The Effect of Board Diversity on the Performance of Banks: Evidence from Turkey

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Abstract
This study has primary two aims. The first is to determine the characteristics of boards of directors in the Turkish banking industry and the second is to investigate the effect of board diversity on performance of the banks. The analyses in this study are built on the banking industry of Turkey in the period from 2008 to 2012. The impact of the board diversity, as measured by the percentage of women and foreign directors on the board and the Blau index, on financial performance is investigated by conducting panel data analysis. The findings of the study provide evidence of a negative relationship between board diversity and financial performance. Hence, the findings do not support the economic case for board diversity, which implies that diverse directors will increase the financial performance of the banks. This study provides additional evidence to the sparse literature regarding the association between board diversity and financial performance in an emerging market context. Furthermore, most prior studies regarding the relationship between gender diversity and performance have excluded financial firms from their samples. In addition, there are few studies that examine the impact of foreign directors on the performance of banks.

Keywords: board of directors, board diversity, financial performance, corporate governance, banking industry, Turkey

1. Introduction
Boards of directors control and monitor the top management of firms on behalf of the shareholders. Due to complexities within the banking sector, the boards of banks take on a special relevance within the framework of limited competition, intense regulation, and high informational asymmetries (de Andrés & Vallelado, 2008). Failure in bank governance can create significant costs (Pathan & Faff, 2013). Thus, the boards of banks play a vital role in controlling the behavior and strategy identification, with inherent implications, of their managers (de Andrés & Vallelado, 2008). Moreover, well-governed banks contribute to the proper functioning of non-financial firms and sustain a more efficient allocation of resources across the economy (Pathan & Faff, 2013).

In the aftermath of corporate scandals, including, Enron, Worldcom, Tyco, and Parmalat, a number of practitioners have highlighted the monitoring role of board of directors (Campbell & Minguez–Vera, 2008) and the importance of board diversity (Ujunwa, Okoyeuzu, & Nwakoby, 2012). Board composition has recently gained a tremendous amount of interest in public debate, academic research, and government agenda due to the supposed benefits derived from diversity in boardrooms (Dang, Nguyen, & Vo, 2013). Many countries, including Norway, Spain, France, and Italy, have enacted laws on the presence of women on the boards of listed companies (Schwizer, Soana, & Cucinelli, 2012). All such legislations aim to increase the quality of the corporate governance system through the presence of women directors (Schwizer et al., 2012). However, most company boards still have only one woman or a small minority of women directors, who can still be considered tokens (Torchia, Calabrò, & Huse, 2011).

The number of foreign directors on boards is increasing in Turkey as a result of international mergers and acquisitions, including in the banking industry. Hence, an increasing number of studies have investigated the impact of board diversity on board effectiveness and firm performance. Many prior studies have argued that the presence of women or foreign directors on the board may improve firm performance if they bring different perspectives to the decision-making processes of the company boards. The main objective of this study is to examine the relationship between board diversity and financial performance in an emerging country, Turkey.
Panel data for Turkish banks from 2008 to 2012 have been analyzed to determine the effect of board diversity on their performance.

This study contributes to the limited existing literature on board diversity and firm performance in several respects. First, there is still a lack of consensus on whether board diversity improves financial performance due to the mixed and contradictory results of research. Hence, this research provides additional evidence to supplement the sparse literature regarding the association between board diversity and bank performance in an emerging market context. Second, the role of women directors on the board has been the subject of political debate in Turkey and is now positively advocated for ethical reasons. The findings of this study will show whether there is also an impact from women’s participation in the boards on improving performance. Furthermore, most prior studies regarding the link between gender diversity and performance have excluded financial firms from their samples. Hence, there is very little evidence concerning the effect of gender diversity on the performance of banks (for example, Pathan & Faff, 2013). In addition, to the best of the author’s knowledge, there are only a few studies that examine the association between foreign directors and financial performance (for example, Ararat, Aksu, & Tansel Cetin, 2010; Ujunwa et al., 2012).

The remainder of the paper is structured as follows. The following section presents the literature review and the theoretical framework. Section 3 develops the hypotheses of the study. Section 4 explains the methodology. Section 5 discusses the results. The last section concludes the paper.

