Proceedings of Sydney International Business Research Conference 2018, Novotel Sydney Central, Sydney, Australia, 25-26 March 2018;
ISBN 978-0-9946029-9-2

Board Independence and Firm Performance: Evidence from Jordan

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ABSTRACT

Purpose: This study aims to investigate the influence of board independence in the form of representation of 'outside independent directors' on firm performance amongst the listed firms in the context of a developing country by considering Jordan as a case study. **Design/methodology/approach:** By using data from 880 firm-year observations of non-financial firms listed on Amman Stock Exchange for the period of 2006-2016, and by using accounting performance measure (i.e., Return on Asset), this study uses regression model to test the hypotheses. **Findings:** The empirical results show that the board independence in general has a positive impact on firm performance. The findings of this study supports agency theory. **Research limitations/implications:** This study has some limitations. The current study employed ROA as an accounting-based measure of firm performance. However, it can be argued that firm performance is a noisy measure and can be manipulated. **Practical implications:** The implication of this study is that, board independence in the form of representation of 'outside independent directors' becoming an important control mechanism that can add value to the firm. **Originality/value:** This contributes to the literature on the practices of corporate governance mechanisms, such as board independence in the context of developing countries.

Keywords: Jordan, Corporate Governance, Independent Directors, Agency Theory, Firm Performance

1. INTRODUCTION

A board is the dominant internal mechanism for the corporate governance (CG) of a company (Shin et al. 2018). In short, a company board's purpose is to supervise management on behalf of shareholders (Chen 2011; Switzer et al. 2018). It is considered to be an essential mechanism for enhancing the CG practices, performance and value of firms and protects shareholders from self-interested managers (Kumar & Zattoni 2013; Kim & Ozdemir 2014; Chen 2015). Therefore, it is argued that company boards may play a vital role in mitigating agency problems (Rose 2005).

The value added by the board of directors to the performance and value of a firm is twofold. First, a company board protects suppliers of finance from management misbehavior, helping access to external resources and decreasing their cost. Second, it may give the firm a competitive advantage by providing a network of contacts and good reputation (Bertoni et al. 2014).

Under agency theory, the main function of the board of directors is decision management through the control and implementation of decisions (Shaukat & Trojanowski 2017). Agency theorists argue that the board's primary role is to monitor the activities of managers by assuring that they act in the interests of owners (Bennouri et al. 2018), for example, by encouraging management to exert more effort and to reduce the pursuit of their private interests (Bertoni et al. 2014). Therefore, promoters of agency theory argue that the board assists in mitigating the agency problems that may arise from the separation of ownership and control (Daily et al. 2003; Adams et al. 2010).

However, the wave of company collapses such as WorldCom, Adelphi, Tyco, Enron and HIH has led to the appearance of an issue described as "the question the board's ability to monitor management" (Mizruchi 2004, p. 614; Harris & Raviv 2006) and as Jensen (1993, p. 893) suggested earlier, "board culture is an important component of board failure". WorldCom, Enron and HIH management were all engaged in controversial accounting practices that were not detected by their boards (Solomon 2007; Rashid et al. 2010).

Brick et al. (2006, p. 421) raised the question of "whether career concerns and incentive compensation of the directors could sufficiently induce directors to properly monitor management". The self-interest of boards which may set up a problem of 'hierarchical agency' with conflicts of interest between owners and managers and between owners and boards has been highlighted (Kumar & Zattoni 2016a). It may be argued that the shareholders will control the board of directors by using their ownership right to elect and remove board members, but they may not have adequate knowledge of the company's internal activities. Therefore, the question arises: who monitor the monitors?

Interestingly, there is an increasing focus on independent directors. Reports of CG (e.g., Higgs Report, 2003, Cadbury Report 1992, Sarbanes-Oxly Act 2002, Smith Report 2003 and Ramsay Report 2001) support many boardroom reforms (Rashid 2018), such as a general improvement in the skills of non-executive directors (Kirkbride & Letza 2005). Worldwide, reforms to increase the number of independent board directors have extensively been adopted (Muravyev et al. 2014; Cladera & Fuster, 2014). An empirical study by Gordon (2006) found that from 1950 to 2005, the percentage of independent directors of large public firms has risen from almost 20% to 75% in US boardrooms. As part of this trend, in 2009, the Jordanian CG code (JCGC) required all listed companies on the Amman Stock Exchange (ASE) to assure the independence of independent directors on a continuous basis.

Thus, this study seeks to investigate whether independent directors influence firm performance in developing countries, with a specific focus on Jordan. The choice of Jordan is notable as over the past decades a considerable amount of literature on CG has concentrated on developed countries with advanced financial and legal systems (Ararat & Yurtoglu 2006; Garanina et al. 2016), with much less attention given to CG issues in developing countries (Denis & McConnell 2003; Ararat & Yurtoglu 2006; Waweru 2014; Elfeky 2017; Tariquzzaman 2017). Furthermore, emerging markets have been affected by the attention paid to CG practices by independent bodies such as the Organization for Economic Cooperation and Development, the World Bank, the International Monetary Fund, the Asian Development Bank and the International Finance Corporation (Solomon, 2007; Jamali et al., 2008; Matten & Moon, 2008; Rashid, 2012; Ngo et al. 2018).

Theses the bodies have also been working on improving a culture of investor protection in developing countries (La Porta et al. 2000; Abdallah & Ismail 2017). Therefore, this study extends the literature on the practices of corporate boards and the performance of firms by providing new evidence from Jordan, which is representative of such developing countries.

The remainder of this study is organized into several sections. Section 2 expalins the independence of board in Jordan. Section 3 discusses selected previous studies on independent directors and firm performance. Section 4 provides a justification of the theoretical foundation of this study. Section 5 develops the hypotheses for this research. In Section 6, the research method is described. Section 7 deals with the presentation and discussion of the results. The final section discusses the study's limitations and offers a conclusion.

2. BOARD INDEPENDENCE IN JORDAN

In Jordan, listed companies on ASE are featured by ownership concentration (Zeitun & Gang Tian 2007; Jaafar & El-Shawa 2009; Zeitun 2009; Abu-Serdaneh et al. 2010; Al-Daoud et al. 2016; Alzoubi 2016; Ibrahim & Hanefah 2016; Yassin 2017). Despite shareholders playing a central role in monitoring the company, boards have little to do with controlling management. The concept of board independence is not prevalent in developing countries, including Jordan.

In contrast, the topic of board independence arises from the context of Anglo-American companies in which as corporate boards are composed of one-tier, while in continental Europe, in countries such as Finland, Germany, and Netherlands (but not Spain and France), they comprise two tiers (Maassen, 2002). In one-tier boards, the board chairman and chief executive officer (CEO) perform their responsibilities together whereas, in two-tier boards, there is a separation of the executive role of the board from its monitoring role (Maassen 2002). It is worth noting that outside directors play a pivotal role in monitoring company management in Anglo-American countries.

There, it can be argued, external board members work well because these countries depend on laws and information disclosure to ensure owners' rights (Rashid 2018). Othman & Zeghal (2006) have pointed out that there is higher control of management by outside directors, financial analysts and the financial press in Anglo-American countries, with directors and managers basically acting as agents for owners and, therefore, maximising shareholder wealth.

However, drawing on agency theory, in the context of corporations with highly dispersed ownership there may exist a conflict of interest between shareholders and managers in which managers tend to engage in opportunistic behavior in the best interests

of themselves at the expense of owners' interests (Yang & Zhao 2014; Aktas et al. 2018). Thus, there may be information asymmetry between owners and management. This is the context in which board independence is played out in Anglo-American and continental European contexts. The independence of the board may act as a balancing mechanism between the board of directors and top management (Dalton & Daily 1999).

Company boards in Jordan are organized under a one-tier board system (ROSC 2004; Cigna et al. 2017). There is no distinction between the board and the management because the board chairman and the CEO are the same person (Shanikat & Abbadi 2011). Thus, Jordanian company boards do not have a supervisory role vis a vis the management.

While there are some similarities of board practices between Jordan and Anglo-American countries (e.g., CEO duality and a one-tier system), the mechanisms of firm control are often internally oriented in developing countries, including Jordan (Zheng et al. 2017). In other words, the ownership structure is quite centralized as the major investors own huge stakes within a single company and, on the whole, these shareholders constitute the company's board of directors, which is the case in Jordan (Alqatamin et al. 2017; Yassin 2017; Jarbou et al. 2018). Therefore, separation of ownership control from management is rare (Claessens et al. 2000). Conversely, in Anglo-American countries, the corporate ownership structure is generally quite dispersed (Meca & Ballesta 2009; Ngo et al. 2018; Rashid 2018).

It is argued that in Jordan, as with many developing countries, institutional regulatory bodies fail to exert pressure on companies to follow CG principles, and standards reliably. This is due to the fact that families hinder the work of governmental institutions in the enforcement of regulations and rules. As Uddin & Choudhury (2008) argue that the families' political relationships are usually in direct contradiction with the state's rational and legal authority.

