

Outside Directors, Firm Life Cycle, Corporate Financial Decisions and Firm Performance

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ABSTRACT

We investigate whether directors with multiple outside board directorships are related to corporate financial strategy across firm life cycle stages. Using a large sample of firms from the Gulf Cooperation Council (GCC) countries, we find that when the number of directors with multiple board seats increases, firms' level of cash holdings rises, capital expenditure declines, selling, general and administrative (SG&A) expenses increase, and firm performance decreases. We further demonstrate how the relationship varies across different stages of their life cycle. Our findings have significant implications for policy makers, regulators and stockholders in GCC countries and in other emerging markets.

Keywords: Director busyness, firm life cycle, financial decisions, GCC countries

JEL Classification: G32, G34, D21

1. Introduction

This paper examines the effect of directors with multiple directorships (referred as “directors’ busyness”) on financial decisions in publicly listed firms in the Gulf Cooperation Council (GCC) countries.¹ Board directors’ busyness is defined as members of a board who hold three or more outside board seats (Ferris et al., 2003; Fich and Shivdasani, 2006). We further investigate how these effects change over firm life cycle stages. Previous studies have taken a static view of the busyness of boards and do not consider differences in the intensity of the directors’ busyness across different stages of the firm life cycle. To the best of our knowledge, this study is the first to investigate the influence of the multiple directorships on financial decisions across firm life cycle stages and to respond to a call for further investigation of this aspect (Bonn and Pettigrew, 2009; Perrault and McHugh, 2015). Although the monitoring role of directors adds value to a firm, the importance of this function can differ throughout a firm’s life cycle. This is because resourcing, strategic roles and implementation strategies can vary across life-cycle stages (Filatotchev et al., 2006; Filatotchev and Wright, 2005).

We choose the GCC countries as our setting to investigate the impact of directors’ busyness on financial decisions and performance for several reasons. First, the capital markets in GCC countries differs from that in many countries with the high frequency of directors who hold multiple board positions (Al-Musalli and Ismail, 2012; Eulaiwi et al., 2016). Subsequently, the limited resources of busy directors, in terms of time and effort, suppresses their ability to monitor board activities (Yasin and Shehab, 2004) eventually contributing to poor governance practices and less effective investment decisions (Chou and Feng, 2019; Jiraporn et al., 2009b). These impediments can adversely affect the efficiency of directors

¹ This study includes seven stock markets in six GCC countries: Saudi Stock Exchange (Tadawul) in Saudi Arabia, Muskat Securities Market (MSM) in Oman, Kuwait Stock Exchange (KSE) in Kuwait, Qatar Exchange (QE) in Qatar, Bahrain Stock Exchange (BSE) in Bahrain, and the Dubai Financial Market (DFM) and Abu Dhabi Securities Exchange (ADX) in the United Arab Emirates.

relating to control of internal management (Morck et al., 1988). Second, stock markets in GCC countries have expanded substantially with the number of listed firms increasing from 473 in 2005 to 792 in 2018 (Agha and Eulaiwi, 2020).² Third, GCC countries are unique in their cultural, economic, political, and institutional characteristics. These countries are a subgroup of emerging economies which are usually smaller than developed economies, as well as less liquid and less organized (Agha and Eulaiwi, 2020; Bley and Saad, 2012). They are ruled by hereditary monarchies who run closed political systems (Al-Alkim, 1996). The presence of the monarchy in these oil-driven economies has allowed them to operate under legal dynamics that differ from the rest of the world (Mazaheri, 2013). Finally, compliance with corporate governance policies in many GCC countries is not mandatory; firms are not required to completely disclose their financial dealings because corporate governance is still in the development stage (Hawkamah, 2010). This has promoted a lack of transparency, monitoring, and accountability in firms' dealings in the region, which has facilitated the dominance of CEO decision making (Hawkamah, 2010).

Using a sample of 1,626 non-financial, publicly listed GCC firms over the period 2006–2016, we find that busyness of directors significantly affects corporate financial decision strategy. Our findings show that directors with multiple directorships increase corporate cash holdings, indicating that firms with directors' busyness may miss new opportunities for investment and growth. We also find that these directors adversely affect capital expenditure: firms' with busy directors invest less than firms' without busy directors. In addition, directors' busyness significantly increases selling, general, and administrative (SG&A) expenses. Such inefficiencies are observed subsequently in firms with directors' busyness decreasing firm performance. Following Dickinson (2011), we divide firms into five phases of the life cycle based on their cash-flow patterns: the introduction, growth, mature, shakeout, and decline

² Further information is available from the GulfBase website [Link: <http://www.gulfbase.com/>].

stages, to test changes in that directors' busyness and financing choices across firm life cycle progression. Our empirical results suggest that the effect of directors' busyness on financial decisions differs significantly across firm's life-cycle stages. In particular, busy directors facilitate cash holdings in the introduction, maturity and shakeout stages and reduce cash holdings in the decline stage. Capital expenditure in firms with busy directors is reduced in the maturity and shakeout stages but is increased in the decline stage. Firms with directors having multiple outside board seats incur high SG&A expenses in the introduction and growth stages, and firm performance diminishes in the introduction, growth, maturity and shakeout stages. To mitigate concerns about endogeneity, we use alternative measures of financial decisions and directors' busyness, apply the two-step system generalized method of moments (GMM), propensity score matching (PSM) and the Heckman two-stage procedure (inverse Mills ratio). Our reported results are robust for all of these measures.

We contribute to the literature in several ways. First, we extend the literature on multiple directorships, life cycle stages of firms and corporate financial decision making (e.g., Fich and Shivdasani, 2006; Habib et al., 2018; Hribar and Yehuda, 2015). Although some of these studies indicate that strategic decision making and firm performance are profoundly influenced by firm life cycle stages, the influence of board directors, especially busy directors, on financial decision making across various stages of the life cycle remains unexplored. Second, previous studies show that composition and size of the board are determined by several core characteristics of the firm (Guest, 2008; Lehn et al., 2009), but fails to acknowledge how the composition of the board is changed across various stages of the life cycle. A case study approach adopted by Huse and Zattoni (2008) using three Norwegian small companies illustrates board behavioral attributes across stages of life cycle progression. They call for further research as they raise concern about whether their findings could be generalizable as board composition and board behavioral attributes vary and is subject to financial regulations

and policies applied in different regions. Our study replies to this call by employing a larger sample size of firms in a different setting i.e. the GCC region, considering board composition with the focus of how busy directors as members of the board influencing financial decisions across various corporate life cycle stages.

Third, we shed light on the agency costs that may arise if the directors hold too many outside board seats which allow them to create information asymmetry for board directors and investors (Jensen and Meckling, 1976). We consider the notion of faultlines from social identity theory as a further hinderance to board member cohesion, hence allowing busy directors' leeway to determine firms' financial decisions without effective monitoring. Faultlines are hypothetical disparities that split group members into homogenous sub groups as a result of similar ideologies of members of each sub group (Bezrukova et al., 2009). However, the complexities of cultural and institutional characteristics that distinguish states in the GCC from those in developed and emerging economies result in distinct corporate governance mechanisms and codes³ between both parties (Baydoun et al., 2013; Bley and Chen, 2006). This study has important implications for regulators and policymakers in the GCC as the findings suggest that boards should consider inclusion of members with multiple directorship positions as this will assist in making effective financial decisions for these firms. Finally, these findings are likely to be important to investors in determining the effectiveness of financial decision making of firms as these firms transgress across various life cycle stages. The reason for this is that each life cycle stage exposes a firm to varying levels of resource and capability exposure with flow on impacts in terms of financial decision making effectiveness.

³ A typical case of the difference in ideology is observed in the GCC where adherence to corporate governance codes are not mandatory in some GCC states. Furthermore, the issue of multiple board seats or the number of outside board seats permitted is ambiguous in the GCC. This ambiguity is only defined in Bahrain and KSA where the number of outside board memberships permitted is five and three respectively.

In Section 2 of this paper, we discuss the corporate governance setting of GCC countries. We review the literature and develop hypotheses in Section 3. In Section 4, we provide an overview of the data and sample. Section 5 presents the empirical results with additional analyses and the robustness checks. Section 6 concludes the paper.

2. The institutional background of the GCC region

Six Arabic countries established the GCC alliance on 25 May 1981 with the goal of economic and financial integration (Espinoza et al., 2011). The region boasts one of the fastest growing global economies through huge deposits of oil and gas that constitute 40–45% and 23%, respectively, of the world reserves (Al-Shammari et al., 2008; Espinoza et al., 2011). Publically and privately funded firms in the GCC region borrow extensively from financial institutions because of irregularities in their financial markets and the low trading volume of securities (Al-Yahyaee et al., 2011). The oil boom of the 1970s strengthened the position of the economies and financial markets of the GCC countries (Agha and Eulaiwi, 2020). In the past two decades, the GCC market has attracted international investors through economic developments resulting from excessive oil and gas revenue (Al Janabi et al., 2010).

Corporate governance is an important part of the business environment because it outlines the acceptable practices for firm transactions. The nature of the GCC region with its inclusion of cultural and complex institutional values in business dealings, makes corporate governance a major concern for professional researchers. Some regulatory bodies and institutions, however, have devised means to inculcate corporate governance into business activities (Al-Malkawi et al., 2014). The urgency to implement corporate governance measures emerged when several firms in the GCC region failed to fulfil their obligations to financial institutions (banks) during the global financial crisis. This failure led to the collapse of many GCC firms and in turn caused banks to insist on transparency, better corporate governance practices, and disclosure when dealing with GCC firms (Eulaiwi et al., 2016). Consequently,

GCC firms improved their transparency in order to avoid similar collapse and to enable access to financial institutions.

Many government reforms in the GCC region have resulted from the establishment of corporate governance measures by legal and regulatory bodies. Hence, the GCC region is now the financial capital of the Middle East (Baydoun et al., 2013). The benefits of including corporate governance practices in business dealings cannot be overlooked by foreign and minority shareholders; these practices offer them financial protection, allow more trust in investment opportunities, and diversify the economy). Thus, increased transparency and incorporation of corporate governance guidelines in business activities, in addition to new infrastructure and technologies, has liberalized and advanced the capital market in the GCC region (Fasano and Iqbal, 2003). The regulatory changes have encouraged local and foreign investors to participate in the capital market (Al Janabi et al., 2010), bolstering economic growth and development in the region.

3. Literature review and hypothesis development

3.1. Directors' busyness

"Directors' busyness" refers to members of the board of directors with greater or equal to three or more outside directorships (Fich and Shivdasani, 2006; Jiraporn et al., 2008). Previous literature suggests that there are two views that explain the impact of directors' busyness: the reputation effect and the busyness effect. The former, in accordance with resource dependency theory, argues that busy directors increase the reputation of the directors themselves and the firm (Fama and Jensen, 1983), to obtain finance through their outside relationships during periods of financial distress (Gilson, 1990; Wilson et al., 2013) and to provide resources to firms so as to ensure that they function effectively (Field et al., 2013). In contrast, the latter view (busyness effect) is built on agency theory tenets that purport that the engagement of busy directors can weaken board effectiveness. For example, directors with multiple directorships

are more likely to miss board meetings (Jiraporn et al., 2009a); to less effectively contribute to strength in corporate governance and in particular monitoring practices; to reduce firm value (Ferris et al., 2003; Fich and Shivdasani, 2006); to increase the probability of financial reporting fraud (Beasley, 1996); to promote deep portfolio diversification which has the potential to reduce firm performance (Andres et al., 2013; Cashman et al., 2012); to lessen the incentive to receive auditor recommendations (Hunton and Rose, 2008); and to increase CEO compensation (Andres et al., 2013; Core et al., 1999).

