DOES HAVING WOMEN ON BOARDS IMPROVE MONITORING ROLE: THE IMPACT OF CONTROL - OWNERSHIP WEDGE IN TURKEY

Aree Saeed MUSTAFA  
Faculty of Business and Economic, University of Duhok, Universiti Utara Malaysia  
Utara, Malaysia  
areemustafa@uod.ac

Sitraselvi A/P CHANDREN  
Department of Business Administration, Universiti Utara Malaysia,  
Sintok, Kedah, Malaysia  
sitraselvi@uum.edu.my

Ayoib B Che-AHMAD  
School of Accountancy, Universiti Utara Malaysia,  
Sintok, Kedah, Malaysia  
ayoib@uum.edu.my

Abstract: Many government sought to enforce gender equality on the corporate boards, but the implication of doing it are not obvious and might harm economies and firms. We underline this topic by conceptualizing the relationship as corporation and board-specific and embedded within specific contexts. The theory is developed with reference to developing countries, and tested on Turkish firms. The result reflects that female directors improve monitoring mechanism for some firms and reduce it for others. The influence is different across various monitoring indicators, control-ownership wedge, and board structure. The impact varies across different audit quality indicators. The findings call for nuanced responses in relation to women’s nominations from both governments and firms.

JEL Classifications: M48, M42, M41

Keywords: Female Directors, Control-Ownership Wedge, Audit Quality and Turkey

INTRODUCTION

Governments around the world are adopting regulations designed to improve female involvement in corporate boards. These regulations suggest that female participation has a positive influence on the role of board and firm strategic decision in term of monitoring function. This argument is aligning with that of theory and empirical evidence, meanwhile, is inconclusive. Previous studies propose that female distinctive management style enhance board monitoring mechanism (Shamsul N Abdullah, Ismail, & Nachum, 2016), while others find that weak experience of female in leadership undermine their effectiveness as board members (Dargnies, 2012). In the same line of the theoretical ambiguity, there is inconsistency in the empirical studies examined the relationship between female directors and audit quality, even in studies addressed same
context (Ararat, Aksu, & Tansel Cetin, 2015a; Mustafa, Che-Ahmad, Chandren, & Sitraselvi, 2017). This inconclusive state of knowledge, at a time when governments are introducing affirmative action policies that require firms to nominate women to boards, is troubling, makes the understanding of the consequences of female’s presence on boards timely and important.

We propose that the theoretical ambiguity and inconsistency of previous empirical evidence is a reflection of the complex relationship between female directors and audit quality that have not been counter for. To grasp this complexity, we develop a theory of monitoring function by female directors that extend existing theory. We propose that the processes of female selection and the consequence of their selection depend on firms characteristics, and therefore the implication of their involvement on corporate board are firm specific (Alfraih & Alfraih, 2016).

Emerging market has been used to develop our theory, and the influence of female directors on monitoring function is conceptualized as determined by the structure of corporate governance and the social perspectives toward gender equality in these contexts (Black, Jang, & Kim, 2006). Based on available literature this study is the first to examine theoretically and empirically the relationship between female directors and audit quality in emerging country.

We examine the theory on a data set of 146 Turkish firms listed in Bursa Istanbul (BIST) for the period of five years between 2011 and 2015. The finding supports our theory, that the relationship between female directors and audit quality contingent on control-ownership wedge. These findings are robust across different measures, enhancing the confidence in their stability. We place Turkey in comparative perceptions with reference to corporate governance structure and culture, and use this comparative approach to demonstrate the wider validity of the study. The outcomes of this study have implications for future government policies because they indicate that women directors could be a desirable to strengthen the monitoring role of the board.

