BOARDS OF DIRECTORS AND FIRM PERFORMANCE: A STUDY OF NON-FINANCIAL LISTED FIRMS ON THE KUWAIT STOCK EXCHANGE

Mejbel Al-Saidi *

* Accounting Department, College of Business Studies, PAAET, Kuwait
Contact details: Accounting Department, College of Business Studies, PAAET, PO Box 23167, Safat 13092, Kuwait

1. INTRODUCTION

Financial crises around the world beginning in 1997, the year of the Asian crisis, and extending to the current coronavirus pandemic have helped governments understand that strong corporate governance rules reduce the impact of these crises. Robust corporate governance rules lead to strong shareholders’ rights, strong boards of directors, high levels of disclosure, high levels of auditing, and low levels of corruption. Thus, having strong corporate governance rules will protect firms and economies in general in the face of financial crises. Several studies from developed and developing countries have found that robust corporate governance principles lead to improvements in both firm performance and value.

Prior to 2017, there were no corporate governance rules in Kuwait. The previous rules were silent regarding boards of directors, shareholders’ rights, disclosure, and auditing. However, at the beginning of 2017, the Kuwaiti government introduced new governance rules and required all firms listed on the Kuwait Stock Exchange (KSE) to comply with these rules. This study examined the impact of boards of directors on firm performance following the implementation of these new rules using a sample of 89 non-financial listed firms from 2017 to 2019. The study used four board variables – namely, board size, board independence, family directors, and board diversity – and found that, based on Tobin’s results, board size, board independence, and board diversity significantly impact firm performance whereas the ROA results indicate that only family directors significantly impact firm performance.

Keywords: Corporate Governance, Boards of Directors, Kuwait, Kuwait Stock Exchange (KSE)

Authors’ individual contribution: The Author is responsible for all the contributions to the paper according to CRediT (Contributor Roles Taxonomy) standards.

Declaration of conflicting interests: The Author declares that there is no conflict of interest.
Cooperation Council (GCC) countries (i.e., Bahrain, Saudi Arabia, Qatar, the UAE, Oman, and Kuwait) to introduce corporate governance rules. Thus, the results of this study will be very useful for the remaining six GCC countries in updating their rules. Second, Kuwait is a developing country, and studying the impact of boards of directors on firm performance will be very useful to our understanding of whether differences exist between the situation in Kuwait and the situation in developed countries. Third, all previous studies that examined the situation in Kuwait conducted their empirical work absent corporate governance rules. Thus, their results do not accurately reflect the current situation.

The main question of this study is: What is the impact of boards of directors on firm performance? Specifically, how do board size, board independence, family directors, and board diversity (presence of women) affect firm performance? Do the results in this study support those found in developed or developing countries or not, and which of the board variables affect (or not) firm performance? To answer these questions, a sample of 89 non-financial listed firms was identified and examined from 2017 to 2019. Boards of directors were studied using four diverse variables: board size, board independence, family directors, and board diversity. The remainder of this study is organized as follows. Section 2 presents the literature review and hypothesis development related to board variables and firm performance. Section 3 presents the research methodology. Section 4 presents the results and a discussion of this study. Section 5 concludes the study.

2. LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

The theoretical framework work of this study is derived from agency theory, which is based on the arguments of Berle and Means (1932), who posited that the separation between ownership and control in any firm leads to competing interests between managers and shareholders. Jensen and Meckling (1976) subsequently supported this argument, adding that this conflict of interests leads to agency conflicts between managers and shareholders because of their divergent goals and interests. Building on these arguments, La Porta, Lopez-de-Silanes, and Shleifer (1999) argued that, in some countries, other conflicts exist, including conflicts between large shareholders and small shareholders as well as between large shareholders and creditors. All of these researchers argued that firms must use effective corporate governance mechanisms to reduce these conflicts; in the absence of such mechanisms, firm performance and value will be negatively impacted.

