

# Corporate board for innovative managerial control: implications of corporate governance deviance perspective

Irfan Saleem, Mujtaba Nasir Ali Khan, Rashedul Hasan, and Muhammad Ashfaq

**Author post-print (accepted) deposited by Coventry University's Repository**

**Original citation & hyperlink:**

Saleem, I., Khan, M.N.A., Hasan, R. and Ashfaq, M., 2020. Corporate board for innovative managerial control: implications of corporate governance deviance perspective. *Corporate Governance: The International Journal of Business in Society*. (In Press)

<https://dx.doi.org/10.1108/CG-04-2020-0151>

DOI [10.1108/CG-04-2020-0151](https://dx.doi.org/10.1108/CG-04-2020-0151)

ISSN 1472-0701

Publisher: Emerald

**Copyright © and Moral Rights are retained by the author(s) and/ or other copyright owners. A copy can be downloaded for personal non-commercial research or study, without prior permission or charge. This item cannot be reproduced or quoted extensively from without first obtaining permission in writing from the copyright holder(s). The content must not be changed in any way or sold commercially in any format or medium without the formal permission of the copyright holders.**

**This document is the author's post-print version, incorporating any revisions agreed during the peer-review process. Some differences between the published version and this version may remain and you are advised to consult the published version if you wish to cite from it.**

# **Corporate board for innovative managerial control: implications of corporate governance deviance perspective**

## **1. Introduction**

The recent wave of the global financial crisis has attracted attention on the governance practices of U.S. firms among academicians and regulators to study innovative governance mechanisms (Filatotchev, *et al.*, 2020; Joseph, *et al.* 2014). The Dodd-Frank Wall Street Reform in 2010 is a direct response to the 2008 Global Financial crisis during the Obama administration, which presented several provisions to bring financial stability among U.S. firms. In the United States of America, as of February 2010, companies are mandated by the Security and Exchange Commission to present the reason and disclosure about their firm structure (Carlsson, 2003). The subsequent market crashes, for example, the U.S. stock market crash in 1929, 1987, 2008, and lately COVID-19 pandemic and a decade of economic depression have created an environment of mistrust between the holders of the capital, and the managers of the money (Harjoto, and Wang, 2020). Such a business environment has resulted in agency conflicts which require innovative governance mechanisms (Aguilera *et al.*, 2019). Notwithstanding, the 20<sup>th</sup> century has witnessed a burst of legislation (Saleem *et al.*, in press), court cases, and shareholder reform movements (Lombardi *et al.*, 2019). Central banks around the world have tried to prevent shareholder rights with an emphasis to instil the pioneering and at the same time standardised governance mechanisms and managerial controls (Saleem *et al.*, in press).

Governance literature has seen a plethora of research on the effectiveness of the corporate board as a control mechanism. For instance, Daily *et al.* (2003) explain corporate governance as a mechanism whose objectives are driven toward maximising the profitability of the shareholders and investor through minimising the cost associated with the deployment of the resources by hiring professional corporate board and adopting for standardised governance practices. Gompers *et al.* (2003) explained that effective management control through corporate board could lead to an increase in shareholder wealth. From the lens of agency theory Aguilera, *et al.* (2019) further explain the necessity of corporate board and innovative governance practices as a

control mechanism for Multinational Companies (MNCs). Filatotchev *et al.* (2020) explore the impact of recent technological changes and conclude that such changes could improve corporate control mechanisms by promoting a transition from strategic to financial controls within the existing governance framework.

While firms are expected to comply with the national institutional governance framework, but lately, Aguilera *et al.* (2018) propose that the firms often over or under-conforming governance practices, thus creating a deviate from industrial norms to reflect organisational identity. Based on the ecological perspective, the organisations also choose to deviate from standard governance practices to demonstrate risk-taking behaviour by exercising the agentic behaviour by challenging legal bindings and managerial control to achieve firm's vision (Filatotchev, *et al.*, 2020). However, to understand the net impact of deviant behaviour still required attention, which is one of the primary objectives of this study (Aguilera *et al.*, 2018). So, this study embarks upon the firm's motivation behind the adoption, customisation and deviation of corporate governance practices that differ from the standardised governance control mechanisms (Filatotchev, *et al.*, 2020). Drawing from the firm's entrepreneurial identity and ecology perspectives, the study explains why the firms deviate from standard corporate governance practices and apply innovative management control.

This paper has five sections. The first section discusses the research gaps and significance to study deviance and innovation in the governance structure and mechanisms. In the second section literature review and hypotheses are developed. In the third section, the research design and methodology are discussed. Section four presents the main results, and the final section is dedicated to discussion and conclusion.

## **2. Literature Review and Hypothesis Development**

The conceptual studies have unveiled the role of corporate governance about the entrepreneurial orientation of the corporate board, and subsequent impact of entrepreneurial board structure on the innovation as a key performance indicator (Aguilera *et al.*, 2019; Miller and Le Breton–Miller, 2011; Sheikh, and Wang, 2012). While classically, corporate governance is considered as a process which is affected by regulatory and legislative mechanisms as an external factor (Saleem *et al.*, in press) but

