

## FEMALE BOARD REPRESENTATION AND BOARD RISK COMMITTEE

Sharifah Faatihah Syed Mohd Fuzi<sup>1\*</sup>, Mohamat Sabri Hassan<sup>2</sup>, & Noorie Haryaniee Moulton<sup>3</sup>

<sup>1,3</sup>Faculty of Administrative Science and Policy Studies, Universiti Teknologi MARA (UiTM), Malaysia

<sup>2</sup>Faculty of Economics and Management, Universiti Kebangsaan Malaysia, Malaysia

\*E-mail: [sfaatihah@uitm.edu.my](mailto:sfaatihah@uitm.edu.my)

### 1. INTRODUCTION

The board of directors is mainly responsible for effective internal control and risk management. One of the reasons for the global financial crisis was the director's lack of time commitment, resulting in excessive risk-taking (Iselin, 2020). Hence, policymakers, regulators, and stakeholders demand firms to establish a board risk committee (Aljughaiman & Salama, 2019; Ames et al., 2018). Before the global financial crisis, the audit committee was in charge of risk oversight functions. However, the audit committee's responsibility for risk oversight has been called into doubt due to business failure (Malik et al., 2021). Both committees also have distinct responsibilities. Whilst, board risk committee is responsible for identifying risks and managing or mitigating them as effectively as possible (Ames et al., 2018). Meanwhile, the audit committee oversees risk oversight, which includes overseeing the external audit's function (Iselin, 2020). Besides, delegating risk supervision responsibility to the separate committee, such as the board risk committee considered costly (Ames et al., 2018). It necessitates greater time commitment and resources (Iselin, 2020). Therefore, it is subject to the board's discretion in setting up the committee. This study expects female corporate board members to influence the board's decision, especially in establishing a board risk committee. Prior studies have discussed the implications of female board representation on firm behaviour and performance. However, there is still inconclusive evidence to support the effective functions of having female directors. For instance, there is no evidence of female directors' influence on firm value and profitability in Turkey unless they can provide an active role in the board committee (Ararat & Yurtoglu, 2021). Even female directors adversely affect Islamic banks globally (Khan et al., 2020). Nonetheless, it is suggested that female directors can provide valuable insight into governance practices when they are involved in board committees. By using a sample of Omani financial companies, female members in the audit committee can improve forward-looking disclosure quality (Lawati et al., 2021). Further, the gender-diverse audit committee was found to reduce aggressive tax practices (García-Meca et al., 2021). The rationale for having female board representation is to increase independence, broaden valuable resources such as expertise and provide efficient monitoring (Lawati et al., 2021). Despite the growing concern on the female directors' function and board risk committee, there is still a limited number of empirical evidence that examine the influence of female directors on the board risk committee. Thus, this study aims to examine to what extent that female board representation influences the board risk committee.

This study is motivated by the Malaysian Code on Corporate Governance (MCCG) 2017 recommendation on establishing a board risk committee. Since the code is principle-based, the establishment of a standalone board risk committee still becomes voluntary. Thus, there is a

possibility some firms choose to establish a standalone, having a combined committee or not having the board risk committee. Secondly, the quota-based imposed by the Malaysian regulator on female gender representation at the corporate board can influence the board's decision to set up a board risk committee. The female gender quota of 30% is expected to provide effective monitoring, especially in ensuring adequate risk oversight function at the board level. A statistic shows a slight increase in the total score of Malaysia's gender gap index from 0.697 in 2017 to 0.709 in 2019 (Department of Statistic Malaysia, 2020a). The education index is higher than 1, but the economic participation and opportunity index is still below 1. The annual growth of women-owned businesses reported for the wholesale and retail trade sector was 4.7% in 2018 (Department of Statistic Malaysia, 2020b). The situations provide the female population greater opportunity to fill in the corporate board's positions and improve the female candidates' pool. This study makes the following contributions. First, we extend the literature that examines the factors associated with establishing the board risk committee. A study conducted by Sekome and Lemma (2014) found a positive association between board size, board independence, firm size, and industry with risk management committees in South Africa. Meanwhile, risk management committees are more likely to form in financial institutions with the international operation, high leverage, larger and independent board, auditor quality, merger and acquisition, and low quality of financial reporting (Hines & Peters, 2015). However, Jiraporn et al. (2020) found that the female gender is only associated with the audit committee but not the risk committee's existence in Turkey. Second, we investigate the influence of female directors' attributes such as size, independence, tenure, multiple directorships, and expertise with the board risk committee.