There are two types of corporate governance mechanisms: internal and external mechanisms. Farinha (2003) argued that internal mechanisms included ownership structure, board of directors, compensation, and financial policies whereas external mechanisms included market law, labor law, and regulations. Gillan (2006) documented that ownership structure, board of directors, and manager incentive as internal mechanisms while external mechanisms include legal systems, regulations, market law, and labor law. Haniffa and Hudaib (2006) stated that

To curb agency conflict and limit agency costs, various internal and external mechanisms have been suggested through what is known as corporate governance. The governance mechanisms include, among others, board structure variables, debt financing, shareholdings by insiders and outsiders, and market for corporate control (p. 1031).

To achieve the primary goal of this study, and considering the data availability in Kuwait, four mechanisms - namely, board size, board independence, family directors, and board diversity - were selected for examination. Table A.2 in Appendix presents previous studies that examined the impact of these four mechanisms on firm performance.

Board size is a significant factor in the governance of a firm (Jensen & Meckling, 1976). Lipton and Lorsh (1992) found that the number of directors on boards should be between seven and eight as a greater number of board members renders boards less effective and wastes both time and effort. The agency theory argues that small board size is more effective and leads to higher firm performance (Jensen & Meckling, 1976) because of the meeting and coordination costs and the freerider problem associated with larger boards. Empirically, many studies from developed and developing countries have examined the impact of boards on firm performance, yielding mixed results. For example, Yermack (1996) found a negative correlation between the financial ratio (Tobin’s Q) and board size for 452 listed firms in the U.S. Similarly, Agrawal and Knoeber (1999), Bhagat and Black (2002), Lin and Jen (2011), and Shahrier, Ho, and Gaur (2018) found that small boards are more likely to be associated with lower agency costs, supporting these results. However, other studies (Anis, Chizema, Lui, & Fakhreldin, 2017; Ciftci, Tatoglu, Wood, Demirbag, & Zaim, 2019; Coles, Daniel, & Naveen, 2008; Haniffa & Hudaib, 2006; Kiel & Nicholson, 2003; Saleh & Islam, 2020) found a positive association between board size and firm performance. They argued that large boards are very useful for listed firms and provide them with greater skills and experience as well as diversity in communication. Still, other studies, such as Sarpong-Danquah, Gyimah, Afriyie, and Asiama (2018), Habbash and Bajaher (2015), Wang, Abbasi, Babajide, and Yekini (2019), found no empirically significant relationship between the two variables.

Within Kuwait, inconsistent with the agency theory perspective, Al-Shammari and Al-Sultan (2009) found a significant positive relationship between board size and financial performance. However, this study was conducted on absent corporate governance rules. Article 181 requires listed firms to maintain a board size with no maximum number and not less than five members, according to the New Companies Law (NCL) of 2016.1Previous studies have yielded mixed results regarding the impact of board size on firm performance, and all of these studies have provided logical reasons for their conclusions. However, the current study will follow the argument of the agency theory, which means that small board size is better for Kuwait listed firms because such

1 Article 181 in NCL in 2016 stated that “the members of the board of directors may not be less than five”.

---

1 Corporate Ownership & Control / Volume 18, Issue 2, Winter 2021

VIRTUS

INTERPRESS

41
boards provide firms with greater coordination and communication and, therefore, increase the level of monitoring and control. Thus, small boards are expected to reach better decisions than large boards. In light of these factors, the first hypothesis is as follows:

**Hypothesis 1 (H1): Board size negatively impacts firm performance.**

From another perspective, agency theory argues that board independence is an important mechanism that improves firm performance and protects the interests of all shareholders against the risky decisions of managers (Jensen & Meckling, 1976). All of the current codes in all developed countries recommend that firms increase the number of independent directors. For example, The Cadbury Committee (1992, p. 12) stated that the main purpose of independent directors is to “bear on issues of strategy, performance and resources including key appointments and standards of conduct” because independent directors do not have conflicts with large shareholders and managers due to their financial independence. Thus, effective monitoring by these directors is likely to increase firm performance and reduce agency conflicts.