It is evident in the GCC countries that busy directors are more commonly used than in other capital markets (Al-Musalli and Ismail, 2012; Eulaiwi et al., 2016). Consequently, the busyness effect takes precedence over the reputation effect in terms of time and effort. The limited resources of these busy board directors prevent them playing a significant role in board activities (Yasin and Shehab, 2004) which ultimately leads to poor corporate governance practices and corporate decisions (Chou and Feng, 2019; Jiraporn et al., 2009b). In addition, time availability can adversely affect the effectiveness of monitoring internal management (Morck et al., 1988). Therefore, we argue that directors' busyness reduces the efficiency of corporate financial decisions, resulting in higher cash holdings and SG&A expenses, lower capital expenditure, and poorer financial performance.

3.2. Hypotheses development

3.2.1. Cash holdings and directors' busyness

Based on agency theory, the role of the board of directors can be influenced by board-member busyness, that is, the number of board memberships that a director holds (Falato et al., 2014; Ferris et al., 2003). This impact is explained by time limitations on busy board members due to their multiple memberships, which poses serious difficulties for fulfilling their legally assigned responsibilities for each directorship (Walsh and Seward, 1990). For example, board-member busyness negatively affects individual director attendance at board meetings (Jiraporn

et al., 2009a). Consequently, busy board directors are less effective in fulfilling their duties regarding strategic decisions on cash management: their involvement in challenging managerial proposals is limited, which may lead eventually to increased cash holdings. Further, directors ought to convey their expertise to their firms in form of expert advice and to play an important role in monitoring management activities (Adams et al., 2010). However, over-commitment by board directors to a number of firms affects their ability to monitor management activities (Fich and Shivdasani, 2006). Falato et al. (2014) support this argument; they document that the monitoring role of independent board members is less effective when they hold multiple directorships. Therefore, when CEOs are involved in the appointment of board members, they tend to choose busy directors for loose monitoring of their activities (Shivdasani and Yermack, 1999). Beasley (1996) concludes that a high number of busy directors on a board increases the possibility of accounting fraud as a result of poor monitoring. Busy directors are not typically penalized for low quality services or dismissed because they are close to retirement (Ferris et al., 2003; Perry and Peyer, 2005). These additional board appointments provide an avenue to earn more money before retirement. A high proportion of busy directors in the boardroom lowers the effectiveness of the board's monitoring processes, thus lowering overall effectiveness of the governance within the firm (Fich and Shivdasani, 2006). In support of this argument, Kalcheva and Lins (2007) argue that low-quality corporate governance in environments with less strict investor protection may result in higher cash holdings.

H_{1a}: *Firms that have boards with busy directors have a higher level of cash holdings.*

3.2.2. *Capital expenditure and directors' busyness*

The ineffectiveness of busy board members' advisory role may lead to poor capital expenditure decisions. In support of this view, Chen and Chen (2012) argue that the time limitations of busy

board directors lead to inefficient evaluation of alternative investment opportunities for the firms on whose boards they serve. Further, the concept of faultlines deduced from the social identity theory by Kaczmarek et al. (2012) has an effect on the cohesiveness of board members. Under this perspective, the appointment of busy directors on a firm's board increases the salience of division among board members, hence negating the effectiveness of board members in terms of quality of advice required for efficient decision making as regards capital expenditure (Kaczmarek et al., 2012).

In addition, poorly performing management teams can hold their positions if the evaluation process is defective, resulting in an accumulation of poor-quality decisions (Tarkovska, 2013). In particular, investment-related decisions need deep discussion and understanding of the investment alternatives and surrounding circumstances. Giroud and Mueller (2010) also contend that firms with weak governance practices are more likely to experience negative effects on their investment decisions.

H_{1b}: *Firms that have boards with busy directors have a lower level of capital expenditure.*

3.2.3. Selling, general, and administrative (SG&A) expenses and directors' busyness

The potential increase in SG&A expenses is another adverse effect of director busyness. SG&A expenses typically include expenses such as salaries, travel, supplies, insurance, commissions, office functions, advertising, rent, stationary, and entertainment. Studies show these expenses are not influenced by economic ramifications but rather by agency problems (Anderson et al., 2003; Chen et al., 2012). This agency problem arises as a result of excessive free cash flows within the company (Jensen, 1986; Masulis et al., 2007). Jensen (1986) postulates a mismatch of the agency problem and SG&A cost asymmetry fueled by free cash flows. The presence of busy directors may allow managers succumb to overinvest in operational costs such as SG&A when there is excess free cash flows. Hence a splurge in SG&A expenses can signal an increase

in output demand and also greater SG&A cost asymmetry (Anderson et al., 2003; Banker et al., 2014). The SG&A cost asymmetry and the agency problem is visible in firms where weak corporate governance mechanisms exist, as seen in the GCC countries (Agha and Eulaiwi, 2020; Larcker et al., 2007). Chen et al. (2012) associate the misappropriation of funds for SG&A expenses with agency problems resulting from lack of supervision by busy directors and existing weak governance regulations. We hypothesize that busy directors on the board will increase SG&A expenses.

H_{1c}: *Firms that have boards with busy directors have a higher level of SG&A expenses.*

3.2.4. Firm performance and directors' busyness

Busy board directors tend to attend fewer board meetings, which in turn affects accuracy of information regarding discussions in board meetings. These directors must rely on other sources of information such as insiders (Cashman et al., 2012; Jiraporn et al., 2009a). Therefore, busy directors' understanding of concurrent circumstances of the firm's operations and the application of the board's strategic plans can be faulty, resulting in misevaluation of management activities (Fich and Shivdasani, 2006). For example, Core et al. (1999) found that, with busy directors on the board, CEOs are compensated with inflated remuneration packages, to the detriment of firms' performance. Moreover, the negative effects of busy directors can also extend to the overall performance of the firm (Brown et al., 2019; Fich and Shivdasani, 2006; Hauser, 2018); arguably, therefore, busy directors may be less committed to serving the firm's interest because they assign insufficient time to fulfilling their duties.

In light of this body of evidence about busy directors' effects on firms' governance and decision making (e.g., Brown et al., 2019; Core et al., 1999; Hauser, 2018), we argue that busy boards can contribute to lower firm performance.

H_{1d}: *Firms that have boards with busy directors have reduced financial performance.*

3.2.5. Financial decisions, firm life cycle, and director's busyness

The board of directors is an essential corporate governance mechanism for monitoring management, approving financial decisions, hiring and firing high-level management, and maintaining transparency in financial reporting across a firm's lifecycle stages (Adams et al., 2010; Hermalin and Weisbach, 1998). Typically, the board of directors comprises 'busy directors' who have multiple directorships on various company boards, have multiple, often conflicting engagements. These directorships may impede board efficiency in directing and optimization of a firm's strategic plan across life cycle stages (Adams and Ferreira, 2007; Harris and Raviv, 2008). A firm's life cycle comprises distinct phases that are delimited by factors such as managerial ability, competitive environment, financial resources, strategy choice and other macroeconomic factors (Dickinson, 2011). Miller and Friesen (1984) propose five progressive life cycle stages namely birth, growth, maturity, revival and decline stages. Gort and Klepper (1982) establish five life cycle stages but opt for a variation in nomenclature, preferring the stages to be named introduction, growth, mature, shake-out and decline. The characteristics of each stage vary and can be identified by variations in environment, strategy, structure, and decision-making style (Miller and Friesen, 1984). However, Dickinson (2011) place emphasis on resource availability and management in cash flows in relation to operating, investment and other financial activities to delimit life cycle stages.

The theory of firm life cycle progression states that firms experience systematic changes in financial decisions and activities, operating and investing activities, risk appetite, resourcing, and organizational capacities during different stages in their life cycle (Helfat and Peteraf, 2003). Prior literature show that financial decisions are more risky and less profitable in the introduction and decline stages but are less risky and more profitable in the growth and mature stages (DeAngelo et al., 2006; Dickinson, 2011; Hasan et al., 2015). It is reasonable to

expect that these differences will affect the type of financial decisions across each stage of the firm life cycle while directors with multiple directorships serve on a firm's board. Filatotchev et al. (2006) argue that corporate governance criteria are related to changes from one stage to another in the firm's life cycle. Avoiding self-interested behaviour of managers requires careful oversight by advisory, independent, or non-executive directors who are not too busy and have no financial interest in the company. Furthermore, the presence of faultlines in an existing board of directors consisting of multiple busy directors would affect task relations, social relations and perceived unity of the board (Kaczmarek et al., 2012). These faultlines inhibit the ability of the company's board of directors to offer quality advice and monitor company's affairs.

Directors with multiple directorships are associated with weak governance mechanisms as these busy board members lack the time for sufficient oversight of management. Therefore, we premise that directors' busyness contributes to weak corporate governance practices that may lead to poor financial decision making. These poor decisions both increase cash holdings and SG&A expenses and decrease capital expenditure and firm performance. Thus, we hypothesize the following:

H_{2a}: *All else being equal, firms that have boards with busy directors across life cycle stages have a higher level of cash holdings.*

H_{2b}: *All else being equal, firms that have boards with busy directors across life cycle stages have a lower level of capital expenditure.*

H_{2c}: *All else being equal, firms that have boards with busy directors across life cycle stages have a higher level of SG&A expenses.*

H_{2d}: *All else being equal, firms that have boards with busy directors across life cycle stages have a lower level of firm financial performance.*

4. Research design

4.1. *Data sample*

Our sample covers firms listed in GCC capital markets, including those in Saudi Arabia, Bahrain, United Arab Emirates, Kuwait, Oman, and Qatar, during the period 2006 to 2016.⁴ Financial and accounting data are mainly drawn from S&P Global's database (Capital IQ) and are used to calculate the measurements of firms' cash holdings, capital expenditure, financial performance, SG&A expenses, and other control variables. Data pertaining to corporate governance was hand-collected from annual board reports and the websites of GCC stock exchanges. We started with 3,286 firm-year observations (see Panel A of Table 1). We then eliminated 72 observations related to cross-listed firms and 1,229 observations with missing corporate-governance data. We also excluded 32 firms with absolute book value of equity, or market value of equity less than US\$1 million and 327 observations with missing data for control variables. The final sample contains 1,626 firm-year observations. We excluded financial firms from our sample due to the unique accounting standards and the different capital structures of these firms. All the continuous variables have been winsorized at the 1st and 99th percent in order to mitigate the influence of outliers.