the governance deviance behaviour of the firms is itself a unique process to achieve competitive advantage. According to literature, the governance deviance decision-making approach happens in three stages (Joseph, *et al.* 2014; Aguilera *et al.*, 2019 and 2018). In the first stage, firms become aware of alternative governance approaches. Firms move toward a stage where deviance becomes more accessible in the second stage. The final stage involves an activation stage where the deviance practice falls outside the legitimate practices specified by the prevailing governance logic. It requires the efforts of various stakeholders to ensure the implementation of effective internal control to protect the interest of the shareholders by introducing pioneering governance reforms. Nevertheless, being entrepreneurial with governance structure can make the firm innovative to ensure sustainable performance (Aguilera *et al.*, 2018). But, the concept of entrepreneurial orientation (E.O.) has been underexplored at corporate board's level and its relevance can be found in line with the strategic decision making through the lens of social and organisational identity theory at the individual level. However, at the firm-level, E.O. can be characterized as the quest for market excellence through the investment in innovative governance structures and managerial controls, despite the high level of risk associated with it (Miller and Le Breton–Miller, 2011). Geng *et al.* (2016) provide empirical evidence in the context of Japan and conclude that centralized E.O. leads to the adoption of a shareholder-oriented which is why firm could deviate from the shareholder-orientation and agency perspective.

Corporate governance is also concerned with the resolution of the state of conflict that born in a corporate setting between principal and manager of the firms (Eisenhardt, 1989). Agency theory identifies that the agent and principal have divergent objectives, and it is difficult for the principal to monitor or control actions of the agent. Ross (1973) proposed agency problem occurs when different decision-makers are faced with the uncertainty considering that both agent and principal are independent states in the matter. Freitas *et al.* (2013) explain the complexities of choosing an appropriate governance model and propose an industry-specific governance mode to mitigate agency conflict by revalidating the work of Hamil *et al.* (2010). Badu and Appiah (2017) provide a comprehensive discussion on the importance of the board as a management control mechanism to mitigate agency conflicts. However, according to the ecology

theory, organizations evolve to survive, and an innovative governance mechanism is a need of time (Aguilera *et al.*, 2018) to live in the competitive global business environment (Filatotchev, *et al.*, 2020). The top-down transformation in the governance structure is usually possible by adopting for deviant governance structures. For instance, a corporate board can effectively reduce moral hazards and improve risk aversion with experienced and independent members (Badu and Appiah, 2017). Ferry and Ahrens (2017) enlightened us about the importance of the control function of the board for public sector firms and reaffirms the role of accountability relationships among key stakeholders that enables corporate governance as an effective management control tools to aid public interest. Similarly, Visser (2016) proposed an innovative management control framework for the public sector organizations that emphasize the need for a hierarchical, instead of the current departmental pyramid structure for better managerial control. So we can say that governance is a complex phenomenon, and "*a one size fits all*" approach may not be appropriate to resolve various types of agency conflict across diverse industries (Aguilera, *et al.*, 2018). For example, Cox and Nguyen (2018) talked about the corporate's identity as the source of competitive advantages that differentiate the firm from other organisations and create a distinct value for shareholders. Cummings *et al.* (2019) found that firm who have the dual-class shares - in which there is a separation of ownership and voting rights - have been observed to experience negative probability of successful offering of company shares. Moreover, Firms with inherent good governance practices would provide higher protection rights to shareholders. It would force top management team to look for a higher pay-out payment option for the shareholders from whence the excess cash generated (Adjaoud and Ben-Amar, 2010). One of innovative governance practice can be CEO duality. Although, Duru *et al.* (2016) found that even the CEO-duality harms the firm's performance, vigilance mitigates the effects that the board of directors provides to the firm. So, a firm that goes beyond the normative expectation in ensuring the equitable treatment of their shareholders would experience profound access to capital resources because the investor should be confident in mechanism in which that can safeguard their value (Harjoto and Wang, 2020). Whilst we have presented a few pieces of evidence from the literature about the impact of innovative and classical governance mechanisms on firm performance (Sheikh and

Wang, 2012), Foley *et al.* (2018) unveiled that 80 per cent of cross-listed firms in the United States chose to opt-out in at least one governance rule prescribed by the Securities and exchange commission; thus most of the firms just fill the documents and keep stick with the innovative governance practices to stay ahead of the market (Harjoto, and Wang, 2020; Sajjad, *et al.*, 2018). In a similar vein, scholars tested the level of corporate governance compliance among Malaysian firms, to understand the governance compliance in emerging economies (Liew, 2007). They found that firms deviate in the adoption of several governance rules prescribed by the Securities to demonstrate an innovative governance structure which is stakeholder-driven. Such statistics provide more validity on the relevance of the cost-benefit analysis for the adoption of a prescribed governance model among corporations (Foley *et al.*, 2018; Sajjad, *et al.*, 2018). Lately, Aguilera *et al.* (2018) also theorised the reasons for firms to adopt governance practices that do not conform to the dominant governance logic. Drawing on the theorisation of Garg (2013) and findings Joseph *et al.* (2014), Aguilera *et al.* (2018, 2019) defined corporate governance deviance as a situation where firms intentionally deviate from standards set by legitimate practices and normative expectations advanced by the dominant national governance logic. There are several theoretical perspectives on deviance behaviour both at individual and organizational levels. Aguilera *et al.* (2018) build a theoretical corporate governance deviance perspective by drawing on the organizational deviance behaviour aspects and characterize the firm's governance deviance as an ecological phenomenon for the industry leaders (Joseph, *et al.*, 2014). From the above discussion, we can assume that financial performance of industrial leaders in the US often demands deviance from standardised governance practices (Garg, 2013; Aguilera *et al.*, 2019) through introduction of an innovative governance structure in response to societal and economic transformations, ensure corporate entrepreneurial identity and observe organisational ecology (Filatotchev *et al.*, 2020; Aguilera *et al.*, 2018). Hence, we hypothesise:

**H<sub>1</sub>:** The firms deviating from the corporate governance norms to demonstrate the entrepreneurial identity usually results in a better performance.

