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## **On the relationship between corporate governance and firm performance: Evidence from GCC countries**

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### **Abstract**

Governance is increasingly recognized by the business community, regulators and capital market authorities as a fundamental driver of corporate performance. The accelerated interests by the investing fraternity in the Gulf Cooperation Council (henceforth GCC) equity markets due to the myriad benefits accruing in the form of laudable trade policies, progressive growth strategies, tax holidays, guaranteed return on investments and political stability signals a radical shift in ensuring better surveillance and robust corporate governance. This study examines the impact of internal mechanisms of corporate governance (CG) on firm performance (FP) in the GCC countries. The study uses firm level panel data set of 349 financial and non-financial companies listed in the stock exchanges of the GCC countries for the period 2005-2012. The paper develops an empirical model based on thirteen testable research hypotheses. The Generalized Least Squares (GLS) method is used to estimate the model parameters. The results show that governance variables such as government shareholdings, audit type, board size, corporate social responsibility and leverage significantly affect the FP in majority of the countries in the GCC. These results give rise to certain regulatory and managerial implications, all of which, calls for more concerted efforts in strategically implementing prudent governance solutions in order to future proof GCC business.

**Keywords:** Corporate governance; Firm performance; Internal mechanisms; GCC; Panel data

JEL Classification: G34, C33

## 1. Introduction

The term "corporate governance" documented by Richard Eells (1960, p.108) to signify "the structure and functioning of the corporate polity" started cornering attention after the nineteenth century with the occurrence of two major events. Firstly, during the wave of financial crises in 1998 in Russia, Asia and Brazil, substandard corporate behavior and deficiencies in corporate governance (CG) endangered world economic and geo-political set up. Secondly, after 2001 several self-inflicted scandals such as Enron, Satyam Computers and Banco Espirito Santo scandals to name a few, tarnished the already defective corporate fabric thus destabilizing the global financial system further. The former woes were further exacerbated by the global economic crisis of 2007 which invited rigid public, political and regulatory scrutiny on the incumbent CG practices of world-wide companies. More recently, turbulent volatilities in the global oil market, political turmoil in the Middle East and the uncertainties associated with Brexit and US presidential policies have necessitated, economic diversification in the GCC as a survival imperative rather than a success mantra. However, the enlisted former are just indicators of a myriad of fundamental reasons as to why CG has become a pivotal concern for global sustainable development and prosperity (Becht, Bolton, & Roell, 2002).

Although CG systems differ throughout the world, stakeholders presume that certain mechanisms must be present in order to minimize the issues of misconduct, bribery and corruption by ensuring corporate disclosure and transparency. "CG is thus framed to perform a system of supervision that uses techniques like board structure, duality, reporting, and remuneration to provide shareholders with the necessary information necessary to hold management liable for their decisions."(Al-Malkawi & Pillai, 2012)

A close scrutiny of the definitions unveiled from various scholar group the different school of thoughts as either considering CG as a shareholder based (Imam & Malik, 2007; Zingales, 1998; Shliefer & Vishney, 1997; Hart, 1995) or stakeholder based concept (Monks & Minnow, 2003; Morrin & Jarrel, 2001; Tricker, 1994). In fact the former two approaches stem from the three main governance models namely the Anglo-Saxon model, the German model and the Japanese model of CG. The Anglo-Saxon model is also called the unitary board model. In the GCC context, for example, the Saudi model of CG has been influenced by the Anglo-American model, generally referred to as a “market model” or “shareholder model,” which focuses on maximizing owners’ wealth. The Japanese/German model on the contrary is a two tier model and central to the German system is good industrial relations (Charkham, 1994). However, Ungureanu (2008) remarks that no model of governance is perfect and their rational application is dependent on the legal and cultural background of the country studied, dominance of capital markets and the form of business organization present.

Albeit widely varying CG definitions, a general consensus is visible in the innumerable fair CG benefits accruing to firms/countries’ in the form of operational efficiency, improved and easy access to capital, liberalization of financial markets and trade, price deregulations, risk mitigation, stimulation of foreign direct investments, elevated public image and long term increase in the value of the firm thus leading to increased shareholders’ wealth.

Needless to say, emerging markets portray vast differences in comparison to developed countries in terms of low market and information efficiency, more volatility, and smaller size (Kumar & Tsetsekos, 1999) and compared to international standards, these markets face hurdles in competing other dynamic peers in the emerging world. Although, a few studies based on an individual GCC country basis, incorporating few mechanisms and centering on either financial or nonfinancial companies have emerged, the findings have been empirically inconclusive. Therefore, this inadequacy of research and a perceived gap in the GCC governance literature is the prime motivator to conduct an original study including all the six GCC countries with respect to the examination of CG mechanisms that emerge significant in determining FP in these countries.

The present paper contributes to CG research for several reasons. For researchers interested in various legal regimes under which CG operates, this paper traces the history in a coherent and concise manner. For scholars interested in a comparative reading of CG mechanisms in emerging countries, this study offers a penetrating view into the scenario by providing a comprehensive picture that integrates ten internal governance mechanisms and its impact on FP in both financial and non- financial companies in all the GCC countries. For innovators in CG research this study will act as a torch bearer for drawing in and integrating other relevant variables into the CG concept as this is first study that inspects the effects of CSR and IFR as a CG activity in all the GCC countries.

Therefore, the objective of this study is three-fold. Firstly, to identify the internal governance mechanisms adopted by the GCC companies by determining the existing CG practices, systems and processes and thus contributing to the CG literature by studying an emerging market such as the GCC. Secondly, to investigate empirically the relationship between CG and FP with the main aim of extending the existing literature on FP by investigating the contribution of these mechanisms in the smooth conduct of business operations in the GCC. Finally, the study aims to draw implications from the results derived which will later on serve as recommendations for improving FP in the GCC.

The paper then proceeds as follows. Section 2 will provide an overview of the GCC countries while Section 3 will emphasize on theoretical background, prior literature and hypotheses formulation. Data and methodology will be elucidated in Section 4 followed by elaboration of diagnostic tests in Section 5. Results will be discussed in Section 6 and the paper concludes with implication and future research prospects in section 7.

## **2. Gulf Cooperation Council (GCC) – Brief overview**

The GCC established on May 25<sup>th</sup> 1981 is an alliance of six countries, including Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and United Arab Emirates, whose enduring advantages are rooted in cultural commonalities, strategic positioning, independent Sharia based judiciary system, incessant socio economic reforms and a minimal corporate tax regime. The GCC countries follow a civil

law legal system<sup>1</sup> which is deeply influenced by strong political and cultural ties. With the ongoing debate on legal origins, Fan and Yu (2012) evince that the governance system in civil law countries rely extensively on internal monitoring mechanisms. Similarly, the GCC governance machinery banks on a control-based system which is characterized by significant insider ownership, concentrated shareholdings, low transparency levels and strong inclination towards family finance (see Farooq & Derrabi, 2012). As per McKinsey & Company study in 2015, family owned business account for a staggering 60 to 70 per cent of GCC businesses, generating approximately \$100bn annually. Furthermore, the inclusion of UAE and Qatar into the MSCI Emerging Markets Index in May 2014 presaged GCC's upsurge to the emerging market status and attracted massive capital inflows. Moreover, the current zero interest regime and geo political uncertainties looming in advanced economies have pressurized profit seeking investors to divert funds into emerging markets especially the GCC. In light of these opportunities, a renewed focus on inculcating solid CG fundamentals into the core of business process is the panacea for ensuring strategic agility, operational nimbleness and enhanced transparency, all precedents' to increased foreign direct investments. Undoubtedly, the establishment of Hawakamah<sup>2</sup> CG institute in 2005 is a constitutional measure taken with a salutary mandate to ensure corporate sector reform and good governance in the MENA region.