[Insert Table 1 about here]

Table 1, Panel B reports the country distribution of the number of directors who hold multiple outside board seats in a different life cycle period. Saudi Arabia has the highest number of directors who hold multiple outside directorships with 44 directors in the INTRO stage, increasing to 142 and 341 directors in the GROWTH and MATURITY stages, but reducing to 60 and 13 directors in the SHAKEOUT and DECLINE stages, respectively. Bahrain has the lowest number of directors with outside directorships in the GROWTH stage

⁴ We chose 2006 as the base year because disclosure of corporate governance reports of GCC firms began in 2006.

with only one director, while Kuwait has lowest number with 26 directors in the MATURITY stage. Table 1, Panel C shows the industry distribution of total number of directors who hold outside board seats in each firm life cycle period. In our sample, materials sector has the highest number of multiple outside board seats in the INTRO, MATURITY and SHAKEOUT stages (39, 268 and 58 directors with multiple directorships, respectively), where industrials sector has the high number in the GROWTH stage with 81 directors and consumer staples sector have 20 directors in the DECLINE stage.

4.2. Variable description

4.2.1. Dependent variables

Following previous studies (e.g., Agha and Eulaiwi, 2020; Anderson et al., 2003), we consider four dependent variables in this study: corporate cash holdings; capital expenditure; SG&A expenses; and firm performance. We measure cash holdings, in accordance to prior literature, by using the ratio of cash and marketable securities to the firm's total assets (*CASH_TA*). Investment used in this analysis is measured as capital expenditure divided by total assets (*CAPEX_TA*). SG&A expenses are calculated as SG&A expenses divided by sales (*SG&A*). Tobin's Q is a market-based measure of firm performance and calculated as the book value of the firm's liabilities plus the market value of the firm's equity divided by the book value of the firm's total assets (*Tobin's Q*).

4.2.2. Independent variables

Consistent with prior research, we denote board of directors as busy (*Busy_Bsize*) if directors serve on multiple outside board sets (Fich and Shivdasani, 2006; Jiraporn et al., 2008). Our main proxy for director busyness is *Busy_Bsize* which is calculated as the percentage of board members who hold multiple outside directorships relative to the total number of directors on the board. As a robustness test and in line with previous studies, we employ several different measures to capture different levels of board directors' busyness (Fich and Shivdasani, 2006;

Jiraporn et al., 2008). Fich and Shivdasani (2006) consider a director is busy if he is holding three or more directorships. *Directorships* is calculated as the total number of directorships per director divided by the board size. *Busy_(log)* is defined as the natural logarithm of the total number of outside directorships that are held by board directors. *Busy03* is calculated as the total number of busy directors who hold only three outside board seats divided by the total number of board members. *Busy03_D* is a dichotomous variable that takes the value of 1 if the board has at least one director with three outside board seats, and 0 otherwise. *Busy04* is calculated as the percentage of total number of directors who hold four or more outside directorships. *Busy04_(log)* is the natural logarithm of the total number of outside directorships that held by directors who have four or more outside directorships. *Busy04_D* is a dichotomous variable that takes the value of 1 if the board has at least one director with four or more outside board seats, and 0 otherwise. Following Fich and Shivdasani (2006), *Busy>50%* is computed as a dichotomous variable that takes the value of 1 if 50% or more of the outside board members hold three or more directorships, and 0 otherwise.

4.2.3. Control variables

We use number of control variables that are often used in the prior literature (e.g., Agha and Eulaiwi, 2020; Chen et al., 2012; Chen and Chen, 2012). We control for governance variables that may have an influence on the busyness of a firm's directors: the board size (*Bsize*), the proportion of independent directors (*Ind_Bsize*)⁵ and the frequency of the firm's board meetings (*B_Meeting*). Additionally, consistent with some studies (e.g., Al-Shammari et al., 2008), we control for ownership variables: CEO ownership (*CEO_OWN*), and family

⁵ The concept of independence in the corporate governance codes is a field in which the GCC countries have different approaches. For example, independent directors in KSA, Oman and the UAE should not have been senior executives or employees of the company within the preceding two years or one year in Bahrain and three years in Qatar, while the code of governance in Kuwait does not mention previous career (Al-Hadi et al., 2020; Al-Hadi et al., 2016; Eulaiwi et al., 2016). Therefore, in our study, if the director meets the criteria of independence according to the country code, a director shall be considered as independent.

ownership (*FAM_OWN*). In addition, we also control for a number of firm financial characteristics such as firm size (*Assets_(log)*), firm leverage (*Leverage*), asset tangibility (*NPPE*), cash from operations (*CFO*), firm growth (*Sales_Growth*), profitability (*EBITDA*), net working capital (*NWC*), dividends (*DIV*). We include year dummies and firm fixed effects as controls in the regressions since they are constant at the level of firm and year, respectively. Definitions of all variables are in Appendix A.

4.3. Empirical model

We estimate the following empirical regression to test the association between board members' busyness and financial decisions, including cash holdings, capital expenditure, firm performance, and SG&A using firm fixed effects model:

$$\begin{aligned}
Y_{it} = & \alpha + \beta_1 \text{Busy_Bsize}_{it} + \beta_2 \text{Bsize}_{it} + \beta_3 \text{Ind_Bsize}_{it} + \beta_4 \text{BMeeting}_{it} + \beta_5 \text{CEO_OWN}_{it} + \\
& \beta_6 \text{FAM_OWN}_{it} + \beta_7 \text{Assets}_{(log)it} + \beta_8 \text{Leverage}_{it} + \beta_9 \text{NPPE}_{it} + \beta_{10} \text{CFO}_{it} + \\
& \beta_{11} \text{Sales_Growth}_{it} + \beta_{12} \text{EBITDA}_{it} + \beta_{13} \text{NWC}_{it} + \beta_{14} \text{DIV}_{it} + \\
& \text{Year Dummy and Firm Fixed Effect} + \varepsilon_{it}
\end{aligned}
\tag{Equation 1}$$

where $Y_{i,t}$ is the dependent variable denoting to *CASH_TA*, *CAPEX_TA*, *SG&A*, and *Tobin's Q*. Our main independent variable of interest is *Busy_Bsize* in the regression model. We predict β_1 to be positive for the *CASH_TA* and *SG&A* expenses, but negative for the *CAPEX_TA* and *Tobin's Q*. We adopt fixed effects analysis (for years and firms) in order to control potential cross-sectional dependence and in doing so, negate the risk that the non-observable characteristics of the firm will be associated with the independent variables (Allison, 2009; Green, 2000). All of the variables incorporated in the regression analysis including the control variables are defined in Appendix A.

Consistent with previous studies (Dickinson, 2011; Lu and Sapra, 2009), we divide our sample into five subsamples that reflect the five stages of the life cycle (i.e., introduction, growth, maturity, shakeout, and decline stages) and run separate regressions for each life cycle stage. This approach increases the statistical power of the analyses (Lu and Sapra, 2009). The proxy measures of life cycle stages used by Dickinson (2011) classifies all firms sampled into the five life cycle stages based on cash flows: INTRODUCTION (if firms have negative operating cash flows and investing activity cash flows, but positive financing activity cash flows); GROWTH (if cash flows from operating and financing activities are positive, but investing activity cash flows are negative); MATURITY (if operating cash flows are positive, but cash flows from investing and financing activity are negative); DECLINE (if firms have negative operating cash flows, positive investing activity cash flows, and financing activity cash flows are either zero, positive or negative); and SHAKEOUT (the rest of the firm years classify into the shakeout stage).

5. Empirical results

5.1. Descriptive statistics

Table 2 presents the descriptive statistics for the dependent variables, independent variables, and control variables used in our empirical analysis. On average, a regular board consists of approximately 8 directors with 33.5% holding multiple outside directorships (*Busy_Bsize*). The average number of board meetings is about six per year. The rest of the control variables are consistent with the findings of previous studies (e.g., Agha and Eulaiwi, 2020; Eulaiwi et al., 2016; Fich and Shivdasani, 2006).

[Insert Table 2 about here]

5.2. Correlation analysis

Table 3 shows the correlation matrix between the dependent and independent variables in this analysis.⁶ The correlation coefficients between *Busy_Bsize* and cash holdings are significant and positive. Capital expenditure is negatively correlated with *Busy_Bsize*. The correlation between SG&A expenses and *Busy_Bsize* is insignificant, whereas firm performance is negatively significant.

[Insert Table 3 about here]

5.3. Regression results

5.3.1. Cash holdings and directors' busyness (*H_{1a}*)

We start the analysis by regressing firm cash holdings on board of directors' busyness using fixed-effects regression as shown in Column (1) of Table 4. The estimated coefficient of *Busy_Bsize* is positive and statistically significant with *CASH_TA* (coefficient 0.033, $p < 0.01$), providing the support for *H_{1a}*. This indicates an economic significance of the directors' busyness with one standard deviation increase in directors with multiple directorships increasing cash holdings by an average of 9%.⁷ Our findings are consistent with prior studies that found the existence of board directors who hold multiple directorships is detrimental to the governance role of the board, the fulfilment of the busy directors' duties (Fich and Shivdasani, 2006) and the effectiveness of board monitoring (Falato et al., 2014). In addition, boards with busy directors are more tolerant of the management team despite the team's poor management of the firm's resources, including cash (Core et al., 1999; Fich and Shivdasani, 2006). Regarding the control variables in model (1), we find that *Ind_Bsize*, *Assets_(log)*, and *CFO* are statistically significant and positive with *CASH_TA*. In contrast, corporate cash holdings

⁶ We analyse inflation factors of variance in our sample to examine the issue of multicollinearity.

⁷ In the first regression model (1), the economic significance of cash holdings = 0.276 (standard deviation of *Busy_Bsize*) * 0.033 (estimated coefficient on *Busy_Bsize*) / 0.099 (standard deviation of *CASH_TA*) = 0.092.

decrease with higher *Leverage*, *NPPE*, and *EBITDA*. These findings are generally consistent with prior research on cash holdings (e.g., Boubaker et al., 2015).

[Insert Table 4 about here]

5.3.2. *Capital expenditure and directors' busyness (H_{1b})*

Since increased corporate cash holdings may be used to finance new investment opportunities, the findings in Column (1) motivated us to expand our analysis to estimate the effect of directors' busyness on capital expenditure as reported in Column (2) of Table 4. It is found that *Busy_Bsize* is significant and negative with estimated coefficients of -0.025 and $p < 0.01$, providing the support for H_{1b}. In terms of economic significance as shown in Column (2), an increase of one standard deviation in *Busy_Bsize* decreases *CAPEX_TA* by an average of 11% ($0.276 \times -0.025 / 0.061$). These results are consistent with the view that directors' busyness has a negative impact on the firm's investment decisions, resulting in inefficient evaluation of investment opportunities (Chen and Chen, 2012; Giroud and Mueller, 2010). We also control for the same variables as in our first regression and find that *FAM_OWN*, *NPPE*, and *CFO* have positive and significant relationships with *CAPEX_TA*, while *Assets_(log)* and *EBITDA* have negative relationships. From the results shown in Columns (1)- (2), we find that firms with busy directors on their boards have both higher levels of cash holdings and lower levels of capital expenditure.

5.3.3. *SG&A expenses and directors' busyness (H_{1c})*

We also check the possibility of the ineffectiveness of extra funds in non-productive areas such as salaries and other expenditures, which are easily hidden under a large account such as SG&A expenses. Column (3) in Table 4 shows that *Busy_Bsize* is significantly positive with coefficients of 0.046 ($p < 0.01$), indicating the support for H_{1c}. This finding suggests that an increase in directors' busyness magnifies SG&A expenses by an average of 9.7% ($0.276 \times 0.046 / 0.131$), likely because such directors are ineffective or distracted in monitoring

the board's and management's decisions. Using the same control variables as in our first empirical analysis, we find that *Assets* (*log*), *NPPE* and *EBITDA* are significantly negative and *DIV* is significantly positive.