### 3. Research Design

The purpose of this study is to explore the effects of corporate governance deviance on the performance of firms operating in the United States of America. Our Sample contains 2538 firms listed on the New York Stock Exchange from the year 2000 to 2017. Our sample dataset is obtained from the Thomson Reuters Eikon and Thomson Assets-4 database. The Thomson Reuters Assets-4 Environment, Social and Governance (ESG) database matrix is used to draw firm-level data on corporate governance (Harjoto, and Wang, 2020). Thomson ESG database constitutes of more than 178 data point collect on the individual firms based on their power of assessment and scoring on corporate governance, environmental, and corporate social responsibility. These 178 measures of a company's performance are grouped among ten categories which are classified as governance, social responsibility, and environment endeavours taken by the firms. Thomson Reuter Assets4 used publicly available sources to accumulate the value of these 178 indicators of more than 4000 firms around the globe to provide the investor with assessments on corporate. Based on the methodological foundation of Gomper *et al.* (2003) and Ferrero-Ferrero *et al.* (2015) test, we have conceptualised the governance deviance index in this study by integrating all aspects of governance. Past studies on governance deviance provide a theoretical outlook (Aguilera *et al.*, 2018). Therefore, this study is a pioneer to provide empirical evidence from the context of the United States of America and provide methodological rigour to extend and test the governance index of Gomper *et al.* (2003).

The purpose of understanding the broader impact of our governance deviance Index, we gather two categories of financial variables. One is their internal or accounting-based, and the other is market-based financial measures of firms, e.g. Market to Book Value and Market Capitalisation.

Table 1 presents a list of the variables. We have divided these variables into five groups: *Right of Shareholders* (RS\_Val), *Responsibility of Boards* (RB\_Val), *Disclosure and Transparency* (DT\_Val), *The Role of Stakeholder in Corporate Governance* (ST\_CG\_VAL) and *Equitable Treatment of Shareholder* (EQU\_TRE\_VAL).

### Insert table 1 here

*Rights of the Shareholder* group include two variables measure designed to evaluate the governance aspect of the firm based on the rights of the shareholder as per the framework of the OECD principles defined and quantified by (Cheung *et al.*, 2007). The *Equitable Treatment* of the shareholder contains two variables designed to measure the disclosure control structure among shareholders of the company. These classifications of variables were performed by matching the definition of the variables by measuring matrix as per the survey of the OECD scale created by the (Cheung *et al.*, 2007).

Governance deviance index is the sum of all the deviance score of the sub-indices (groups) created for five subgroups, i.e. *Right of Shareholders* (RS\_Val), *Responsibility of Boards* (RB\_Val), *Disclosure and Transparency* (DT\_Val), *The Role of Stakeholder in Corporate Governance* (ST\_CG\_VAL) and *Equitable Treatment of Shareholder* (EQU\_TRE\_VAL). The Governance Deviance: GD-index values range from 1 to 16 and is the sum of sub-indices.

We unveil the impact of corporate governance deviance practices on firm performance measured through Tobin's Q. Tobin's Q has been a popular measure of firm performance in corporate governance studies (Singh *et al.*, 2018). We measure Tobin's Q by dividing the market value of assets by the book value of the assets. Our second model is adopted from Gomper *et al.* (2003) to look for the operational reason behind the deviance practices. We perform our principal analysis using the system *Generalised Method of the Moment* as the techniques for the previous resolving issues in literature and looking into the causation between the corporate governance deviance and firm valuation. Hence, we define corporate governance deviance and the firm's performance measured in term of Tobin's-Q is deployed as follow:

$$Q_i = \alpha + \beta DEV_i + \beta_i \times_i + \epsilon_i$$

Our dynamic GMM model for the firms operating performance represented by sales growth, return on assets, and net operating margin is as follow:

$$OP_{it} = \alpha + \beta_1 GDevit + \beta_2 Controls_{it} + u_{it} + \epsilon_{it}$$

## 4. Results

Descriptive statistics for GDev-Index and the sub-indices for 2015, 2016, and 2017 are presented in Table 2. Table 2 also shows the distribution of GDev-Index according to years and also broken up into a portfolio based upon the tendency of deviance based on three "percentiles." These three percentiles-based divisions are similar but unbalanced in terms of firm size. However, size distribution in  $P_{0.3333}$  portfolio remains relatively stable in contradiction to  $P_{0.6667}$  portfolio from 2015 to 2017.

**Insert Table 2 here**

Table 3 provides the top five largest market capitalisation firms in the  $G \leq P_{0.3333}$  and  $G \leq P_{0.6667}$  portfolio in 2015. Both Portfolios contain mobile, communication, and mortar companies in their top five most significant firms in terms of market capitalisation as well. Table 3 identifies two companies, Exxon Mobil Corp and General Electric Co., as our minimum deviant firm in 2015 which are found to adopt the deviant practice in the on-going years as deviance score of 1 in 2015 has raised to 2 in 2016 and seven scores in 2017. For General Electric Co while three scores in 2015 have reached to 5 scores in 2016 and 2017 for Exxon Mobil Crop, suggesting motivation of a firm to adopt a higher degree of governance deviation.

**Insert Table 3**

Table 4 provides the summary statistics and correlation of GDev-Index with several firm characteristics, such as return on assets, market capitalisation, and book value per share, shares outstanding, earning per share, market to book value, gross profit margin, operating profit margin, and debt to equity, etc.