### **3. Theoretical framework, Prior literature and Hypotheses development**

CG is a pertinent global phenomenon affecting FP, nonetheless the concept lacks any accepted theoretical background or commonly accepted pattern till date (Abdulla & Valentine, 2009; Larcker, Richardson, & Tuna, 2004). However, few theories namely resource dependency theory (Pfeffer & Salancik, 1978), institutional theory (Suchman, 1995), stewardship theory (Donaldson and Davis, 1989), stakeholders' theory (Edward Freeman, 1984), social contract theory (Thomas Hobbes, 1651) and the agency theory (Jensen & Meckling, 1976) have taken the center stage to underpin CG. A proliferation of theories suggests the adoption of a multi-theoretical approach (also employed by Pallathitta, 2005; Eisenhardt, 1989 and Kuhn, 1970) by incorporating the most pertinent elements from the above discussed theories to get a vivid reflection of the internal

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<sup>1</sup> France, Germany, Brazil, China, Japan, Mexico, Russia, Switzerland and Turkey are some of the other countries following civil law

<sup>2</sup> For further information on Hawakamah please visit <http://www.hawkamah.org/>

governance influencers on FP. Extant research has marked several variables categorized under internal mechanisms. They are board independence (Black, Jang, & Him, 2006) leverage (McConnell & Servaes, 1995), dividend policy (Gugler & Yurtoglu, 2003), duality (Brickley, Coles, & Jarrell, 1997) level of institutional ownership (Agarwal & Knoeber, 1996) and board size (Canyon & Peck, 1998).

### *3.1. Insider shareholding (INSD)*

INSD-FP relationship, shaped by the stewardship theory and agency theory postulates that senior executives and shareholders share similar interest and perceive a higher utility from alignment of interests (also called the convergence of interest principle as proposed by Jensen & Meckling, 1976) rather than indulging in self-serving behavior (see Donaldson & Davis 1989). On the other hand, the agency theory (see Donaldson, 1990; Morck et al., 1988) proposes that increased managerial shareholdings lead to entrenchment effects (as suggested by Shliefer and Vishney, 1989) and convert the traditional principal agent problem to a problem involving multiple principals with varied goals, all these at the expense of minority shareholders (also see Henry, 2008 and Claessens & Fan, 2003;).

Prior studies by Al-Malkawi and Pillai (2013); Gugler, Mueller and Yurtoglu (2008); Agrawal and Knoeber (1996); Chung and Pruitt (1996); and McConnell and Servaes (1990) all document significant INSD-FP relationship. The current study hypothesizes a positive INSD-FP relationship in the GCC context as the latter exhibits the traits of civil law countries where INSD dominates the companies' shareholding structure, whilst working for shareholder wealth maximization. Lending our support to the stewardship theory, the dominance of positive INSD-FP relationship revealed in prior research and consistent with the results reported in the UAE setting by Al-Malkawi and Pillai (2013) claiming that the insiders work for the common interest of the other minority shareholders thereby minimizing agency cost and maximizing FP, the hypothesis to be tested is formulated as follows:

*H1: Ceteris Paribus, there is a positive relationship between INSD and FP.*

### 3.2. Institutional Shareholdings (INST)

Institutional shareholders are considered to be active participants in firm monitoring with the agency theory and institutional theory supporting the same. The institutional theory relates to the influence of those norms, values, beliefs, judicial and regulatory systems on the firms structure, behaviour and decision making element. In addition, the “active monitoring hypothesis” posits a positive INST-FP relationship arguing that institutions are equipped with resources, expertise and capability to monitor managements’ attitude and prevent their self-serving behavior (see Shleifer & Vishny, 1986; McConnell & Servaes, 1990; Pound, 1988). The other accruing INST benefits are the reduction of agent-principle information asymmetry (Mitra, 2002), the competitive advantage and acumen in monitoring the firms portfolio (see Schleifer & Vishny, 1986; Jensen & Meckling, 1976;), continuity and consistency in firm monitoring in order to avoid hasty exit strategies (see Coffee, 1991) and promotion of indirect monitoring by stock analysts (see Pinto, 2005).

Previous research by Al-Malkawi and Pillai (2013); Erkens, Hung, and Matos (2012); Lee and Chen (2011); Gugler, Mueller and Yurtoglu (2008); Agrawal and Knoeber (1996) and McConnell and Servaes (1990) have reported significant INST-FP relationship. Building on the above factors and the datum that GCC companies reveal a high percentage of INST in the ownership structure, the vital role of INST cannot be overlooked. Consistent with the active monitoring hypothesis and the positive impact found in recent empirical evidence gathered in the GCC context, INST is assumed to have a positive relationship on FP and the hypothesis to be tested is formulated as follows:

*H2: Ceteris Paribus, there is a positive relationship between INST and FP.*

### 3.3. Governmental Shareholdings (GOVT)

The institutional theory supports the presence of GOVT as an agency cost mitigator. According to Chhibber and Majumdar (1998), government intervention in developing economies assume dual forms, one as a regulator and the other as an economy developer. Labra (1980) and Shirley and Walsh (2000) emphasize that developing economies GOVT facilitate eliminating monopolistic tendencies, minimizing externalities, reducing information asymmetry, monitoring



underdeveloped managerial market, protecting minority shareholder interest and promoting economic development. On the contrary, allegations exist that companies with GOVT have less performance based accountability, lower capital market dependency due to easier financial access and lack of exposure to a market for corporate control and agency issues (see for example, Dewenter & Malatesta, 2001).

Previous research by Alfaraih, Alanezi and Almujaed (2012); Aljifri and Mustafa (2007); Sun, Tong and Tong (2002) and Chhibber and Majumdar (1998) amongst others, find evidence of strong GOVT-FP relationship. The GCC business culture regards government participation in business ventures as a sign of credibility and as an inbuilt monitoring mechanism constraining management opportunistic behavior and promoting FP. The presence of large GOVT in the ownership structure of GCC companies, and the arguments put forth in extant research GOVT in developing economies minimizes monopolistic tendencies, externalities, information asymmetry and promotes economic development along with the empirical evidence derived in the UAE setting (see Al-Malkawi & Pillai, 2013; Aljifri & Mustafa, 2007;) urges us to hypothesize a positive relationship between GOVT and FP.

*H3: Ceteris Paribus, there is a positive relationship between GOVT and FP.*

### *3.4. Audit type (AUDIT)*

Employing Big 4 (external auditors) is assumed to improve audit quality, reduce agency costs as per the agency theory and in turn improve FP. Two main arguments provide explanation for a positive relationship between audit type and audit quality. These are the reputation hypothesis and deep pocket hypothesis. The reputation hypothesis as suggested by De Angelo (1981) argues that large auditors have the responsibility to deliver quality services as there is a tendency to loose client specific rents if they fail to do so. The deep pocket hypothesis as suggested by Becker et al. (1998) and Simunic (1980) relate to the wealth of these auditing companies which can be at stake in case of any litigation.

Prior research by Geiger and Rama (2006); Francis, Maydew and Sparks (1999); Francis and Krishnan (1999) and Becker et al. (1998) document significant AUDIT – FP relationship. Although the relevance of big 4 has been proved insignificant in many of the GCC countries (see

for example Alzharani, Ahmed & Aljaaidi, 2011; Aljifri & Mustafa, 2007), studies by Al Shetwi et al. (2011) commend the role of the big 4 in minimizing earnings management in the GCC context. Such inconclusive results affirm the need of further research. However, the relevance of governance codes, concentrated ownership structure in GCC and prior empirical evidence augmented by the popularity and significant employment levels of the Big 4 in firms in the GCC motivates us to hypothesize a positive relationship between AUDIT and FP.

*H4: Ceteris paribus, there is a positive relationship between AUDIT and FP.*

### *3.5. Board Size (BOD)*

The agency theory and resource dependency theory provide fundamental support for an appropriate BOD to control agency cost and provide valuable resources to the firm in the form of finance and capital, links to key suppliers, customers and significant stakeholders (see Jackling & Johl, 2009). Forbes and Milliken (1999) suggest that a larger board has advantages such as sharing of management and expertise and the capacity to oppose any illogical decisions made by the CEO while Jensen (1993) argues that a larger board creates agency costs, gives rise to free rider problems, delays in making good decisions and in actively supervising the firm (see also Goodstein, Gautam & Boeker, 1994; Shaw, 1976).