However, empirical studies have produced mixed results related to the impact of board independence on firm performance. For example, Sarpon-Danquah et al. (2018) investigated the level of board independence and found positive effects on firm performance in Ghana. Anis et al. (2017) examined the situation in Egypt, and Habbash and Bajaher (2015) studied the relationship in Saudi Arabia. Both studies yielded similar results. Lin and Jen (2011) confirmed these findings using a data sample from Taiwan. They concluded that most independent board members work to protect all shareholders and minimize the level of agency conflicts. Moreover, Shahrier et al. (2018) tested the relationship between board independence and firm performance in Malaysia and concluded that the presence of board independence positively affects firm performance. Conversely, although others disagree with these results, Coles et al. (2008), Bhagat and Black (2002) found that board independence negatively impacts firm performance in the US. Yermack (1996) found similar results and concluded that many independent directors in the US do not have the necessary skills or qualifications. Agrawal and Knoeber (1996) also examined the impact of board independence on firm performance in the same country and identified results that supported previous studies. Finally, many studies such as Haniffa and Hudaib (2006), Al-Shammari and Al-Sultan (2009), and Wang et al. (2019) failed to identify any relationship between the two variables.

In the case of Kuwait, the newly established rules currently require firms to have at least one independent board member, with no more than 50% of the total directors on the board being independent. Based on agency theory, the new Kuwaiti corporate governance rules, and the results from previous studies, the current study argues that independent boards help firms increase firm performance and reduce agency conflicts between shareholders and managers as well as between large shareholders and small shareholders. Thus, the second hypothesis is as follows:

**Hypothesis 2 (H2): Board independence positively impacts firm performance.**

In terms of family directors, this study argues that family directors positively impact firm performance, which is consistent with agency theory. Agency theory argues that family directors reduce agency conflicts between managers and shareholders because both are essentially the same people (Jensen & Meckling, 1976). Family directors usually have control over ownership and management roles in the firm, which leads to reduced agency costs (controlling and monitoring costs) between shareholders and managers as well as among shareholders. Thus, this arrangement increases firm performance. Empirically, as with the previous two variables, the literature review produced mixed results. For example, Villalonga and Amit (2006), Sraer and Thesmar (2007), Anderson, Mansi, and Reeb (2003) found that family directors or members positively affect firm performance. Their results argued that the presence of family reduces agency conflicts between different parties. However, other studies found evidence of a negative relationship between family directors and firm performance, such as Lin and Jen (2011) and Shahrier et al. (2018). They argued that non-family directors are better in terms of skills, qualifications, and experience. Meanwhile, other studies, such as Habbash and Bajaher (2015) and Ciftci et al. (2019), failed to find any association between family directors and firm performance in Saudi Arabia or Turkey, respectively. Thus, no one conclusion can be drawn regarding the impact of family directors on firm performance. The association between family directors and financial performance is still unresolved.

In the case of Kuwait, families are very strong and have a strong influence over the Kuwaiti government, and their names and reputations are very important to them. Family directors conduct business according to the law and protect the interests of all shareholders because this behavior enhances their family name among people as well as in Kuwaiti society as a whole. As a result, Kuwait families care more about their members’ skills and experience. Thus, the third hypothesis is as follows:

**Hypothesis 3 (H3): Family directors positively impact firm performance.**

Finally, following the financial crisis, many studies argued that board diversity (i.e., the presence of women) can help reduce agency conflicts during a meeting. Agency theory argues that board diversity may lead to reduced agency conflicts and improved firm performance (Jensen & Meckling, 1976). Consistent with this theory, some studies have argued that female directors are like independent directors in that both can protect the interests of all parties and reduce agency conflicts between managers and shareholders. However, empirical studies have produced mixed results. For example, Green and Homroy (2018) examined the situation in 11 developed countries from 2004 to 2015 and found that, when a woman serves on a board of directors, the firm has higher...
performance and value. In the US, Australia, and Ghana, studies by Fahlenbrach (2009), Nguyen and Faff (2007), and Sarpong-Daquah et al. (2018), respectively, found that the presence of a woman on a board positively impacts firm performance. All of these studies argued that firms with a high proportion of women members increase their effectiveness in controlling and reducing agency conflicts.