**Insert Table 4 here**

Table 5 depicts the correlation between pairs of sub-indices; right of shareholders, disclosure, and transparency; the role of stakeholders in corporate governance and equitable treatment of shareholders, all have a positive and significant pairwise correlation with each other.

**Insert Table 5 here**

There is also an existence of multicollinearity between the *Disclosure and Transparency* and *Equitable Treatment of Shareholder* ( $\rho_{X,Y} = 0.965$ ;  $p < 0.01$ , collinearity). Such collinearity exists because of the nature of principle motivation behind the *Disclosure and Transparency* will force the firms to have *Equitable Treatment of Shareholder* incorporated in their governance mechanism. However, the presence of this multicollinearity can affect the study of firm performance and sub-indices using OLS regression analysis. However, we do not treat for multicollinearity as our analysis do not employ OLS linear regression analysis; instead, we rely on the Generalised Method of Moment. Table 6 shows the result on the impact of corporate governance deviance on firm performance by controlling for endogeneity and specifying the dynamic relational model.

**Insert Table 6 here**

The Tobin's Q is regressed against our corporate governance deviance index independently in the model (1) and also with each control variable add one by one respectively in the model (2), (3), and (4). Our result depicts the presence of positive and significant relation between the corporate governance deviance and firm performance. Causation between the firm size (log of total assets), market capitalisation (in the log) and book Value of Share (in Log) has an insignificant but positive relationship with the firm performance except in the case of a firm size where our model (3) and (4) shows that firm size is insignificant but also negatively impacts on Tobin's Q.

Our result shows the presences of the bias that can arise if we do not control for endogeneity. Our finding is somewhat similar and supports the notion that the firm adopts the corporate governance deviance practices in response to their target firm characteristics in our case (Wolfe and Sauaia, 2014) financial investment performance as measured by Tobin' s-Q.

Table-7 presents the result regarding the relationship of firm value with five sub-indices and all control variables. Result in that role of stakeholder ( $\beta=4.63$ ;  $p < 0.05$ ) and

responsibility of the board ( $\beta=1.27$ ;  $p<0.05$ ) have a positive and significant effect on the Tobin' s-Q. A firm that goes beyond the regulator and institutional norm in the term of the realisation of the responsibilities of the board and in defining the role of stakeholders in their corporate strategic decisions experience an increase in their investment performance. However, our model found an insignificant effect of deviance in terms of rights of shareholders ( $\beta=1.13$ ; NS), disclosure and transparency ( $\beta=-2.23$ ; NS), and equitable treatment ( $\beta=-1.71$ ; N.S.). Surprisingly, deviance in; equitable treatment and disclosure and transparency have a negative but insignificant relation with firm performance. However, Table-7 somewhat presents a consistent inference about the adoption of deviance practices, as mentioned above. We can say that deviance in term of responsibilities of the board and the role of stakeholder in the strategic decision have significant effects on firm investment, motivates partly because of government regulations.

**Insert Table 7 here**

#### *Robustness Tests*

In our model, we use return on assets measure as operating income divided by the total assets as the measure of the operating capability of a firm. To ensure greater robustness in our model, we also use a sales growth rate of the firm and net operating margin measure as operating income divided by sales as the indicator of firm operating ability.

For reliable results, the choice of instrumental variables is vital in our model. As mention in the above-stated assumptions, and the scholarly work of Core *et al.* (2006) found that there is a correlation between firm size with shareholder rights and firm profitability. Similarly, to control for the presence of cross-sectional difference among the firms, we also controlled for the book value of shares and market capitalisation in our model. Our dynamic GMM model for the firms operating performance represented by sales growth, return on assets, and net operating margin is as follow:

$$OP_{it} = \alpha + \beta_1 GDevit + \beta_2 Controls_{it} + u_{it} + \epsilon_{it}$$

Table-8 presents the relation between corporate governance deviance and firm operating performance. Model (1) results show that there exists a significant negative relationship

between the firm that deviates from market defined corporate policies and their returns on assets. Given that our result is somewhat consistent with the notion of Gomper *et al.* (2003), the nature of corporate bylaws, charter, and provision defined are aimed at depicting the strength of governance as a solution to agency problems among the investor and management. If so model (1) suggest that firm that deviates from these provision faces a negative return on their assets ( $\beta=-0.58$ ;  $p<0.01$ ).

### **Insert Table 8 here**

Model (2) shows a statistically weak significance but positive relationship between the governance deviance and net operating profit margin ( $\beta=847.27$ ;  $p<0.1$ ). The results in the model (2) are similar to the notion presented by Akbar *et al.* (2016) that companies define their optimal level of compliance with the code of governance in response to their firm's operating performance objectivity. Also, in our model (3) sales growth shows a negative and statistically insignificant relation with governance deviance ( $\beta=-0.03$ ;  $p<0.1$ ).

## **5. Discussion and Conclusion**

Organisational adoption of deviant behaviour leads to the creation of the entrepreneurial orientation that leads to enhanced financial performance. We expand the findings of Miller and Le Breton–Miller (2011) and Gomper *et al.* (2003) by presenting an association between corporate governance deviance and performance. Although after empirically analysing the proposed hypothesis H1, we found that firm who are more aware of defining the practices that may not wholly comply with the spirit of the regulation is observed to have experienced enhanced firm performance measured in term of Tobin's Q. Our results supplement the findings of Garg (2013), Gomper *et al.* (2003) and the theory regarding entrepreneurial identify of the firm of Aguilera *et al.* (2018, 2019). We also support the propositions of organisation theory and conclude that corporate governance setting has an impact on the firm financial performance. Our result supports the contemporary literature (Filatotchev *et al.*, 2020) that firms who deviate corporate governance practices are found to experience a 1.5% increase in their financial performance.