**THEORY AND HYPOTHESES**

The presence of women in board leads to gender diversity. Women involvement align with the logic of the major theories that address the performance implication of board structure- agency theory (Jensen & Meckling, 1976) and resource dependency theory (Salancik & Pfeffer, 1978) in two aspects. First, female directors behave differently than men directors because they view their role and behave in society differently than men directors. Female perceptions of themselves effect their occupation selections and determine the magnitude and quality of the pool of female candidates for board nominations (Barbulescu & Bidwell, 2013). Second, Firms’ stockholders remark female presence differently than men in the corporate boards. This impact on firms demand for female directors and the corporate environment they experience as board members (Ishak, Amran, Manaf, & Bahrain, 2015). These aspects drive females’ involvement in corporate boards and it is influence on firms’ strategic decision (Ding, Murray, & Stuart, 2013). Gender influence is designed by the institutional context in which they take place particularly, corporate governance structure (Doidge, Karolyi, &
Studies illustrate these contextual attributes have important influence on the variations of female presence in the corporate boards in terms of monitoring function (Desender, Aguilera, Crespi, & Garcia-cestona, 2013; Terjesen & Singh, 2008).

The theory is derived on the assumption that the influences of female involvement on boards are inextricably embedded in an institutional context and shape the configuration of the culture and institutional fabric of this context. We sought to address this institutional embeddedness in one setting that has not studied sufficiently particularly emerging market. This definition is suitable for this study because the institutional setting is a core driver of the relationship addressed in this study. The development of theory is based on institutional environment present in these countries.

We start by anticipating differences in the influence of female directors on monitoring function in emerging countries, differentiating between audit quality proxies for instance Big4 auditors and client industry concentration. Previous research in emerging countries treated these audit quality indicators as different operation proxies of the same theoretical construct and proposed that they make little variances for the outcomes (Craswell, Francis, & Taylor, 1995; Mustafa et al., 2017). We propose and that those indicators considers theoretically different of board monitoring creation by female directors. Big4 auditors are expected to have stronger incentives and greater competencies to provide high audit quality (DeAngelo, 1981). Client industry concentration is expected to have greater competencies and stronger reputation incentives to provide high audit quality.

There are many reasons to suggest that female directors in the corporate board in emerging countries will exercise a positive influence on board monitoring function. First, female’s excellence in creating relationships and in cooperative work is of high value for the group work that describes boards’ activity (Dargnies, 2012). Also, female directors tend to excel in monitoring function and to hold management accountable for activities misalignment with firm interests (Triana, Miller, & Trzebiatowski, 2013). We propose that these behavioral characteristics are of specific value in developing countries. Studies explains that the influence of monitoring mechanism on performance is valuable in the presence of weak corporate governance systems (Adams & Ferreira, 2009), which is often the case in developing countries. The luck of strong external monitoring mechanism to oversight management behavior, for instance the market for corporate control, further highlights the value female monitoring abilities (Morck, 2000). Researches in developing countries explains that the existence of female directors in the corporate board reduce accounting manipulation and earnings management, and improve the informativeness of the accounting numbers (Shamsul Nahar Abdullah, Ismail, & Izah, 2017).

Second, the career aspirations of female directors often result in various occupational profiles than male directors (Barbulescu & Bidwell, 2013), and as a consequence their existence on corporate board improve the diversity of functional background. Substantial studies on developed countries recognize diversity as a significant driver of board effectiveness because it connects companies to different external resources. Board diversity has particular value in developing countries, because it mirrors the high level of diversification typical of developing country firms. Diversified
firms are subject to the demands of multiple and diverse environmental dependencies and need varied capabilities to manage them (Salancik & Pfeffer, 1978). Female directors are effective to make vast network with resource controlled by female, and in assisting them to retain female employees (Hillman & Dalziel, 2003). This is likely to be of substantial value in developing countries, where the gender divide inhibits the capability of male directors to improve connect with female directors.