A relevant BOD-FP relationship has been established by Lee and Chen (2011); Jackling and Johl (2009); Kyereboah-Coleman and Biekpe (2007); Haniffa and Hudaib (2006) and Yermack (1996); amongst others. In the GCC context, prior research by Naushad and Malik (2015); Al-Matari et al. (2012) and Aljifri and Mustafa (2007) report a negative BOD-FP relationship but with varying levels of significance. In the backdrop of the criticisms of a large board in the agency theory, specific board characteristics unique to the GCC where the presence of the required number of independent directors as well as directors serving similar positions on other boards are mandatory to provide valuable advice, the presence of a smaller board with such expertise is preferred and therefore the hypothesis is formulated as follows:

*H5: Ceteris Paribus, there is a negative relation between BOD and FP.*

### *3.6. Duality (DLTY)*

Duality refers to a situation where the chairman and the CEO positions are occupied by the same individual. While agency theory suggests that duality makes an individual practical and self-serving and concludes with self-beneficial actions (see Donaldson & Davis, 1991), stewardship theory argues that duality empowers management to take autonomous executive actions (Mallin, 2007; Davis et al., 1997). In a varied perspective, multiple roles lead to difficulties in the execution of their respective roles thus contributing to chaos and mismanagement (see Dedman & Lin, 2002). Moreover, Goodwin and Seow (2000, p. 43) reiterates on “the inherent cost with respect to duality related to the incomplete transfer of information and the confusion of who is in charge of running the company”.

Inconclusive results have surfaced in prior research, as Gill and Mathur (2011); Al-Hawary (2011) Peng, Zhang, and Li (2007) report a strong positive relationship between DLTJ and FP while Arora (2012); Chaghadari (2011); Kyereboah-Coleman and Biekpe (2007); Brickley et. al. (1997); and Pi and Timme (1993) find a negative relationship. In the GCC, the business culture entails a single tier board system due to a family dominated ownership structure, (see Al-Malkawi, Twairesh & Harery, 2013) and does not permit a third party to assume executive role. The coexistence of immense risk and intricacies in routine business affairs with the former issue makes it advisable to adhere to the agency theory which obviates duality for enhancing FP. Additionally, the inverse relationship reported in prior empirical evidence gathered in the GCC setting by Al-Malkawi and Pillai (2013) and Al-Matari et al. (2012) leads to the current study hypothesizing a negative relationship between duality and FP.

*H6: Ceteris paribus, there is a negative relation between existence of DLTJ and FP.*

### *3.7. Leverage (LEV)*

Leverage refers to the extent of debt in the capital structure of companies. According to the agency theory (see Jensen & Meckling, 1976), the inclusion of debt reduces the cost of external equity and increase firm value by motivating managers to align their interests with the shareholders, thus minimizing agency cost. Agency costs may also arise between shareholders and debt holders as the shareholders may invest in riskier projects as the former receives gains if the investment assures returns above the debt value (see also Fama & Miller, 1972). The monitoring role of the creditors

in order to reassure their investments, reduction of agency conflicts between managers and shareholders due to underinvestment issues (Myers, 1977), advantages accruing to high quality companies due to their low refinancing risk (Diamond, 1991), information asymmetry and the assurance of getting their funds back are some of the other facts associated with the issue of debt.

Research by Al-Malkawi and Pillai (2013); Al-Saidi (2010); Aljifri and Moustafa (2007); Haniffa & Hudaib (2006); Chhibber and Majumdar (1998) and McConnell & Servaes (1995) document significant LEV- FP relationship. However, a severe dearth of studies from the GCC, the relevance of negative LEV-FP relationship in the empirical evidence gathered and the general immaturity of the financial markets further serves as a basis to hypothesize a negative relationship between LEV and FP.

*H7: Ceteris paribus, there is a negative relationship between LEV and FP.*

### *3.8. Dividend payments (DIV)*

Dividend declarations serve as effective CG mechanisms which align the interests and minimize agency problems between managers and shareholders by increasing the potential default risk of firms and by reducing the available funds to managers (De Angelo et al., 2006; Easterbrook, 1984). Also agency costs in ownership concentrated firms (which is the case in most of the GCC companies) between majority shareholders and minority shareholders (see Gugler & Yurtoglu, 2003) are mitigated by dividend payments reflecting an alignment of interest between them. With respect to the emerging markets (like the GCC) with an immature financial market, dividend payments can serve as a less costly bonding mechanism in comparison with the net benefits accruing from governance improvements (see Doidge et al., 2007) and in countries with weak investor protection such payments reduce the potential fear of minority shareholder expropriation (Mitton, 2004).

The inclusion of dividend payout as a factor affecting the agency cost has been widely debated in empirical research (see Henry, 2008; Wilkinson & Clements; 2006; Gugler & Yurtoglu, 2003; Fama & French, 2001 and La Porta et al. 2000). However, country specific factors and extent of shareholder and investor protection act as commonalities which aid employing dividends as governance mechanisms affecting FP. Consistent with the theoretical arguments proposed by

Doidge et al. (2007) that dividend payments are much sought after in emerging countries with weak shareholder rights and legal bindings, the empirical evidence reported by Farooq and Chetoui (2012) and Al-Jifri and Mustafa (2007) in the GCC and an extreme dearth of DIV-FP evidence from the Middle East suggest a significant relationship between DIV and FP. The hypothesized relationship is as follows:

*H8: Ceteris paribus, there is a significant relationship between DIV and FP.*

### *3.9. Corporate social responsibility (CSR)*

Corporate social responsibility roots itself to the stakeholder theory and social contract theory. These theories assert that every firm is presumably accountable to every stakeholder eventually amassing advantages such as long term increase in companies good will (see Soloman & Hansen, 1985), capital accessibility (Fombrun, Gardberg & Barnett, 2000), abating systematic risk with social certifications (Botosan, 1997). On the contrary Barnea and Rubin (2010); Henderson (2002); Aupperle, Carroll and Hatfield (1985) and Vance (1975) offer conflicting views with the former statement. They caution that CSR engagement can lead to tradeoffs, entail a longer payback period and be resorted to illegitimately corner public attention. Prior literature by Setiawan and Darmawan (2011); Crisostomo, Freire and Vasconcellos (2011) and Chapple and Moon (2005) report a positive CSR-FP relationship while Soni and Arora (2012); Maignan and Ralston (2002) and McGuire et al. (1988) among others, report the CSR engagement impact as negligible.

The facts enumerated above helps us to arrive at few significant conclusions. Firstly, it can be stated that firms will adopt CSR only after a marginal cost-benefit analysis. Secondly, both country and firm specific factors have bearing on CSR adoption. Thirdly, a severe vacuum from the emerging countries and specifically the gulf countries employing CSR as a governance mechanism affecting FP entails a further in depth study of the variable in the GCC setting. Also, in the GCC, the concept of CSR is still in its embryonic stage with regards to its adoption by local companies. Moreover, Rettab, Brik and Mellahi (2009) comment that the CSR-FP relationship in emerging countries are based on the stakeholders' perception and reaction to CSR activities. Based on the forgoing discussion we expect CSR to have a significant impact on FP but the hypothesized relationship can be either positive or negative.

*H 9: Ceteris Paribus, there is a significant relationship between CSR and FP.*

### *3.10. Internet Financial Reporting (IFR)*

According to the FASB, IFR refers to the disclosure of firm's FP on the company's websites for avoiding information asymmetry thereby lowering the firm's cost of capital (Botosan, 1997). The impact of IFR on FP revolves around the "stakeholder theory", "social contract theory", "the efficient market theory" and "signaling theory". According to Fama (1970) if the market is efficient and in equilibrium, any information published in the market will be reflected in stock prices. Besides, the institutional theory support adopting technological innovation in ensuring transparency to seek legitimacy during institutionalization process. Furthermore, Ficci and Aybar (2012) set a strong rationale for emerging countries to resort to IFR as it would expedite equity markets' development which mandates strong institutional infrastructure and relevant flow of information.