The findings of our study are essential for the researchers, policymakers and board members of corporations at large. Efforts to enhance and evolve corporate governance, one shall focus on new dimensions and innovative governance practices that may result from the organisation ability to look for alternative governance choices. It will allow the practitioner to have in place an alternative entrepreneurial governance mechanism that facilitates them in pursuing the firm growth, entrepreneur and stakeholder objectives. Our research also lacks the study of the industrial impact that firms faced in their specific business sector. Resource-Based View of the organisation has shed the importance of the industrial sector the organisation belongs. Research on the impact of the acquisition of the organisation has been the subject of further study (Li *et al.*, 2020). Their research tests the influence of industry, business-specific, and corporate parent influence on the profitability of the organisation. Their relative effect of these influences under the doctrine of corporate governance deviance is not performed to undergo the Meso-level analysis of the governance deviance concept and hence limits the scope of this study and model proposed. Such limitation severely impacts the adoption of the model as the explanatory factor of a practical scenario. We contribute to governance and management control research by sharing new insight and pioneer empirical work on the impact of governance deviance on financial performance. Future research could focus on governance deviance decisions (Augrila *et al.*, 2019) of small firms and the importance of board as a management control function to improve the governance of family-owned firms (Saleem *et al.*, 2019; Saleem *et al.*, 2020) to study innovative governance mechanisms by engaging interdisciplinary governance perspectives (Filatotchev *et al.*, 2020). Scholars can also test the hybrid of self-regulation and state-regulation for better governance control (Saleem *et al.*, in press), the role of sustainability in the service sector of emerging markets (Sajjad, *et al.*, 2018) and understand the role of ethical climate to spark deviant workplace behaviours (Appelbaum, *et al.* 2005)

Our findings have several implications for theoretical and policy perspective. We provided empirical evidence of corporate governance deviant behaviour to reflect entrepreneurial identity. We explored the resource-based framework to develop a theoretical foundation of deviant governance behaviour. We presented a multi-dimensional view of governance deviance through governance deviance index. As such,

we recommend greater involvement of shareholder in governance standard adoption. The board also needs to be more vigilant in deciding an innovative governance practice which may deviate from dominant governance logic of industry.

## References

- Adjaoud, F. and Ben-Amar, W. (2010), "Corporate governance and dividend policy: shareholders' protection or expropriation?", *Journal of Business Finance & Accounting*, Vol. 37 No. 5, pp. 648–667.
- Aguilera, R. V., Judge, W.Q. and Terjesen, S.A. (2018), "Corporate Governance Deviance", *Academy of Management Review*, Vol. 43 No. 1, pp. 87–109.
- Aguilera, R. V., Marano, V. and Haxhi, I. (2019), "International corporate governance: A review and opportunities for future research. , 1-42.", *Journal of International Business Studies*, Vol. 50, pp. 457–498.
- Appelbaum, S. H., Deguire, K. J., and Lay, M. (2005). "The relationship of ethical climate to deviant workplace behaviour". *Corporate Governance: The international journal of business in society*, Vol. 5 No. 4, pp. 43-55
- Badu, E.A. and Appiah, K.O. (2017), "The effects of board experience and independence on mitigating agency conflict", *Journal of Accounting in Emerging Economies*, Vol. 7 No. 4, pp. 445–467.
- Carlsson, R. H. (2003). "The benefits of active ownership". *Corporate Governance: The International journal of business in society*. Vol. 3 No. 2, pp. 6-31
- Cheung, Y.L., Thomas Connelly, J. and Limpaphayom, P., and Zhou, L. (2007), "Do investors really value corporate governance? Evidence from the Hong Kong market", *Journal of International Financial Management and Accounting*, Vol. 18 No. 2, pp. 86–122.
- Core, J.E., Guay, W.R. and Rusticus, T.O. (2006), "Does weak governance cause weak stock returns? An examination of the firm operating performance and investors' expectations.", *The Journal of Finance*, Vol. 61 No. 2, pp. 655–687.
- Cox, J. and Nguyen, T. (2018), "Does the crowd mean business? An analysis of rewards-based crowdfunding as a source of finance for start-ups and small businesses", *Journal of Small Business and Enterprise Development*, Vol. 25 No. 1, pp. 147–162.
- Cummings, M.E., Rawhouser, H., Vismara, S. and Hamilton, E.L. (2019), "An equity crowdfunding research agenda: evidence from stakeholder participation in the rulemaking process", *Small Business Economics*, Vol. 1 No. 1, pp. 1–26.
- Daily, C.M., Dalton, D.R. and Cannella, A.A. (2003), "Corporate governance: Decades of dialogue and data", *Academy of Management Review*, Vol. 28 No. 3, pp. 371–382.
- Duru, A., Iyengar, R.J. and Zampelli, E.M. (2016), "The dynamic relationship between CEO duality and firm performance: The moderating role of board independence.",