Ownership structures and their consequences mean there are some distinct institutional differences between the Jordanian market and developed markets. Because of the dispersed ownership structure, corporations in developed markets have a greater tendency to employ professional managers (La Porta et al. 2000), who do not have a stake of significant ownership within the companies. In contrast, executive directors in Jordanian companies are family-based owners with a large stake. Al-Azzam et al. (2015) stated that 90 percent of Jordanian companies are controlled and owned by families, which mitigates the need for performance-based pay arrangements (Banghøj et al., 2010) or equity-based pay (Ramadan 2013; Olaniyi et al. 2017) for such executives. Therefore, the requirement of a remuneration committee (typical of Anglo-American countries) is absent in the JCGC for shareholding companies listed on the ASE.

In 2005, the Jordan Securities Commotion issued the first JCGC for firms listed on the ASE, the adoption of which, however, is not mandatory. In addition, Jordan announced a new CG code was based on a 'comply or explain' approach. However, JSC issued circular No. 12/1/4659 for CG code for shareholding companies listed on the ASE, which came into effect on 1 January 2009. A publication entitled the "Bank Directors' CG Handbook" was issued in 2004, which was strengthened by a CG code specifically for Jordanian banks in 2007, followed by CG instructions for banks in 2014. Among numerous requirements, it was recommended that at least one-third of board members should be independent members.

Thus it can be concluded that there have been some CG attempts in Jordan but company ownership is largely controlled by families. For this reason, the similarity of Jordanian companies having the same one-tier system that Anglo-American companies is in form only. In practice, executives in Jordan have a large family-controlled stake in the companies they manage and CEO duality is influenced by this centralization of ownership.

3. LITERATURE REVIEW

CG is a general term that includes many aspects related to specific issues, such as theories and board practices of directors and their executive and non-executive directors (Maassen 2002). As argued by Zahra & Pearce (1989) and Dalton & Daily (1999) there are three main roles of boards, namely, strategy, control, and services. In practice, the structure of the board is closely related to the quality of CG mechanisms. From a review of the literature, it appears that corporations with weak governance practices and inadequate protection of shareholder rights may lead to more agency problems. Hence, the presence of an efficient board of directors can avoid the opportunistic behavior of directors and determining the alignment of their aims with those of the firms' shareholders (Rubino et al. 2017).

From an agency theory perspective, the corporation can be seen as a nexus of contracts through which different participants transact with each other (Voordeckers et al., 2007). Moreover, CG is interpreted by bringing in the board of directors and its relations to the top management team (Finkelstein & Hambrick 1996). Therefore, the effectiveness of the board may help in

enhancing firm performance (Anderson & Reeb 2004). A large of number of research studies have been conducted on boards in the sectors of finance, management, economics and even law. Some researchers have investigated company boards based on four board attributes (i.e., composition, process, structure, and characteristics) which may directly affect the firm's performance (Zahra & Pearce 1989; Dalton & Daily 1999). Studies on CG practices explain the value of the association between the board and firm performance (Maseda et al. 2015), with much empirically based research (Voordeckers et al. 2007; Rubino et al. 2017). However, the bulk of the literature findings were non-conclusive or mixed (Che & Langli 2015; Maseda et al. 2015; Rubino et al. 2017). This study attempts to provide evidence focusing in particular on a characteristic of the board of directors (i.e., board composition in the form of representation from outside independent directors).

Broadly speaking, the board of the directors is divided into insiders (executive directors) including the CEO and other current members of the company's (or its subsidiaries') management or outsiders (non-executive directors). Outsider directors may be non-affiliated or affiliated (Anderson & Reeb 2004; Dey 2008). Affiliated members, such as lawyers or former executive, have personal links with the company (Pearce & Zahra, 1992; Voordeckers et al., 2007; Jones et al., 2008; Samara & Mirabent, 2017). Non-affiliated outsiders are referred to as independent directors (Zahra & Pearce 1989; Pearce & Zahra 1992). Earlier studies propose that board composition is a critical variable in understanding managers' performance of their duties and boards' contribution to mitigate agency problems.

It may be considered that outside directors are more independent and may have expertise in capital markets and company law, and therefore more efficiently monitor the management team (Fama & Jensen 1983b; Chen 2011) than internally appointed directors. Ample earlier evidence suggests that the presence of independent directors protects owners when agency problems exist (Brickley & James 1987; Hermalin & Weisbach 1988; Bathala & Rao 1995; Kumar & Zattoni 2017a; Samara & Mirabent 2017). Maseda et al. (2015) stated that independent outside directors may offer a significant CG mechanism to resolve a potential conflict of interest between managers and shareholders. This is consistent with Che & Langli (2015), who pointed out that as conflicts of interest between shareholders and managers are commonly found in listed companies, it is essential to have independent directors to control CEOs. Indeed, outside independent directors have been found to support company boards by monitoring the activities of management and confirming that management decisions are made in the best interests of the shareholders (Kuo & Hung 2012).

Yet, findings of the previous studies that addressed the relationship between the proportion of independent outside board directors and firm performance have been mixed (Kryzanowski & Mohebshahedin 2016; Zattoni et al., 2017). Brickley et al. (1994) and Beasley (1996) indicated a positive influence. However, Yasser et al. (2017) reached the conclusion that the appointment of outsider independent directors may negatively affect a firm's value. It may be argued that a higher percentage of outside independent directors decreases market-based measures, such as Tobin's Q (Song et al. 2017). Zhu et al. (2016) found a higher percentage of such directors is linked with less earnings management and therefore improved firm value.

On the positive side, in an investigation of 403 firms, Anderson & Reeb (2004) outside independent directors to be positively related to firm performance and to mitigate agency problems. This is in line with Al-Najjar (2014) evidence from five Middle Eastern countries, and two Hong Kong studies (Leung et al. 2014; Cheng et al., 2012), Bathala & Rao (1995) research in the USA, Liu et al. (2015) study and Zhu et al. (2016) studies in China and Lefort & Urzúa's (2008) findings in Chile. Kuo & Hung (2012) found outside independent directors mitigate the negative influence of family control on investment cash flow sensitivity. Masulis & Mobbs (2011) confirmed that the announcements of outsiders' independent directors' appointments increase the wealth of the shareholders and outsiders independent directors are an important source of insiders' directors' incentives.

On the negative side, Dey (2008) asserted that the companies with higher agency problems have better CG practices in place, most especially those related to the independence of the board. Additionally, Rubino et al. (2017) indicated that independent directors do not seem beneficial for resolving agency problems in family companies, based on Tobin's Q. Similarly Singh & Davidson III (2003) suggested that independent directors do not seem to protect the firms from agency costs. Muravyev et al. (2014) found that in Russia independent directors are linked with a higher private benefit of control and thus do not seem to support better CG practices. No clear empirical evidence was found that outside independent directors are more or less valuable than other directors (Rosenstein & Wyatt, 1990). Studies carried out by Cavaco et al. (2014), Hermalin and Weisbach (1991), Horváth and Spirollari (2012), Christensen et al. (2010) and Bird et al. (2017) claimed a significant negative association between independent directors and firm performance.

Finkelstein & Hambrick (1996) stated numerous reasons for such differences in findings. These include not considering contextual factors (e.g., company strategy and life cycle), and not efficiently considering as how members of a firm's board

interact to make decisions. However, despite these differences, they agree that in general, the board of directors may affect the firm performance directly by quality controlling (Finkelstein & Hambrick 1996).

4. THEORETICAL BACKGROUND

As Davis et al. (2010) argue, the primary assumption of the agency theory is that the individual is opportunistic and self-serving and will increase his wealth, probably at the expense of company shareholders' interests. Hence, agency theory centers on "extrinsic rewards: tangible, exchangeable commodities that have a measurable 'market' value" (Davis et al. 1997, pp. 27-28). The separation of ownership (principal) from management (agent) in firms leads to what is known as an agency relationship which has been defined as "as a contract under which one or more persons (the principal(s)) engage another person (the agent) to perform some service on their behalf which involves delegating some decision-making authority to the agent" (Jensen & Meckling 1976, p. 5). Proponents of agency theory argue that there is a conflict of interest between the related parties (e.g., managers and shareholders). To overcome these agency problems within the firm, several different mechanisms, checks, balances, and incentives are suggested to monitor and/or motivate managers to align themselves with the interests of principals.

The CG code concerning the role of a board of directors, chosen from developed markets' principles and codes, requires insider directors and outsider independent directors to act together. It has been suggested that boards without outsider independent directors work as a "rubber stamp" and are dominated by the CEO, which may lead to a conflict of interests between shareholders and managers (Weidenbaum 1986). Proponents of agency theory argue that a board with a high number of external independent directors can maximize owners' wealth (Brickly & Zimmerman, 2010). Hence, under agency theory, there is a positive association between the independence of the board and firm performance (Boyd 1995).