5.3.4. Firm performance and directors' busyness (H_{1d})

In this section, we present the results from the empirical analysis relating to the effects of directors' busyness on firm value. As shown in Column (4) in Table 4, the effect of directors' busyness using the proxy of *Busy_Bsize* is statistically negative with estimated coefficients of 0.357 ($p < 0.01$), indicating the support for H_{1d} . This finding suggests that an increase in busy director is significantly associated with an un-improvement (decrease) in firm value using *Tobin's Q*. This result could be an outcome of our previous findings that directors' busyness increases cash holdings, decreases capital expenditure, increases SG&A expenses, and affect firm performance when they reach a certain level.

5.3.5. Life cycle stages and directors' busyness (H_{2a-d})

We also investigate how directors' busyness increases both cash holdings and SG&A expenses and reduces capital expenditure and firm performance through the stages of the firm life cycle. Table 5 presents our results regarding the association between board directors' busyness, firm life cycle stages, and financial decisions. We include the proxy of directors' busyness (*Busy_Bsize*) in each regression of the financial decisions (*CASH_TA*, *CAPEX_TA*, *SG&A*, and *Tobin's Q*) and across the five stages of firm life cycle (INTRO, GROWTH, MATURITY, SHAKEOUT and DECLINE) proposed by Dickinson (2011). The *Busy_Bsize* variable is adjusted to match with the firm life cycle and calculated as the number of outside board seats held by each director scaled by the total number of directors on the board in each of the firm life cycle periods. In Panel A, our results suggest that the coefficients of *Busy_Bsize* are economically significant and positively associated with *CASH_TA* during the introduction (0.168, $p < 0.10$), maturity (0.024, $p < 0.05$) and shakeout (0.091, $p < 0.10$) stages of a firm's

life cycle, whereas it is negatively significant in the decline stage ($-0.276, p < 0.05$). The results of analyzing *CAPEX_TA* as dependent variable are presented in Panel B. It reports that the coefficients of *Busy_Bsize* during the maturity and shakeout stages are negative and significant ($-0.017, p < 0.10$ and $-0.076, p < 0.05$, respectively), but positively significant during the decline stage ($0.094, p < 0.10$). Our regression results support the theoretical argument that since CEOs in firms with busy directors increase cash holdings in maturity and shakeout stages, they would potentially miss investment opportunities and decrease capital expenditure in these stages. However, managers of decline firms tend to re-invest in order to keep firm survive.

Panel C reports our findings for SG&A expenses and directors' busyness. The coefficient on *Busy_Bsize* is significantly positive in the introduction ($0.290, p < 0.10$) and growth ($0.054, p < 0.05$) stages. These findings show that managers would take advantage of the opportunity to manipulate SG&A expenses in the earlier stages of corporate life cycles. Panel D shows that the coefficients of directors' busyness are significantly negative for Tobin's Q across the first four stages of firm life cycles (INTRO, GROWTH, MATURITY and SHAKEOUT) at $p < 0.01$ or better. Our findings are consistent with our hypotheses (H_{2a-d}), suggesting that boards with too many seats occupied by busy directors are less effective in their monitoring functions within a firm, which may allow managers to hide important information and make financial decisions based on their personal interests.

[Insert Table 5 about here]

5.4. Additional analysis: robustness check

5.4.1. Alternative proxy measures of financial decisions

In this section, we use alternative measures for each proxy of financial decisions as robustness checks. Table 6, Column (1) provides the estimation results of an alternative proxy measure of corporate cash holdings. Following Bates et al. (2009), we measure corporate cash holdings by

the ratio of cash and marketable securities over net assets; net assets is used because the future profitability of a firm depends on its total assets. The results obtained from this analysis are consistent with our findings in Table 4 that director with multiple board seats magnify cash holdings. We also use another measure of capital expenditure calculated as the ratio of capital expenditure divided by lagged total assets and report the results in Column (2) of Table 6. We find a negative relationship between capital expenditure and *Busy_Bsize*. We adopt additional a proxy measure of SG&A expenses using the ratio of SG&A expenses to total assets. The regression result (reported in Column (3) of Table 6) is consistent with our finding in Table 4 that the SG&A expenses are magnified for boards with multiple directorships. Finally, we also apply an alternative measure of Tobin's Q, calculated as the sum of the market value of equity and book value of liabilities, divided by lagged total assets. Column (4) of Table 6 presents the regression result for the alternative measure of Tobin's Q, where the economic magnitude of the finding is statistically significant and the association is negative. Overall, our results are robust to alternative measures of financial decisions and firm performance.

[Insert Table 6 about here]

5.4.2. *Alternative proxy measures of directors' busyness*

To further check the robustness of our empirical findings presented in Tables 4, we use different proxies for director busyness: *Directorships*, *Busy_(log)*, *Busy03*, *Busy03_D*, *Busy04*, *Busy04_(log)*, *Busy04_D*, and *Busy>50%* (Fich and Shivdasani, 2006; Jiraporn et al., 2008). The *Busyness* variable (see Table 7) represents any of the eight additional proxies of busy director attributes. Table 7 Panel A presents the relationship between additional measures of directors with multiple outside directorships and cash holdings. Columns (1)-(8) show the coefficients of busyness and cash holdings are all positive and significant at $p < 0.05$ or better. Panel B shows the relationship between additional measures of directors with multiple outside directorships

and capital expenditure. It is shown that the coefficients of alternative proxy measures of busy directors and capital expenditure are negatively significant, except for *Directorships*. Panel C presents the relationship between additional measures of directors with multiple outside board seats and SG&A expenses. The coefficient of all proxies for director busyness are significantly positive at $p < 0.05$ or better. Panel D presents the relationship between additional measures of directors with multiple outside directorships and firm performance (Tobin's Q). The coefficients of all additional measures of busy directors in all models are significant and negative. The overall results of Table 7 suggest that our main results reported in Table 4 are robust to additional measures of directors' busyness.

[Insert Table 7 about here]

5.4.3. *Alternative proxy measures of firm life cycle*

As robustness check of our regression results presented in Table 5, we also use the retained earnings to total assets (RE/TA), retained earnings to total equity (RE/TE) and firm age (AGE) as proxies for the firm life cycle (DeAngelo et al., 2006; Pástor and Pietro, 2003). Following previous literature (e.g., Al-Hadi et al., 2016; Owen and Yawson, 2010), we partition the original sample into three sub-samples representing three life cycle stages. Young firms include those belonging to the cohort with the lowest one-third of RE/TA , RE/TE or AGE , mature firms include those belonging to the cohort with the middle one-third, and firms in the top third are classified as old firms. From the theoretical life cycles predictions on a firm's decision to pay dividends, DeAngelo et al. (2006) suggest that the contributed capital (i.e., RE/TA or RE/TE) has more impact than growth or profitability opportunities. Similar to analysis in Table 5, we adjust the *Busy_Bsize* variable in order to match with the firm life cycle.

As presented in Panel A of Table 8, young and mature firms with busy directors have significantly more cash holdings when using the proxies of RE/TA and RE/TE for classifying

firms, whereas firms have more cash holdings when they reach mature and old stages under the *AGE* classification ($p < .05$ or better). Panel B shows that busy directors significantly reduce capital investment in mature and old firms ($p < .05$ or better) under the life cycle classification using *RE/TA* and *RE/TE* proxies. In Panel C, directors with multiple outside board seats increase SG&A expenses in young and mature firms ($p < .05$ or better). Panel D shows a negative relationship ($p < .01$ or better) between busy directors and Tobin's Q in young firms (under the *RE/TA* and *RE/TE* classification). However, this negative association is evident in all three firm life cycle stages under the *AGE* classification ($p < .05$ or better). In brief, these additional results broadly support our regression findings on the firm life cycle presented in Table 5.

[Insert Table 8 about here]

5.4.4. *Endogeneity test: two-step system generalized method of moments (GMM)*

To account the possible endogeneity problem that the board busyness may be correlated with the error term (ε), we adopt the two-step system (GMM) method developed by Arellano and Bover (1995) and Blundell and Bond (1998). We applied the 'xtabond2' module in Stata to obtain the two-step system GMM estimate (Roodman, 2009). For the GMM estimation, the lagged instruments and explanatory variables are treated as endogenous variables. In this case, the lagged independent variable (i.e. directors with multiple board directorships) and control variables are potential endogenous variables. In our analysis, the p -values of AR_1 and AR_2 are determined from measuring the significance of the first-order autocorrelations, but not the significance of the second-order autocorrelations. Moreover, the 'Hansen test' of overidentifying restrictions is used to check the validity of the instruments, under the null hypothesis that these instruments used are valid and exogenous in the GMM estimation. Table 9 reports the results for serial autocorrelations tests and the Hansen test of overidentifying

restrictions. Our sample size is reduced after using the lag on our key variables. We obtain significant results which strengthen our main findings in Tables 4.

[Insert Table 9 about here]

5.4.5. *Propensity score matching (PSM)*

Busy directors are likely to be randomly appointed by firms. We therefore employ propensity score matching (PSM) to tackle possible selection bias. We identify a control group of firms whose board directors do not consist of a director with multiple board seats, but do not show significant difference in characteristic compared to firm with busy directors (treatment group)-firms whose directors consist of multiple directorships. In the first stage, we run a logistics estimation to predict the possibility of appointing a busy director and include the same control variables from our main regressions, as well as the year and industry (Shipman et al., 2016). The dependent variable is busy director (*Busy_Bsize_D*), a dichotomous variable that equals one if a firm's board has at least one director with multiple outside board seats, and zero if the board has no busy director with multiple outside board seats. The logistic regression results for the first stage are presented in Column (1) of Table 10. We then match on a one-to-one nearest neighbor obtained from logistic regressions with replacement. This approach ensures that each busy director (treatment group) in a firm is paired with a non-busy director (control group) in that firm. We combine the treatment sample and the matched sample and perform the regression for all financial-decisions variables. In the second stage of the PSM, we use *Busy_Bsize* across *CASH_TA*, *CAPEX_TA*, *SG&A*, and *Tobin's Q* on Columns (2) to (5), respectively. The results of *Busy_Bsize* across all regression models are significant at $p < 0.01$. These results of the PSM mitigate the effects of selection bias and further reinforce our reported findings in Tables 4.