2. Literature Review

The primary aim of a board is to protect the interests of shareholders (Abdullah, 2004). The board of directors has the responsibility for setting corporate goals (Abdullah, 2004), establishing the business strategy (Nekhili & Gatfaoui, 2013), evaluating the appropriateness of the strategies and approaches (Abdullah, 2004), and overseeing and monitoring the actions of the management (Wang & Hsu, 2013). The board functions as a corporate governance mechanism through its appointment, supervision, and remuneration of senior managers, and its impact on overall strategies in firms (Campbell & Minguez-Vera, 2008). Boards of directors may have a more important role as a governance mechanism in banks than in non-financial institutions due to their fiduciary responsibilities, which extend well beyond shareholders to depositors and regulators (Macey & O’Hara, 2003). Thus, a bank’s board plays a vital role in effective governance (Pathan & Faff, 2013).

Proponents of board diversity argue the case for diversity citing ethical and economic gains (Ujunwa et al., 2012). The ethical perspective regards board diversity as desirable, and argues that it is inequitable to exclude certain groups from corporate elites based on gender, race, and religion, among others (Carter, Simkins, & Simpson, 2003). The economic case for a diverse board is that board diversity leads to a more profitable business and creates value for shareholders (Carter, D'Souza, Simkins, & Simpson, 2008). This may be explained by several factors. First, diverse directors may not be perfect substitutes for other board members, but they may have unique characteristics that create additional value (Carter et al., 2008). Second, a diverse board is seen to have a better understanding of the market place, and is considered to increase innovation and creativity (Carter et al., 2003). Moreover, heterogeneous boards can bring alternative perspectives on various issues and greater access to information resulting in creative problem solving (Erhardt, Werbel, & Shrader, 2003). In addition, a higher degree of diversity in a company’s board may send a positive signal to potential job applicants and other stakeholders, such as consumers, suppliers, and the community (Rose, 2007). Hence, a gender and racially diverse board signals that the firm may meet the needs of a diverse market place, understand the business environment, and advise the firm executives effectively (Miller & Triana, 2009).

An increasing number of studies have investigated the impact of gender diversity (for example, Carter et al., 2003; Campbell & Minguez-Vera, 2008; Adams & Ferreira, 2009; Dang et al., 2013) and nationality on firm performance (for example, Randoy, Thomsen, & Oxelheim, 2006; Ararat et al., 2010). However, there is still sparse empirical evidence on the relationship between board diversity and the performance of banks (for example, Pathan & Faff, 2013).

3. Theoretical Framework

3.1 Agency Theory

Agency theory is based on the fact that many corporate managers are not owners but agents of owners contracted to manage the company on their behalf (Ujunwa et al., 2012). According to Fama and Jensen (1983), the board of directors is one of several important mechanisms that control and monitor managers and has a vital role in the managerial policies of the companies. The board of directors aims to solve agency problems between managers and shareholders (Dang et al., 2013). Based on this theory, the presence of women and foreign directors will
increase the board’s effectiveness and firm performance. The basic premise is that diversity may lessen the tendency for boards to engage in groupthink (Ujunwa et al., 2012). Agency theorists also indicate that having women, ethnic minorities, and foreigners as external stakeholders may bring fresh solutions to complex issues (Francoeur, Labelle, & Sinclair-Desgagné, 2007). For instance, female directors might be more active in monitoring and controlling managers by asking more questions and bringing different perspectives to the boardroom (Dang et al., 2013). Furthermore, diversity will increase board independence because people with a different gender, ethnicity, or cultural background might ask questions that would not come from directors with traditional backgrounds (Carter et al., 2003). Hence, diverse boards will improve firm performance by increasing board independence.

3.2 Resource Dependence Theory

Resource dependence theory proposes that companies depend on the resources in their external environments to survive (Pfeffer & Salancik, 1978). The dependence of an entity on the resources in its external environment will pose risks for the business (Liu, Wei, & Xie, 2013). Resource dependence theory suggests four benefits from external linkages, such as the provision of specific resources, the creation of communication with constituents, the provision of support from important groups in the external environment, and the creation of legitimacy (Pfeffer & Salancik, 1978). Boards of directors represent an important means of managing external dependency (Pfeffer & Salancik, 1978), reducing environmental uncertainty (Pfeffer, 1972), and decreasing associated transaction costs (Dang et al., 2013). Resource dependence theory views board diversity as one of the instruments that facilitates access to critical resources (Johnson, Daily, & Ellstrand, 1996). Each director will bring unique attributes and heterogeneity of resources, such as expertise, skill, information, and potential links to constituencies (Hillman, Cannella, & Paetzold, 2000). Firms can respond to changes in their external environment by altering their board composition strategically to provide the benefits of reduced uncertainty (Hillman et al., 2000). Diversity on the board will enhance the information provided by the board to managers and will bring new perspectives and nontraditional approaches to problems (Carter, D’Souza, Simkins, & Simpson, 2010). For instance, women directors are desirable because they bring a breadth of resources, such as prestige, legitimacy, skills, knowledge, and connections to external sources of dependency (Dang et al., 2013).