By contrast, stewardship theory contends that the agent is motivated to act in the interests of owners or the principal (Donaldson & Davis 1991), describing situations where "managers are not motivated by individual goals, but rather are stewards whose motives are aligned with the objectives of their principals" (Davis et al. 1997, p. 21), and of shareholders because fiduciary responsibilities (Donaldson 1990; Donaldson & Davis 1991). Therefore, there is no conflict between shareholders and managers. As Tricker (1994, p.3) argues "classical corporate governance, derived from the mid-nineteenth concept of the corporation, is rooted in the philosophy that men can be trusted; that directors can be relied on to act in the best interests of the company". Stewardship theory states that fewer outside independent directors should be present on a board of directors owing to the mitigated need for a controlling purpose (Che & Langli 2015). Therefore, the principal mission of the board is to support the management team rather than to supervise and monitor it (Barka & Legendre 2017).

This study considers that because the separation of ownership and management may lead to self-interested actions of the managers. It has been confirmed that the board independence will be capable of providing an essential monitoring function in trying to resolve agency problems (Bathala & Rao 1995). As this study investigates whether the independence of the board improves firm performance, it relies on agency rather than stewardship theory. It is argued that the independent directors will produce independent advice which theory of stewardship ignores (Nicholson & Kiel 2007).

5. RESEARCH HYPOTHESIS

Promoters of agency theory argue that the central role of the board of directors is to monitor the activities of managers to protect the interests of shareholders (Eisenhardt 1989; Bathala & Rao 1995; Hillman & Dalziel 2003; Nicholson & Kiel 2007; Kaymak & Bektas 2008). From this perspective, the independence of the board will emerge from a balance of power between outside and inside directors. If outsiders are absent, inside directors may dominate, and therefore, the board can abuse its power (Dalton & Daily 1999). Independence of the board is supposed to be a primary driver of board monitoring (Kumar & Zattoni 2017b), which will improve performance. Therefore, this study considers that the proportion of outside independent directors will serve an essential monitoring function in trying to resolve agency problems (Chen 2011). This leads to the following hypothesis:

Hypothesis: There is a positive relationship between independent directors and firm performance.

6. RESEARCH METHOD

6.1. Sample Selection

Based on the Bloomberg database and firm annual reports, the current study considered 80 non-financial firms listed on the ASE for the period of 2006-2016, representing 35.71% of the total number listed firms as on 31st December 2016. The study has

excluded listed financial companies from the sample given the unique characteristics of their financial statements (Campbell II & Keys 2002; Lemmon & Lins 2003; Rose 2005; Pham et al. 2011). This sample consists of all the listed non-financial companies and almost 36.19% of the market capitalization of all listed companies as of 31st December 2016. The sample is composed of a variety of industries as per the Global Industry Classification Standard (GICS). The total number of firm-year observations is 880. The data related to the CG variable of interest (proportion of independent directors on the company board), was manually collected from firm annual reports. The Bloomberg database was the basis for obtaining the firm's accounting information.

Table 1 displays industry classification of the Jordanian companies according to GICS.

6.2. Definition of Variables

6.2.1. Dependent variable

In the present study, for the dependent variable one measure of performance is considered (i.e., Return on Asset). According to Core et al. (1999), Liu et al. (2012), Salim & Yadav (2012), Kang & Kim (2012), O'connell & Cramer (2010) and Mangena et al. (2012), ROA is calculated as the ratio of profit (before interest and tax) divided by total assets.

6.2.2. Independent variable

In this study, the independent variable refers to the percentage of the number of outside directors as a percentage of the total number of directors (BDIND) which is in line with earlier studies (e.g., Rachner & Dalton 1986; Zahra & Stanton 1988; Chen 2011; Bertoni et al. 2014; Rashid, 2018).

6.2.3. Control variables

A number of control variables are included in this study based on the earlier literature on governance and firm performance. These are ownership structure, CEO duality, board gender diversity, free cash flow, board size, firm size, firm age, sales growth, liquidity, leverage, research and development expenditures, year and industry.

Ownership concentration plays a pivotal role in monitoring and disciplining a company's management, which lead to alleviate agency problems and improve firm performance (Frias-Aceituno et al. 2013; Rashid 2016). This study use three ownership control variables (i.e., director ownership (DIROWN), institution ownership (INSOWN) and largest bloc holding ownership (LBOWN)). This study considers DIROWN, INSOWN and LBOWN as the percentage of shares owned by directors, institutions and three largest block holding respectively. The board's capability to apply the governance function count on a number of board characteristics, such as the distribution of missions between the board chair and the CEO (Kakabadse et al. 2006; Rashid 2013). CEO duality (CEOD) as a control variable is measured as a binary, which CEOD is equal to one (1) if the post CEO and board chair is hold by the same person, otherwise zero (0). It has been confirmed that the increase gender diversity on boards (BDGDIV) in the form of representation by women is that it can make a positive contribution by increasing the number of alternatives that are considered by its members, and therefore, positively influence its creativity and the decision-making quality (Adams et al. 2015). This study is defined BDGDIV as the percentage of female directors to total directors. It is argued with increase free cash flow, managers may invest in projects is not economically feasible or unnecessary projects

Table 1 : Industry classification of the sample

Industries	Number of firms in the sample	Observed firms years
Consumer discretionary	19	209
Consumer staples	9	99
Energy	1	11
Financial	9	99
Health care	3	33
Industrials	10	110
Materials	26	286
Telecommunication services	1	11
Utilities	2	22
Total	80	880

(Jensen 1986). The present study is measured FCF as the measured by operating income before depreciation minus the sum of taxes plus interest expense and dividends paid scaled by total assets.

It may be argued that board size plays an important role in disciplining the company and monitoring the management. Therefore, board size may influence the capacity of boards to work efficiently (Coles et al. 2008). This study uses a similar measurement method to that of Elsayed (2007), Donnelly & Mulcahy (2008), Bertoni et al. (2014) and Fedaseyeu et al. (2018), by measuring board size (BDSIZE) as the natural logarithm of the total number of board members. Large firms have been found to have a greater capacity to create internal funds, be more diversified and be less likely to make an omission regarding debt. However, they may also have higher agency problems. In line with Carter et al. (2010), Al-Bassam et al. (2015), Ararat et al. (2015) and Ducassy & Guyot (2017), this study measured firm size (size) as the natural logarithm of the total assets. Performance of a firm may be influenced by firm age; older firms have been found more likely to be more efficient and effective than younger ones (Ang et al. 2000). On the other hand, for young firms, the rating may not only indicate economic wealth but also the probability of survival (Czarnitzki & Kraft 2006). Consistent with Chen (2011), Madanoglu et al. (2018) and Ngo et al. (2018), firm age (AGE) is calculated as the natural logarithm of the total number of years a firm has been listed on the stock exchange. It may be argued that firms with grown sales are likely to grow more quickly than those without (Durnev & Kim 2005). Therefore, sales growth rate may indicate future firm performance. Borrowing from Short & Keasey (1999), Ducassy & Guyot (2017) and Ngo et al. (2018), sales growth (GROWTH) is measured as the percentage of current year sales minus previous year sales scaled by previous year sales.

It has been confirmed that liquidity "helps capture firm-specific attributes since the ability to manage working capital and acquire a greater quantity of cash balances relative to current liabilities reflects superior skills" (Majumdar & Chhibber, 1999, p. 296). Consistent with Al-Najjar (2014) and Connelly et al. (2017), liquidity (LIQ) is calculated by employing the current ratio, dividing current assets by current liabilities. It is argued that debt is an essential governance tool because higher debt levels assist in decreasing the agency cost of free cash flows (Akbar et al. 2016). On the other hand, debt may mitigate the agency problem of the shareholder-debtholder and may affect firm performance (Jensen & Meckling 1976). Hence, it may be considered as a mechanism of CG. Leverage (LEV) is defined as the ratio of total debt to total assets (Chen 2011; Ararat et al. 2015; Ararat et al. 2017). It is argued that firms with high research and development (R&D) expenses are more likely to be high growth companies and may have a high valuation (Durnev & Kim 2005). Further, R&D in production processes and technologies may help in improving a firm's performance of firm (Akbar et al. 2016). R&D is calculated as R&D's percentage of total expenditure scaled by sales (Anderson & Reeb 2003; Choi et al. 2012; Farag et al. 2014; Ararat et al. 2017).

Controlling for industry effects is very important. It is argued industry effect may assist in identifying "unobserved heterogeneity at the industry level" (Elsayed 2007, p. 1207). On the other hand, the performance's measures may vary among industries. In current study, industry effects are controlled for by the inclusion of dummy variables using GICS as the value of (1) is used if the firm is in the industry or (0) otherwise. In addition, the regression equations are controlled for time effect. This is done by adding 'time dummies' for the year in which the observations are made (Rashid & Hoque 2011).