Third, drawing on the female portion of the population, which is often excluded from the pool of candidates for board nominations, is likely to improve the quality of board members. Excluding segments of the population on discriminatory grounds is costly for firms, particularly when the excluded groups are large, as is the case for women (Ding et al., 2013). The board proportion of female directors in developing countries is 7.4 percent compared to developed countries that is about 11.8 (Gladman & Lamb, 2013). It is lags far behind female’s education achievements and their performance in the labor market. The benefits of drawing on this group are thus specifically notable in developing countries (Siegel, Pyun, & Cheon, 2014). Formally:

Hypothesis 1: There is a relationship between female directors and audit quality.

MODERATING EFFECTS: CONTROL-OWNERSHIP WEDGE

The firms’ attributes drive the likelihood of nominations of female and the criteria utilized in their selection. In addition, they shape the corporate governance environment in which women director operates and their capability to impact boards’ functioning and monitoring. Thus, the influence of female directors on board monitoring is contingent on the attributes of firms (Hillman, Shropshire, & Cannella, 2007). Remarkably, between these characteristics is the control-ownership wedge.

There are many reasons for expecting the impact of female directors on board monitoring will be weaker in wedge firms. For example, risk-averse and conformist family firms are likely to occupy female directors because female nominations consider a deviation from societal norms and are high-risk moves (Litov, Moreton, & Zenger, 2012).

The averseness to nominate female deprives wedge firms from the potential economic benefits of female directors. To the extent that wedge firms nominate female, they display preference for selections from within their circles as a means of decreasing risk. Female director nominations based on such relationship are highlighted in developing countries; this is because business relationships are influenced by personal ties to a greater extent than in emerging countries. Corporate board directed by large numbers of group of directors pursue firms agendas that misalignment with that of shareholders’ interests and this unfavorable for shareholders, negatively influence board monitoring. The case is differing when ownership is highly concentrated for instance; the interests of controlling shareholders who nominated the board member are closely aligned. Female director improve board monitoring function, a behavioral characteristics that is likely to be valued by controlling shareholders whose large proportion in the company increases their incentives and abilities to monitor management activities (Shleifer & Vishny, 1986). Therefore, they provide an environment that is encouraging for female directors to enforce themselves and make an influence. Consistently, minority
shareholders valued female’s monitoring skills in the presence of high concentrated ownership, this is because improve minority shareholders protection. Previous studies in developing countries explain that concentrated ownership is positively influence on management manipulation.

In addition, the misalignment of interest between management and shareholders improve in the presence of diffused ownership while this is not the case with high concentrated ownership. Therefore, high concentrated ownership provide suitable environment that is more encouraging for female to demonstrating their tendencies for conflict avoidance and consensus. The moderating influence of control-ownership wedge is likely to be notable in developing countries particularly Turkey, in the presence of high concentrated ownership (Ararat et al., 2015a). The power of concentrated ownership tends to be greater than their equity ownership, as a result of complicated cross-holding and pyramidal ownership in developing countries. Hence, 

**Hypothesis 2: Control-ownership wedge moderates the relationship between female directors and audit quality.**

**METHODS**

The population of this study on concentrates on Turkish listed firms. Hence, Financial institutions and banks are excluded from the sample because they are following various corporate governance principles (Zulkarnain, 2009). Turkey provides an interesting context for our study. The new Turkish commercial code has been issued, effective from July 1, 2012 to improve corporate governance, financial reporting and auditing. Thus, to evaluate the influence of corporate governance in 2012, our study covers the five-year period starting from 2011 to 2015. Also, the Capital Market Board of Turkey (CMBT) promotes firms to employ women in business, including on boards, and has made considerable steps in advancing women. As part of these gender advancement initiatives, in 2013 the CMBT has revised its recommendation by asking the companies to set and disclose a voluntary target level of women on boards, which should not be less than 25%, by a target date they specify. The first Asian government to do so, pioneering among developing countries. Turkey therefore provides a rich context for the study of the monitoring consequence of female directors in developing countries. In addition, Turkey considers a corporate governance context that is common in Europe countries, but it is unfamiliar in a global perception. This offers a fruitful context for our research, and provides the opportunity for theoretical extensions. Lastly, Turkey is interesting also in regards to gender equality. It is notable in its institutional commitment to gender equality and the advancement of women and at the same time deeply rooted cultural resistance to women advancement. This provides an interesting setting for examining the interaction between institutional characteristics for instance, control-ownership wedge in the influencing the relationship we study. Turkish publically listed firms are employed as unite of analysis, this is because these firms are statutory required to report their annual reports. This facilitates the accessibility to firms' annual reports via the BIST. The original sample is consisting of 411 firms, including financial institutions and banks.
Table 1 shows the procedures followed to determine the final sample of firms employed in the study.