[Insert Table 10 about here]

5.4.6. Heckman selection model (inverse Mills ratio)

To monitor possible self-selection bias in our sample and control for potential endogeneity problem due to an omitted variable bias, we use the Heckman (1979) two-stage procedure. In the first stage, we perform the analysis based on the level of director's busyness by employing a probit estimation in order to predict the probability of a busy director as shown in equation (2). In the second stage, we add inverse Mills ratio that obtained from the first stage in order to control for possible self-selection bias in the sample (Tucker, 2010). The model specification of the first stage is described as follows:

$$\begin{aligned} \text{Busy_Bsize_D}_{it} = & \alpha + \beta_1 \text{Bsize}_{it} + \beta_2 \text{Ind_Bsize}_{it} + \beta_3 \text{Assets}_{(\log)it} + \beta_4 \text{NPPE}_{it} + \\ & \beta_5 \text{Sales_Growth}_{it} + \beta_6 \text{EBITDA}_{it} + \text{Year Dummy and Industry Dummy} + \varepsilon_{it} \end{aligned} \quad (\text{Equation 2})$$

Busy_Bsize_D is a dummy variable that takes a value of one if a firm's board has at least one director with multiple outside board seats, and zero otherwise. The independent variables are selected from the director with multiple directorships literature that are commonly found for explaining the firm's decision to use busy director. The results from the first stage are in Column (1) of Table 11, suggesting that larger firms or firms with poor profitability are more likely to employ busy directors. The results of the second stage of the Heckman two-stage model are presented in Columns (2)-(5) of Table 11. It is shown that the *Busy_Bsize* is positively significant with *CASH_TA* and *SG&A* (at $p < .01$ or better), whereas it is significantly negative with *CAPEX_TA* and *Tobin's Q*. The results of the second stage of the Heckman two-stage model provide more evidence in support of our main findings in Table 4.

[Insert Table 11 about here]

5.4.7. Further robustness test

We conduct a further test to account for the asymmetry between increases or decreases in revenue (aggregate demand) against the cost stickiness notion by Anderson et al. (2003). Anderson et al. (2003) argues the proportion of cost increased in relation to the increase in

aggregate demand is greater than the proportion of cost decreased when there is a reduction in aggregate demand. Due to the sticky nature of cost, an increase in the presence of busy directors on firm's board would potentially allow for an increase in SG&A expenses and the cost stickiness issue might have caused distortions in our results for increase in SGA expenses (Table 6). Following Anderson et al. (2003), we propose the following model to test for cost stickiness:

$$\ln \left[\frac{SG\&A_{i,t}}{SG\&A_{i,t-1}} \right] = B_0 + B_1 \ln \left[\frac{Revenue_{i,t}}{Revenue_{i,t-1}} \right] + B_2 Decrease_Dummy_{i,t} * \ln \left[\frac{Revenue_{i,t}}{Revenue_{i,t-1}} \right] + \varepsilon_{i,t} \quad (\text{Equation 3})$$

Where $Decrease_Dummy_{i,t}$ takes the value of 1 when revenue of firm (i) in period (t) decreases than that in the preceding period ($t-1$), and 0 otherwise. The coefficient B_1 calculates the percentage increase in SG&A costs in response to a 1 percent increase in sales revenue. The coefficient $B_1 + B_2$ calculates the increase in SG&A costs in response to a 1 percent decrease in sales revenue. Hence, the empirical hypothesis to test the stickiness of SG&A costs is dependent on $B_1 > 0$ and $B_2 < 0$. We apply the above model based on the presence of busy directors by constructing 2 subsamples: $Busy_Bsize_D^8$ and $Busy04_D^9$. The first regression result for the $Busy_Bsize_D$ subsample is as follows:

$$\ln \left[\frac{SG\&A_{i,t}}{SG\&A_{i,t-1}} \right] = 0.051 + 0.356 \ln \left[\frac{Revenue_{i,t}}{Revenue_{i,t-1}} \right] - 0.178 * Decrease_Dummy_{i,t} * \ln \left[\frac{Revenue_{i,t}}{Revenue_{i,t-1}} \right] + \varepsilon_{i,t} \quad (\text{Equation 4})$$

$t\text{-statistic} \quad (5.33) \quad (10.19) \quad (-2.99)$

The estimated value of B_1 is 0.356 (t -statistic = 10.33), showing that SG&A costs increase 0.36% for 1% increase in revenues if there is an existence of $Busy_Bsize_D$ in a firm. The estimated value of B_2 of -0.178 (t -statistic = -2.22) provides an evidence of the presence of the sticky costs' hypothesis in listed GCC firms with the existence of busy directors. The sum value of $B_1 + B_2 = 0.178$ provides that SG&A costs decrease 17.8% for each percent decrease in

⁸ $Busy_Bsize_D$ is a dummy variable that takes a value of 1 if all directors have outside directorships.

⁹ $Busy04_D$ is a dummy variable takes a value of 1 if a director holds four or more directorships.

revenues based on the existence of *Busy_Bsize_D* in a firm. Our results in B_1 and $B_1 + B_2$ are statistically significant at $p < 0.01$. These results provide supporting evidence of the cost stickiness hypothesis that the presence of busy directors in a firm may allow managers to manipulate cost asymmetry.

6. Conclusions

This paper examines the impact of directors holding multiple outside directorships (directors' busyness) on both the financial decisions of firms, namely, cash holdings, capital expenditure, SG&A expenses and firm performance. Corporate reformers and academia disagree about the effects of board directors' busyness, and the former recommends reducing the number of board seats that members can hold. However, empirical studies have shown mixed findings on the influence of busy directors. We find that board directors' busyness may be universally detrimental to financial decisions. We also examine the effect of directors' busyness on financial decisions across the life cycle stages of firms. Using nonfinancial, publicly listed firms from the six GCC countries in the 2006–2016 period, our empirical study provides evidence that firms with boards of busy directors increase cash holdings, reduce firm investment opportunities by reducing capital expenditure, increase SG&A expenses, and decrease firm performance. Furthermore, we find evidence that firms with busy directors increase cash holdings in the introduction, maturity and shakeout stages, but decrease in the decline stage of the firm life cycle. Busy directors also decrease investment in the maturity and shakeout, but increase it in the decline stage. They also help to boost SG&A expenses in the introduction and growth stages; but diminish firm performance in the introduction, maturity and growth stages of the firm life cycle. Our results remain robust when we use alternative measures of the financial decisions and multiple directorships. We also apply the GMM, PSM and inverse Mills ratio models to test endogeneity and minimize the possibility that our results are correlative rather than causal. Our empirical results are consistent with prior literature

suggesting that increasing of the number of busy directors is not always in the best interests of financial decisions and shareholders. This outcome arises because such directors provide less effective monitoring of management due to their service on many other boards.

We argue that an analysis of board busyness of financial decisions of firms is important especially in the context of developing GCC stock markets. As the GCC are characterized by weaker investor protection and different variable development of governance regimes, strategic financing decisions can vary significantly based on board busyness, across life cycle stages, and based on availability of resources. The results from our study are useful for regulators, policymakers, practitioners, and academic scholars. One implication of our findings is that standard-setters should implement legislation that places a cap on the number of outside board seats that board directors of listed firms can hold in order to protect firms' financial decisions and shareholders' interests. In addition, the study's findings suggest that firms may choose busy directors inappropriately for financial decisions during life cycle stages of their firm. Thus, regulators should consider the dynamics of the corporate life cycle in order to improve corporate governance systems in firms. Future research could explore empirically whether and how demographic characteristics of busy directors at different stages of the life cycle influence firms' market-risk disclosures, investment efficiency and accounting conservatism, among other factors. This will provide valuable insights into strengthening corporate governance internationally.

This study does have some limitations. Because our study sample is based on publicly listed GCC firms, our sample may have selection bias. In addition, the study is region specific and thus the findings may not be generalizable to other countries with different cultural mores, backgrounds, and corporate-governance environments. Future research may yield different findings and provide further policy implications. Moreover, since financial listed firms were excluded from our study, future studies could obtain new insights into these firms.

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Table 1: Sample Specifications

Panel A: Sample Selection					
Number of non-financial firms available in S&P Capital IQ for the GCC countries					3,286
Less:					
Joint-listed firms observation					(72)
Firms with unavailable annual report					(1,229)
Firms with absolute book value of equity, or market value of equity below \$1 million					(32)
Firms with missing values in control variables					(327)
Total firm-year observations					1,626
Panel B: Sample distribution of directors who hold multiple directorships by country					
Country/ Stages	Number of these directors were in each firm cycle period				
	INTRO	GROWTH	MATURITY	SHAKEOUT	DECLINE
Saudi Arabia	44	142	341	60	13
Oman	63	90	297	57	17
United Arab Emirates	16	43	122	27	11
Qatar	6	37	63	17	1
Bahrain	0	1	40	22	3
Kuwait	8	7	26	10	0
Total	137	320	889	193	45
Panel C: Sample distribution of directors who hold multiple directorships by industry					
Industry/ Stages	Number of these directors were in each firm cycle period				
	INTRO	GROWTH	MATURITY	SHAKEOUT	DECLINE
Materials	39	79	268	58	4
Industrials	35	81	143	43	18
Consumer staples	36	55	122	37	20
Consumer discretionary	15	29	133	32	1
Energy	5	23	73	7	0
Telecommunication services	3	19	59	1	0
Utilities	0	20	48	6	1
Health Care	2	13	33	4	1
Information technology	2	1	10	5	0
Total	137	320	889	193	45

Note: Panel A presents sample selection; Panel B presents the distribution of directors who hold multiple directorships by country across firm life cycle; and Panel C presents the distribution of directors who hold multiple directorships by industry across firm life cycle.

Table 2: Descriptive statistics for the variables used in the regression analysis

	Obs	Mean	Median	SD	P25	P75	Skewness	Kurtosis
Dependent Variables								
CASH_TA	1,626	0.099	0.062	0.099	0.028	0.140	1.771	6.595
CAPEX_TA	1,626	0.056	0.036	0.061	0.014	0.076	2.092	8.311
SG&A	1,626	0.142	0.111	0.131	0.058	0.189	3.198	19.505
Tobin's Q	1,626	1.417	1.240	0.877	0.984	1.723	1.393	6.431
Independent Variable								
Busy_Bsize	1,626	0.335	0.286	0.276	0.111	0.545	0.593	2.462
Control Variables								
Bsize	1,626	7.910	7.000	1.720	7.000	9.000	0.759	4.913
Ind_Bsize	1,626	0.664	0.667	0.262	0.429	0.900	-0.172	1.931
B_Meeting	1,626	5.680	5.000	2.091	4.000	7.000	1.457	6.869
CEO_OWN	1,626	0.021	0.000	0.074	0.000	0.006	5.145	32.375
FAM_OWN	1,626	0.084	0.000	0.145	0.000	0.130	2.128	7.585
Assets _(log)	1,626	4.436	4.425	1.874	3.165	5.617	0.148	2.860
Leverage	1,626	0.191	0.158	0.175	0.031	0.309	0.821	3.066
NPPE	1,626	0.402	0.390	0.219	0.237	0.565	0.226	2.355
CFO	1,626	0.083	0.074	0.088	0.025	0.131	0.424	3.630
Sales_Growth	1,626	0.201	0.060	1.264	-0.057	0.183	8.366	81.702
EBITDA	1,626	0.099	0.089	0.077	0.047	0.142	0.569	3.447
NWC	1,626	0.061	0.038	0.147	-0.031	0.145	0.481	3.717
DIV	1,626	0.035	0.021	0.046	0.000	0.048	2.124	8.124

Note: This table presents descriptive statistics of financial decisions, directors with multiple outside directorships, and control variables. Statistics cover the mean, median, standard deviation, 25th percentile, 75th percentile, skewness and kurtosis per variable. Details regarding abbreviation and measurement of variables are provided in Appendix A. All continuous variables are winsorized at the 1st and 99th percentiles.