6.3. Regression Model

For this study, the following model has been developed to test the association between board independence and firm performance.

$$Y_{i,t}=\alpha+\beta_1 BDIND_{i,t}+ \beta_2 CEODi_{,t} + \beta_3 BDGDIVi_{,t} + \beta_4 DIROWNi_{,t} + \beta_5 BLOWNi_{,t} + \beta_6 INSTOWNi_{,t} + \beta_7\ BDSIZEi_{,t} + \beta_8\ SIZE_{i,t} + \beta_9 AGE_{i,t} + \beta_{10} GROWTH_{i,t} + \beta_{11} LIQ_{i,t} + \beta_{12} LEV_{i,t} + \beta_{13} FCF_{i,t} + \beta_{14} R\&D_{i,t} + \Omega YEAR + \gamma industry + \varepsilon_{i,t}$$

Where, $Y_{i,t}$ comprises the measure of performance, namely, $ROA_{i,t.,}$ $BDIND_{i,t}$ is the proportion of independent directors to the total number directors. $CEOD_{i,}$ is the CEO duality. $BDGDIV_{i,t}$ is the board diversity (as measured by the percentage of women on the board of directors). $DIROWN_{i,t}$ is the percentage of shares owned by directors. $BLOWN_{i,t}$ is the percentage of shares owned by three largest block holders. $INSTOWN_{i,t}$ is the percentage of shares owned by institutions. $BDSIZE_{i,t}$ is the natural logarithm of the total number of board members. $SIZE_{i,t}$ is the natural logarithm of the total assets. $AGE_{i,t}$ is the natural logarithm of the total number of years a firm has been listed on the stock exchange. $GROWTH_{i,t}$ is the changes in sales. $LIQ_{i,t}$ is the liquidity. $LEV_{i,t}$ is the ratio of total debt to total assets. $FCF_{i,t}$ is the measured by operating income before depreciation minus the sum of taxes plus interest expense and dividends paid scaled by total assets. $R\&D_{i,t}$ is calculated as R&D's percentage to sales. α is the intercept, β is the regression coefficient and ε is the error term.

For achieving statistical analysis, there is a need to meet statistical analysis assumptions, such as multicollinearity, normality, endogeneity and heteroscedasticity. It is confirmed that the normality violations are of little concern when the

size of a sample is high (higher than 30) (Coakes & Steed 2001). However, the Residual 'Test/Histogram'-'Normality Test' of the regression model provided a 'Bell Shape' conforming to the data normality. With respect to the correlation matrix of the variables, Table 4 presents that there is no correlation between the variables due to the correlation coefficients are less than 75% or negative. It is suggested that the variance inflation factor higher than 10 is evidence of multicollinearity (Gujarati 2003). The 'Variance Inflation Factor' of all the variables of this study are less than (4). Despite the standardised predicted value (ZPRED) versus the plot of standardised residuals (ZRESID) of the regression model does not seem curve shape or a funnel showing that there is no an indication of heteroscedasticity. The chi-square statistics and a corresponding p-value of Breusch–Pagan–Godfrey test propose that heteroscedasticity is present in the regression model, which is adjusted using correction technique for unknown heteroscedasticity of (white 1980). On the other hand, if endogeneity is present, the ordinary least square regression model is inconsistent, and 'Instrumental Variable Techniques' are applied to address endogeneity. As argued by Gujarati 2003, that the F-test for the predicted value of board independence was marginally insignificant. This outcome suggested that there are no Indicators of potential endogeneity between the board independence and the firm performance, proposing that the ordinary least square and instrumental variable techniques are consistent.

6.4. Descriptive Statistics

Table 2 shows the descriptive statistics for the examined variables. The average of ROA for the sample is 4.6% and the minimum and maximum of ROA are -28.3% to 36% respectively. The average board independence is found to be 52.1%, which are ranging from 0% to 100%, suggesting that on average the sample firms' board has more than 50% of independent directors.

The average board gender diversity is found to be only 3.2% indicating that firms operating in Jordan have very lower level of gender diversity in their board (Cigna et al. 2017). On an average, there is 20.2% of CEO duality in the sample. The average director ownership, largest block holders and institutional investors are 48.7%, 52.6% and 8.6% respectively. The size of board is 8 directors and Al-Najjar (2014) argued that board should not exceed 8 or 9 members to be effectively. Table 2 presents an average of debt ratio, free cash flow and R&D of approximately 31.9%, 330.1% and 2.7% respectively.

7. EMPIRICAL RESULTS

This study applied regression model analysis to measure the effects of board independence on firm performance. Different models were constructed to examine effects board independence as independent variable. In models where ROA is the dependent variable. As expected, the model fits as well as the coefficients of the independent variables are better. The results of the regression analysis of board independence on firm performance of non-financial Jordanian companies are presented in Table 3.

Table 2 : Descriptive statistics of the sample

	N	Mean	Standard deviation	Minimum	Maximum
ROA	880	0.046	0.097	0.283	0.360
BDIND	880	0.521	0.233	0.000	1.000
BDGDIV	880	0.032	0.069	0.000	0.429
CEOD	880	0.202	0.402	0.000	1.000
DIROWN	880	0.487	0.265	0.006	0.986
LBOWN	880	0.526	0.222	0.085	0.987
INSTOWN	880	0.086	0.124	0.000	0.638
BDSIZE	880	8.467	2.356	3.000	14.000
SIZE	880	17.014	1.458	12.886	21.310
LN_AGE	880	2.716	0.754	0.000	3.664
GROWTH	880	0.123	0.692	–0.819	5.022
LIQ	880	2.812	3.989	0.073	29.036
LEV	880	0.319	0.210	0.004	0.929
FCF	880	3.301	16.117	–26.360	98.836
R&D	880	0.027	0.065	0.000	0.363

Table 3: Board independence and firm performance (Regression Results)

Model	Model 1	Model 2	Model 3
Constant	0.0647 (7.50)***	−0.3815 (−7.27)***	−0.3636 (−5.16)***
BDIND	−0.0361 (−2.61)***	0.0355 (2.67)***	0.0358 (2.55)**
CEOD		0.0294 (3.91)***	0.0322 (4.40)***
BDGDIV		0.0885 (2.13)**	0.1004 (2.30)**
DIROWN		0.0529 (3.10)***	0.0308 (1.79)*
LBOWN		−0.0249 (−1.39)	−0.0210 (−1.19)
INSTOWN		0.0443 (1.76)*	0.0436 (1.78)*
BDSIZE		−0.0039 (−2.96)***	−0.0059 (−4.08)***
SIZE		0.0259 (7.97)***	0.0273 (7.60)***
LN_AGE		0.0055 (1.37)	0.0069 (1.63)
GROWTH		0.0073 (1.38)	0.0057 (1.07)
LIQ		0.0004 (0.53)	0.0003 (0.27)
LEV		−0.1233 (−7.81)***	−0.1181 (−5.72)***
FCF		0.0010 (4.83)***	0.0013 (5.00)***
R&D		−0.1775 (−4.66)***	−0.1694 (−4.14)***
Year	No	No	Yes
Industry	No	No	Yes
Adjusted R-squared	0.0064	0.2823	0.3041
F-statistic	6.66	25.70	13.01
Probability	0.0100	0.0000	0.0000
N	880	880	880

Table 3 shows the regression results for ROA. In general, this study found a significant positive relationship between board independence and firm performance. In model 2, other variables were included except dummy variables were excluded, yielded an adjusted R-squared of 28.23%. When this study added the dummy variables in model 3, the adjusted R-squared increased to 30.41% from 28.23%.

The results also indicated that CEOD and BDGDIV had a significant positive explanatory power in influencing performance. DIROWN had a significant positive explanatory power in influencing firm performance in model 2. BDZISE, LEV and R&D had a significant negative explanatory power in influencing ROA. SIZE and FCF had a positive explanatory power in influencing firm performance. Additionally, the dummy for the energy and health care had a negative effect.

The model with dummy variables pointed out the significant effects the association between the board independence and firm performance is the opposite of that studies carried out by Cavaco et al. (2014), Hermalin and Weisbach (1991), Horváth and Spirollari (2012), Christensen et al. (2010) and Bird et al. (2017) claimed that a significant negative association between board independence and firm performance. Therefore, the results on the effects of board independence on firm performance are much conflicted in the literature review.