4. Hypotheses

4.1 Board Diversity

One highly debated characteristic of board diversity is gender (Rao, Tilt, & Lester, 2012). The representation of women on boards is generally very low worldwide, including in developed economies; for example, women represent 12.4% of board members in the United States, 6.4% in the United Kingdom, and less than 5% in Canada (Javed, Saeed, Lodhi, & Malik, 2013). Several researchers have proposed that gender diversity has a positive effect on the financial performance of the entities concerned (for example, Carter et al., 2003; Erhardt et al., 2003; Liu et al., 2013). Several reasons have been documented for this, such as the increased independence of the board, the quality of decisions being made, board effectiveness, different communication channels, etc.

First of all, because women directors do not belong to the “old boys club”, they correspond to the concept of the independent director (Adams & Ferreira, 2009). Furthermore, recruiting more women to boards of directors may add value (Adams & Ferreira, 2004) as they bring different opinions, experiences, working styles, and perspectives to the board (Huse & Solberg, 2006). According to Torchia et al. (2011), women on a board will enable it to make high-quality decisions because more alternatives will be considered by virtue of their diverse approaches. Women are believed to be more intuitive in decision making and have the ability to multitask, whereas men tend to be more task-focused (Jhunjhunwala & Mishra, 2012). Adams and Ferreira (2004, 2009) found that female directors have lower attendance problems compared to male directors, and hence increase board effectiveness. Furthermore, gender diversity may enhance the communication channels of the firms by sustaining good relations with female clients, customers, and employees (Liu et al., 2013). The creation of this linkage is important because nearly half of the human capital and customers of the firm will be composed of women (Carter et al., 2008). Board gender diversity may enhance board reputation to the benefit of the firm (Liu et al., 2013).

Some of the prior discussion regarding the presence of women directors on the board is also notably applicable to foreign directors. First, a larger number of qualified members will be available on the board (Randøy et al., 2006). Second, foreign directors will sustain diverse opinions and perspectives in decision-making processes due to their different backgrounds and experience (Ararat et al., 2010). Third, foreign directors who come from countries with stronger shareholder rights may represent different notions about the role of the board of directors (Ararat et al., 2010). Fourth, foreign directors may promote more effective global relationships and increase
cultural sensitivity, which is critical in an international environment (Carter et al., 2003). Moreover, foreign members can help assure foreign minority investors that the company is professionally managed in their best interests (Randøy et al., 2006). Board nationality is the ratio of foreign directors on the board to total board size. Some prior studies have determined that there is a positive effect of high board nationality on firm performance (for example, Carter et al., 2003; Choi, Park, & Yoo, 2007; Ujunwa et al., 2012).

Three proxies are used to measure the gender diversity and nationality of the board of directors. First, dummy variables are used taking a value of one when at least one woman and foreign director are present on the board. Second, the proportions of women and foreign directors are calculated as the number of total female and foreign directors divided by the total number of directors on the board. The percentage of women or foreign directors may not be an appropriate measure of diversity as the high presence of women or foreign directors may actually show a high degree of homogeneity in terms of gender or nationality (Campbell & Minguez-Vera, 2008). The Blau index (Blau, 1977) takes the maximum value when the proportion of categories (i.e., gender, nationality) is at the maximum (Campbell & Minguez-Vera, 2008). The Blau index ranges from 0 to a maximum of 0.5 and is used to measure board diversity, calculated as follows:

\[
I - \sum_{i=1}^{n} P_i^2
\]

where \( P_i \) denotes the percentage of board members in each category and \( n \) is the number of categories used.

The following hypotheses are proposed:

HP 1a: The presence of women directors on the board has a significant positive impact on bank performance.
HP 1b: The proportion of women directors on the board has a significant positive impact on bank performance.
HP 1c: Gender diversity (as measured by the Blau index) has a significant positive impact on bank performance.
HP 2a: The presence of foreign directors on the board has a significant positive impact on bank performance.
HP 2b: The proportion of foreign directors on the board has a significant positive impact on bank performance.
HP 2c: Nationality diversity (as measured by the Blau index) has a significant positive impact on bank performance.

