.000**	**.412**** **.001**	1					
BM	Pearson Correlation SIG.(2TAILED)	**.555**** **.000**	**.542**** **.000**	.662** .000	1				
PWD	Pearson Correlation SIG.(2TAILED)	.005 .970	.114 .385	-.172 .188	-.082 .536	1			
PWM	Pearson Correlation SIG.(2TAILED)	.015 .912	-.066 .619	.322* .012	.050 .703	.007 .957	1		
AS	Pearson Correlation SIG.(2TAILED)	-.162 .218	-.161 .220	-.422** .001	-.334** .009	.153 .245	-.148 .258	1	
TA	Pearson Correlation SIG.(2TAILED)	**.479*** **.000**	**.609**** **.000**	.463** .000	.694** .000	.223 .087	-.070 .594	-.197 .131	1

**. Correlation is significant at 0.01 level (2-tailed)

*. Correlation is significant at 0.05 level (2-tailed)

Correlation test in Malaysia

		ROA	ROE	BD	BM	PWD	PWM	AS	TA
ROA	Pearson Correlation SIG.(2TAILED)	1							
ROE	Pearson Correlation SIG.(2TAILED)	.562** .000	1						
BD	Pearson Correlation SIG.(2TAILED)	-.040 .682	.196* .045	1					
BM	Pearson Correlation SIG.(2TAILED)	-.052 .599	.212* .030	.539** .000	1				
PWD	Pearson Correlation SIG.(2TAILED)	.016 .873	.094 .343	-.165 .092	-.045 .646	1			
PWM	Pearson Correlation SIG.(2TAILED)	-.040 .684	**-.221*** **.024**	.004 .966	.039 .691	-.022 .827	1		
AS	Pearson Correlation SIG.(2TAILED)	**-.197*** **.044**	**-.423**** **.000**	-.087 .378	-.154 .117	-.147 135	.177 .070	1	
TA	Pearson Correlation SIG.(2TAILED)	-.038 .703	**.393**** **.000**	.446** .000	.204* .036	-.092 .350	-.118 .231	-.070 .477	1

**. Correlation is significant at 0.01 level (2-tailed)

*. Correlation is significant at 0.05 level (2-tailed)