However, Adams and Ferreira (2009) examined the same issue from 1996 to 2003 in the US and found that women in the boardroom had a negative effect on firm performance, particularly for firms with strong corporate governance rules. Finally, the third category of studies failed to find any significant impact in terms of firm performance when women served on boards, including Anis et al. (2017), Wang et al. (2019), and Saleh and Islam (2020). They argued that, in some countries, women are more likely to follow male directors, while some lack the necessary skills and education. In addition, some women appear to obtain their positions through family influence.

Not enough information is available about the percentage of Kuwaiti females on boards of directors. However, dependent upon the Kuwaiti culture, one can argue that female representation in Kuwaiti firms is still very weak. Thus, studying this variable should prove very interesting and may also yield a strong contribution to the literature review. This study argues that board diversity, or the presence of females, will lead to improved firm performance and reduce agency conflict, thereby increasing the value of decision-making processes. Thus, the fourth hypothesis is as follows:

Hypothesis 4 (H4): Board diversity (the presence of women) positively impacts firm performance.

3. RESEARCH METHODOLOGY

This study used a sample of 89 non-financial listed firms during a period spanning from 2017 to 2019 (see Table 1). The study excluded all financial firms because they have different capital structures. In addition, 14 non-financial firms were excluded due to missing data.

Table 1. Study sample (2017-2019)

| Sector                | Total firms | Excluded firms | Included firms |
|-----------------------|-------------|----------------|----------------|
| Financial firms       | 70          | 70             | 0              |
| Oil and gas           | 0           | 1              | 5              |
| Basic metals          | 4           | 0              | 4              |
| Industrials           | 28          | 5              | 23             |
| Consumer goods        | 3           | 0              | 3              |
| Health care           | 5           | 0              | 0              |
| Consumer services     | 14          | 2              | 12             |
| Telecommunications    | 5           | 0              | 5              |
| Real estate           | 39          | 6              | 33             |
| Technology            | 1           | 0              | 1              |
| Total                 | 173         | 84             | 89             |

All data were collected from listed firms’ annual reports and the KSE website. The study used two performance measures as dependent variables – Tobin’s Q and ROA – to enhance the study’s robustness. This method is often used, including by studies such as Yermack (1996), Bhagat and Black (2002), Haniffa and Hudaib (2006), Anis et al. (2017), and Al-Shammari and Al-Sultan (2009). The current study also used four independent variables – namely, board size, board independence, family directors, and board diversity (presence of women on boards) – and three control variables (i.e., debt ratio, firm size, and industry type; see Table 2). To achieve the study’s objective, the following equations were used:

\[ TQ \ (Model \ 1) = \alpha + \beta_1 BS + \beta_2 BI + \beta_3 FD + \beta_4 BD + \beta_5 DT + \beta_6 FS + \beta_7 IT + \varepsilon \]  

\[ ROA \ (Model \ 2) = \alpha + \beta_1 BS + \beta_2 BI + \beta_3 FD + \beta_4 BD + \beta_5 DT + \beta_6 FS + \beta_7 IT + \varepsilon \]

Table 2. Study variables

| Variables              | Definitions                                      |
|------------------------|--------------------------------------------------|
| Tobin’s Q (TQ)         | Market value of firm + total debt = book value of total assets |
| Return on assets (ROA) | Net income + total assets                        |
| Board size (BS)        | Total board directors on the board of directors  |
| Board independence (BI)| Total independent directors to total directors   |
| Family directors (FD)  | Proportion of family directors on the board of directors |
| Board diversity (BD)   | Dummy variable (1 if the firm has at least one woman on the board, and 0 otherwise) |
| Debt (DT)              | Total liabilities + total assets                 |
| Firm size (FS)         | Natural log of total assets                      |
| Industry type (IT)     | Industry sectors in KSE (nine non-financial sectors) |