The emerging markets being prone to severe information asymmetry and this deficiency posing as a major hurdle for cross border investment, the necessity for further research is warranted. With the exception of few IFR-GCG related research (see Rahman, 2010; Ball & Shivakumar, 2008 and Dutta & Bose, 2007 ), the only study analyzing IFR as a CG mechanism affecting FP in the GCC is by Al-Malkawi and Pillai (2013) who report an insignificant IFR-FP relationship due the presence of immature equity culture, lack of shareholder interest and insufficient knowledge in analyzing the company's credentials. Currently GCC corporates are urged to adopt IFR, the non-compliance of which, can invite the criticism from the capital market and regulatory authorities. At the same time, consistent with the theoretical support meted out by agency theory and signaling theory that IFR reduces information asymmetry and signals transparency a significant relationship between the presence of IFR and FP is thus hypothesized.

*H 10: Ceteris Paribus, there is a significant relationship between IFR and FP.*

### *3.11. Firm Size (MCAP)*

Firm size is an important component while judging FP because large firms may have more agency problems and therefore need to incorporate strong governance mechanisms (Klapper & Love,

2004; Himmelberg et al., 1999). Prior literature has extensively considered size as a control variable (see, Al-Matari et al., 2012; Shan & McIver, 2011; Loderer & Weelchli, 2010 and Jackling & Johl, 2009) in their CG study. Evidence suggest that larger firms harness public support, escape regulators scrutiny, enjoy greater economies of scale and win laudable ratings. These companies are more likely to employ efficient financial reporting systems however, manipulation chances are recurrent as external auditors find it difficult to detect frauds in a sophisticated system (Johnson, Khurana & Reynolds, 2002).

In the GCC context, accessibility to colossal finance options due to the presence of ownership concentration by large affluent families and the easy availability of debt posits that majority of the firms in the GCC are large with respect to market capitalization. In lines with the theory surrounding firms' size that a larger firm enjoys economies of scale and specialization and the emergence of a positive relationship in prior studies (Al-Malkawi & Pillai, 2013; Fallatah & Dickins, 2012 and Aljifri & Mustafa, 2007) related to the GCC business environment, this study also hypothesizes a positive relationship between firm size and FP.

*H11: Ceteris Paribus, there is a positive relationship between MCAP and FP.*

### *3.12. Firm age (AGE)*

Another common control variable frequently employed in CG literature is firm age (see for example, Chung & Pruitt, 1996; Jackling & Johl, 2009; Kumar, 2004; Shan & McIver, 2011). Generally while mature firms exhibit economies of scale, industry experience, provide differentiated products ” (Majumdar, 1997, p. 239), withstand unprecedented market related developments (Stinchcombes, 1965), the younger firms fare better in developing export capabilities and exhibit resilience towards economic shocks (Autio, Sapienza & Almeida, 2000). However, older firms are normally associated with obsolescence in both assets and technology (see Barron, West & Hannan, 1994), degenerated governance polices, larger boards (Loderer & Waelchli, 2010), all paving way for a negative FP. A negative relationship between AGE and FP is revealed by Al-Malkawi and Pillai (2013) and Loderer and Waelchli (2010) reiterating that older (mature) firms face sluggish FP.

In hypothesizing a specific relationship, firstly the researchers support the theoretical backing specifying a declining FP for aging firms due to the organizational inertia present within and the inability to appreciate and accommodate rapid changes in the business environment. The presence of several mature firms in the sample studied also justifies the need to study the effect of age on FP. Finally, consistent with prior literature emerged from the GCC context (see for e.g. Al-Malkawi & Pillai, 2013) negative relationship is hypothesized between firm age and FP.

*H12: Ceteris Paribus, there is a negative relationship between AGE and FP.*

### *3.13. Sector Dummy (NFIN)*

Extant literature on CG has employed industry dummies in their regression to control for industry specific effects which are time invariant (see Black et al., 2006; Klapper & Love, 2004). This is because “CG can vary due to differences in complexity of operations, capital structure, ownership structure and line of business”. (Haniffa & Cooke, 2002, p.328). Firms are mainly classified into financial and non-financial firms. The former can be further classified as banks, insurance companies, investment banking, financial services and so on. The latter can be classified as industries, services, real estate, manufacturing, retail, hospitality and so on. In order to be consistent and avoid ambiguities in industry classification, the present study classifies the companies into financial and non-financial companies. Thus, to capture the potential effects of these unobserved sector level heterogeneity the study will use NFIN as a control variable to distinguish itself from financial companies. The following hypothesis is proposed:

*H13: Ceteris Paribus, there is a significant relationship between NFIN and FP.*

## **4. Data and Methodology**

### *4.1. Data*

The data for the study consists of 349 companies (financial and non -financial) listed in the stock exchanges of the GCC countries for an eight-year period ranging from 2005 – 2012. There are 673 listed companies as on 30<sup>th</sup> December 2012; however 324 companies have been eliminated due to two reasons such as (i) non availability of data for the study period 2005-2012 (ii) unavailability



of websites or any relevant information on certain companies with specific reference to Kuwait.<sup>3</sup> As a result the final sample consists of 31 companies from Bahrain, 82 companies from the UAE, 28 companies from Qatar, 86 companies from Oman, 79 companies from Saudi Arabia and 43 companies from Kuwait. In order to gain the maximum possible observations, pooled cross-section and time-series data is used. The relationship between CG and FP in this study is viewed and analyzed from the equilibrium model approach (also employed by Al-Malkawi & Pillai, 2013; Gill & Mathur, 2011; Aljifri & Mustafa, 2007; Majumdar & Chhibber, 1999; Brickley et al., 1997; Agrawal & Knoeber, 1996; McConnell & Servaes, 1995; Pi & Timme, 1993 amongst others) which assumes that the CG mechanisms are decided internally within the firm (John & Senbet, 1998 and Agrawal & Knoeber, 1996;) and the “optimal governance structure is decided by the company without any external intervention” (Danielson & Karpoff, 1998, p.348).

#### 4.2. Methodology

The main purpose of this paper is to examine the impact of certain internal CG mechanisms on FP. In order to assess the relationship between CG and FP, by and large, the following model can be written as:

$$FP = f(CGV, CV) \quad (1)$$

where firm performance ( $FP$ ) is a function of corporate governance variables ( $CGV$ ) and other control variables ( $CV$ ) supposed to be related to performance.

For a panel regression model, Model (1) can be written as:

$$y_{it} = \alpha_0 + \beta'x_{it} + \varepsilon_{it} \quad (2)$$

$$i = 1, \dots, N \quad \text{and} \quad t = 1, \dots, T$$

where  $i$  is the cross-section dimension ( $i = 1, \dots, N$ ),  $t$  is time dimension ( $1, \dots, 8$ ),  $y$  is the dependent variable ( $FP$ ) for firm  $i$  and period  $t$ ,  $x_{it}$  is a vector of explanatory variables,  $\beta'$  is a vector of parameters to be estimated and  $\varepsilon_{it}$  is the error term. On the basis of the research hypotheses formulated in the prior section, the general empirical model for firm  $i$  in period  $t$  can be written as

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<sup>3</sup>. Al-Musalli and Ismail (2012) and Aroui, Hossain, and Muttakin, (2011) has completely avoided companies in Kuwait in their GCC study due to unavailability of data.

$$y = \alpha_0 + \alpha_1 INSD + \alpha_2 INST + \alpha_3 GOVT + \alpha_4 AUDIT - \alpha_5 BOD - \alpha_6 DLT Y - \alpha_7 LEV + \alpha_8 DIV \pm \alpha_9 CSR \pm \alpha_{10} IFR + \alpha_{11} MCAP - \alpha_{12} AGE \pm \alpha_{13} NFIN + \varepsilon \quad (3)$$

where  $y$  is firm performance measured by using both Tobin Q (hybrid/market measure) and ROA (accounting measure). This is because, as suggested by Black et al., (2006, p. 370), that “CG is perceived differently by insiders and outsiders. While the accounting measures focus on wealth effects of CG which is the priority of insiders (management), Tobin Q represents financial valuation of CG by investors (outsiders)” (See also Al Matari et al. 2014). Thus the latter authors suggest a skilful integration of both the measures in CG research for ensuring invaluable information about the firm, which will channel pathways for establishing sound CG policies. The Tobin’s Q ratio is calculated as the sum of market value of equity and the book value of total liabilities divided by the book value of total assets, while the ROA is return on assets which is the net income over total assets. INSD is the percentage of shares held by insiders, INST is the percentage of institutional ownership, GOVT is the percentage of government ownership, AUDIT is Audit type which equals 1 for presence of Big 4 and 0 otherwise, BOD is the board size, DLT Y is CEO duality which equals 1 if duality persists and 0 otherwise, LEV is leverage measured by debt-to-equity ratio, DPS is dividend payout measured by total dividend paid over total shares outstanding, CSR is a dummy variable which equal 1 if a firm involves in CSR and 0 otherwise, IFR is a dummy variable which equal to 1 for a firm engaging in IFR and 0 otherwise, MCAP is proxy for firm size measured by the natural logarithm of market capitalization, and AGE is firm age and NFIN is industry type where a dummy variable of 1 is for non-financial companies and 0 otherwise.