Proceedings of Sydney International Business Research Conference 2018, Novotel Sydney Central, Sydney, Australia, 25-26 March 2018;
ISBN 978-0-9946029-9-2

Table 4 : Correlation coefficients

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	VIF
1	ROA	1															
2	BDIND	−0.09*	1														1.50
3	CEOD	0.15**	0.06	1													1.04
4	BDGDIV	0.13**	−0.19**	0.05	1												1.07
5	DIROWN	0.19**	−0.53**	−0.06	0.13**	1											3.65
6	LBOWN	0.09**	−0.38**	−0.12**	0.11**	0.66**	1										2.72
7	INSTOWN	−0.05	0.27**	−0.02	−0.10**	−0.45**	−0.03	1									1.56
8	BDSIZE	0.12**	0.07	−0.01	−0.05	0.12**	−0.22**	−0.11**	1								1.62
9	SIZE	0.33**	−0.17**	−0.04	0.01	0.23**	0.07*	−0.06	0.46**	1							1.92
10	AGE	−0.01	0.01	−0.10**	−0.13**	−0.01	0.05	0.07*	0.12**	0.15**	1						1.15
11	GROWTH	0.04	−0.04	0.03	0.04	0.02	0.06	0.08*	−0.04	−0.06	−0.19**	1					1.07
12	LIQ	0.06	0.04	0.094**	0.02	0.10**	0.09**	−0.06	−0.12**	−0.34**	−0.19**	0.11**	1				1.40
13	LEV	−0.23**	0.08*	−0.11**	−0.16**	−0.15**	−0.01	0.16**	0.02	0.29**	0.23**	−0.01	−0.44**	1			1.58
14	FCF	0.34**	-0.18**	−0.01	0.06	0.24**	0.21**	−0.06	0.15**	0.38**	0.06	−0.02	0.02	−0.08*	1		1.29
15	R&D	−0.18**	0.09*	−0.06	−0.03	0.03	0.01	−0.01	0.09**	0.08*	0.07*	−0.04	−0.14**	0.27**	−0.06	1	1.12

The findings of this does support the agency theory. It is argued conflicts of interst between shareholders and managers are commonly found in listed companies; it is an essential to have independent directors to control CEOs in order to resolve this problem (Che & Langli 2015), and therefore reduce agency problems.

This table shows the summary of results of the board independence and firm performance under ROA as accounting measure. Colum (1), (2), and (3) represent the various coefficients of various models. The *t*-tests are displayed in the parentheses.

8. DISCUSSION AND CONCLUSION

One characteristic of most modern firms is that the separation of the ownership from the management may lead to so-called agency problems (Jensen & Meckling 1976) where management acts as an agent in its own self-interest, thus conflicts of interest may arise between managers and shareholders. Promoters of agency theory argue that the board of directors assists in mitigating the agency problems inherent in managing corporations which may arise from the separation of ownership and control (Daily et al. 2003; Adams et al. 2010). It may be considered that outside directors to the firm are more independent and that their expertise in capital markets and company law, therefore, makes them more efficient in monitoring the management team (Fama & Jensen 1983b; Chen 2011). It has been argued that firms have boards of directors which are independent of management influence in order to accomplish maximum performance for the business (Muth & Donaldson 1998).

The empirical findings on the influences of board independence on firm performance are mixed. Earlier studies concentrated mostly on developed countries, with dispersed ownership context. Thus, this study tried to fill this gap by investigating if board independence in the form of 'representation of outside independent directors' may influence the firm's performance in the context of listed firms featuring highly concentrated ownership.

The empirical results suggest in general that there is a positive association between board independence and firm performance. This research provides evidence that board independence is positively related to performance as measured by ROA, which is in line with earlier studies such as (Daily & Dalton 1992; Anderson & Reeb 2004; Luan & Tang 2007; Al-Najjar 2014; Barka & Legendre 2017; Boateng et al. 2017).

Board independence is found to be an important CG mechanism for the study's sample of Jordanian non-financial firms. Therefore, independent directors can constitute a significant CG means to resolve the potential conflicts of interest between managers and shareholders. The outcomes of this study support the hypothesis that board independence in enhances firm performance. It is also support the argument that control by a company board is a suitable mechanism for many emerging markets as firm ownership may not achieve full control (Luo et al. 2011). Therefore, this study provides valuable empirical evidence for decision makers and policymakers to assist them in formulating regulations regarding the CG of non-financial firms. Regulations that promote the adoption of independent directors are necessary.

9. LIMITATIONS

This study has some limitations that might warrant future investigations. First, the current study employed ROA as an accounting-based measure of firm performance. However, it may be argued that accounting profits can be easily manipulated. Additionally, on some occasions, accounting profits are prepared within management guidelines and therefore managers are likely to use a particular accounting system to provide firm performance in the most efficient manner (Chakravarthy 1986; Deegan 2005). Moreover, stock market measures may lead to problems, particularly in less developed and emerging markets. It may be argued that most companies tend to use debt financing in these economies rather than using finance from the stock market. Therefore, stock market measures may not reflect the real profits made by the investors on their investments (Lindenberg & Ross 1981). Second, the current study excluded financial firms because these are managed by different rules and instructions, thus the sample size was decreased from 224 firms to 80, which is limited. Finally, this study was concerned only with firms listed in the ASE. It is recommended that a future study can examine CG across different Arab countries with similarly share cultures, economies, institutional settings and financial infrastructure.

10. ACKNOWLEDGEMENT

This work is financially supported by the Tafila Technical University. We express our appreciation and thanks for their financial support.

REFERENCES

Abdallah, A.A.N. and Ismail, A.K., 2017. Corporate governance practices, ownership structure, and corporate performance in the GCC countries. Journal of International Financial Markets, Institutions and Money, 46, pp.98-115.

Abu-Serdaneh, J., Zuriekat, M. and Al-Sheikh, I., 2010. Ownership Structure and Corporate performance in the Jordanian manufacturing companies. Jordan Journal of Business Administration, 6(3), pp.426-439.

Adams, R.B., Haan, J., Terjesen, S. and Ees, H., 2015. Board diversity: Moving the field forward. Corporate Governance: An International Review, 23(2), pp.77-82.

Adams, R.B., Hermalin, B.E. and Weisbach, M.S., 2010. The role of boards of directors in corporate governance: A conceptual framework and survey, Journal of Economic Literature, 48(1), pp.58-107.

Akbar, S., Poletti-Hughes, J., El-Faitouri, R. and Shah, S.Z.A., 2016. More on the relationship between corporate governance and firm performance in the UK: Evidence from the application of generalized method of moment's estimation. Research in International Business and Finance, 38, pp.417-429.

Aktas, N., Andreou, P.C., Karasamani, I. and Philip, D., 2018. CEO Duality, Agency Costs, and Internal Capital Allocation Efficiency. British Journal of Management.

Anderson, R.C. and Reeb, D.M., 2003. Founding□family ownership and firm performance: evidence from the S&P 500. The Journal of Finance, 58(3), pp.1301-1328.

Anderson, R.C. and Reeb, D.M., 2004. Board composition: Balancing family influence in S&P 500 firms. Administrative Science Quarterly, 49(2), pp.209-237.

Ang, J.S., Cole, R.A. and Lin, J.W., 2000. Agency costs and ownership structure. The Journal of Finance, 55(1), pp.81-106.

Ararat, M., Aksu, M. and Tansel Cetin, A., 2015. How board diversity affects firm performance in emerging markets: Evidence on channels in controlled firms. Corporate Governance: An International Review, 23(2), pp.83-103.

Ararat, M., Black, B.S. and Yurtoglu, B.B., 2017. The effect of corporate governance on firm value and profitability: Time-series evidence from Turkey. Emerging Markets Review, 30, pp.113-132.

Ararat, M. and Yurtoglu, B.B., 2006. Corporate governance in Turkey: an introduction to the special issue. Corporate Governance: An International Review, 14(4), pp.201-206.

Al-Azzam, Z.F., Al-Mohameed, H. and Al-Qura'an, A.B., 2015. How the corporate governance affects organization strategy: Lessons from Jordan environment, Journal of Business and Management, 17(4), PP. 52-66.

Al-Bassam, W.M., Ntim, C.G., Opong, K.K. and Downs, Y., 2015. Corporate boards and ownership structure as antecedents of corporate governance disclosure in Saudi Arabian publicly listed corporations. Business & Society, 57(2), pp. 335-377.

Al-Daoud, K.I., Saidin, S.Z. and Abidin, S., 2016. Board Meeting and Firm Performance: Evidence from the Amman Stock Exchange. Corporate Board: Role, Duties and Composition, 12(2), pp.6-11.

Al-Najjar, B., 2014. Corporate governance, tourism growth and firm performance: Evidence from publicly listed tourism firms in five Middle Eastern countries. Tourism Management, 42, pp.342-351.

Alqatamin, R.M., Aribi, Z.A. and Arun, T., 2017. The effect of the CEO's characteristics on EM: evidence from Jordan. International Journal of Accounting & Information Management, 25(3), pp.356-375.

Alzoubi, E.Saleem Salem, 2016. Ownership structure and earnings management: evidence from Jordan. International Journal of Accounting & Information Management, 24(2), pp.135-161.