5. Methodology

5.1 Data

The sample of the study comprises banks operating in Turkey. Two groups of banks development and investment banks and foreign banks which have only one or two branches are excluded from the research to get more homogeneous data. The sample comprises 26 banks and 130 observations in total. The sample for this research represents the total population of the Turkish banking industry, covering all banks operating in four categories, namely, state-owned, privately owned, foreign, and participation. The data were obtained from the banks' annual reports and the website of the Bank Association of Turkey (BAT) for the period 2008 to 2012.

Return on assets (ROA) and return on equity (ROE) are used as measures of bank financial performance, defined as the proportion of net income to total assets and total equity, respectively. Tobin’s Q, which is a widely used firm performance measure in the existing literature, is not a proper proxy for this study because some of the banks in the sample are not listed on the stock exchange.

A number of control variables are included in the model: the logarithm of the total number of directors, BSIZE (for example, de Andrés & Valledado, 2008); the percentage of independent directors to the total number of directors on the board, BINDP (for example, Ararat et al., 2010), the logarithm of total assets of the bank, SIZE (for example, El Mehdi, 2007).

5.2 Descriptive Statistics

Table 1 presents the descriptive statistics for the variables. The average ROA and ROE are 1.61 and 12.50, respectively. Of the 26 banks in the sample, 54.6% have one or more women directors on their boards. The average percentage of female directors on boards in the banking industry, PWOMAN, is 7.96, ranging from 0.00 to 33.33. In addition, the average Blau index of gender, BLAUGENDER, is 0.13, ranging from 0.00 to 0.44. The Blau index will be equal to zero if all of the board members are women or men. The index will be 0.50 if the proportion of women and men is equal and the board is homogeneous in gender. Furthermore, 69.2% of the banks have one or more foreign directors on their boards. The mean percentage of foreign directors on boards, PFOREIGN, is 34.96, ranging from 0.00 to 87.50. The proportion of the foreign directors on bank boards is
relatively high due to foreign mergers and acquisitions in this industry. The average Blau index of nationality, BLAUNATION, is 0.31. On average, boards seem to be more nationally diverse than gender diverse.

The mean value of the number of directors, BSIZE, is 9.20. The average board size reported in this research is less than in several prior studies. For instance, the average size of the board is 16 members for OECD banks (de Andrés & Valledalado, 2008), 20 members for US banks (Adams & Mehran, 2012), and 13 members for European banks (de Cabo, Gímeno, & Nieto, 2012). The average percentage of independent directors on the board, BINDP, is 5.03. The average of the logarithm of total assets of banks, LNSIZE, is 16.46.

Table 1. Descriptive statistics

<table>
<thead>
<tr>
<th>Observation</th>
<th>Mean</th>
<th>Standard deviation</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROA</td>
<td>130</td>
<td>1.61</td>
<td>1.06</td>
<td>-0.19</td>
</tr>
<tr>
<td>ROE</td>
<td>130</td>
<td>12.50</td>
<td>6.846</td>
<td>-1.50</td>
</tr>
<tr>
<td>AWOMAN</td>
<td>130</td>
<td>0.54</td>
<td>0.49</td>
<td>0.00</td>
</tr>
<tr>
<td>PWOMAN</td>
<td>130</td>
<td>7.96</td>
<td>8.55</td>
<td>0.00</td>
</tr>
<tr>
<td>BLAUGENDER</td>
<td>130</td>
<td>0.13</td>
<td>0.13</td>
<td>0.00</td>
</tr>
<tr>
<td>AFOREIGN</td>
<td>130</td>
<td>0.69</td>
<td>0.46</td>
<td>0.00</td>
</tr>
<tr>
<td>PFOREIGN</td>
<td>130</td>
<td>34.68</td>
<td>26.69</td>
<td>0.00</td>
</tr>
<tr>
<td>BLAUNATION</td>
<td>130</td>
<td>0.31</td>
<td>0.22</td>
<td>0.00</td>
</tr>
<tr>
<td>BSIZE</td>
<td>130</td>
<td>9.20</td>
<td>1.55</td>
<td>6.00</td>
</tr>
<tr>
<td>LNBSIZE</td>
<td>130</td>
<td>2.20</td>
<td>0.17</td>
<td>1.79</td>
</tr>
<tr>
<td>BINDP</td>
<td>130</td>
<td>5.03</td>
<td>11.47</td>
<td>0.00</td>
</tr>
<tr>
<td>LNSIZE</td>
<td>130</td>
<td>16.46</td>
<td>1.54</td>
<td>13.43</td>
</tr>
</tbody>
</table>

ROA: return on assets; ROE: return on equity; AWOMAN: takes the value of 1 when there is at least one woman on the board, and 0 otherwise; PWOMAN: percentage of women directors on the board; BLAUGENDER: Blau index of gender diversity; AFOREIGN takes the value of 1 when there is at least one foreign director on the board, and 0 otherwise; PFOREIGN: percentage of foreign directors on the board; BLAUFORINDEX: Blau index of foreign directors; BSIZE: number of directors on the board; LNBSIZE: logarithm of the number of directors on the board; BINDP: percentage of independent directors on the board; LNSIZE: logarithm of total assets of the bank.