- Journal of Business Research*, Vol. 69 No. 10, pp. 4269–4277.
- Eisenhardt, K.M. (1989), "Agency Theory: An Assessment and Review", *Academy of Management Review*, Vol. 14 No. 1, pp. 57–74.
- Ferrero-Ferrero, I., Fernández-Izquierdo, M.Á. and Muñoz-Torres, M.J. (2015), "Integrating sustainability into corporate governance: an empirical study on board diversity", *Corporate Social Responsibility and Environmental Management*, Vol. 22 No. 4, pp. 193–207.
- Ferry, L. and Ahrens, T. (2017), "Using management control to understand public sector corporate governance changes", *Journal of Accounting & Organizational Change*, Vol. 13 No. 4, pp. 548–567.
- Filatotchev, I., Aguilera, R. V. and Wright, M. (2020), "From Governance of Innovation to Innovations in Governance.", *Academy of Management Perspectives*, Vol. 34 No. 2, pp. 173–181.
- Foley, C.F., Goldsmith-Pinkham, P., Greenstein, J. and Zwick, E. (2018), "Opting out of good governance", *Journal of Empirical Finance*, Vol. 48, pp. 93–110.
- Freitas, I.M.B., Geuna, A. and Rossi, F. (2013), "Finding the right partners: Institutional and personal modes of governance of university-industry interactions", *Research Policy*, Vol. 42 No. 1, pp. 50–62.
- Garg, S. (2013), "Venture boards: Distinctive monitoring and implications for firm performance", *Academy of Management Review*, Vol. 38 No. 1, pp. 90–108.
- Geng, X., Yoshikawa, T. and Colpan, A.M. (2016), "Leveraging foreign institutional logic in the adoption of stock option pay among Japanese firms", *Strategic Management Journal*, Vol. 37 No. 7, pp. 1472–1492.
- Gompers, P., Ishii, J. and Metrick, A. (2003), "Corporate governance and equity prices", *The Quarterly Journal of Economics*, Vol. 118 No. 1, pp. 107–156.
- Hamil, S., Morrow, S., Idle, C., Rossi, G. and Faccendini, S. (2010), "The governance and regulation of Italian football", *Soccer & Society*, Vol. 11 No. 4, pp. 373–413.
- Harjoto, M.A. and Wang, Y. (2020), "Board of directors network centrality and environmental, social and governance (ESG) performance", *Corporate Governance: The international journal of business in society*, Vol. 20 No. 6, pp. 965-98.
- Joseph, J., Ocasio, W. and McDonnell, M.H. (2014), "The structural elaboration of board independence: Executive power, institutional logics, and the adoption of CEO-only board structures in U.S. corporate governance.", *Academy of Management Journal*, Vol. 57 No. 6, pp. 1834–1858.
- Liew, P. K. (2007). Corporate governance reforms in Malaysia: The key leading players' perspectives. *Corporate Governance: An International Review*, Vol. 15 No. 5, 724-740.
- Li, H., Terjesen, S. and Umans, T. (2020), "Corporate governance in entrepreneurial firms: A systematic review and research agenda", *Small Business Economics*, Vol. 54 No. 1, pp. 43–74.

- Lombardi, R., Trequattrini, R., Cuzzo, B. and Cano-Rubio, M. (2019), "Corporate corruption prevention, sustainable governance and legislation: First exploratory evidence from the Italian scenario", *Journal of Cleaner Production*, Vol. 217, pp. 666–675.
- Miller, D. and Le Breton–Miller, I. (2011), "Governance, social identity, and entrepreneurial orientation in closely held public companies", *Entrepreneurship Theory and Practice*, Vol. 35 No. 5, pp. 1051–1076.
- Ross, S.A. (1973), "The economic theory of agency: The principal's problem", *The American Economic Review*, Vol. 63 No. 2, pp. 134–139.
- Sajjad, A., Jilani, A., and Raziq, M. M. (2018). "Sustainability in the Pakistani hotel industry: an empirical study". *Corporate Governance: The International Journal of Business in Society*, Vol. 18 No. 4, pp. 714-727
- Saleem I., Lamarque E., and Hasan R. (in press). State and self-regulation for better governance: An Implication of Collibration, *International Journal of Law and Management*,
- Saleem, I., Khalid, F. and Nadeem, M. (2019), "Family Business Governance: What's wrong? What's right? What's Next?", *Emerald Emerging Markets Case Studies*, Vol. 9, pp. 1–23.
- Saleem I., Siddique I., and Ahmed A. (2020). "An Extension of the Socioemotional wealth", *Journal of Family Business Management*, DOI: <https://doi.org/10.1108/JFBM-04-2019-0022>.
- Sheikh, N. A., and Wang, Z. (2012). "Effects of corporate governance on capital structure: empirical evidence from Pakistan". *Corporate Governance: The international journal of business in society*, Vol. 12 No. 5, pp. 629-641.
- Singh, S., Tabassum, N., Darwish, T.K. and Batsakis, G. (2018), "Corporate governance and Tobin's Q as a measure of organizational performance", *British Journal of Management*, Vol. 29 No. 1, pp. 171–190.
- Visser, M. (2016), "Management Control, Accountability, and Learning in Public Sector Organizations: A Critical Analysis', Governance and Performance in Public and Non-Profit Organizations", *Studies in Public and Non-Profit Governance*, Vol. 5, pp. 75–93.