The parameters of the empirical model are estimated using Generalized Least Squares (GLS) regression (also employed by Lee & Cho, 2016; Elkelish & Hassan, 2015; Al Otaibi, 2014 and Kyereboah-coleman & Biekpe, 2006 amongst others). For this, some diagnostic tests such as test for normality, multicollinearity, heteroskedasticity, autocorrelation and endogeneity are initially performed. Under both heteroscedasticity and auto correlation the usual OLS estimators although linear, unbiased and asymptotically (i.e. in large samples) normally distributed, no longer have minimum variance. In other words, they may not be BLUE (Baddeley & Barrowclough, 2009).

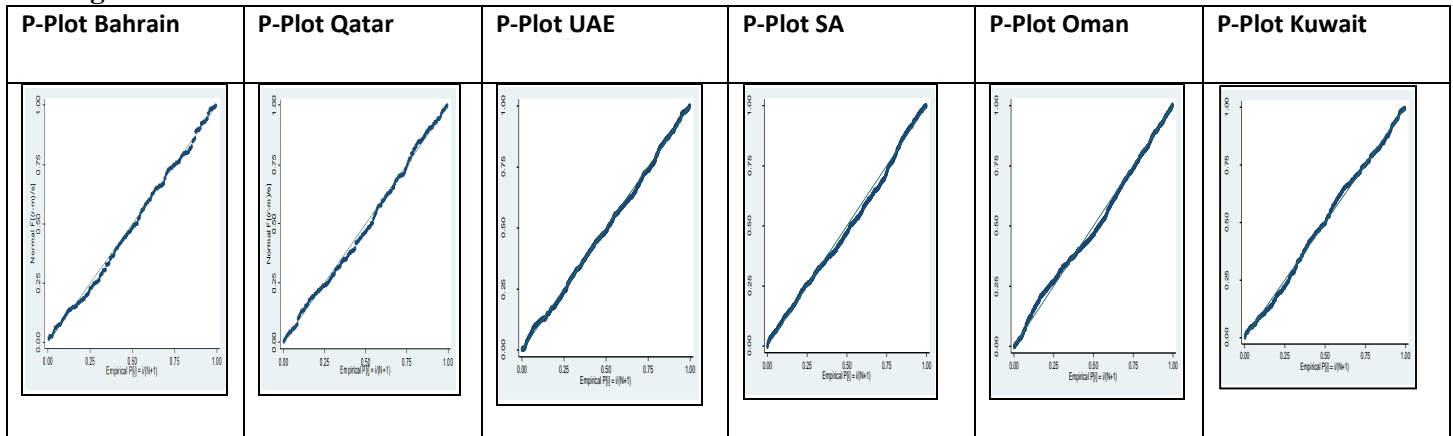
At this point, Greene (2008) suggests employing the GLS panel data regression (see also Habbash, et al. 2010) as it strengthens the reliability of the coefficient estimates due to the assumption that regression parameters do not differ between various cross-sectional units.

## 5. Diagnostic tests

### 5.1. Normality test

Parametric tests are valid only if the errors are normally distributed (Ayyangar, 2007). The data corrected by eliminating outliers with the help of *lvr2* plot (see Appendix I) and calculation of DFBETA's is tested for normality (a prerequisite for an unbiased estimator) by conducting the Shapiro Wilks test and graphing a standard normal probability plot (P-P plot) of the residuals ( $r$ ). The results of the Shapiro Wilks reveal an insignificant chi<sup>2</sup> (p-value = 0.11, 0.48, 0.10, 0.10, 0.09, 0.17) for Bahrain, Qatar, UAE, Saudi Arabia, Oman and Kuwait respectively indicating that the null hypothesis cannot be rejected, with the P-P plot in Figure 1 below further attesting the former statement.

**Figure 1: Results of P-P Plot**



### 5.2. Multicollinearity test

A multicollinearity test was performed to identify the correlation of the independent variables in the model which might then inflate the standard errors of the coefficient estimators, leading to large confidence intervals for coefficients and a very small  $t$ -statistic (Berry & Feldman, 1985). To test for multicollinearity, the VIF statistic is calculated for all variables and for each country as

shown in Table 1 below. As can be seen from Table 1 below, the mean values for all countries are much lower than the threshold value of 10 indicating no major signs of multicollinearity problem (Gujarati & Sangeetha, 2007). For further check, the correlation matrices (not reported) confirm the absence of high correlation among variables for all countries.

**Table 1: Multicollinearity Test-VIF Statistics**

<b>Country</b>	<b>Mean VIF</b>
Bahrain	2.1
Qatar	2.4
UAE	1.6
Saudi Arabia	2.4
Oman	1.4
Kuwait	1.5

### 5.3. Heteroskedasticity and Autocorrelation tests

The data for each country is also subjected to the Breusch-Pagan / Cook-Weisberg to test for heteroskedasticity and Woolridge test for autocorrelation. The Breusch-Pagan / Cook-Weisberg tests the null hypothesis that the error variances are all equal while the Woolridge test testifies whether errors associated with a certain observation are correlated with the errors of any other observations in the current or previous years. Table 2 below reveals that data from Oman, Saudi and Qatar signal heteroskedasticity issues. However, the Woolridge test for autocorrelation report a high significance (P-values <1) which indicate that the residuals are auto correlated in the first order thus leading to the rejection of the null hypothesis of the absence of AR (1), once again coercing the need to employ the GLS estimation technique.

**Table 2: Results for Heteroscedasticity and Autocorrelation Tests**

<b>Country</b>	<b>Breusch – Pagan Test</b>		<b>Woolridge Test</b>	
	<b>Tobin q</b>	<b>ROA</b>	<b>Tobin q</b>	<b>ROA</b>
	$\chi^2$ [p-value]	$\chi^2$ [p-value]	F statistic[p-value]	F statistic[p-value]

<b>Bahrain</b>	0.48	0.46	17.379***	30.735***
<b>Qatar</b>	16.42***	17.52***	19.23***	28.23***
<b>UAE</b>	1.86	1.78	17.23***	29.25***
<b>Saudi Arabia</b>	36.99***	1.64	21.23***	28.23***
<b>Oman</b>	15.47***	19.01***	31.25***	30.20***
<b>Kuwait</b>	2.65	1.68	32.21***	21.23***

**Note:** \*\*\*denotes statistical significance at the 1% level. Breusch-Pagan test for heteroskedasticity. Woolridge test for autocorrelation.

#### 5.4. Endogeneity test

The tests for endogeneity are performed in lines with Black et al. (2006) and Rashid (2008) on the CG models for the GCC countries. First the endogenous variable INSD is regressed on all the other independent variables, control variables and instrumental variable stock variance. The residuals ( $r$ ) are stored and in the second step the performance measure (Tobin  $Q$  and ROA) is regressed on all the independent variables, control variables and the residuals so calculated. Table 3 below reveals values derived for  $r$ , which is statistically insignificant with both Tobin  $Q$  and ROA for all the countries with the exception of UAE with ROA. Endogeneity concerns are addressed by employing 2SLS (two stage least squares regression) which corrects for simultaneity, omitted variables or measurement errors (Cameron & Trivedi, 2005; Greene, 2008). Instrumental Variable Regression is the corrective tool employed, subsequently yielding a statistically significant positive relationship at 5% level for INSD in the UAE. Rest assured, the other residuals does not exhibit any relationship with the performance measures thus proving the absence of endogeneity issues in the GCC CG model. The residuals are further tested under the Durbin Wu Hausman test for endogeneity and gives an insignificant p-value with both Tobin  $Q$  and ROA.