## 2. METHODOLOGY

The initial sample consisted of the Top 100 public listed firms in Malaysia. The data was retrieved on 6 June 2018. Financial firms were excluded because of the additional requirements compared to other industries, especially on establishing a board risk committee. As a result, the final sample consists of 76 firms. The period of analysis covered the five years between 2014 to 2018. The final sample based on firm-year observations is 380 firms. Further analysis was conducted to examine the implications of female directors' attributes on the size of the risk committee. The final sample (firm-year) for further analysis is 195 firms. All the corporate governance data was obtained from the annual report. Meanwhile, the firm size variable was obtained from the Thomson Reuters database.

Main regression model:

$$BRC_{it} = \beta_0 + \beta_1 FSIZE_{it} + \beta_2 FINED_{it} + \beta_3 FTEN_{it} + \beta_4 FDE_{it} + \beta_5 FMDR_{it} + \beta_6 BSIZE_{it} + \beta_7 BINED_{it} + \beta_8 MCCG_{it} + \beta_9 lnTA_{it} + \varepsilon$$

Where:

- BRC* = Board risk committee (BRC) (existence, standalone and size)  
 BRC existence (1= Firm with board level risk committee, 0=otherwise)  
 BRC standalone (1=Standalone board risk committee, 0=otherwise)  
 BRC size (total number of members in board risk committee)
- FSIZE* = Female directors' size (total percentage of female directors on board)
- FINED* = Female director's independence (Total percentage of female directors as independent non-executive directors)
- FTEN* = Female director's tenure (Average tenure of female directors in the firm (in the year))

- FDE* = Female director's expertise (1=at least 1 female director with a business administration/  
accounting/finance, 0=otherwise)
- FMDR* = Female director's multiple directorships (Total percentage of female directors hold  
directorship in other public listed firms)
- BFSIZE* = Board size (Total number of board members)
- BINED* = Board independence (Total percentage of independent non-executive directors)
- MCCG* = Malaysian Code on Corporate Governance 2017 (1= preceding 1 year, 0=otherwise)
- lnTA* = Firm's size (natural logarithm of total assets)
- i* = firm
- t* = time
- $\varepsilon$  = error term

### 3. RESULTS AND DISCUSSION

Table 1 below shows the descriptive results of all variables. On average, the percentage of firms in the sample with BRC existence is 51.3%. The average sample firm with a standalone board risk committee is 26.8%. On average, the size of BRC is 3 persons, with a minimum number of 2 persons and a maximum number of 8 persons. Meanwhile, the mean value of female directors' percentage is 16.98%, with a minimum value of 0% and a maximum value of 60%. The percentage of female directors' independence is 45.58%. The average female director's tenure is 5 years, with a minimum of 0 years and a maximum of 37 years. The sample firm consists of 66.1% with at least one female director's expertise in business administration, accounting, or finance. The average percentage of female directors with multiple directorships is 57.54%. Further, the average board size is 8, with a minimum value of 5 and a maximum of 14. The mean value for board independence is 48.84%. On average, MCCG2017 affected 20% of sample firms. Lastly, the average firm size is 15.78.

**Table 1: Descriptive Statistics**

	Observations	Mean	Standard Deviation	Minimum	Maximum
BRC existence	380	0.513	0.500	0	1
BRC standalone	380	0.268	0.444	0	1
BRC size	195*	3.728	0.996	2	8
Female director (%)	380	16.983	11.982	0	60
Female director independence (%)	380	45.583	42.979	0	100
Female director's tenure	380	5.519	6.913	0	37
Female director's expertise (Dummy)	380	0.661	0.474	0	1
Female director's multiple directorships	380	57.544	44.246	0	100
Board size	380	8.716	1.810	5	14
Board independence (%)	380	48.838	11.651	20	100
MCCG	380	0.200	0.401	0	1
Firm size (lnTA)	380	15.783	1.369	12.336	18.850

Models 1 and 2 in Table 2 contain panel logit regressions results; meanwhile, models 3 and 4 are Ordinary Least Square (OLS) regression results. In model 1, the coefficient of female directors' percentage as board members is positive and statistically significant with BRC existence ( $\beta=0.188$ ,  $p<10\%$ ). The result indicates that the critical mass of female directors can be more effective in monitoring (Alkebsee et al., 2021). In general, the percentage of female directors' independence also can positively influence BRC existence ( $\beta =0.045$ ,  $p<10\%$ ). The