4. RESULTS AND DISCUSSION

4.1. Descriptive analysis

This study used OLS regressions to examine five assumptions: multicollinearity, homoscedasticity, autocorrelation, linearity, and normality. No multicollinearity was found among the variables (see Table 3). Multicollinearity may be a problem when the correlation among variables exceeds 80% (Brooks, 2014). Table 4 demonstrates that the study variables were not normally distributed. The analyses of the skewness and kurtosis and normality test statistics indicated that the normality assumption was not met. The analyses of residuals, Q-Q plots, and studentized residuals against predicted values found that the assumptions of linearity, autocorrelation, and homoscedasticity were not present. Thus, four variables (i.e., Tobin’s Q, ROA, board independence, and firm size) were transformed into normal scores, which is consistent with the results of Haniffa and Cooke (2002) and Haniffa and Hudaib (2006). Table 4 further indicates that the mean value of Tobin’s Q was approximately 1.07, and the mean value of ROA was -0.01. In addition, the data revealed that the mean value of board size was 6.19, with a minimum value of 5 and a maximum value of 10; independence ranged from zero to 0.80, with a mean value of 0.19. Furthermore, family directors ranged from 0 to 0.63, with a mean value of 0.19, while board diversity had a mean value of 0.22. In terms of control variables, the study found that debt had a mean value of 0.41, and the mean value of firm size was KD226086 (1KD = $0.302).

\[ \text{Variables} = \alpha + \beta_1 \text{BS} + \beta_2 \text{BI} + \beta_3 \text{FD} + \beta_4 \text{BD} + \beta_5 \text{DT} + \beta_6 \text{FS} + \beta_7 \text{IT} + \varepsilon \]
Table 3. Pearson correlation matrix for study variables (2017-2019)

|     | TQ  | ROA | BS  | BI  | FD  | BD  | DT  | FS  |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| TQ  | 1   | 0.49** | 0.12* | -0.03 | -0.32** | 1   | 0.35* | 0.28* |
| ROA | 0.49** | 1   | -0.05 | -0.15* | 0.23** | -0.03 | 1   | -0.02 |
| BS  | 0.12* | 1   | -0.05 | 0.11  | -0.08 | -0.03 | 1   | 0.18** |
| BI  | -0.03 | -0.15* | 1   | 0.18** | 0.06  | 0.13* | 0.06 | 0.06  |
| FD  | -0.32** | -0.15* | -0.15* | 1   | 0.15* | 0.15* | 1   | 0.46** |
| BD  | -0.03 | 0.11  | -0.08 | 0.15* | 1   | 0.46** | 1   | 0.46** |
| DT  | 1   | 0.18** | -0.02 | 0.06  | 0.13* | 0.15* | 0.06 | 1    |
| FS  | 0.28* | 0.20* | 0.19  | 0.03  | 0.11  | 0.15* | 0.06 | 0.46** |

Note: ***, **, and * significant at the 0.01, 0.05, and 0.10 levels, respectively (two-tailed). For definitions of the variables, see Table 2.