The means of the ROA and ROE of banks are compared for banks that have at least one woman on the board and those without woman directors between the years 2008 and 2012. The results of the comparison indicate that those banks with at least one female director on their boards perform worse compared to those that do not. They have a lower level of ROA (1.474 versus 1.795) and ROE (10.424 versus 14.997), significant at the 0.10 and 0.01 levels, respectively, as shown in Table 2.

Table 2. Comparisons of banks with female directors to those without mean for firm years with female directors

<table>
<thead>
<tr>
<th></th>
<th>Mean for firm years with female directors</th>
<th>Mean for firm years without female directors</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROA</td>
<td>n = 71</td>
<td>n = 59</td>
<td>-.321*</td>
</tr>
<tr>
<td>ROE</td>
<td>1.474</td>
<td>1.795</td>
<td></td>
</tr>
<tr>
<td></td>
<td>10.424</td>
<td>14.997</td>
<td>-4.572**</td>
</tr>
</tbody>
</table>

Note. * p < 0.10, ** p < 0.01.

Means of ROA and ROE of banks which have at least one foreign director on board and without foreign directors are compared for complete sample data. The comparison findings show that banks which have at least one foreign director on their boards have lower level of ROA (1.556 versus 1.762) and ROE (11.197 versus 15.432). This finding reveals that low representation banks outperform high representation banks. The difference of ROA of two groups is not significant, while difference of ROE is significant at 0.01 level. The details of analysis are presented in Table 3.
Table 3. Comparisons of banks with foreign directors to those without

<table>
<thead>
<tr>
<th></th>
<th>Mean for firm years with foreign directors</th>
<th>Mean for firm years without foreign directors</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>( n = 90 )</td>
<td>( n = 40 )</td>
<td></td>
</tr>
<tr>
<td>ROA</td>
<td>1.556</td>
<td>1.762</td>
<td>-0.205</td>
</tr>
<tr>
<td>ROE</td>
<td>11.197</td>
<td>15.432</td>
<td>-4.234*</td>
</tr>
</tbody>
</table>

Note. * \( p < 0.01 \).

6. Results

6.1 Pearson Correlation Analysis

Pearson correlation analysis was carried out to determine the bivariate relationships among the variables before panel data analysis. The correlation analysis results are presented in Table 4. The correlation findings suggest that board diversity has a negative correlation with financial performance indicators.

Table 4. Pearson correlation analysis

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 ROA</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 ROE</td>
<td>0.728**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 AWOMAN</td>
<td>-0.151*</td>
<td>-0.333**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 PWOMAN</td>
<td>-0.220**</td>
<td>-0.352**</td>
<td>0.851**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 BLAUGENDER</td>
<td>-0.209**</td>
<td>-0.349**</td>
<td>0.893**</td>
<td>0.984**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 AFOREIGN</td>
<td>-0.089</td>
<td>-0.286**</td>
<td>0.061</td>
<td>0.012</td>
<td>0.020</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7 PFOREIGN</td>
<td>-0.183*</td>
<td>-0.349**</td>
<td>0.026</td>
<td>-0.039</td>
<td>-0.023</td>
<td>0.869**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8 BLAUNATION</td>
<td>-0.081</td>
<td>-0.254**</td>
<td>-0.032</td>
<td>-0.043</td>
<td>-0.041</td>
<td>0.940**</td>
<td>0.841**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9 LNBSIZE</td>
<td>0.048</td>
<td>0.101</td>
<td>0.195*</td>
<td>0.073</td>
<td>0.119</td>
<td>0.175*</td>
<td>0.211**</td>
<td>0.200*</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10 BINDP</td>
<td>-0.089</td>
<td>0.017</td>
<td>0.116</td>
<td>0.132</td>
<td>0.128</td>
<td>-0.278</td>
<td>-0.282**</td>
<td>-0.270**</td>
<td>0.162*</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>11 LNSIZE</td>
<td>0.186**</td>
<td>0.595**</td>
<td>-0.164*</td>
<td>-0.109</td>
<td>-0.126</td>
<td>-0.217**</td>
<td>-0.288**</td>
<td>-0.265**</td>
<td>0.146</td>
<td>0.092</td>
<td>1</td>
</tr>
</tbody>
</table>

Note. **Correlation is significant at the 0.01 level (two-tailed).
*Correlation is significant at the 0.05 level (two-tailed).