Table 3: Correlation Statistics Between Directors with Multiple Outside Directorships and Corporate Financial Decisions

	CASH_TA	CAPEX_TA	SG&A	Tobin's Q	Busy_Bsize	Bsize	Ind_Bsize	B_Meeting	CEO_OWEN
CASH_TA	1								
CAPEX_TA	-0.047	1							
SG&A	-0.025	0.019	1						
Tobin's Q	0.171***	0.135***	-0.036	1					
Busy_Bsize	0.051*	-0.069**	-0.034	-0.088***	1				
Bsize	-0.024	0.006	0.006	-0.042	0.233***	1			
Ind_Bsize	0.050	-0.087***	0.031	-0.191***	-0.043	-0.113***	1		
B_Meeting	0.011	-0.020	-0.028	-0.056*	0.061*	-0.026	0.130***	1	
CEO_OWEN	-0.051*	0.054*	-0.003	0.118***	0.005	-0.041	-0.161***	-0.151***	1
FAM_OWEN	-0.165***	0.059*	-0.001	0.067**	0.008	-0.114***	-0.159***	-0.068**	0.314***
Assets (log)	0.039	0.086***	-0.057*	0.041	0.359***	0.406***	-0.353***	0.083**	0.004
Leverage	-0.339***	0.049	0.042	-0.288***	0.008	0.088***	-0.051	-0.076**	-0.006
NPPE	-0.214***	0.311***	0.052*	-0.058*	-0.150***	0.081**	0.025	-0.070**	0.047
CFO	0.244***	0.187***	-0.078**	0.351***	0.011	0.052*	-0.029	0.026	0.093***
Sales_Growth	0.013	0.051*	0.430***	0.036	-0.015	0.029	-0.001	0.006	0.045
EBITDA	0.213***	0.174***	-0.110***	0.417***	0.003	0.031	-0.020	-0.020	0.066*
NWC	0.234***	-0.168***	-0.050	0.156***	-0.067**	-0.174***	0.049	0.021	-0.126***
DIV	0.274***	-0.003	-0.060*	0.506***	0.042	0.077**	-0.066*	0.028	0.051*

Table 3: (continued)

	FAM_OWN	Assets (log)	Leverage	NPPE	CFO	Sales_Growth	EBITDA	NWC	DIV
FAM_OWN	1								
Assets (log)	-0.054*	1							
Leverage	-0.032	0.205***	1						
NPPE	-0.067**	-0.093***	0.288***	1					
CFO	-0.030	0.078**	-0.273***	0.203***	1				
Sales_Growth	0.023	0.050	0.027	0.016	-0.003	1			
EBITDA	-0.040	0.087***	-0.227***	0.166***	0.772***	0.031	1		
NWC	0.039	-0.130***	-0.298***	-0.341***	-0.016	-0.063*	0.133***	1	
DIV	-0.022	0.060*	-0.309***	0.012	0.565***	-0.010	0.639***	0.130***	1

Note: This table presents the Pearson's correlation matrix of dependent, independent and control variables. Details regarding abbreviation and measurement of variables are provided in Appendix A. All continuous variables are winsorized at the 1st and 99th percentiles. * denotes significance at the 10% level, ** significance at the 5% level, and *** significance at the 1% level.

Table 4: Regression results of directors with multiple directorships on financial decisions

Model:	(1)	(2)	(3)	(4)
Variables:	CASH_TA	CAPEX_TA	SG&A	Tobin's Q
Constant	-0.188*** (-4.52)	0.055 (1.43)	0.303*** (4.52)	1.429*** (3.65)
Busy_Bsize	0.033*** (3.31)	-0.025*** (-2.76)	0.046*** (2.87)	-0.357*** (-3.85)
Bsize	0.011 (0.66)	0.003 (0.19)	0.021 (0.79)	-0.102 (-0.65)
Ind_Bsize	0.030*** (2.84)	-0.005 (-0.48)	0.014 (0.85)	-0.011 (-0.11)
B_Meeting	0.006 (0.89)	-0.003 (-0.54)	-0.003 (-0.28)	-0.081 (-1.25)
CEO_OWN	-0.008 (-0.22)	0.041 (1.17)	0.082 (1.35)	-0.364 (-1.03)
FAM_OWN	-0.023 (-0.91)	0.046** (1.99)	-0.019 (-0.48)	0.139 (0.59)
Assets _(log)	0.083*** (18.85)	-0.007* (-1.71)	-0.039*** (-5.47)	0.056 (1.36)
Leverage	-0.107*** (-6.34)	-0.023 (-1.45)	-0.034 (-1.25)	-0.752*** (-4.74)
NPPE	-0.178*** (-10.11)	0.117*** (7.24)	-0.077*** (-2.74)	0.342** (2.07)
CFO	0.229*** (8.91)	0.058** (2.45)	0.019 (0.46)	-0.220 (-0.91)
Sales_Growth	0.001 (0.95)	0.001 (0.70)	-0.001 (-0.81)	0.018* (1.83)
EBITDA	-0.175*** (-4.15)	-0.209*** (-5.40)	-0.562*** (-8.32)	1.974*** (4.99)
NWC	0.003 (0.18)	0.017 (0.94)	0.042 (1.35)	0.187 (1.02)
DIV	0.074 (1.41)	0.075 (1.54)	0.145* (1.71)	2.215*** (4.46)
Year Dummy	Yes	Yes	Yes	Yes
Firm Fixed Effect	Yes	Yes	Yes	Yes
Observations	1,626	1,626	1,626	1,626
R-squared	0.4258	0.1381	0.1066	0.1609

Note: This table presents the relationship between directors with multiple outside directorships and corporate financial decisions. The dependent variable in model (1) is cash holdings, model (2) is capital expenditure, model (3) is SG&A expenses and model (4) is firm performance. Details regarding abbreviation and measurement of variables are provided in Appendix A. All continuous variables are winsorized at the 1st and 99th percentiles. The *t*-statistic is reported in parentheses below each coefficient. * denotes significance at the 10% level, ** significance at the 5% level, and *** significance at the 1% level.

Table 5: Regression results of director with multiple directorships on financial decisions across life cycle stages

Panel A: Dependent variable = CASH_TA					
Variables \ Stages	INTRO	GROWTH	MATURITY	SHAKEOUT	DECLINE
Constant	0.126 (0.43)	-0.350*** (-2.77)	-0.274*** (-4.95)	-0.205 (-1.04)	0.028 (0.06)
Busy_Bsize	0.168* (1.71)	-0.030 (-1.04)	0.024** (2.01)	0.091* (1.93)	-0.276** (-2.66)
Control Variables	Included	Included	Included	Included	Included
Year Dummy	Yes	Yes	Yes	Yes	Yes
Firm Fixed Effect	Yes	Yes	Yes	Yes	Yes
Observations	128	320	921	189	68

Panel B: Dependent variable = CAPEX_TA					
Variables \ Stages	INTRO	GROWTH	MATURITY	SHAKEOUT	DECLINE
Constant	-0.152 (-0.87)	0.155 (0.90)	0.010 (0.22)	-0.020 (-0.13)	-0.008 (-0.06)
Busy_Bsize	0.017 (0.29)	-0.058 (-1.47)	-0.017* (-1.81)	-0.076** (-2.38)	0.094* (2.35)
Control Variables	Included	Included	Included	Included	Included
Year Dummy	Yes	Yes	Yes	Yes	Yes
Firm Fixed Effect	Yes	Yes	Yes	Yes	Yes
Observations	128	320	921	189	68

Panel C: Dependent variable = SG&A					
Variables \ Stages	INTRO	GROWTH	MATURITY	SHAKEOUT	DECLINE
Constant	0.399 (0.77)	0.033 (0.28)	0.183** (2.25)	-0.250 (-1.62)	-0.836 (-1.05)
Busy_Bsize	0.290* (1.73)	0.054** (2.07)	0.002 (0.09)	0.042 (1.22)	-0.218 (-1.26)
Control Variables	Included	Included	Included	Included	Included
Year Dummy	Yes	Yes	Yes	Yes	Yes
Firm Fixed Effect	Yes	Yes	Yes	Yes	Yes
Observations	128	320	921	189	68

Panel D: Dependent variable = Tobin's Q					
Variables \ Stages	INTRO	GROWTH	MATURITY	SHAKEOUT	DECLINE
Constant	-1.166 (-0.62)	0.925 (0.82)	1.872*** (3.16)	-2.881 (-1.58)	-1.432 (-0.34)
Busy_Bsize	-1.470*** (-2.79)	-0.915*** (-3.56)	-0.241* (-1.81)	-1.101** (-2.31)	0.804 (1.39)
Control Variables	Included	Included	Included	Included	Included
Year Dummy	Yes	Yes	Yes	Yes	Yes
Firm Fixed Effect	Yes	Yes	Yes	Yes	Yes
Observations	128	320	921	189	68

Note: This table presents the relationship between directors with multiple outside directorships and financial decisions across firm life cycle stages. The dependent variable in Panel A is cash holdings, Panel B is capital expenditure, Panel C is SG&A expenses and Panel D is firm performance. *Busy_Bsize* variable is adjusted to match with the firm life cycle, calculated as the number of outside board seats held by each director scaled by the total number of directors on the board in each of the firm life cycle periods. Details regarding abbreviation and measurement of variables are provided in Appendix A. All continuous variables are winsorized at the 1st and 99th percentiles. The *t*-statistic is reported in parentheses below each coefficient. * denotes significance at the 10% level, ** significance at the 5% level, and *** significance at the 1% level.

Table 6: Regression results of director with multiple directorships on alternative measures of financial decisions

Model:	(1)	(2)	(3)	(4)
Variables:	CASH	CAPEX	SG&A	Tobin's Q
Constant	-0.237*** (-3.98)	6.345*** (7.63)	0.576*** (8.31)	5.273*** (3.46)
Busy_Bsize	0.037*** (2.58)	-0.389** (-1.98)	0.045*** (2.78)	-1.484*** (-4.24)
Bsize	0.015 (0.64)	-2.705*** (-8.16)	-0.075*** (-2.72)	-0.209 (-0.35)
Ind_Bsize	0.040*** (2.68)	-0.682*** (-3.23)	-0.005 (-0.30)	-1.215*** (-3.27)
B_Meeting	0.009 (0.94)	-0.058 (-0.42)	-0.003 (-0.30)	0.175 (0.73)
Control variables	Included	Included	Included	Included
Year Dummy	Yes	Yes	Yes	Yes
Firm Fixed Effect	Yes	Yes	Yes	Yes
Observations	1,626	1,626	1,626	1,626
R-squared	0.3962	0.0709	0.1315	0.3522

Note: This table presents the relationship between directors with multiple outside directorships and additional measures of financial decisions. The dependent variable in model (1) is cash holdings, model (2) is capital expenditure, model (3) is SG&A expenses and model (4) is firm performance. Details regarding abbreviation and measurement of variables are provided in Appendix A. All continuous variables are winsorized at the 1st and 99th percentiles. The *t*-statistic is reported in parentheses below each coefficient. * denotes significance at the 10% level, ** significance at the 5% level, and *** significance at the 1% level.