**Table 3: Results for Endogeneity Test**

<b>Countries</b>	<b><i>r</i>- value</b>	
	<b><i>t</i>-stat(<i>p</i>-value)</b> <b><i>Tobin Q</i></b>	<b><i>t</i>-stat(<i>p</i>-value)</b> <b><i>ROA</i></b>
<b>Bahrain</b>	1.2	0.91
<b>Qatar</b>	-0.044	-0.23
<b>UAE</b>	-0.75	-3.9***
<b>Saudi Arabia</b>	-0.78	1.69
<b>Oman</b>	1.51	-1.67
<b>Kuwait</b>	1.77	-1.29

**Note:** \*\*\*denotes statistical significance at the 1% level

## 6. Results and Discussion

Analysis of data begins with descriptive statistics of all the dependent and independent variables employed in the study in order to judge the spread and trend of the data employed. The tables (see Appendix II) report the number of observations (OBS), mean, standard deviation, minimum and maximum values for each variable. An overview of the tables clearly depicts a significant presence of INSD, INST and GOVT in the ownership structure of the companies. BOD varies from 3-12 and the presence of DLTY is ignorable. CSR engagement is minimal in most of the countries while LEV is visible to be on the higher spectrum. While majority of the companies resort to IFR, min-max results for DIV are diverging on a broader scale indicating that wide variations persist in dividend payouts. AGE and MCAP reveals that there are both mature and immature companies in the sample with majority of them being heavily capitalized.

Table 4 reports the GLS estimation results of the general models developed for each GCC country based on Tobin  $Q$  and ROA. The Wald Test Statistics reveal a Chi-square ( $\chi^2$ ) distribution significant beyond 1% level rejecting the null hypothesis that all the exogenous variables are equal to zero. They also indicate that the explanatory power of CG mechanisms in combination with control variables are significant in terms of elucidating the variation in market performance measured by Tobin  $Q$  and ROA.

Table 4: Country wise regression results with Tobin Q and ROA

VARIABLE	EXPECTED SIGN	BAHRAIN		QATAR		UAE		SAUDI		OMAN		KUWAIT	
		Tobin Q	ROA	Tobin Q	ROA	Tobin Q	ROA	Tobin Q	ROA	Tobin Q	ROA	Tobin Q	ROA
		COEF (z-stat)	COEF (z-stat)	COEF (z-stat)	COEF (z-stat)	COEF (z-stat)	COEF (z-stat)	COEF (z-stat)	COEF (z-stat)	COEF (z-stat)	COEF (z-stat)	COEF (z-stat)	COEF (z-stat)
INSD	+	0.626 (2.680)***	-0.108 (-1.420)	0.100 (0.120)	-0.235 (-2.140)***	0.697 (4.060)***	0.411 (13.65)***	-0.200 (-2.43)***	0.391 (6.640)***	-0.211 (-0.350)	-0.008 (-0.080)	0.500 (6.630)***	0.102 (0.880)
GOVT	+	-1.732 (-3.170)***	-0.084 (-1.320)	1.575 (2.460)***	0.077 (2.500)***	-1.440 (-6.550)***	-1.121 (-14.48)***	-0.810 (-14.23)***	-1.119 (-8.670)***	1.219 (2.020)**	-0.783 (-7.090)***	-0.778 (-2.84)***	-1.406 (-8.570)***
INST	+	0.670 (1.250)	-0.071 (-1.220)	0.669 (1.020)	0.089 (4.030)***	-0.047 (-0.270)	0.724 (12.12)***	-0.261 (-4.940)***	-1.229 (-11.61)***	6.465 (10.97)***	0.527 (7.660)***	-0.067 (-0.370)	0.298 (2.440)**
AUDIT	+	0.313 (0.680)	0.078 (1.360)	-2.325 (-3.820)***	0.050 (2.080)**	-1.123 (-6.840)***	-0.530 (-11.32)***	-0.137 (-5.490)***	-1.256 (-15.83)***	-1.542 (-2.740)***	-0.479 (-7.670)***	-0.668 (-3.840)***	-0.704 (-6.190)***
DLTY	-	-0.570 (-0.940)	0.089 (1.300)	0.495 (0.860)	0.049 (3.460)***	0.308 (2.020)**	0.306 (17.59)***	-0.360 (-4.140)***	0.378 (8.890)***	-18.77 (-8.810)***	-1.022 (-5.500)***	0.947 (5.580)***	0.871 (9.090)***
BOD	-	-2.013 (-2.790)***	-0.502 (-7.510)***	-4.879 (-6.430)***	-0.007 (-4.750)***	-0.648 (-4.240)***	0.522 (-9.580)***	-0.057 (-7.110)***	-1.506 (-20.89)***	-2.608 (-5.630)***	-0.761 (-13.36)***	-0.658 (-3.120)***	-1.444 (-10.09)***
CSR	(+/-)	-0.923 (-1.720)***	-0.631 (-9.370)***	2.683 (3.980)***	-0.011 (-1.360)	-0.705 (-4.280)***	-0.273 (-5.070)***	-0.044 (-1.910)**	-1.021 (-9.540)***	0.977 (1.690)*	-0.800 (-8.070)***	-0.811 (-4.060)***	-1.371 (10.10)***
IFR	(+/-)	0.045 (0.080)	-0.272 (-5.370)***	1.570 (1.260)	-0.025 (-1.220)	-1.273 (-6.460)***	-0.834 (-16.70)***	-0.193 (-6.290)***	-0.776 (-10.90)***	-2.057 (-3.580)***	-0.283 (-3.950)***	-0.447 (-2.920)***	1.053 (4.910)***
LEV	-	-3.664 (-5.130)***	-0.514 (-5.240)***	-1.866 (-2.540)**	-0.006 (-7.310)***	-4.234 (-17.58)***	-1.058 (-14.89)***	-0.007 (-1.440)	-3.733 (-14.66)***	-3.447 (-8.640)***	-0.295 (5.950)***	-0.848 (-7.89)***	-0.918 (-8.230)***
DIV	(+/-)	0.584 (2.230)***	-0.132 (3.690)***	-2.130 (-3.060)***	0.001 (2.030)**	0.110 (0.770)	-0.055 (-1.120)	0.0180 (11.97)***	-0.196 (-4510)***	0.116 (0.240)	-0.295 (-6.110)***	-0.261 (-1.940)**	-0.638 (-5.010)***
AGE	-	-0.666 (-1.850)*	-0.088 (-1.970)*	-9.445 (-11.32)***	-0.001 (-2.920)***	-1.223 (-8.560)***	-0.553 (-11.91)***	-0.002 (-2.790)***	-0.445 (-5.680)***	-5.988 (-9.900)***	-0.215 (-3.460)***	-1.435 (-7.970)***	-1.061 (-8.750)***
MCAP	+	-1.552 (-2.210)**	-0.577 (-7.260)***	-0.069 (-0.070)	0.002 (0.360)	-1.711 (-8.590)***	-1.158 (-17.66)***	0.419 (22.76)***	-2.261 (-16.27)***	0.095 (0.120)	-0.993 (10.62)***	-0.649 (-2.890)***	-1.809 (-11.35)***
NFIN	(+/-)	0.929 (1.720)*	-0.036 (-0.460)	5.897 (5.520)***	-0.003 (-0.190)	2.507 (13.56)***	0.724 (13.06)***	0.191 (5.110)***	3.205 (11.20)***	10.217 (13.24)***	0.186 (2.550)**	0.710 (3.910)***	-0.099 (-0.870)
CONS		1.121 (36.61)***	0.051 (13.80)***	1.621 (35.14)***	0.091 (1.90)*	0.071 (7.030)***	0.053 (32.95)***	-2.979 (-16.64)***	0.066 (13.80)***	1.269 (79.56)***	0.040 (19.44)***	0.054 (4.970)***	0.025 (6.900)
Obs		216	216	224	224	616	616	600	600	608	608	336	336
Wald chi <sup>2</sup>		126	966	1010	251	519	4015	1027	2400	1743	805	251	557
Prob>chi <sup>2</sup>		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Note: Variables are defined in Section 4.2., \*\*\*, \*\*, \* denotes statistical significance at the 1%, 5% and 10% levels, respectively

Table 4 reveals that of the 10 CG variables tested, five CG variables emerge statistically different from zero (GOVT, AUDIT, BOD, IFR and LEV) in majority of the GCC countries concurrently with Tobin Q and ROA.