**Table 1 Procedure of Sample Selection**

<table>
<thead>
<tr>
<th>Firms</th>
<th>No. of firms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Firms listed on Borsa Istanbul Webpage in 2015</td>
<td>411</td>
</tr>
<tr>
<td>Less: financial institution and holding</td>
<td>142</td>
</tr>
<tr>
<td>Less: firms with missing corporate governance information</td>
<td>15</td>
</tr>
<tr>
<td>Less: firms with missing directors’ profiles</td>
<td>70</td>
</tr>
<tr>
<td>Less: firms with missing interlocking directors’ information</td>
<td>38</td>
</tr>
<tr>
<td>Final sample observations</td>
<td>146</td>
</tr>
</tbody>
</table>

The study excludes 142 non-financial firms and 123 firms due to missing information and weak corporate governance and lower quality auditors. The final sample of this study comprises 146 firms listed on the BIST. BIST consist of 9 two digit industries with more than ten observation firms. The large representation of firms listed on BIST is explained in Table 2 for the nine industries.

**Table 1 Data Composition**

<table>
<thead>
<tr>
<th>Industry</th>
<th>No. of firms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food, beverage and tobacco</td>
<td>18</td>
</tr>
<tr>
<td>Textile, wearing apparel and leather</td>
<td>12</td>
</tr>
<tr>
<td>Paper and paper products, printing and publishing</td>
<td>10</td>
</tr>
<tr>
<td>Chemicals, petroleum rubber and plastic products</td>
<td>27</td>
</tr>
<tr>
<td>Non-metallic mineral products</td>
<td>15</td>
</tr>
<tr>
<td>Fabricated metal products, machinery and equipment</td>
<td>25</td>
</tr>
<tr>
<td>Information technology</td>
<td>14</td>
</tr>
<tr>
<td>Construction and public work</td>
<td>10</td>
</tr>
<tr>
<td>Wholesale and retail trade, hotels and restaurant</td>
<td>15</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>146</strong></td>
</tr>
</tbody>
</table>

Source: KAP.

The larger industry is chemicals, petroleum rubber and plastic products with 27 firms and smaller industry is for construction and public work. To determine the value of SPECLST_MS this study follows Jones, Krishnan, and Melendrez’s (2008) study to deduct industries comprising less than ten firms from the final sample of the study. The empirical analysis based on data collected from firms’ annual reports, complemented byDataStream (for audit quality indicators) and Bursa Istanbul (BIST). Table 3 shows the variables in the model, their operation measures, descriptive statistics, and Pearson coefficient to provide a useful discussion and to afford meaningful information, untransformed variables are utilized.

**Table 3 Descriptive Statistic and Univariate Analysis of Continuous Variables**
This study used panel data analysis instead of cross-sectional or time-series data analysis to gain the inherent benefits of using this approach. Logistic regression is employed for Big4 measured by binary measurement (Gujarati & Porter, 2009), and linear regression model is utilized for SPECLST_MS measured by continues measurement (Schneider, Hommel, & Blettner, 2010).