Table 7: Regression results of additional measures of busy directors on financial decisions

Panel A: Dependent variable = CASH_TA								
Model:	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Variables	Directorships	Busy _(log)	Busy03	Busy03_D	Busy04	Busy04 _(log)	Busy04_D	Busy>50%
Constant	-0.255*** (-4.96)	-0.178*** (-4.09)	-0.194*** (-4.36)	-0.171*** (-3.99)	-0.181*** (-4.17)	-0.179*** (-4.13)	-0.166*** (-3.89)	-0.169*** (-3.93)
Busyness	0.012** (2.05)	0.008*** (2.95)	0.035*** (2.85)	0.013*** (2.67)	0.031*** (3.68)	0.009*** (3.58)	0.013** (2.57)	0.010** (2.00)
Control Variables	Included	Included	Included	Included	Included	Included	Included	Included
Year Dummy	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm Fixed Effect	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	1,626	1,626	1,626	1,626	1,626	1,626	1,626	1,626
R-squared	0.4191	0.4163	0.4161	0.4036	0.4183	0.4180	0.4034	0.4024
Panel B: Dependent variable = CAPEX_TA								
Model:	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Variables	Directorships	Busy _(log)	Busy03	Busy03_D	Busy04	Busy04 _(log)	Busy04_D	Busy>50%
Constant	-0.033 (-0.72)	0.043 (1.14)	0.052 (1.33)	0.057 (1.49)	0.044 (1.17)	0.045 (1.19)	0.056 (1.48)	0.061 (1.61)
Busyness	-0.001 (-0.18)	-0.004* (-1.83)	-0.019* (-1.72)	-0.008** (-1.97)	-0.016** (-2.13)	-0.006*** (-2.60)	-0.012*** (-2.78)	-0.012*** (-2.67)
Control Variables	Included	Included	Included	Included	Included	Included	Included	Included
Year Dummy	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm Fixed Effect	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	1,626	1,626	1,626	1,626	1,626	1,626	1,626	1,626
R-squared	0.1606	0.1353	0.1351	0.1426	0.1360	0.1374	0.1448	0.1445

Panel C: Dependent variable = SG&A								
Model:	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Variables	Directorships	Busy _(log)	Busy03	Busy03_D	Busy04	Busy04 _(log)	Busy04_D	Busy>50%
Constant	0.409** (2.30)	0.710*** (4.12)	0.742*** (4.16)	0.793*** (4.45)	0.756*** (4.37)	0.764*** (4.41)	0.833*** (4.69)	0.806*** (4.50)
Busyness	0.040** (2.04)	0.062*** (6.14)	0.104** (2.21)	0.086*** (4.59)	0.139*** (4.38)	0.040*** (4.30)	0.087*** (4.35)	0.070*** (3.58)
Control Variables	Included	Included	Included	Included	Included	Included	Included	Included
Year Dummy	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm Fixed Effect	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	1,626	1,626	1,626	1,626	1,626	1,626	1,626	1,626
R-squared	0.1130	0.1032	0.0937	0.1035	0.0947	0.0948	0.0995	0.0976

Panel D: Dependent variable = Tobin's Q								
Model:	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Variables	Directorships	Busy _(log)	Busy03	Busy03_D	Busy04	Busy04 _(log)	Busy04_D	Busy>50%
Constant	1.237*** (2.74)	1.313*** (3.37)	1.545*** (3.90)	1.334*** (3.49)	1.293*** (3.32)	1.310*** (3.37)	1.271*** (3.33)	1.301*** (3.39)
Busyness	-0.139*** (-2.68)	-0.084*** (-3.54)	-0.454*** (-4.12)	-0.152*** (-3.61)	-0.232*** (-3.07)	-0.085*** (-3.83)	-0.155*** (-3.45)	-0.112** (-2.52)
Control Variables	Included	Included	Included	Included	Included	Included	Included	Included
Year Dummy	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm Fixed Effect	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	1,626	1,626	1,626	1,626	1,626	1,626	1,626	1,626
R-squared	0.1589	0.1597	0.1624	0.1595	0.1579	0.1610	0.1588	0.1557

Note: This table presents the relationship between additional measures of busy directors and financial decisions. The dependent variable in Panel A is cash holdings, Panel B is capital expenditure, Panel C is SG&A expenses and Panel D is firm performance. We use 8 different measures of busy directors. *Directorships* is the total number of directorships held by each of the board directors divided by the board size. *Busy_(log)* is the natural logarithm of the total number of outside directorships that are held by board directors. *Busy03_Bsize* is the total number of busy directors who hold only three outside board seats divided by the total number of board members. *Busy03_D* is a dichotomous variable that takes the value of 1 if the

board has at least one director with three outside board seats, and 0 otherwise. *Busy04* is the percentage of total number of directors who hold four or more outside directorships. *Busy04_(log)* is the natural logarithm of the total number of outside directorships that held by directors who have four or more outside directorships. *Busy04_D* is a dichotomous variable that takes the value of 1 if the board has at least one director with four or more outside board seats, and 0 otherwise. *Busy>50%* is a dichotomous variable that takes the value of 1 if 50% or more of the outside board members hold three or more directorships, and 0 otherwise. Details regarding abbreviation and measurement of all other variables are provided in Appendix A. All continuous variables are winsorized at the 1st and 99th percentiles. The t-statistic is reported in parentheses below each coefficient. * denotes significance at the 10% level, ** significance at the 5% level, and *** significance at the 1% level.

Table 8: Regression results of busy directors on financial decisions using additional measures of firm's life cycle

Panel A: Dependent variable = CASH_TA									
Model: Variables	RE/TA			RE/TE			AGE		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Young	Mature	Old	Young	Mature	Old	Young	Mature	Old
Constant	-0.029 (-0.36)	-0.097 (-1.37)	-0.356*** (-5.01)	0.006 (0.08)	-0.243*** (-2.94)	-0.302*** (-4.18)	-0.093 (-0.97)	-0.152** (-2.03)	-0.334*** (-4.86)
Busy_Bsize	0.058** (2.07)	0.034* (1.68)	0.011 (0.77)	0.074*** (2.62)	0.072*** (3.39)	0.002 (0.16)	-0.019 (-0.76)	0.062*** (2.92)	0.032** (2.31)
Control Variables	Included	Included	Included	Included	Included	Included	Included	Included	Included
Year Dummy	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm Fixed Effect	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	376	410	840	396	441	789	375	427	824
R-squared	0.4242	0.5258	0.5251	0.4210	0.5722	0.4831	0.4055	0.5035	0.4493

Panel B: Dependent variable = CAPEX_TA									
Model:	RE/TA			RE/TE			AGE		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Variables	Young	Mature	Old	Young	Mature	Old	Young	Mature	Old
Constant	0.063 (0.76)	0.001 (0.01)	-0.010 (-0.17)	0.085 (1.03)	0.134* (1.79)	-0.039 (-0.56)	0.203** (2.24)	0.090 (1.16)	0.047 (0.76)
Busy_Bsize	0.042 (1.54)	-0.066*** (-2.89)	-0.033*** (-2.73)	0.046 (1.62)	-0.052*** (-2.73)	-0.026** (-1.99)	0.030 (1.27)	-0.018 (-0.85)	-0.012 (-0.97)
Control Variables	Included	Included	Included	Included	Included	Included	Included	Included	Included
Year Dummy	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm Fixed Effect	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	376	410	840	396	441	789	375	427	824
R-squared	0.1734	0.2263	0.1546	0.2065	0.2614	0.1577	0.2068	0.1590	0.1642

Panel C: Dependent variable = SG&A									
Model:	RE/TA			RE/TE			AGE		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Variables	Young	Mature	Old	Young	Mature	Old	Young	Mature	Old
Constant	0.688*** (3.51)	0.965*** (4.02)	0.223*** (5.15)	0.577*** (2.73)	0.008 (0.07)	0.178*** (3.32)	0.934*** (2.70)	0.761 (1.32)	0.171** (2.53)
Busy_Bsize	0.187*** (2.90)	0.003 (0.07)	-0.001 (-0.07)	0.215*** (2.95)	-0.012 (-0.36)	-0.014 (-1.40)	0.206** (2.41)	0.471*** (3.11)	-0.013 (-0.92)
Control Variables	Included	Included	Included	Included	Included	Included	Included	Included	Included
Year Dummy	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm Fixed Effect	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	376	410	840	396	441	789	375	427	824
R-squared	0.2299	0.2304	0.2180	0.2024	0.1130	0.1575	0.2258	0.1637	0.1660

Panel D: Dependent variable = Tobin's Q									
Model: Variables	RE/TA			RE/TE			AGE		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Young	Mature	Old	Young	Mature	Old	Young	Mature	Old
Constant	2.830*** (3.55)	2.318*** (3.18)	-0.803 (-1.43)	2.683*** (3.48)	1.926*** (2.67)	-0.541 (-0.79)	1.938** (2.20)	3.911*** (5.12)	-0.439 (-0.69)
Busy_Bsize	-0.727*** (-2.78)	-0.301 (-1.58)	-0.175 (-1.53)	-0.869*** (-3.26)	-0.247 (-1.33)	-0.031 (-0.24)	-0.827*** (-3.54)	-0.503** (-2.38)	-0.278** (-2.18)
Control Variables	Included	Included	Included	Included	Included	Included	Included	Included	Included
Year Dummy	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm Fixed Effect	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	376	410	840	396	441	789	375	427	824
R-squared	0.2546	0.2839	0.2639	0.2608	0.2566	0.3128	0.2756	0.2681	0.2287

Note: This table presents the relationship between busy directors and financial decisions across alternative life cycle measures. The dependent variable in Panel A is cash holdings, Panel B is capital expenditure, Panel C is SG&A expenses and Panel D is firm performance. *RE/TA* and *RE/TE* refer to the ratio of retained earnings to total assets, and to total equity, respectively. *AGE* is firm age, calculated as the difference from the current year to the year of firm incorporation. *Busy_Bsize* variable is adjusted to match with the firm life cycle, calculated as the number of outside board seats held by each director scaled by the total number of directors on the board in each of the firm life cycle periods. Details regarding abbreviation and measurement of all other variables are provided in Appendix A. All continuous variables are winsorized at the 1st and 99th percentiles. The t-statistic is reported in parentheses below each coefficient. * denotes significance at the 10% level, ** significance at the 5% level, and *** significance at the 1% level.