The CG variable INSD is positive and significant at 1% level ( $z$ -stat=4.060, Tobin Q; 13.65, ROA) in the UAE endorsing the strategic alliance interest theory and the findings by McKinsey & Company (2015) that family shareholdings (family constituting majority of insiders in the current study as well) generate more than \$100 billion in yearly revenues in the country.

The results show that the CG variable GOVT has positive and significant relationship with FP in Qatar ( $z$ -stat=2.46, Tobin Q; 2.50, ROA) while it is negative in UAE, SAUDI and Kuwait. Although variations in relationships are due to country specific factors, the bent towards the negative side can only be attributed to their over focus on social goals rather than profit goals which both the outsiders and insiders do not appreciate due to self-interests and reduction in their share of profits, consistent with the findings by Alfaraih et al. (2012).

As per Table 4, CG variable INST exhibits negative and statistically significant relationship at 1% ( $z$ -stat=-4.940, Tobin Q;  $z$ -stat=11.61, ROA) in Saudi Arabia. However, a positive and statistically significant relationship at 1% level ( $z$ -stat=10.97, Tobin Q;  $z$ -stat=7.660) is reported in Oman highlighting the relevance of active monitoring hypothesis. This result is in line with other GCC related studies by Al-Malkawi and Pillai (2013) and Alfaraih et al (2012).

AUDIT has emerged negative and statistically significant at 1% level with Tobin Q in all the GCC countries except Bahrain substantiating the former with the investors' disagreement towards the reputation hypothesis and deep pocket hypothesis as proposed by Becker et al. (1998), De Angelo (1981) and Simunic (1980), amongst others. This uniformity in results may be attributed to the Big 4 being discredited in uncovering the discrepancies in the Lehman Brothers, the prime contributor of the global financial crisis in 2008.

As hypothesized, the CG variable BOD has emerged negative and statistically significant at 1% level with Tobin Q and ROA in all the GCC countries further lending support to prior GCC research findings by Naushad and Malik (2015), Al-Matari et al. (2012) and Aljifri and Mustafa (2007). This documents that the investors opinions are at par with the findings by Conyon and Peck (1998) and Yermack (1996) cautioning the impending agency costs exuding from a large



board thus leading to overall inefficiency in operations, duplication of work and miscommunication issues.

DLTY is representing a positive inclination in UAE and Kuwait with varying levels of significance between 1% and 5% level. Notably, these countries are dominated by family businesses as observed by Mc Kinsey above and in such firms' agency issues are minimal as the managers and owners are one and the same person (Al-Malkawi et al, 2013). On the contrary a negative and significant at 1% level is noticed in Oman, also reported in the studies by Al- Matari et al. (2012).

The variable CSR exhibits a statistically significant inverse relationship varying between 1% - 5% with both performance measures in Bahrain, UAE, Saudi Arabia, and Kuwait. The results signal the insiders support to the trade-off theory as argued by Aupperle et al. (1985) and Vance (1975) and to the opinion of Henderson (2002) who advocate the longer payback period associated with such expenses.

In relation to the CG variable IFR, it shows a statistically significant negative relationship with FP at 1% level in UAE, Saudi Arabia, Oman and Kuwait. This can imply a general consensus in external investors and insiders' opinion that IFR can invite competitors and reduce the profit of the company in the long run.

With respect to LEV, the coefficients are consistently negative and significant in all the GCC countries at 1% level with the exception of Saudi Arabia where insignificant results surface with Tobin Q. This presumes that external investor mentality in the GCC is one that supports the tradeoff theory associated with debt and the prevalent low investor protection (see Weill, 2003) all of which causes the inclusion of debt as a CG mechanism affecting the FP in an inverse manner.

Table 4 further shows that results for CG variable DIV is inconclusive for all the GCC countries except Kuwait where a negative and statistically significant relationship has appeared (z-stat = -1.94, Tobin Q; -5.01, ROA). These results can be attributed to the conceptualization of dividend in Kuwait, which according to Sady et al (2012, pp.26) is based on (1) current earnings levels (2) liquidity constraints; (3) potential profitable investment opportunities; and (4) future expected earnings, rather than presumable agency issues. This means insiders and investors in Kuwait perceive dividend distributions profitable only if the four former points enlisted above

are satisfied but the dent created by the 2008 financial crisis and the current dwindling oil prices all force them to perceive dividend payments to adversely impact FP.

The control variable AGE has emerged negative and statistically significant varying between 1%-5% level with FP in all GCC countries, asserting that older firms face obsolescence in both assets and technology (see Barron et al., 1994), degenerated governance policies and larger boards (Loderer & Waelchli, 2010).

An element of consensus can also be seen in the variable MCAP where a negative and statistically significant relationship at 1% level is reported in Bahrain, UAE and Kuwait. This documents the insiders and investors' support to the findings of Loderer and Weelchli (2009) and Majumdar (1997) who assert a negative scale of returns accruing from a larger size.

Finally, the relationship between FP and NFIN is found to be positive and statistically significant at 1% level in the GCC. This suggests that the investors in the GCC feel that non-financial companies exhibit better FP due to the nature of goods and services they deal in (mostly consumer goods) unlike the financial companies who are prone to micro and macroeconomic turbulences.

## **7. Conclusion, implications and limitations**

The prime motive of the paper is to examine the main internal mechanisms of CG that affect FP in the GCC countries. The study uses firm level panel data set of 349 companies listed in the stock exchanges of the GCC countries for the period 2005-2012. The paper develops thirteen testable research hypotheses while the results are estimated by employing GLS regression. Results reveal that the CG variable BOD emerged as a vital determinant of FP with both the performance measures in all the GCC. This implies that a large board size is detrimental to the FP of companies and the firms ought to limit their board size ranging 8-11 (see Kiel & Nicholson, 2003, Leblanc & Gilles, 2003 and Lipton & Lorsch, 1992). The other variables emerging negative and statistically significant with both the performance measures in majority of the GCC countries studies are the CG variables AUDIT, CSR, LEV, and the control variable AGE. The proficiency exhibited by local auditors and the immaturity of the CSR concept along augmented with negative returns are the vital concerns emanating from AUDIT and CSR factors.

The findings in the present study extend some implications to self-regulatory bodies such as the HAWAKAMAH and stock exchanges as well. Currently, the GCC governance systems heavily depend on the effectiveness of self-regulatory measures apart from litigatory measures due to the prevalent CG immaturity. Therefore, betterment and convergence of existing CG codes into internationally acclaimed best practices can accelerate regulators confidence in the effectiveness of CG self-regulation keeping in mind the range of legal domains such as the presiding legal and tax contract laws, current accounting and auditing standards followed in the GCC countries. In light of the results derived for BOD, regulators shall also make substantial endeavours in maintaining an optimum board size simultaneously undertaking ongoing training programmes that underscore the professional, ethical and technical demands imposed by the increasingly complex industry practices. In addition, the negative LEV-FP relationship sets certain managerial implications. To counter the negative effects of LEV the management may opt for more reliance on retained earnings. Also as Herring and Chatusripitak (2000) have suggested, a well-functioning bond market can also be looked into as options for the financial development in emerging markets.

To conclude, although the derived results are specific to the GCC countries, their parity with other emerging countries' governance models suggests an extended investigation into the MENA regions as well. The former can also be compounded with the inclusion of external governance mechanisms such as take over, poison pills and managerial market, the exclusion of which is the main limitation of this paper. Furthermore, standardized governance themes are mandatory but they must be tailored to the overall structure of the jurisdictions where they are to be implement in, the abstinence of which will feature CG as a mere tick-box activity. Finally, ambitious and coveted initiatives on the threshold such as the EXPO 2020 and Hyperloop One for the UAE, 2022 Qatar FIFA World Cup, Bahrain Vision 2030, Saudi Arabia Vision 2030, Oman Vision 2020 and Kuwait Vision 2035 are further vindications of the GCC's undeterred intentions to wean itself away from their over-reliance on fossil fuels, all of which entails adoption of robust unconventional strategies in governance to catapult the GCC into an investment hub and enhance global competitiveness.