Banghøj, J., Gabrielsen, G., Petersen, C. and Plenborg, T., 2010. Determinants of executive compensation in privately held firms. Accounting & Finance, 50(3), pp.481-510.

Barka, H.B. and Legendre, F., 2017. Effect of the board of directors and the audit committee on firm performance: a panel data analysis. Journal of Management & Governance, 21(3), pp.737-755.

Bathala, C.T. and Rao, R.P., 1995. The determinants of board composition: An agency theory perspective. Managerial and Decision Economics, 16(1), pp.59-69.

Beasley, M.S., 1996. An empirical analysis of the relation between the board of director composition and financial statement fraud. Accounting Review, pp.443-465.

Bennouri, M., Chtioui, T., Nagati, H. and Nekhili, M., 2018. Female Board Directorship and Firm Performance: What Really Matters? Journal of Banking & Finance, 88, pp. 267-291.

Bertoni, F., Meoli, M. and Vismara, S., 2014. Board independence, ownership structure and the valuation of IPOs in continental Europe. Corporate Governance: An International Review, 22(2), pp.116-131.

Bird, R., Huang, P. and Lu, Y., 2018. Board independence and the variability of firm performance: Evidence from an exogenous regulatory shock. Australian Journal of Management, 43(1), pp. 3-26.

Boateng, A., Bi, X. and Brahma, S., 2017. The impact of firm ownership, board monitoring on operating performance of Chinese mergers and acquisitions. Review of Quantitative Finance and Accounting, 49(4), pp.925-948.

Brick, I.e.,, Palmon, O. and Wald, J.K., 2006. CEO compensation, director compensation, and firm performance: Evidence of cronyism? Journal of Corporate Finance, 12(3), pp.403-423.

Brickley, J.A., Coles, J.L. and Terry, R.L., 1994. Outside directors and the adoption of poison pills. Journal of financial Economics, 35(3), pp.371-390.

Brickley, J.A. and James, C.M., 1987. The takeover market, corporate board composition, and ownership structure: The case of banking. The Journal of Law and Economics, 30(1), pp.161-180.

Brickley, J.A. and Zimmerman, J.L., 2010. Corporate governance myths: comments on Armstrong, Guay, and Weber. Journal of Accounting and Economics, 50(2-3), pp.235-245.

Boyd, B.K., 1995. CEO duality and firm performance: A contingency model. Strategic Management Journal, 16(4), pp.301-312.

Campbell II, T.L. and Keys, P.Y., 2002. Corporate governance in South Korea: the chaebol experience. Journal of Corporate Finance, 8(4), pp.373-391.

Carter, D.A., D'Souza, F., Simkins, B.J. and Simpson, W.G., 2010. The gender and ethnic diversity of US boards and board committees and firm financial performance. Corporate Governance: An International Review, 18(5), pp.396-414.

Cavaco, S., Challe, E., Crifo, P., Rebérioux, A. and Roudaut, G., 2014. Board independence and operating performance: Analysis on (French) company and individual data.

Chakravarthy, B.S., 1986. Measuring strategic performance. Strategic Management Journal, 7(5), pp.437-458.

Che, L. and Langli, J.C., 2015. Governance structure and firm performance in private family firms. Journal of Business Finance & Accounting, 42(9-10), pp.1216-1250.

Chen, H.L., 2011. Does board independence influence the top management team? Evidence from strategic decisions toward internationalization. Corporate Governance: An International Review, 19(4), pp.334-350.

Chen, T., 2015. Institutions, board structure, and corporate performance: Evidence from Chinese firms. Journal of Corporate Finance, 32, pp.217-237.

Cheng, P., Su, L.N. and Zhu, X.K., 2012. Managerial ownership, board monitoring and firm performance in a family-concentrated corporate environment. Accounting & Finance, 52(4), pp.1061-1081.

Cho, D.S. and Kim, J., 2007. Outside directors, ownership structure and firm profitability in Korea. Corporate Governance: An International Review, 15(2), pp.239-250.

Choi, S.B., Park, B.I. and Hong, P., 2012. Does ownership structure matter for firm technological innovation performance? The case of Korean firms. Corporate Governance: An International Review, 20(3), pp.267-288.

Christensen, J., Kent, P. and Stewart, J., 2010. Corporate governance and company performance in Australia. Australian Accounting Review, 20(4), pp.372-386.

Cigna, GP, Sigheartau, A & Advisors, N 2017, Corporate Governance in Transition Economies, Jordan Country Report, European Bank for Reconstruction and Development.

Claessens, S., Djankov, S. and Lang, L.H., 2000. The separation of ownership and control in East Asian corporations. Journal of Financial Economics, 58(1-2), pp.81-112.

Coakes, S.J. and Steed, L.G. (2001), SPSS Analysis without Anguish, John Wiley and Sons Australia Ltd, Sydney.

Coles, J.L., Daniel, N.D. and Naveen, L., 2008. Boards: Does one size fit all? Journal of Financial Economics, 87(2), pp.329-356.

Connelly, J.T., Limpaphayom, P., Nguyen, H.T. and Tran, T.D., 2017. A tale of two cities: Economic development, corporate governance and firm value in Vietnam. Research in International Business and Finance, 42, pp.102-123.

Core, J.E., Holthausen, R.W. and Larcker, D.F., 1999. Corporate governance, chief executive officer compensation, and firm performance. Journal of Financial Economics, 51(3), pp.371-406.

Cladera, R. and Fuster, B., 2014. Does the independence of independent directors' matter? Journal of Corporate Finance, 28, pp.116-134.

Czarnitzki, D. and Kraft, K., 2006. R&D and firm performance in a transition economy. Kyklos, 59(4), pp.481-496.

Daily, C. M. and D. R. Dalton (1992), The relationship between Governance Structure and Corporate Performance in Entrepreneurial Firms, Journal of Business Venturing, 7(5): 375-386.

Daily, C.M., Dalton, D.R. and Cannella, A.A., 2003. Corporate governance: Decades of dialogue and data. Academy of Management Review, 28(3), pp.371-382.

Dalton, D.R. and Daily, C.M., 1999. What's wrong with having friends on the board? Across the board, 36(3), pp.28-32.

Dalton, D.R., Daily, C.M., Certo, S.T. and Roengpitya, R., 2003. Meta-analyses of financial performance and equity: fusion or confusion? Academy of Management Journal, 46(1), pp.13-26.

Davis, J.H., Schoorman, F.D. and Donaldson, L., 1997. Toward a stewardship theory of management. Academy of Management Review, 22(1), pp.20-47.

Davis, J.H., Allen, M.R. and Hayes, H.D., 2010. Is blood thicker than water? A study of stewardship perceptions in family business. Entrepreneurship Theory and Practice, 34(6), pp.1093-1116.

Deegan, C. (2005). Australian financial accounting 4th ed. Sydney: McGraw Hill Australia Pty Ltd.

Denis, D.K. and McConnell, J.J., 2003. International corporate governance. Journal of Financial and Quantitative Analysis, 38(1), pp.1-36.

Dey, A., 2008. Corporate governance and agency conflicts. Journal of Accounting Research, 46(5), pp.1143-1181.

Donaldson, L., 1990. The ethereal hand: Organizational economics and management theory. Academy of Management Review, 15(3), pp.369-381.

Donaldson, L. and Davis, J.H., 1991. Stewardship theory or agency theory: CEO governance and shareholder returns. Australian Journal of Management, 16(1), pp.49-64.

Donnelly, R. and Mulcahy, M., 2008. Board structure, ownership, and voluntary disclosure in Ireland. Corporate Governance: An International Review, 16(5), pp.416-429.

Ducassy, I. and Guyot, A., 2017. Complex ownership structures, corporate governance and firm performance: The French context. Research in International Business and Finance, 39, pp.291-306.

Durnev, A. and Kim, E.H.A.N., 2005. To steal or not to steal: Firm attributes, legal environment, and valuation. The Journal of Finance, 60(3), pp.1461-1493.