Table 9: Two-Step System Generalised Method of Moments (GMM) Regression Results of Multiple Directorships on Financial Decisions

Model:	(1)	(2)	(3)	(4)
Variables:	CASH	CAPEX	SG&A	Tobin's Q
Constant	0.088** (2.43)	-0.073* (-1.79)	0.450*** (15.68)	4.045*** (12.54)
L.Busy_Bsize	0.043*** (8.44)	-0.008*** (-3.12)	0.020*** (4.15)	-0.340*** (-5.53)
L.Bsize	-0.012 (-0.88)	0.021*** (3.10)	-0.038*** (-3.14)	-0.861*** (-7.27)
L.Ind_Bsize	0.013 (1.34)	0.015** (2.46)	-0.024** (-2.40)	-0.345*** (-4.16)
L.B_Meeting	0.026*** (3.37)	-0.001 (-0.25)	-0.060*** (-12.00)	-0.878*** (-9.41)
L.CEO_OWN	0.043 (0.97)	0.058*** (3.16)	0.105*** (3.61)	0.282 (0.98)
L.FAM_OWN	-0.153*** (-9.19)	0.002 (0.23)	-0.021 (-1.19)	0.082 (0.56)
L.Assets _(log)	0.001 (0.80)	0.004*** (2.63)	-0.012*** (-8.02)	0.107*** (7.16)
L.Leverage	-0.080*** (-4.76)	-0.110*** (-12.87)	-0.059*** (-4.50)	-0.209 (-1.35)
L.NPPE	-0.108*** (-8.55)	0.072*** (10.19)	0.024* (1.66)	0.348*** (2.88)
L.CFO	0.162*** (6.56)	-0.045*** (-5.31)	-0.023 (-1.42)	1.643*** (7.13)
L.Sales_Growth	0.001 (0.89)	-0.006*** (-5.86)	-0.001*** (-2.66)	0.078*** (4.69)
L.EBITDA	0.362*** (9.62)	0.318*** (17.83)	-0.821*** (-22.59)	-2.153*** (-4.22)
L.NWC	0.135*** (8.00)	-0.005 (-0.51)	0.133*** (10.28)	0.998*** (4.73)
L.DIV	-0.586*** (-10.06)	-0.600*** (-19.30)	0.469*** (8.92)	13.786*** (17.57)
Year Dummy	Yes	Yes	Yes	Yes
Firm Fixed Effect	Yes	Yes	Yes	Yes
Observations	1,436	1,436	1,436	1,436
m1-test p-value	0.000	0.000	0.017	0.001
m2-test p-value	0.799	0.141	0.141	0.669
Hansen test p-value	0.114	0.355	0.255	0.141

Note: This table presents the relationship between directors with multiple outside directorships and financial decisions using the two-step system generalised method of moments (GMM) regression. The dependent variable in model (1) is

cash holdings, model (2) is capital expenditure, model (3) is SG&A expenses and model (4) is firm performance. Details regarding abbreviation and measurement of variables are provided in Appendix A. All continuous variables are winsorized at the 1st and 99th percentiles. The *t*-statistic is reported in parentheses below each coefficient. * denotes significance at the 10% level, ** significance at the 5% level, and *** significance at the 1% level.

Table 10: Propensity score matching (PSM) regression results of directors with multiple directorships on financial decisions

	First stage		Second stage		
Model:	(1)	(2)	(3)	(4)	(5)
Variables:	Busy_Bsize_D	CASH_TA	CAPEX_TA	SG&A	Tobin's Q
Constant	-5.720*** (-5.77)	-0.247*** (-5.17)	0.008 (0.18)	0.359* (1.89)	1.378*** (3.12)
Busy_Bsize		0.031*** (2.70)	-0.036*** (-3.35)	0.129*** (2.90)	-0.499*** (-4.71)
Bsize	2.713*** (7.36)	0.023 (1.18)	0.025 (1.42)	0.019 (0.25)	-0.143 (-0.81)
Ind_Bsize	0.835*** (2.91)	0.024* (1.94)	0.009 (0.75)	-0.005 (-0.10)	0.077 (0.68)
B_Meeting	-0.004 (-0.02)	0.009 (1.15)	-0.003 (-0.42)	0.005 (0.16)	-0.058 (-0.81)
CEO_OWN	-0.222 (-0.21)	0.017 (0.41)	0.066* (1.77)	0.019 (0.12)	-0.370 (-0.99)
FAM_OWN	0.794 (1.50)	-0.021 (-0.68)	0.083*** (2.84)	-0.011 (-0.09)	0.354 (1.22)
Assets _(log)	0.309*** (6.25)	0.084*** (17.31)	-0.008* (-1.69)	-0.026 (-1.36)	0.077* (1.71)
Leverage	0.869* (1.84)	-0.081*** (-4.28)	-0.036** (-2.05)	-0.111 (-1.52)	-0.534*** (-3.04)
NPPE	-1.544*** (-3.80)	-0.156*** (-8.20)	0.125*** (7.04)	-0.268*** (-3.54)	0.325* (1.85)
CFO	1.625 (1.29)	0.238*** (8.22)	0.052* (1.94)	0.034 (0.30)	-0.348 (-1.30)
Sales_Growth	0.002 (0.03)	0.001 (0.99)	0.000 (0.32)	-0.019*** (-4.24)	-0.002 (-0.16)
EBITDA	-1.520 (-0.99)	-0.127** (-2.53)	-0.290*** (-6.17)	-0.749*** (-3.80)	2.297*** (4.93)
NWC	-1.304** (-2.29)	0.007 (0.31)	0.005 (0.24)	-0.053 (-0.60)	0.486** (2.31)
DIV	-0.851 (-0.43)	0.078 (1.31)	0.115** (2.09)	0.311 (1.37)	2.431*** (4.44)
Year Dummy	Yes	Yes	Yes	Yes	Yes
Firm Fixed Effect	Yes	Yes	Yes	Yes	Yes

Observations	1,626	1,321	1,321	1,321	1,321
R-squared (Pseudo)	(0.1583)	0.4320	0.1666	0.0694	0.1754

Note: This table presents the relationship between directors with multiple outside directorships and financial decisions using the Propensity score matching (PSM) regression. In the first stage, we run logistics regression and the dependent variable is busy director (Busy_Bsize_D), a dichotomous variable that equals one if a firm's board has at least one director with multiple outside board seats, and zero if the board has no busy director with multiple outside board seats, the results are presented in model (1). In the second stage, we use the percentage of busy directors who hold multiple outside directorships to measure director busyness (Busy_Bsize). The dependent variable in model (2) is cash holdings, model (3) is capital expenditure, model (4) is SG&A expenses and model (5) is firm performance. Details regarding abbreviation and measurement of variables are provided in Appendix A. All continuous variables are winsorized at the 1st and 99th percentiles. The *t*-statistic is reported in parentheses below each coefficient. * denotes significance at the 10% level, ** significance at the 5% level, and *** significance at the 1% level.

Table 11: Heckman selection regression results of directors with multiple directorships on financial decisions

	First stage		Second stage		
Model:	(1)	(2)	(3)	(4)	(5)
Variables:	Busy_Bsize_D	CASH_TA	CAPEX_TA	SG&A	Tobin's Q
Constant	-2.746*** (-6.34)	-0.364*** (-3.63)	0.321*** (3.60)	0.934*** (6.01)	5.153*** (5.70)
Inverse-Mills		0.095* (1.96)	-0.146*** (-3.38)	-0.341*** (-4.54)	-2.029*** (-4.64)
Busy_Bsize		0.030*** (2.95)	-0.022** (-2.38)	0.051*** (3.21)	-0.305*** (-3.28)
Bsize	1.464*** (7.92)	0.068* (1.92)	-0.089*** (-2.82)	-0.195*** (-3.55)	-1.377*** (-4.31)
Ind_Bsize	0.131 (0.96)	0.022* (1.89)	-0.010 (-0.94)	-0.002 (-0.13)	-0.076 (-0.71)
B_Meeting		0.008 (1.17)	-0.001 (-0.21)	0.001 (0.02)	-0.061 (-0.95)
CEO_OWN		-0.004 (-0.10)	0.033 (0.97)	0.064 (1.06)	-0.469 (-1.34)
FAM_OWN		-0.026 (-1.03)	0.049** (2.13)	-0.011 (-0.28)	0.188 (0.81)
Assets (log)	0.199*** (7.51)	0.095*** (15.84)	-0.019*** (-3.60)	-0.067*** (-7.20)	-0.118** (-2.17)
Leverage		-0.119*** (-6.79)	-0.018 (-1.14)	-0.022 (-0.81)	-0.679*** (-4.30)
NPPE	-0.434** (-2.45)	-0.208*** (-10.48)	0.142*** (8.03)	-0.022 (-0.73)	0.685*** (3.83)
CFO		0.229*** (8.59)	0.060** (2.54)	0.020 (0.49)	-0.181 (-0.75)
Sales_Growth	0.016 (0.64)	0.002* (1.81)	-0.001 (-0.44)	-0.004** (-2.20)	0.002 (0.24)

EBITDA	-1.014**	-0.247***	-0.137***	-0.391***	2.981***
	(-2.08)	(-4.98)	(-3.10)	(-5.07)	(6.64)
NWC		-0.003	0.019	0.046	0.215
		(-0.14)	(1.05)	(1.48)	(1.17)
DIV		0.065	0.072	0.123	2.123***
		(1.18)	(1.47)	(1.45)	(4.30)
Year Dummy	Yes	Yes	Yes	Yes	Yes
Firm Fixed Effect	Yes	Yes	Yes	Yes	Yes
Observations	1,626	1,626	1,626	1,626	1,626
R-squared (Pseudo)	(0.1506)	0.4258	0.1381	0.1066	0.1609

Note: This table presents the relationship between directors with multiple outside directorships and financial decisions using Heckman selection regression. We perform the analysis based on the level of director's busyness. In the first stage, we employ probit model in order to predict the probability of a director being busy and the dependent variable is busy director (Busy_Bsize_D), a dichotomous variable that equals one if a firm's board has at least one director with multiple outside board seats, and zero if the board has no busy director with multiple outside board seats; the results are reported in model (1). In the second stage, we add an inverse Mills ratio that is obtained from the first stage to control possible self-selection bias of the sample. The dependent variable in model (2) is cash holdings, model (3) is capital expenditure, model (4) is SG&A expenses and model (5) is firm performance. Details regarding abbreviation and measurement of variables are provided in Appendix A. All continuous variables are winsorized at the 1st and 99th percentiles. The *t*-statistic is reported in parentheses below each coefficient. * denotes significance at the 10% level, ** significance at the 5% level, and *** significance at the 1% level.

Appendix A: Definition of variables

Variables	Definition and Measurement	Abbreviation
Dependent Variable		
Cash holdings	The ratio of cash and marketable securities to total assets.	CASH_TA
Capital expenditure	The ratio of capital expenditure made during year to total assets.	CAPEX_TA
SG&A expenses	The ratio of selling, general and administrative expenses to total sales.	SG&A
Firm performance	The sum of total market value of equity and book value of total liabilities, scaled by book value of total assets.	Tobin's Q
Independent Variable		
Busy director	The total number of directors with outside board seats, scaled by the total number of members on the board or board size.	Busy_Bsize
Control Variables		
Board size	Number of directors sitting on the board of directors.	Bsize
Independent directors	The proportion of independent directors to the total members on the board.	Ind_Bsize
Board meetings	The total number of meetings of the board held over the year.	B_Meeting
CEO ownership	The percentage of the total number of shares owned by CEO to total number of outstanding shares.	CEO_OW_N
Family ownership	The percentage of the total number of shares owned by family to total number of outstanding shares.	FAM_OW_N
Firm size	Natural logarithm of total assets, calculated at the end of the fiscal year.	Assets (log)
Leverage	Total debt of firm, divided by total assets of firm at the fiscal year end.	Leverage
Asset tangibility	Net plant, property and equipment, scaled by total assets.	NPPE
Cash flow	The ratio of cash from operations to total assets.	CFO
Firm growth	Sales in current year minus the previous year's sales, scaled by the previous year's sales.	Sales_Growth
Profitability	Earnings before interest, taxes, depreciation and amortisation, scaled by total assets.	EBITDA
Net working capital	Ratio of net working capital to total assets.	NWC
Dividend payment	Total dividends, scaled by total assets.	DIV
Year	Dummy variables in order to control for fiscal year.	Year