Table 4. Descriptive statistics for study variables

| Variables | Sample | Mean | S. D. | Min | Max | Skewness | Kurtosis |
|-----------|--------|------|-------|-----|-----|----------|----------|
| TQ        | 89     | 1.07 | 2.08  | 0.16| 32.7| 12.99    | 192.8    |
| ROA       | 89     | -0.01| 0.006 | -0.61| 0.22| 14.3     | -2.9     |
| BS        | 89     | 0.19 | 1.4   | 5   | 10  | 0.933    | -1.48    |
| BI        | 89     | 0.19 | 0.12  | 0   | 0.80| 1.5      | 6.4      |
| FD        | 89     | 0.19 | 0.21  | 0   | 0.63| 0.383    | -1.4     |
| BD        | 89     | 0.19 | 0.23  | 0.01| 1.01| 0.261    | -0.605   |
| DT        | 89     | 0.41 | 0.23  | 1439| 4736093| 6.05     | 45.2     |
| FS        | 89     | 2.26086| 503687 | 1439| 4736093| 6.05     | 45.2     |

Note: For definitions of the variables, see Table 2.

4.2. OLS regression results

The regression results of the impact of the board of directors on firm performance based on two performance measures are presented in Table 5. The adjusted R-squared was 0.24 based on Tobin’s Q measure and 0.19 based on ROA measure, while the F-value was 7.389 based on Tobin’s measure and 5.725 based on ROA measure. All of these figures are significant and indicated a reasonable overall fit for the regressions in this study.

Table 5. OLS results analysis for total sample of 89 firms from 2017 to 2019

| Variables | T-statistic | Variables | ROA | T-statistic |
|-----------|-------------|-----------|-----|-------------|
| Constant  | -3.764***   | Constant  | -0.745 |
| BS        | 2.750***    | BS        | 0.459 |
| BI        | 2.444**     | BI        | 1.458 |
| FD        | 1.100       | FD        | 1.705** |
| BD        | 2.531**     | BD        | -0.342 |
| DT        | 3.449***    | DT        | 5.794*** |
| FS        | 1.013       | FS        | 4.452*** |
| T1        | 0.869       | T1        | 1.179 |
| T2        | 1.585       | T2        | 2.739** |
| T3        | 2.536**     | T3        | 2.719** |
| T4        | 2.333**     | T4        | 1.481 |
| T5        | 2.435**     | T5        | 1.385 |
| T6        | 2.360       | T6        | 1.377 |
| T7        | 2.889***    | T7        | 3.238*** |
| T8        | 1.311       | T8        | 1.361 |
| R²        | 0.28        | R²        | 0.24  |
| Adj R²    | 0.24        | Adj R²    | 0.19  |
| F-value   | 7.389       | F-value   | 3.725 |

Note: ***, **, and * significant at the 0.01, 0.05, and 0.10 levels, respectively (two-tailed). For definitions of the variables, see Table 2.

The excluded sector is the technology sector.

HI suggested that board size negatively impacts firm performance; however, this hypothesis was rejected. The results indicate that board size positively impacts firm performance in a significant way based on Tobin’s Q (p < 0.05) and positively insignificantly impacts firm performance based on ROA (p > 0.10). Thus, it seems that a large board is better for Kuwaiti listed firms. This result contradicts agency theory, which assumes that a small board is better for firm performance. However, this result is consistent with the studies of Coles et al. (2008), Haniffa and Hudaib (2006), Ciftci et al. (2019), Saleh and Islam (2020), Anis et al. (2017), and Kiel and Nicholson (2003). An explanation for such results is that firms with big boards may provide more experience and discussion and deal with problems efficiently. Thus, large boards provide Kuwaiti firms with more diversity in education, skills, and experience, helping them protect their resources (Haniffa & Hudaib, 2006; Pearce & Zahra, 1992).

However, the study supported H2, which assumed that board independence positively impacts firm performance. The results indicated a significant positive relationship between board independence and firm performance based on Tobin’s Q (p < 0.05) and a positive but not significant relationship between the two variables based on ROA (p > 0.10). The main reason for this result is probably because more independent board members may improve the directors’ effectiveness, leading to better control for the managers and large shareholders while maintaining a balance among shareholders, between the interests of large
The study also found that board independence positively impacts firm performance based on Tobin's Q, although this relationship is insignificant based on ROA. This implies that the new corporate governance rules requiring firms to have at least one independent director, without exceeding half of the board members, are successful. This is not similar to non-executive directors because independent directors are able to control and monitor the behaviors of large shareholders and managers. The study also found that family directors positively impact firm performance based on ROA, although this relationship is insignificant based on Tobin's Q. Although the new corporate governance rules do not mention this issue, Kuwaiti firms must assess the optimal number of family directors depending on their qualifications and skills. If family directors are not qualified, they must be removed from the board of directors. Similarly, the study found that board diversity (presence of women) positively impacts firm performance based exclusively on Tobin's Q. This issue must be considered by governments in their subsequent updates to corporate governance rules.