Our study follow Pallant (2011) to employ assumptions applied in logistic regression: 1) sample size, 2) multicollinearity and 3) outliers. The sample size of this study is 146 firms with an average of 14.6 ~ 15 firms for each independent variable. The proper ratio required is about 10 observations for each explanatory variable according to Pallant (2007). The Variance Inflation Factor (VIF) results of all independent variables and control variables are not greater than 5, and far below the threshold value of 10, as proposed by (Hair, Anderson, Babin, & Black, 2010), as a result this assert to the absence of multicollinearity problem. Outliers represent a unique combination of values across a number of variables or observations that are unusually low and high value on a variable that will distort statistics (Hair et al., 2006). Standardized residual cases of less than -3.3
and more than 3.3 are considered outliers (Pallant, 2007). In this study, the minimum standard residual is -2.38 and the maximum standard residual is -2.40 and this indicates that this study does not have any outliers.

To conduct linear regression analyses effectively, several regression diagnostic tests need be performed to avoid misleading results. Our study outlines the issues related to outliers, normality, linearity, multicollinearity, heteroscedasticity and autocorrelation for the linear regression model. Outliers multicollinearity tests are of the assumptions that must be met for logistic regression, and this test was done for this study. Normality and linearity tests are not conducted because, under panel data analysis, normality and linearity are not major concerns because the standard least squares assumption is not applicable in panel data (Gujarati & Porter, 2009). The results of the Breusch-Pagan/Cook-Weisberg test show p-value of the model SPECLST_MS is significant at 1%. Thus, the null hypothesis of homogeneity of variance (error variances are all equal) could be rejected proposing that the data are heteroscedastic. Consequently, feasible GLS is used in this study to tackle the heteroskedasticity problem as Wooldridge (2002) proposed. The Wooldridge Test for Aurocorrelation displays that it is possible to reject the null hypothesis because F value of the test is below the 5% significant level. This indicates the autocorrelation problem is present. According to the results of univariate test, the Hausman test, Bseusch-Pagan/Cook-Weisberg test and the Wooldridge test, FGLS is able to reweight the error variance and to correct autocorrelation and heteroskedasticity problems (Adkins & Hill, 2008;Gujarati & Porter, 2003).

RESULTS AND DISCUSSION

FEMD has negative influence of 0.9% on Big 4 (Model1). This suggests that for every single increase in FEMD on the board of directors, the impact on the Big 4 auditor falls by 0.9%. However, this relationship is not significant (t = -0.87 & p = 0.384). Previous studies by Kibiya, Che-Ahmad, and Amran (2016) and Mustafa, Che-Ahmad, and Chandren (2017) on this relationship provide support in line with this study. Nevertheless, the insignificant relationship is not surprising because of the negligible proportion of FEMD on Turkish corporate boards. Typically, male directors have dominated the composition of the corporate boards in the most parts of the world. Turkey, in particular, traditions, socio-cultural and religious restrains limit women from occupying board memberships (Torun, 2010).

The regression result of female directors is highly significant at the 1% level of s (t = 3.75; p = 0.000) (Table 4) Model2. From Table 4, the result of the regression shows that the impact of female director is 0.59% and for every change in female directors of 1 unit, industry specialist auditor (SPECLST_MS) will rise by 0.59%. According to resource dependency theory, various attributes of board could demonstrate the variation in the demand for strong monitoring mechanism. Previous evidences by Chapple et al. (2012a), Gul et al. (2008), Gavious et al. (2012), and Kuang (2011) provide support for this relationship. For instance, Kuang (2011) argues that female directors have a positive influence on improving the effectiveness and efficiency of the board. Similarly, Broadbridge et al. (2006) document that gender diversity has an essential impact on
enhancing the corporate governance role. Consequently, the addition of women to the board improves the board monitoring function (Carter, Simkins, & Simpson, 2003). One reason is that female directors are more conscious in protecting their reputational capital and maximizing shareholders’ interests (Gul et al., 2008).