Eisenhardt, K.M., 1989. Agency theory: An assessment and review. Academy of Management Review, 14(1), pp.57-74.
Elfeky, M.I., 2017. The extent of voluntary disclosure and its determinants in emerging markets: Evidence from Egypt. The Journal of Finance and Data Science, 3(1-4), pp. 45-59.
Elsayed, K., 2007. Does CEO duality really affect corporate performance? Corporate Governance: An International Review, 15(6), pp.1203-1214.
Farag, H., Mallin, C. and Ow-Yong, K., 2014. Governance, ownership structure, and performance of entrepreneurial IPOs in AIM companies. Corporate Governance: An International Review, 22(2), pp.100-115.
Fama, E.F. and Jensen, M.C., 1983a. Agency problems and residual claims. The Journal of Law and Economics, 26(2), pp.327-349.
Fama, E.F. and Jensen, M.C., 1983b. Separation of ownership and control. The Journal of Law and Economics, 26(2), pp.301-325.
Fedaseyeu, V., Linck, J.S. and Wagner, H.F., 2018. Do qualifications matter? New evidence on board functions and director compensation. Journal of Corporate Finance, 48, pp.816-839.
Finkelstein, S. and Hambrick, D.C., 1996. Strategic Leadership: Top Executives and their Effects on Organizations, West Publ. Co.: Minneapolis.
Frias-Aceituno, J.V., Rodriguez-Ariza, L. and Garcia-Sanchez, I.M., 2013. The role of the board in the dissemination of integrated corporate social reporting. Corporate Social Responsibility and Environmental Management, 20(4), pp.219-233.
Jaafar, A. and El-Shawa, M., 2009. Ownership concentration, board characteristics and performance: evidence from Jordan. Accounting in Emerging Economies, 9, pp. 73-95.
Jamali, D., Safieddine, A.M. and Rabbath, M., 2008. Corporate governance and corporate social responsibility synergies and interrelationships. Corporate Governance: An International Review, 16(5), pp.443-459.
Jarbou, L., Abu-Serdaneh, J. and Atmeh, M., 2018. Ownership Structure and Conservatism's Impact on Jordanian Bank's Financial Performance. The Journal of Developing Areas, 52(4), pp.183-197.
Jensen, M.C., 1986. Agency costs of free cash flow, corporate finance, and takeovers. The American Economic Review, 76(2), pp.323-329.
Jensen, M.C., 1993. The modern industrial revolution, exit, and the failure of internal control systems. The Journal of Finance, 48(3), pp.831-880.
Jensen, M.C. and Meckling, W.H., 1976. Theory of the firm: Managerial behavior, agency costs and ownership structure. Journal of Financial Economics, 3(4), pp.305-360.
Jones, C.D., Makri, M. and Gomez-Mejia, L.R., 2008. Affiliate directors and perceived risk bearing in publicly traded, family-controlled firms: The case of diversification. Entrepreneurship Theory and Practice, 32(6), pp.1007-1026.
Harris, M. and Raviv, A., 2006. A theory of board control and size. The Review of Financial Studies, 21(4), pp.1797-1832.
Hermalin, B.E. and Weisbach, M.S., 1991. The effects of board composition and direct incentives on firm performance. Financial Management, pp.101-112.
Hillman, A.J. and Dalziel, T., 2003. Boards of directors and firm performance: Integrating agency and resource dependence perspectives. Academy of Management Review, 28(3), pp.383-396.
Horváth, R. and Spirollari, P., 2012. Do the board of directors' characteristics influence firm's performance? The US evidence. Prague Economic Papers, 4, pp.470-486.
Ibrahim, A.H. and Hanefah, M.M., 2016. Board diversity and corporate social responsibility in Jordan. Journal of Financial Reporting and Accounting, 14(2), pp.279-298.
Garanina, T. and Kaikova, E., 2016. Corporate governance mechanisms and agency costs: cross-country analysis. Corporate Governance, 16(2), pp.347-360.
Gordon, J.N., 2006. The rise of independent directors in the United States, 1950-2005: Of shareholder value and stock market prices. Stan. L. Rev., 59, pp.1465-1568.
Kakabadse, A., Kakabadse, N.K. and Barratt, R., 2006. Chairman and chief executive officer (CEO): that sacred and secret relationship. Journal of Management Development, 25(2), pp.134-150.
Kang, Y.S. and Kim, B.Y., 2012. Ownership structure and firm performance: Evidence from the Chinese corporate reform. China Economic Review, 23(2), pp.471-481.
Kaymak, T. and Bektas, E., 2008. East meets west? Board characteristics in an emerging market: Evidence from Turkish banks. Corporate Governance: An International Review, 16(6), pp.550-561.
Kim, Y.U. and Ozdemir, S.Z., 2014. Structuring corporate boards for wealth protection and/or wealth creation: The effects of national institutional characteristics. Corporate Governance: An International Review, 22(3), pp.266-289.
Kirkbride, J. and Letza, S., 2005. Can the non-executive director be an effective gatekeeper? The possible development of a legal framework of accountability. Corporate Governance: An International Review, 13(4), pp.542-550.
Kryzanowski, L. and Mohebshahedin, M., 2016. Board governance, monetary interest, and closed-end fund performance. Journal of Corporate Finance, 38, pp.196-217.
Kumar, P & Zattoni, A 2013, Editorial: corporate governance, board of directors, and firm performance, Oxford, Blackwell.
Kumar, P. and Zattoni, A., 2016a. Corporate governance, board gender diversity and firm performance. Corporate Governance: An International Review, 24(4), pp.388-389.
Kumar, P. and Zattoni, A., 2016b. Executive compensation, board functioning, and corporate governance. Corporate Governance: An International Review, 24(1), pp.2-4.
Kumar, P. and Zattoni, A., 2017a. Ownership structure and corporate governance: The need to further explore mutual and complex relationships. Corporate Governance: An International Review, 25(5), pp.292-293.

Kumar, P. and Zattoni, A., 2017b. Board monitoring and effectiveness: Antecedents and implications. Corporate Governance: An International Review, 25(2), pp.76-77.

Kuo, Y.P. and Hung, J.H., 2012. Family control and investment-cash flow sensitivity: Moderating effects of excess control rights and board independence. Corporate Governance: An International Review, 20(3), pp.253-266.

La Porta, R., Lopez-de-Silanes, F., Shleifer, A. and Vishny, R., 2000. Investor protection and corporate governance. Journal of Financial Economics, 58(1), pp.3-27.

Lefort, F. and Urzúa, F., 2008. Board independence, firm performance and ownership concentration: Evidence from Chile. Journal of Business Research, 61(6), pp.615-622.

Lemmon, M.L. and Lins, K.V., 2003. Ownership structure, corporate governance, and firm value: Evidence from the East Asian financial crisis. The Journal of Finance, 58(4), pp.1445-1468.

Leung, S., Richardson, G. and Jaggi, B., 2014. Corporate board and board committee independence, firm performance, and family ownership concentration: An analysis based on Hong Kong firms. Journal of Contemporary Accounting & Economics, 10(1), pp.16-31.

Lindenberg, E.B. and Ross, S.A., 1981. Tobin's q ratio and industrial organization. Journal of Business, pp.1-32.

Liu, Y., Miletkov, M.K., Wei, Z. and Yang, T., 2015. Board independence and firm performance in China. Journal of Corporate Finance, 30, pp.223-244.

Liu, C., Uchida, K. and Yang, Y., 2012. Corporate governance and firm value during the global financial crisis: Evidence from China. International Review of Financial Analysis, 21, pp.70-80.

Luan, C.J. and Tang, M.J., 2007. Where is independent director efficacy? Corporate Governance: An International Review, 15(4), pp.636-643.

Luo, W., Zhang, Y. and Zhu, N., 2011. Bank ownership and executive perquisites: New evidence from an emerging market. Journal of Corporate Finance, 17(2), pp.352-370.

Maassen, G. F. (2002). An International Comparison of Corporate Governance Models, Third Edition, Spencer Stuart, Amsterdam, Netherlands.

Madanoglu, M., Kizildag, M. and Ozdemir, O., 2018. Which bundles of corporate governance provisions lead to high firm performance among restaurant firms? International Journal of Hospitality Management, 72, pp.98-108.

Majumdar, S.K. and Chhibber, P., 1999. Capital structure and performance: Evidence from a transition economy on an aspect of corporate governance. Public Choice, 98(3-4), pp.287-305.

Mangena, M., Tauringana, V. and Chamisa, E., 2012. Corporate boards, ownership structure and firm performance in an environment of severe political and economic crisis. British Journal of Management, 23(S1).

Maseda, A., Iturralde, T. and Arosa, B., 2015. Impact of Outsiders on Firm Performance over Different Generations of Family-Owned SMEs. Journal of Small Business Management, 53(4), pp.1203-1218.

Masulis, R.W. and Mobbs, S., 2011. Are all inside directors the same? Evidence from the external directorship market. The Journal of Finance, 66(3), pp.823-872.

Matten, D. and Moon, J., 2008. Implicit" and "explicit" CSR: A conceptual framework for a comparative understanding of corporate social responsibility, Academy of Management Review, 33(2), pp.404-424.

Meca, E. and Ballesta, J.P., 2009. Corporate governance and earnings management: A meta-analysis. Corporate governance: An International Review, 17(5), pp.594-610.

Mizruchi, M.S., 2004. Berle and Means revisited: The governance and power of large US corporations. Theory and Society, 33(5), pp.579-617.

Muravyev, A., Berezinets, I. and Ilina, Y., 2014. The structure of corporate boards and private benefits of control: evidence from the Russian stock exchange. International Review of Financial Analysis, 34, pp.247-261.

Muth, M. and Donaldson, L., 1998. Stewardship theory and board structure: A contingency approach. Corporate Governance: An International Review, 6(1), pp.5-28.