6.2 Panel Data Analysis

Panel data analysis was conducted to examine the impact of board diversity on bank performance. Panel data analysis is a useful methodology which eliminates estimation bias to a certain extent and also addresses problems related to multicollinearity. Moreover, panel data analysis specifies the time-variant relationship between independent and dependent variables (Baltagi, 2001). The three models proposed are given as:

Model 1:

\[
PERF = \beta_0 + \beta_{1}AWOMEN + \beta_{2}AFOREIGN + \beta_{3}LNBSIZE + \beta_{4}BINDP + \beta_{5}LNSIZE + \epsilon
\]

Model 2:

\[
PERF = \beta_0 + \beta_{1}PWOMEN + \beta_{2}PFOREIGN + \beta_{3}LNBSIZE + \beta_{4}BINDP + \beta_{5}LNSIZE + \epsilon
\]

Model 3:

\[
PERF = \beta_0 + \beta_{1}BLAUGENDER + \beta_{2}BLAUNATION + \beta_{3}LNBSIZE + \beta_{4}BINDP + \beta_{5}LNSIZE + \epsilon
\]

The variables used in the model are defined as follows:

PERF: The percentage of net income to total assets and equity (ROA and ROE), respectively.

AWOMEN: Takes the value of 1 when there is at least one woman on the board and 0 otherwise.

PWOMEN: Percentage of women directors on the board.

BLAUGENDER: Blau index of gender diversity.

AFOREIGN: Takes the value of 1 when there is at least one foreign director on the board and 0 otherwise.

PFOREIGN: Percentage of foreign directors on the board.
BLAUNATION: Blau index of foreign directors.
LNBSIZE: The logarithm of the number of total directors on the board.
BINDP: The proportion of independent directors on the board.
LNSIZE: The logarithm of total assets of the bank.
BINDP: The proportion of independent directors on the board.
\( \varepsilon \): Error term.

Fixed effects and random effects were compared using the Hausman test as displayed in Table 5. The Hausman test statistics (\( p > .05 \)) for all models show that random effects are more appropriate and efficient compared to fixed effects, and thus the results for random effects are taken into consideration for further discussion and stating the implications of the study.

Table 5. Hausman test

<table>
<thead>
<tr>
<th>Dependent variable</th>
<th>ROA</th>
<th>ROE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Model 1</td>
<td>Model 2</td>
</tr>
<tr>
<td>Hausman test</td>
<td>1.44</td>
<td>2.25</td>
</tr>
<tr>
<td>Significance level (p-value)</td>
<td>0.919</td>
<td>0.813</td>
</tr>
</tbody>
</table>

Table 6 presents the results of the panel data analysis of the three models regarding board diversity. While there are several theoretical arguments that support board diversity, there is a lack of consensus in the prior literature due to mixed and contradictory findings. Such results are not unexpected because the link between board diversity and financial performance is both theoretically and empirically complicated (Carter et al., 2008). This study examined the relationship between board diversity and firm performance for additional evidence using the two dependent variables ROA and ROE.

Table 6. Random effects model

<table>
<thead>
<tr>
<th>Model: Random effects</th>
<th>Dependent variable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Independent variables</td>
<td>ROA</td>
</tr>
<tr>
<td>AWOMAN</td>
<td>-0.232</td>
</tr>
<tr>
<td>PWOMAN</td>
<td>-0.024**</td>
</tr>
<tr>
<td>BLAUGENDER</td>
<td>-1.433***</td>
</tr>
<tr>
<td>AFOREIGN</td>
<td>-0.200</td>
</tr>
<tr>
<td>PFOREIGN</td>
<td>-0.086**</td>
</tr>
<tr>
<td>BLAUNATION</td>
<td>-0.004</td>
</tr>
<tr>
<td>LNBSIZE</td>
<td>0.646</td>
</tr>
<tr>
<td>BINDP</td>
<td>-0.010</td>
</tr>
<tr>
<td>LNSIZE</td>
<td>0.102</td>
</tr>
<tr>
<td>Constant</td>
<td>-0.311</td>
</tr>
<tr>
<td>R-square (within)</td>
<td>0.039</td>
</tr>
<tr>
<td>R-square (between)</td>
<td>0.188</td>
</tr>
<tr>
<td>R-square (overall)</td>
<td>0.065</td>
</tr>
<tr>
<td>Wald Chi^2</td>
<td>8.04</td>
</tr>
<tr>
<td>Number of observations</td>
<td>130</td>
</tr>
<tr>
<td>Number of groups</td>
<td>26</td>
</tr>
</tbody>
</table>

Note. \( * p < 0.10, ** p < 0.05, *** p < 0.01 \).