**Table 1: Corporate Governance Variables**

	Symbol	Percentage of Firm with Deviance in		
		2015	2016	2017
<b>Rights of Shareholder</b>				
Compensation Committee	CC	1.8	2.1	2.4
Nomination Committee	NC	9.6	12.8	13.3
<b>Equitable Treatment of Shareholder</b>				
Insider Dealings Controversies	SL_IDC	0.2	0.2	0.3
Policy Equal Voting Right	SRP_EquVot	5.2	7.2	7.8
<b>Role of Stakeholder</b>				
Succession Plan for Executives	SuccPlan	2.8	5.9	6.8
Board Diversity	BS_BGD	9.9	17.8	18.8
<b>Disclosure and Transparency</b>				
Staggered Board Structure	SBS	5.2	7.2	7.8
Classified Board Structure	CBS	0.0	0.1	0.7
<b>Responsibility of the Board</b>				
Audit Committee Independence	ACI	45.2	22.7	19.1
Chairman is ex-CEO	Chai_Ex-CEO	76.9	63.2	57.3
Compensation Committee Independence	CCI	47.6	27.2	24.5
Compensation Committee Non-Executive Member	CC_NonExec	55.1	35.3	33.5
Nomination Committee Independence	NCI	50.9	37.0	33.8
Nomination Committee Non-Executive Member	NC_NonExec	62.4	45.7	43.7
<b>Strictly Independent Board Members</b>				
Strictly Independent Board Members	BS_SIBM	79.8	71.4	70.3
Non-Executive Board Members	BS_NonExec	0.4	1.0	1.3

This table shows the percentage of firms within each governance measure for the period of 2015 to 2017. Thomson Reuters Asset4 is used to draw this data set. See Appendix 1 for the description of each governance measure as per the Thomson Reuters ESG matrix. The sample consists of all firms listed in the USA from 2000 to 2017.

**Table 2: Corporate Governance Index**

	2015	2016	2017
<b>Governance Deviance Index</b>			
Mean	4.53	3.57	3.41
Median	5	3	3
Standard Deviation	2.47	2.22	2.18
Minimum	0	0	0
Maximum	13	11	12
<b>No. of Firms</b>			
$G \leq P_{0.3333}$	1037	1056	1077
$G \geq P_{0.6667}$	1088	1108	1039
<b>Sub-indices Means</b>			
Right of Shareholder	0.11	0.15	0.16
Equitable Treatment	0.05	0.07	0.08
Role of Stakeholder	0.13	0.24	0.26
Disclosure and Transparency	0.05	0.07	0.08
Responsibility of the Board	4.18	3.03	2.83

This table provides summary statistics on the distribution of GDev-Index, the corporate governance deviance index, and sub-indices (rights of a shareholder, the equitable treatment of shareholders, the role of stakeholders, disclosure and transparency, and responsibility of board) over time. Sub-indices are computed from the variables listed in table I and described in appendix I. We have divided the sample in the third percentile based on the yearly level of GDev-Index and list the number of firms in each portfolio.

**Table 3: Largest Firm in Extreme Portfolio**

<b><math>G \leq P_{0.3333}</math> Portfolio</b>			
	2015	2016	2017
	Governance	Governance	Governance
	Deviance Index	Deviance Index	Deviance Index
AMAZON.COM INC	2	2	2
APPLE INC	1	0	1
EXXON MOBIL CORP	3	5	5
GENERAL ELECTRIC CO.	1	2	7
MICROSOFT CORP	1	0	0
<b><math>G \geq P_{0.6667}</math> Portfolio</b>			
	2015	2016	2017
	Governance	Governance	Governance
	Deviance Index	Deviance Index	Deviance Index
ALIBABA GROUP	7	7	7
FACEBOOK INC	7	7	7
MERCADOLIBRE INC	7	1	7
VERIZON COMMUNICATIONS	7	7	7
X5 RETAIL GROUP N.V.	8	7	7

The table presents the firm with the largest market capitalization at the end of 2015 of companies in our extreme portfolio, i.e.,  $G \geq P_{0.6667}$  &  $G \leq P_{0.3333}$ . The calculation of G discussed in the governance deviance index section. One means minimum deviance, eight means highly deviant firm.

**Table 4: Descriptive Summary of Governance Deviance and Firm Characteristics**

	Correlation with G	Mean G ≤ P <sub>0.3333</sub> Portfolio	Mean G ≥ P <sub>0.6667</sub> Portfolio	Difference
Return on Assets	-0.09***	2.02	-3.39	5.41*** (0.00)
Market Capitalization	-0.06***	13,848,424	8,402,024	5,446,400*** (0.00)
Book Value per Share	0.00	21.48	21.44	0.04 (0.98)
Outstanding Share	-0.07***	226,757	156,468	70,289*** (0.00)
Earnings Per Share	-0.00	1.87	-.68	2.55 (0.07)
Market to Book Value	-0.01	2.96	2.84	0.12 (0.84)
Gross Profit Margin	-0.02	35.68	28.80	6.88 (0.26)
Operating Profit Margin	-0.01	-462.05	-646.56	184.51 (0.46)
Debt to Equity	-0.01	101.08	87.90	13.18 (0.62)
Share Price	0.02	57.41	288.63	-231.22 (0.09)
Sales	-0.03**	7,209,864	5,162,344	2047520** (0.01)
Capital Expenditure	-0.02	427,658	361,347	66311 (0.21)
Total Assets	-0.05***	23,168,844	12,032,201	11,136,643*** (0.00)
Tobin's-Q	0.02	1.62	13.11	-11.49 (0.08)
Sales Growth	0.01	.54	.62	-0.08 (0.84)

="\* p<0.05, \*\* p<0.01, \*\*\* p<0.001"

The table presents the summary statistics of GDev-Index with several financial and accounting variables. First, Colum gives us the correlation of GDev-Index with each of the measures of financial and accounting of firms. Second and third columns give the means of the same variables within our extreme portfolio structures. The last column provides the statistical difference of means with their respective significance level in parenthesis.