This study makes some important contributions to previous studies that examined the impact of boards of directors on firm performance. First, this study is the first of its kind to examine the impact of the new governance rules in Kuwait on firm performance. By extending the investigation to Kuwait, we found that many board variables lead to improved firm performance, which appears to be the situation in both developed and developing countries. Second, the results of this study might encourage directors and managers to afford greater attention to those mechanisms that lead to improved firm performance; they also confirmed that robust corporate governance rules have a positive impact on firm performance and value. Thus, Kuwaiti listed firms should consider these rules as a means of increasing their performance and attracting more investors.

This study has some limitations. Further studies are suggested to overcome these limitations. First, this study used a sample of 89 non-financial listed firms on the KSE from 2017 to 2019. Thus, a strong opportunity for further study would be to use different variables or firms. Second, many studies, such as Agrawal and Knoeber (1996) and Wintoki et al. (2007) argued that there may be endogeneity and causality issues between boards of directors and firm performance. They believed that good boards of directors lead to higher firm performance, and firms build their boards of directors in strong ways in response to higher firm performance. Future studies should consider these issues in examining the impact of boards of directors on firm performance. Finally, the current study examined the situation in one of the GCC countries (i.e., Kuwait); the other GCC countries are Saudi Arabia, Bahrain, Qatar, Oman, and the UAE. Future research should extend the present work by comparing the results of this study with the status of other members of the GCC. Such a comparison may help regulators in their efforts to harmonize corporate governance rules among these countries.

shareholders and creditors, and between managers and large shareholders. This result is consistent with the view of agency theory and the studies of Sarpong-Danquah et al. (2018), Anis et al. (2017), Habbash and Bajaher (2015), Lin and Jen (2011), and Shahrier et al. (2018). All of these studies confirmed that board independence leads to higher firm performance.

The results of the current study report an insignificant positive relationship between family directors and firm performance based on Tobin's Q (p > 0.10) and a significant positive relationship between family directors and firm performance based on ROA (p < 0.10). Thus, the results support the argument that family directors lead to higher firm performance. This may be due to the strong and long relationship that exists between family directors and firms. Family directors care more about their names and reputations; losing their firms means losing their name and reputation.

This result is consistent with agency theory and the studies of Villalonga and Amit (2006), Sraer and Thesmar (2007), and Anderson et al. (2003). Thus, H3 is supported.

Finally, regarding H4, unlike the accounting performance measure (ROA), board diversity is found to be positively significantly (p < 0.05) related to the market performance measure (Tobin's Q). Thus, the result of this study supports the argument of agency theory that board diversity is better for firm performance. This result is consistent with the studies of Green and Homroy (2018), Fahlenbrach (2009), Nguyen and Faff (2007), and Sarpong-Danquah et al. (2018). Thus, in Kuwait, having women on boards leads to increased firm performance and value. This is means that Kuwaiti women are more capable of controlling managers' behaviors and minimizing agency conflicts. The majority of Kuwaiti women are well educated and have a strong ability to ask questions and challenge executive directors. In terms of control variables, the study found that debt and firm size positively impact firm performance while industry type produced mixed results.