The results indicate that AWOMAN (\( \beta = -0.232, p < .1; \beta = -3.418, p < .01 \)), PWOMAN (\( \beta = -0.024, p < .05; \beta = -0.243, p < .01 \)), and BLAUGENDER (\( \beta = -1.433, p < .01; \beta = -15.100, p < .05 \)) all have a negative impact on both ROA and ROE, respectively, suggesting that women directors on the board lead to lower performance in the banking industry. All the values are significant, with the exception of the effect of AWOMAN on ROA, which is not significant. Thus, H1a, H1b, and H1c are rejected. Hence, the findings of this study indicate a negative
impact of gender diversity on financial performance. Previous literature regarding the relationship between
gender diversity and firm performance is inconclusive. Some of the studies found a positive relationship (for
example, Carter et al., 2003; Liu et al., 2013), some found a negative relationship (for example, Darmadi, 2013),
and others no relationship at all (for example, Rose, 2003; Francoeur et al., 2008; Gallego-Álvarez,
García-Sánchez, & Rodríguez-Dominguez, 2010; Dang et al., 2013). The mixed results may be caused by
several factors, such as the use of different methodology, divergent and small samples, short-term observation,
industry coverage, and different control variables, etc. (Miller & Triana, 2009; Pathan & Faff, 2013). The
possible reasons for the reported negative relationship are various. First, gender diversity in boardrooms can be
disadvantage, especially in terms of group performance. Different styles, attitudes, and perspectives may
increase conflict, reduce cohesion, and hinder communication and coordination within the team (Jhunjhunwala
& Mishra, 2012). Such conflicts may slow the decision-making process, which could have a negative effect in
competitive environments (Gallego-Álvarez et al., 2010). Second, gender diversity may entail costs in digesting
different viewpoints and resolving disagreements (Adams & Ferreira, 2004, 2009). Third, board diversity may
increase the probability of ambiguities, misunderstandings, and decision errors (Randøy et al., 2006). Hence,
heterogeneous boards may have a negative impact on board effectiveness because of coordination difficulties,
group conflicts, slower decision making, and lack of harmony. Moreover, women directors may affect the
shareholder value negatively if their appointment is motivated by societal pressure for greater equality of the
sexes (Campbell & Mínguez-Vera, 2008). In addition, gender diverse boards may not lead directly to
performance improvement in firms if women directors are seen as tokens and do not have the power to affect
ideas (Miller & Triana, 2009). Board members not originating from the traditional “old boys’ club” may adopt
the norms and behaviors of the conventional board members (Rose, 2003). For instance, a token woman may
feel marginal to the decision-making process and unable to voice her own views and opinions, contrary to
expectations (Grosvosd, Brammer, & Rayton, 2007).

The results show that AFOREIGN ($\beta = -0.200, p > .1$; $\beta = -3.032, p < .01$), PFOREIGN ($\beta = -0.86; p < .05$; $\beta =
-0.071, p < .01$), and BLAUNATION ($\beta = -0.004, p > .1$; $\beta = -0.053, p < .05$) all have a significant negative effect on
ROA and ROE, respectively. These results are significant, except for AFOREIGN and BLAUNATION, which do
not affect ROA significantly. Hence, H2a, H2b, and H2c are rejected. This finding is contrary to those of prior
studies (for example, Carter et al., 2003; Choi et al., 2007). A possible explanation for this is that the
appointment of foreign directors on boards is due to foreign mergers and acquisitions in the Turkish banking
industry, rather than governance issues. Furthermore, foreign board members may be less informed about
domestic issues and thus reduce the board’s effectiveness (Ujunwa et al., 2012).

The results of this research suggest that the assignment of women and foreign directors should not be based
solely on financial criteria, but on other aspects. It may be socially and ethically correct to achieve a balanced
presence of both genders in the boardroom (Gallego-Álvarez et al., 2010). Constituting an effective diverse
board requires careful planning and the right selection of the right mix of directors (Jhunjhunwala & Mishra,
2012). However it needs further investigation.