result supports those female directors contribute to effective monitoring because they are not part of the old-boys club and are more likely to be independent (Lawati et al., 2021; Zalata et al., 2018). On the other hand, female directors' tenure at the mean level can negatively influence BRC existence ( $\beta = -0.228$ ,  $p < 10\%$ ). The finding contradicts the assumptions that longer tenure of directors' positions can benefit firm performance due to increasing directors' learning ability (Li & Li, 2020). However, the long tenure can improve female directors' knowledge about the firm's internal control system and may not see the importance of establishing a board-level risk committee. They may support the current practice by having only an audit committee. The implications of female directors' attributes and BRC standalone can only be found for the percentage of female directors on board (positive) and expertise (negative) (Model 2). The rationale can be because the non-accounting/finance and business administration have limited knowledge in monitoring financial statements (Abbasi et al., 2020). Thus, it can affect their judgment to strengthen the firm's internal control system through BRC standalone.

Based on the OLS regression results, the size of female board representation is positively associated with BRC size ( $\beta = 0.031$ ,  $p < 1\%$ ) for model 3 and the coefficient ( $\beta = 0.029$ ,  $p < 1\%$ ) for model 4. By using a dummy variable for female directors' independence, the finding shows a positive association with BRC size ( $\beta = 0.356$ ,  $p < 10\%$ ). The results also reveal the negative association of female directors' expertise ( $\beta = -0.564$ ,  $p < 1\%$ ) and multiple directorships ( $\beta = -0.003$ ,  $p < 10\%$ ) with BRC size. The result indicates that the director's expertise and multiple directorships can reduce BRC size at the mean level. The control variable, MCCG2017, is significantly and positively associated with BRC existence. The result implies that the corporate governance reformation can potentially lead to changes in the firm's behaviour to establish the committee; however, it is not guaranteed to have a standalone committee. Meanwhile, board size is positively associated with BRC standalone and BRC size.

**Table 2: Multiple Regression Analysis between Female Directors' Attributes and Board Risk Committee**

	(1) BRC existence	(2) BRC standalone	(3) BRC size	(4) BRC size
Intercept	-42.840**	-53.020***	3.911***	3.953***
Female director (%)	0.188*	0.136*	0.031***	0.029***
Female director independence (%)	0.045*	0.003	0.001	-
Female director independence (Dummy)	-	-	-	0.356*
Female director's tenure	-0.228*	-0.007	0.002	0.008
Female director's expertise (Dummy)	-2.465	-2.031*	-0.686***	-0.564***
Female director's multiple directorships	0.011	-0.016	-0.003*	-0.003*
Board size	0.213	1.115***	0.221***	0.219***
Board independence (%)	0.068	0.049	-0.009	-0.009
MCCG	7.744***	0.845	0.166	0.164
Firm size (lnTA)	1.617	2.011***	0.039	0.037
Wald Chi2	46.360	38.120	-	-
Adjusted R-squared	-	-	41.4%	41.5%
Observations	380	345	195	195
Industry effect	Yes	Yes	Yes	Yes
Year effect	Yes	Yes	Yes	Yes

Note: \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$

#### 4. CONCLUSION

Our results support the explanations on the influence of female board representation on the board risk committee's establishment. Based on the analysis of the non-financial Top 100 listed firms in Malaysia, we conclude that the percentage of female directors on board can influence either setting up BRC, BRC standalone, or BRC size. However, female directors' attributes can encourage or discourage the board's action in setting up the committee. The size

of female independence is positively influencing the setup of the committee. However, female directors' attributes such as tenure and directors' expertise in business administration, accounting, and finance negatively affect the BRC establishment. The female director's multiple directorships also can adversely affect BRC size. This study confirms the critical mass theory that a higher proportion of female board representation can influence board decisions (Alkebsee et al., 2021). Secondly, this study supports the agency and resource-based theory on the female director's independence to facilitate effective monitoring (Lawati et al., 2021; Zalata et al., 2018). Gender diversity can broaden the valuable resources of the firm through their expertise, experience, interest, and perspective (Lawati et al., 2021). In contrast, this study proves that few attributes such as tenure, expertise, and multiple directorships at a certain level can negatively affect the voluntary formation of BRC or BRC size. There are a few limitations to this study. First, the data was limited to the Top 100 Malaysian public listed firms. The results may not be generalized to non-listed firms or firms with small market capitalizations. This study focuses mainly on a few attributes related to female directors. Other attributes such as female directors as CEO/chairman, share ownership, foreign director, and meeting attendance can be tested in future studies. Third, the institutional setting like ownership structure is not tested in this study. Future studies may explore female board representation and board risk committees for different ownership settings (family versus non-family, or state versus non-state firms) and other countries.

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