5. CONCLUSION

The study attempted to examine the impact of the board of directors after introducing the new governance rules on firm performance in KSE for a sample of 89 firms from 2017 to 2019. This study used two regressions in order to test the hypotheses as well as two performance measures - namely, Tobin's Q (market measure) and ROA (accounting measure) - four board variables, and three control variables. The results based on Tobin's Q found that board size positively impacts firm performance, which means that a large board is more effective for listed firms on the KSE. However, based on ROA, board size appeared to be insignificant. The new corporate governance rules increase the minimum board size from three to five members and give firms the freedom to decide their maximum number. The Kuwaiti government encourages listed firms to increase their board size, and such a policy is very useful to firms.
### APPENDIX

#### Table A.1. Comparison of Kuwaiti laws

| Items                              | Before 2017                                      | After 2017                                      |
|------------------------------------|--------------------------------------------------|------------------------------------------------|
| Companies law                      | No. 15 of 1960                                   | No. 15 of 2017                                 |
| Board composition                  | No requirements                                  | Details for qualifications of directors        |
| Board size                         | 3-11 members                                     | At least 5 members                             |
| Board independence                 | No requirement                                   | At least one and no more than 50% of board members |
| Role duality                       | Very common                                      | Not allowed                                    |
| Board committees                   | No requirement                                   | More details, especially for audit committee    |
| Board responsibility and liability | No requirements                                  | Defines the responsibility and liability of directors |
| Roles of boards                    | No details                                       | Clear role and tasks                           |

#### Table A.2. Studies of board variables and firm performance

| Authors                          | Country        | Dependent variables | Independent variables |
|----------------------------------|----------------|---------------------|-----------------------|
| Agrawal and Koneber (1996)       | USA            | Tobin’s Q           | BS(+), BI(-)          |
| Haniffa and Hudaib (2006)        | Malaysia       | Tobin’s Q, ROA      | BS(mixed), BI(non)    |
| Yermack (1996)                   | USA            | Tobin’s Q, ROA      | BS(-), BI(mixed)      |
| Coles et al. (2008)              | USA            | Tobin’s Q           | BS(+), BI(-)          |
| Bhagat and Black (2002)          | USA            | Tobin’s Q, ROA, ROE | BS(-), BI(-)          |
| Sarpong-Danquah et al. (2018)    | Ghana          | ROA, ROE            | BS(non), BI(+), BD(+)|
| Habbash and Bajaher (2015)       | Saudi Arabia   | ROA                 | BS(non), BI(+), FD(non)|
| Anis et al. (2017)               | Egypt          | Tobin’s Q, ROA      | BS(+), BI(+), BD(non) |
| Al-Shammari and Al-Sultan (2009) | Kuwait         | Tobin’s Q, ROA      | BS(+), BI(non)        |
| Wang et al. (2019)               | Pakistan       | ROA, ROE            | BS(non), BI(non), BD(non)|
| Lin and Jen (2011)               | Taiwan         | Tobin’s Q, ROA, ROE | BS(-), BI(+), FD(-)   |
| Adams and Ferreira (2009)        | USA            | Tobin’s Q, ROA      | BD(-)                 |
| Villalonga and Anait (2006)      | USA            | Tobin’s Q, ROA      | BD(-)                 |
| Nguyen and Faff (2007)           | Australia      | Tobin’s Q           | BD(+), FD(-)          |
| Fahlenbrach (2009)               | USA            | Stock price         | BD(+), FD(-)          |
| Saleh and Islam (2020)           | Palestine      | ROE                 | BD(+), FD(non)        |
| Sraer and Thesmar (2007)         | France         | ROA, ROE, MB        | BD(+), FD(+)          |
| Green and Homroy (2018)          | Multiple countries | ROA, ROE, MV | BD(-)                 |
| Shahrir et al. (2018)            | Malaysia       | ROA, ROE            | BS(-), BI(+), FD(-)   |
| Ciftci et al. (2019)             | Turkey         | Tobin’s Q, ROA      | BS(+), FD(non)        |

**Note:** BS = Board size, BI = board independence, FD = family directors, BD = board diversity