Examining the association between the control variables and ROA and ROE, it can be observed first that
LNBSIZE has a significant positive effect on ROE. This finding is compatible with prior studies (Arslan, Karan,
& Ekşi, 2010; Adams & Mehran, 2012; Darmadi, 2013). Larger boards may develop firm performance by
increasing the effectiveness of the decision-making processes through the diversified experience and know-how
of various members (Arslan et al., 2010). Furthermore, larger boards may have more directors with subsidiary
directorships who are particularly suited to dealing with organizational complexity (Adams & Mehran, 2012).

Whilst agency and resource dependence theories support the presence of independent directors on the board, the
findings of this study surprisingly fail to determine a significant impact of independent directors on bank
performance. This finding is compatible with Adams and Mehran (2012). Several factors may explain this result.
First of all, there may be information asymmetry between the dependent and independent members of a board
(Arslan et al., 2010). In addition, independent directors may not have access to adequate and detailed
information about the operations of entities. On the other hand, insider directors are considered to have access to
a greater amount and better quality of organizational information relevant to strategic decisions (Wang & Hsu,
2013).

7. Conclusion

The board of directors plays a significant role in bank governance, either through monitoring the managers or
advising them in the design and implementation of strategies (de Andrés & Valllelado, 2008). One of the most
important governance issues currently facing the management of companies is the composition of the board of
directors (Carter et al., 2003). Hence, the impact of board composition on a firm’s financial performance has been an area of considerable research interest. Prior studies suggest that the composition of the board may influence the effectiveness of board decisions and thus the financial performance of the entities (for example, Rose, 2003; de Andrés & Valledado, 2008; Adams & Ferreira, 2009). This article has analyzed the relationship between board diversity and bank performance by employing panel data methodology. Prior empirical research on the association between board diversity and financial performance is sparse and inconclusive. Hence, this paper contributes to the limited existing body of literature by presenting new insights regarding the impact of board diversity on bank performance in an emerging country context, Turkey.

The findings of the study indicate that there is a low level of female representation on Turkish bank boards at only 7.96%. On the other hand, the percentage of foreign directors is high, with a value of 34.68%. Moreover, the results of the research provide evidence of a negative relationship between board diversity and bank performance.

The article’s findings have important ramifications for policy and practice. The findings of this study do not support the appointment of women directors to the boards from a financial perspective. This negative relationship may due to the low presence of women directors on boards. The result of the analyses suggest that the appointment of women directors should be based on criteria other than financial performance in line with the arguments of Carter et al. (2010) and Dang et al. (2013). In fact, arguments regarding female representation on boards may be based on ethical and economic grounds (Campbell & Mínguez-Vera, 2008). The former proposes that excluding women from company boards on the grounds of gender is immoral (Campbell & Mínguez–Vera, 2008). For instance, the under-representation of women in boardrooms raises ethical issues with respect to equality and discrimination in employment (Nekhili & Gatfaoui, 2013). Thus, companies may increase female representation on boards as a response to internal preferences and external pressure rather than an improvement in firm performance (Farrell & Hersch, 2005; Adams & Ferreira, 2009).

The evidence of this research does not provide support for policies regarding having a quota of female and foreign directors on boards of directors based on the expectation of improved financial performance. In fact, political debate concerns under-representation of women in powerful position due to discriminatory applications (Mensi-Klarbach, 2014). Therefore, quota-based policies may prevent gender discrimination on boards and thus promote and sustain gender equity. Turkey is one of the countries with a low percentage of female representation on boards. Affirmative programs have the potential to increase the number of females in boardrooms (Grosvold et al., 2007). For instance, Norway enacted laws to foster the presence of women directors on boards. Spain has also followed Norway’s lead by introducing a law that requires a 40% quota of female directors by 2015 (Adams & Ferreira, 2009). Most of these legislations will equalize and strengthen the position of women in the boardroom and improve corporate governance (Grosvold et al., 2007). Hence, policymakers in Turkey should pay attention to the effect of mandated reforms regarding board diversity and may choose to apply affirmative action programs to create more diverse boards of directors.

There are several directions for future research arising from this study. First, this research could be undertaken in other similar emerging countries to provide the opportunity for comparison of the findings. Second, the impact of the presence of women directors on bank performance should be analyzed again after the passing of legislation regarding gender quotas. Third, the impact of several other variables regarding board diversity that are not considered in this research, such as age, education, and experience, and their influence on bank performance should be examined in future studies.

References


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