**Table 5: Correlation Matrix of Sub-indices**

	(1)	(2)	(3)	(4)	(5)
Right of Shareholder	1				
Equityable Treatment	0.066*	1			
Role of Stakeholder	0.037*	0.118*	1		
Disclosure and Transparency	0.068*	0.965*	0.129*	1	
Responsibility of Board	0.095*	-0.054*	-0.101*	-0.053*	1

This table shows the pairwise correlation among the sub-indices, right of shareholders, equitable treatment, the role of stakeholders, disclosure and transparency, and responsibility of the board. The calculation of sub-indices shown mentioned in the data section of the paper moreover, the constituents of the sub-indices are depicted in Table 1 and are described in Appendix I. \* indicates significance at the .01 level.

**Table 6: Firm performance and Corporate Governance Deviance**

	(1)	(2)	(3)	(4)
GDev-Index-Index	2.71** (1.25)	1.59** (0.69)	1.40*** (0.37)	1.50** (0.69)
Firm Size		1.51 (1.25)	-0.16 (1.84)	-2.98 (6.28)
Log Book Value of Share			0.65 (2.04)	1.09 (4.43)
Market Capitalization				2.77 (4.56)
Constant	-5.80 (4.25)	-22.34 (18.31)	-0.73 (20.69)	-1.04 (25.65)
Durbin chi2				0.009
Wu-Hausman F(1,6884)				0.009
Sargan Overidentification				0.724
Basman Overidentification				0.725
Observations	7,607	7,607	7,133	7,133
No. of companies	2,536	2,536	2,461	2,461

The result in the table are Generalized Method of Moment estimates for four different specifications for Panel of 2532 firms; the model is  $Q_i = a + B(\text{GDev-Index}) + BX_i + \varepsilon_i$ . The dependent variable is Tobin's-Q; GDev-Index is the governance deviance index. The control variable is Firm Size (log of Assets), Book Value of Share (Log BV) and Market Capitalization (log mrkcap). Two instrumental variables in the model are also used to cater for the endogeneity, i.e., Capital expenditure and Debt to equity ratio, between the corporate governance deviance and Tobin's-Q, i.e., Capital Expenditure and leverage. \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ . The table also depicts the results of Test of Endogeneity (i.e., Durbin and WU-Husman) and Instrument validity (i.e., Sargan test and Basman )

**Table 7: Firm performance and Corporate Governance Deviance Sub-indices**

VARIABLES	(1)	(2)	(3)	(4)	(5)
Rights of Shareholder	1.13 (3.11)				
Equitable Treatment		-1.71 (6.48)			
Role of Stakeholder			4.63** (1.89)		
Disclosure and Transparency				-2.23 (6.39)	
Responsibility of Boards					1.27** (0.56)
Firm Size	-1.54 (2.84)	0.25 (2.71)	-5.98 (5.16)	0.30 (2.41)	-2.87 (11.68)
Book value of Share	-0.65 (1.88)	0.24 (3.78)	1.34 (1.66)	0.57 (4.16)	0.24 (7.36)
Market Capitalization	3.28 (2.81)	-1.20 (7.62)	9.37** (4.54)	-1.71 (7.58)	3.53 (8.14)
Constant	-21.77 (31.54)	16.41 (71.62)	-52.07*** (20.05)	22.67 (77.95)	-10.56 (36.41)

The result in the table is Dynamic Generalized Method of Moment estimates for firm performance and sub-indices of corporate governance deviance based on OECD principal. the model is  $Q_i = a + B(\text{GDev-Index}) + BX_i + \epsilon_i$ . The dependent variable is Tobin's-Q; GDev-Index is the governance deviance index. The control variable is Firm Size (log of Assets), Book Value of Share (Log BV), and Market Capitalization (log mrkcap). Two instrumental variables in the model are also used to cater for the endogeneity, i.e., is capital expenditure and debt to equity ratio, between the corporate governance deviance and Tobin's-Q, i.e., Capital Expenditure and leverage. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

**Table 8: Corporate Governance Deviance and Firms Operating performance**

	(1) ROA	(2) OPM	(3) Sale Growth
GDev-Index	-0.58*** (0.12)	847.27* (486.91)	-0.03 (0.17)
Firm Size	-2.30*** (0.50)	-220.03 (1,965.14)	2.46*** (0.90)
Book Value of Share	3.32*** (0.40)	-12.32 (1,569.69)	0.47 (0.56)
Market Capitalization	1.03*** (0.31)	-1,120.67 (1,212.10)	0.58 (0.43)
Durbin chi2	0.000	0.054	0.010
Wu-Hausman F(1,6884)	0.000	0.054	0.010
Observations	4,652	4,652	4,463
Number of com	2,364	2,364	2,285

This table presents the result of *The Generalized Method Of Moment* regression for gross profit margin, return on assets, and sales growth on Governance Deviance Index GDev-Index. First regression shows the results of GDev-Index with return on assets. Second regression shows the effects Operating profit margin with the regressor GDev-Index. Moreover, the third column shows the result of the implication of one-year sales growth due to GDev-Index. In all model, the controlling variables are the size of the firm, i.e., a log of total assets of the firm., log of market capitalisation and a book value of the share. Significance at 1%, 5% and 10% is shown as \*\*\*, \*\* and \* respectively. The standard error of each variable is shown below in parenthesis. The table also depicts the results of Test of Endogeneity (i.e., Durbin and WU-Husman) and Instrument validity (i.e. Sargan test and Basman )