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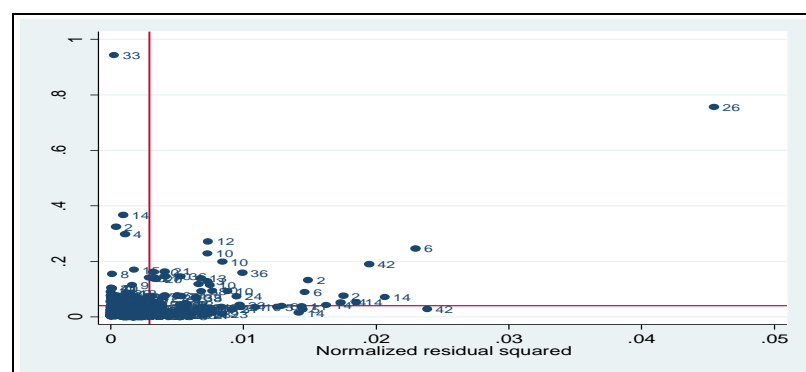
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Ivr2 plot for checking outliers from Kuwait data



## Appendix 2: Summary statistics for all variable

Summary statistics for Bahrain						
VAR	OBS	MEAN	SDEV	MIN	MAX	RANGE
INSD	216	0.002	0.010	0.000	0.050	0.050
GOVT	216	0.145	0.201	0.000	0.640	0.640
INST	216	0.385	0.270	0.000	0.940	0.940
AUDIT	216	0.815	0.389	0.000	1.000	1.000
DLTY	216	0.034	0.189	0.000	1.000	1.000
BOD	216	8.305	1.569	5.000	12.00	7.000
CSR	216	0.484	0.501	0.000	1.000	1.000
IFR	216	0.926	0.263	0.000	1.000	1.000
LEV	216	1.754	2.538	0.001	12.25	12.30
DIV	216	0.028	0.023	0.000	0.156	0.156
AGE	216	29.111	10.559	3.500	56.00	52.50
MCAP	216	7.773	0.721	7.000	9.000	2.000
NFIN	216	0.407	0.492	0.000	1.000	1.000
TOBINQ	216	1.113	0.416	0.200	2.980	2.786
ROA	216	0.054	0.077	-0.440	0.250	0.692

Summary statistics for UAE						
VAR	OBS	MEAN	STD	MIN	MAX	RANGE
INSD	224	0.020	0.064	0.000	0.250	0.250
GOVT	224	0.087	0.160	0.000	0.550	0.550
INST	224	0.127	0.173	0.000	0.742	0.742
AUDIT	224	0.929	0.258	0.000	1.000	1.000
DLTY	224	0.214	0.411	0.000	1.000	1.000
BOD	224	8.420	1.790	5.000	12.000	7.000
CSR	224	0.429	0.496	0.000	1.000	1.000
IFR	224	0.893	0.310	1.000	0.000	1.000
LEV	224	2.201	3.250	0.028	25.388	25.36
DIV	224	2.906	2.624	0.000	12.500	12.50
AGE	224	23.411	15.08	2.000	55.00	53.00
MCAP	224	9.478	0.798	8.000	11.00	3.000
NFIN	224	0.536	0.500	0.000	1.000	1.000
ROA	224	0.076	0.067	-0.097	0.389	0.486
TOBINQ	224	1.573	0.890	0.374	6.428	6.050

Summary Statistics for Oman						
VAR	OBS	MEAN	SDEV	MIN	MAX	RANGE
INSD	608	0.038	0.091	0.000	0.400	0.400
GOVT	608	0.076	0.162	0.000	0.750	0.750
INST	608	0.401	0.259	0.000	0.950	0.950
AUDIT	608	0.763	0.425	0.000	1.000	1.000
DLTY	608	0.023	0.160	0.000	1.000	1.000
BOD	608	7.355	1.685	3.000	12.00	9.000
CSR	608	0.211	0.408	0.000	1.000	1.000
IFR	608	0.684	0.465	0.000	1.000	1.000
LEV	608	1.878	2.290	7.710	17.69	25.41
DIV	608	0.097	0.174	0.000	1.000	1.000
AGE	608	17.35	8.151	3.000	39.00	36.00
MCAP	608	7.160	0.763	5.400	9.300	3.900
NFIN	608	0.711	0.454	0.000	1.000	1.000
TOBINQ	608	1.302	0.671	0.140	5.000	5.130
ROA	608	0.053	0.089	-0.500	0.320	0.830

Summary Statistics for Saudi Arabia						
VAR	OBS	MEAN	SDEV	MIN	MAX	RANGE
INSD	336	0.010	0.044	0.000	0.240	0.240
GOVT	336	0.043	0.108	0.000	0.490	0.490
INST	336	0.386	0.233	0.000	0.850	0.850
AUDIT	336	0.640	0.481	0.000	1.000	1.000
DLTY	336	0.357	0.480	0.000	1.000	1.000
BOD	336	6.167	1.917	3.000	11.00	8.000
CSR	336	0.301	0.466	0.000	1.000	1.000
IFR	336	0.952	0.213	0.000	1.000	1.000
LEV	336	1.581	2.156	4.160	25.25	21.08
DIV	336	0.017	0.028	0.000	0.201	0.201
AGE	336	23.32	12.90	1.000	60.00	59.00
MCAP	336	7.942	0.659	6.070	9.814	3.730
NFIN	336	0.571	0.496	0.000	1.000	1.000
TOBINQ	336	0.025	0.108	-0.68	0.372	1.050
ROA	336	0.045	0.194	-0.39	0.794	1.090

Summary Statistics for Qatar						
VAR	OBS	MEAN	SDEV	MIN	MAX	RANGE
INSD	616	0.070	0.147	0.000	0.680	0.680
GOVT	616	0.130	0.187	0.000	0.610	0.610
INST	616	0.291	0.259	0.000	0.990	0.990
AUDIT	616	0.844	0.363	0.000	1.000	1.000
DLTY	616	0.026	0.159	0.000	1.000	1.000
BOD	616	7.364	1.975	3.000	12.00	9.000
CSR	616	0.247	0.431	0.000	1.000	1.000
IFR	616	0.701	0.458	0.000	1.000	1.000
LEV	616	1.960	2.395	0.010	14.77	14.76
DIV	616	0.828	3.085	0.000	25.00	25.00
AGE	616	24.554	11.723	1.000	53.00	52.000

Summary Statistics for Kuwait						
VAR	OBS	MEAN	SDEV	MIN	MAX	RANGE
INSD	336	0.010	0.044	0.000	0.240	0.240
GOVT	336	0.043	0.108	0.000	0.490	0.490
INST	336	0.386	0.233	0.000	0.850	0.850
AUDIT	336	0.640	0.481	0.000	1.000	1.000
DLTY	336	0.357	0.480	0.000	1.000	1.000
BOD	336	6.167	1.917	3.000	11.00	8.000
CSR	336	0.301	0.466	0.000	1.000	1.000
IFR	336	0.952	0.213	0.000	1.000	1.000
LEV	336	1.581	2.156	4.160	25.25	21.08
DIV	336	0.017	0.028	0.000	0.201	0.201
AGE	336	23.32	12.90	1.000	60.00	59.00
MCAP	336	7.942	0.659	6.090	9.814	3.730

MCP	616	9.099	0.645	7.350	11.14	3.790	NFIN	336	0.571	0.496	0.000	1.000	1.000
NFIN	616	0.468	0.499	0.000	1.000	1.000	TOBINQ	336	0.025	0.108	-0.680	0.372	1.050
TOBINQ	616	0.071	0.191	-0.590	0.687	1.270	ROA	336	0.045	0.194	-0.390	0.794	1.090
ROA	616.	0.051	0.077	-0.270	0.583	0.850							