Nicholson, G.J. and Kiel, G.C., 2007. Can directors impact performance? A case-based test of three theories of corporate governance. Corporate Governance: An International Review, 15(4), pp.585-608.

Ngo, M.T., Jorissen, A. and Nonneman, W., 2018. Do OECD-type governance principles have economic value for Vietnamese firms at IPO? Corporate Governance: An International Review, 26(1), pp.58-79.

O'connell, V. and Cramer, N., 2010. The relationship between firm performance and board characteristics in Ireland. European Management Journal, 28(5), pp.387-399.

Olaniyi, C.O., Obembe, O.B. and Oni, E.O., 2017. Analysis of the Nexus between CEO Pay and Performance of Non-Financial Listed Firms in Nigeria. African Development Review, 29(3), pp.429-445.

Othman, H.B. and Zeghal, D., 2006. A study of earnings-management motives in the Anglo-American and Euro-Continental accounting models: The Canadian and French cases. The International Journal of Accounting, 41(4), pp.406-435.

Pham, P.K., Suchard, J.A. and Zein, J., 2011. Corporate governance and alternative performance measures: evidence from Australian firms. Australian Journal of Management, 36(3), pp.371-386.

Pearce, J.A. and Zahra, S.A., 1992. Board composition from a strategic contingency perspective. Journal of Management Studies, 29(4), pp.411-438.

Ramadan, I.Z., 2013. Jordanian Evidence for the Pay-Performance Relation. International Business Research, 6(3), p.174.

Rashid, A., 2012, Corporate governance, ownership structure and firm performance: Evidence from an emerging economy, Corporate Ownership and Control, 9(4), pp.441-455.

Rashid, A., 2013. CEO duality and agency cost: evidence from Bangladesh. Journal of Management & Governance, 17(4), pp.989-1008.

Rashid, A., 2016. Managerial ownership and agency cost: evidence from Bangladesh. Journal of Business Ethics, 137(3), pp.609-621.

Rashid, A. and Hoque, A., 2011. Corporate capital structure and firm performance: Evidence from Bangladesh. Academy of Taiwan Business Management Review, 7(2), pp.59-72.

Rashid, A., De Zoysa, A., Lodh, S. and Rudkin, K., 2010, Board composition and firm performance: Evidence from Bangladesh. Australasian Accounting Business & Finance Journal, 4(1), pp.76-95.

Rashid, A., 2018. Board independence and firm performance: Evidence from Bangladesh. Future Business Journal, 4(1), pp.34-49.

Rechner, P. L., & Dalton, R. D., 1986. Board Composition and Shareholders Wealth: An Empirical Assessment, International Journal of Management, 3 (2), 86-92.

Renders, A. and Gaeremynck, A., 2012. Corporate governance, principal-principal agency conflicts, and firm value in European listed companies. Corporate Governance: An International Review, 20(2), pp.125-143.

Romano, G. and Guerrini, A., 2014. The effects of ownership, board size and board composition on the performance of Italian water utilities. Utilities Policy, 31, pp.18-28.

Rose, C., 2005. Managerial Ownership and Firm Performance in Listed Danish Firms: In Search of the Missing Link, European Management Journal, 23(5), pp.542-553.

Rosenstein, S. and Wyatt, J.G., 1990. Outside directors, board independence, and shareholder wealth. Journal of Financial Economics, 26(2), pp.175-191.

Rubino, F.E., Tenuta, P. and Cambrea, D.R., 2017. Board characteristics effects on performance in family and non-family business: a multi-theoretical approach. Journal of Management & Governance, 21(3), pp.623-658.

Salim, M. and Yadav, R., 2012. Capital structure and firm performance: Evidence from Malaysian listed companies. Procedia-Social and Behavioral Sciences, 65, pp.156-166.

Samara, G. and Mirabent, J., 2017. Independent directors and family firm performance: does one size fit all? International Entrepreneurship and Management Journal, 14(1), pp.149-172.

Shanikat, M. and Abbadi, S.S., 2011. Assessment of corporate governance in Jordan: An empirical study. Australasian Accounting Business & Finance Journal, 5(3), p.93.

Shaukat, A. and Trojanowski, G., 2017. Board governance and corporate performance. Journal of Business Finance & Accounting, 45(1-2), pp. 184-208.

Shin, J.Y., Hyun, J.H., Oh, S. and Yang, H., 2018. The effects of politically connected outside directors on firm performance: Evidence from Korean chaebol firms. Corporate Governance: An International Review, 26(1), pp.23-44.

Short, H. and Keasey, K., 1999. Managerial Ownership and the Performance of Firms: Evidence from the UK. Journal of Corporate Finance, 5(1), pp.79-101.

Singh, M. and Davidson III, W.N., 2003. Agency costs, ownership structure and corporate governance mechanisms. Journal of Banking & Finance, 27(5), pp.793-816.

Solomon, J 2007, Corporate Governance and Accountability, Second Edition, Chichester: John Wiley & Sons Ltd.

Song, S., Van Hoof, H.B. and Park, S., 2017. The impact of board composition on firm performance in the restaurant industry: A stewardship theory perspective. International Journal of Contemporary Hospitality Management, 29(8), pp.2121-2138.

Switzer, L.N., Tu, Q. and Wang, J., 2018. Corporate governance and default risk in financial firms over the post-financial crisis period: International evidence. Journal of International Financial Markets, Institutions and Money, 52, pp.196-210.

Tariquzzaman, A.T.M., 2017. Effects of Corporate Governance Guidelines on Investors: An Experimental Examination of Bangladeshi Investors' Decisions, ph. D. Thesis, Victoria University of Wellington.

Tricker, R. I. (1994). Editorial. Corporate Governance: An International Review, 2(1): 1-4.

Uddin, S. and Choudhury, J., 2008. Rationality, traditionalism and the state of corporate governance mechanisms: Illustrations from a less-developed country. Accounting, Auditing & Accountability Journal, 21(7), pp.1026-1051.

Voordeckers, W., Van Gils, A. and Van den Heuvel, J., 2007. Board Composition in Small and Medium-Sized Family Firms. Journal of Small Business Management, 45(1), pp.137-156.

Waweru, N., 2014. Factors influencing quality corporate governance in Sub Saharan Africa: an empirical study. Corporate Governance, 14(4), pp.555-574.

Weidenbaum, M.L., 1986. Updating the corporate board. Journal of Business Strategy, 7(1), pp.77-83.

World Bank. 2004. Jordan - Report on the Observance of Standards and Codes (ROSC) - Corporate Governance Country Assessment (English). Washington, DC: World Bank.

Yang, T. and Zhao, S., 2014. CEO duality and firm performance: Evidence from an exogenous shock to the competitive environment. Journal of Banking & Finance, 49, pp.534-552.

Yasser, Q.R., Mamun, A.A. and Seamer, M., 2017. Do corporate boards affect firm performance? New evidence from an emerging economy. International Journal of Productivity and Performance Management, 66(6), pp.724-741.

Yassin, M.M., 2017. The determinants of internet financial reporting in Jordan: financial versus corporate governance. International Journal of Business Information Systems, 25(4), pp.526-556.

Zahra, S.A. and Pearce, J.A., 1989. Boards of directors and corporate financial performance: A review and integrative model. Journal of Management, 15(2), pp.291-334.

Zahra, S. A., & Stanton, W. W., 1988. The Implications of Board of Directors'Composition for Corporate Strategy and Performance, International Journal of Management, 5 (2), 229-236.

Zattoni, A., Witt, M.A., Judge, W.Q., Talaulicar, T., Chen, J.J., Lewellyn, K., Hu, H.W., Gabrielsson, J., Rivas, J.L., Puffer, S. and Shukla, D., 2017. Does board independence influence financial performance in IPO firms? The moderating role of the national business system. Journal of World Business, 52(5), pp.628-639.

Zeitun, R., 2009. Ownership structure, corporate performance and failure: Evidence from panel data of emerging market the case of Jordan. Corporate Ownership and Control, 6(4), pp.96-114.

Zeitun, R. and Gang Tian, G., 2007. Does ownership affect a firm's performance and default risk in Jordan? Corporate Governance: The International Journal of Business in Society, 7(1), pp.66-82.

Zheng, C., Moudud-Ul-Huq, S., Rahman, M.M. and Ashraf, B.N., 2017. Does the ownership structure matter for banks' capital regulation and risk-taking behavior? Empirical evidence from a developing country. Research in International Business and Finance, 42, pp.404-421.

Zhu, J., Ye, K., Tucker, J.W. and Chan, K.J.C., 2016. Board hierarchy, independent directors, and firm value: Evidence from China. Journal of Corporate Finance, 41, pp.262-279.

Zhu, H. and Yoshikawa, T., 2016. Contingent value of director identification: The role of government directors in monitoring and resource provision in an emerging economy. Strategic Management Journal, 37(8), pp.1787-1807.