Another reason is that female directors are more conservative with respect to the financial reporting process than their male counterparts, and this positively impacts the board’s demand for a high audit quality. Chapple et al. (2012a) find that board gender diversity improves the board monitoring function and reduces the odds of receiving a qualified opinion from the external auditor. This conclusion is based on that the notion that firms employing female directors on their boards has enough capability to handle their operational risks. In addition, female directors are more active, more risk-averse and more conservative towards litigation risks and want to maintain their reputational capital. The finding partially supports Hypothesis 1. Even though not significant, the moderating effects of wedge with female directors (FEMD) on Big 4 strengthens the variation of audit quality to 13.2% proposing that the FEMD explained 13.2% of the Big 4 Model1. Table 4 results shows that, when the FEMD increases on the board of directors, they affect the Big 4 positively due to wedge. In both cases the relationship is not significant.

The result is, however, not supported by Ararat et al. (2015b) in the area of firm performance who examined the relationship between FEMD and board monitoring intensity. However, this result is supported by the empirical studies of Kibiya, Che-Ahmad, and Amran (2016)and Mustafa, Che-Ahmad, and Chandren (2017) indicating that FEMD has no significant influence on the demand of clients for high quality audit services. However, the insignificant relationship is not unexpected because of negligible proportion of female directors in Turkey at the corporate board level. This infers that a substitution influence exists between board demographic diversity in terms of female directors and audit quality in the presence of a wedge in the Turkish environment. This study is the first to examine the moderate role of wedge on the relationship between these two variables. Desender, Aguilera, Crespi, and Garcíaestona (2013) study results provide a support for this study results. They argue that a substitution impact exists between board composition and ownership structure when it comes to monitoring.

**Table 4 Results of Regression analysis**

| Item   | Model1 | | Model2 | |
|--------|--------| |--------|--------|
|        | Big4   | SPECLST_MS | Big4   | SPECLST_MS |
|        | Coefficient | Standard Errors | Coefficient | Standard Errors | Coefficient | Standard Errors | Coefficient | Standard Errors |
| FEMD   | -0.090 | 0.104 | 0.059*** | 0.015 | -0.131 | 0.109 | 0.097 | 0.066 |
| AGE1   | -0.025 | 0.157 | -0.025* | 0.013 | 0.024 | 0.170 | -0.022 | 0.013 |
| AGE2   | 0.662*** | 0.129 | -0.001 | 0.009 | 0.729*** | 0.133 | 0.005 | 0.009 |
The moderating effects of a wedge on female directors have a lower and an insignificant impact even though the impact is positive (t = 0.75, p = 0.455) Model2. A few previous studies support this relationship. Kibiya, Che-Ahmad, and Amran (2016) and Mustafa, Che-Ahmad, and Chandren (2017) report that an insignificant relationship between FEMD and the demand of clients for high quality audit services. Additionally, the insignificant relationship is not surprising because of the low proportion of female directors serving on the corporate boards of Turkish firms. Consistently, the Deputy Prime Minister of Turkey responsible for the economy has stated that the number of
female in work life whether as a business owner, manager and worker is far from satisfying. The finding does not support Hypothesis 2.

CONCLUSIONS

Our study outcome is conclusive in validating that board demographic proxed by women directors reduce Type II Agency Problems via hire strong monitoring mechanism, which align with agency-dependency theory. Our study offers unique insights and improver the understanding of the impact of control-ownership wedge on the clients to demand for strong monitoring function, specifically in a setting of developing countries, the lack of strong corporate governance code in the Turkish environment. Consistently the general notion and the stream of outcomes of studies of the control-ownership wedge, the adverse impact of control-ownership wedge on board demographic and audit quality is proven by the outcomes of our study. This designates that control-ownership wedge declines the clients demand for strong monitoring function, a result which will be unfavorable to minority shareholders. Consequently, further advances in enactment of the Corporate Governance Code (CGC) to address the distinctive features of control-ownership wedge firms are still required.

References
