

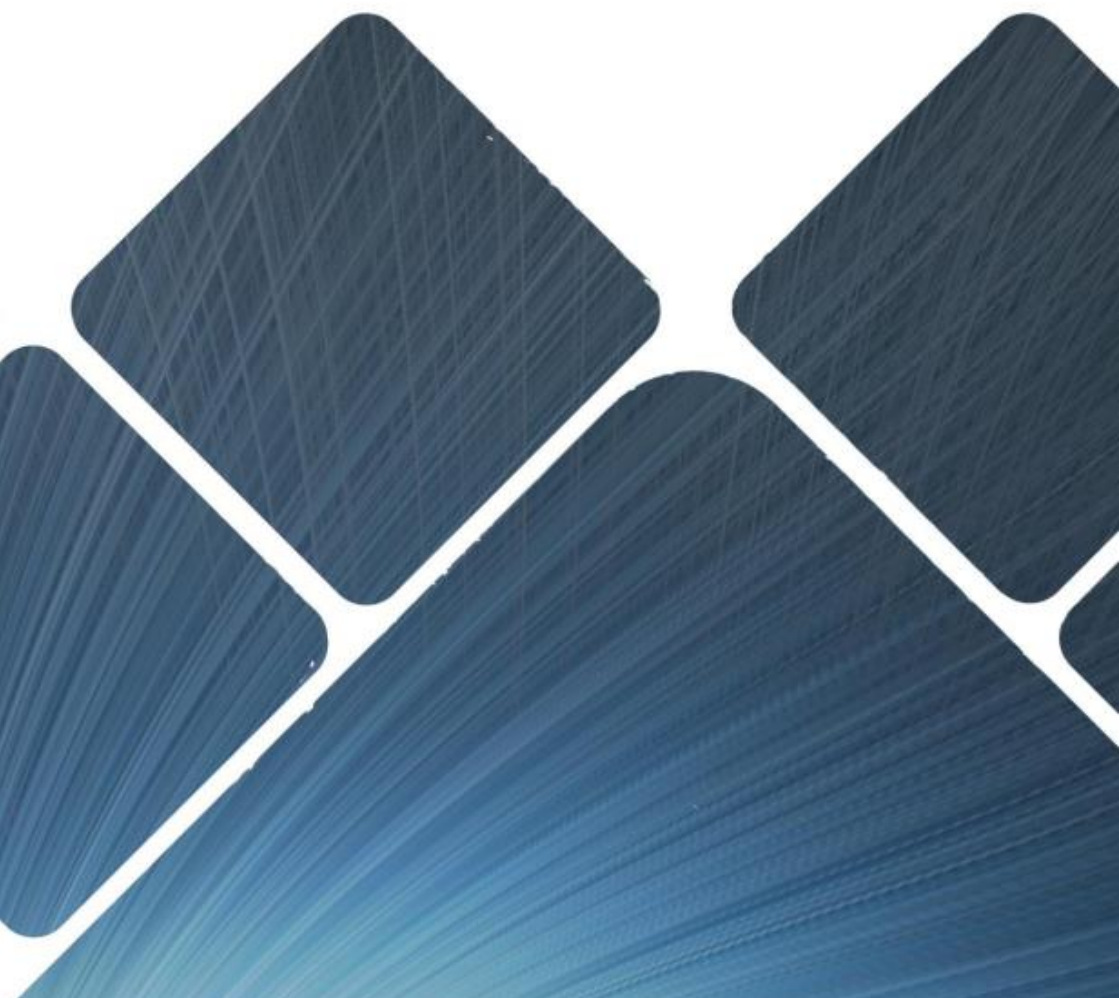
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**CORPORATE GOVERNANCE:
AN INTERDISCIPLINARY OUTLOOK**

Conference proceedings



Proceedings
of the
International Online Conference
**“Corporate Governance:
An Interdisciplinary Outlook”**

November 24, 2022

名誉

Meiyo
Honor

良心

Ryoushin
Conscience

高貴

Kouki
Nobility

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DIGITAL TECHNOLOGIES AND THEIR INFLUENCE ON ORGANIZATIONS AND CORPORATE GOVERNANCE

Erik Karger *

* Chair of Information Systems and Strategic IT Management, University of Duisburg-Essen,
Essen, Germany



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Another important topic reflected by some of the conference contributions is the influence and role of digital technologies. Due to the digital transformation, both private life and business environment changed significantly. New technologies like the internet of things and artificial intelligence have become increasingly common. The increasing digitalization of society is an ongoing development that also significantly impacts organizations and companies. During the COVID-19 pandemic, digital technologies enabled work location-independently and allowed for home-office and teleworking. Digital platforms allow for new types of cooperation or serve as the foundation for e-commerce (Wulfert & Karger 2022; Wulfert et al., 2022). And technologies like augmented reality or artificial intelligence can be used by companies, for example, to foster organizational learning or to automatize processes and generate new business models.

Especially data are an asset and development of the digital age that can play a decisive role in generating new value. Data are generated every day by an increasingly growing number of sources. A report published by the World Economic Forum in 2019 estimates that in 2025, 200 exabytes of data will be produced every day (Desjardins, 2019). Companies try to manage and generate value from this “flood of data” (Jagals et al., 2021, p. 105) by applying big data and real-time analytics

data have to be managed and governed properly to be of value. Processes like data governance or data management are crucial for companies to manage the data they have access to properly.

While IT and data were mostly organized centrally and inside companies in the past, there is a trend towards decentralization that can be perceived during the last years. Decentralized technologies like the blockchain are investigated for different use cases like FinTech (Siddiqui & Rivera, 2022) or in the context of arts and collectibles (Gonserkewitz et al., 2022). The increasing relevance of data has also led to more and more trends that exhibit characteristics of decentralization. Companies are increasingly willing to blur their organizations' boundaries to cooperate with other organizations to get access to more data. In socio-technical networks called data ecosystems, participants collaborate with each other with the goal to enhance innovation and create value.

The ongoing trend of digitalization also affects the board of directors and the field of corporate governance (Bankewitz et al., 2016; Grove et al., 2018; Rey, 2020) and will continue to do so. Thereby, digitalization is not only a trend that has to be considered by the boards of directors. Additionally, digital technologies might help to get insights that help with better decision-making and strategic positioning. It's that relationship between corporate governance and digital trends and technologies that is likely to be a research field of growing importance and relevance in the future.

REFERENCES

1. Bankewitz, M., Aberg, C., & Teuchert, C. (2016). Digitalization and boards of directors: A new era of corporate governance. *Business and Management Research*, 5(2), 58–69. <https://doi.org/10.5430/bmr.v5n2p58>
2. Desjardins, J. (2019, April 17). *How much data is generated each day?* World Economic Forum. <https://www.weforum.org/agenda/2019/04/how-much-data-is-generated-each-day-cf4bddf29f/>
3. Gonserkewitz, P., Karger, E., & Jagals, M. (2022). Non-fungible tokens: Use cases of NFTs and future research agenda. *Risk Governance and Control: Financial Markets & Institutions*, 12(3), 8–18. <https://doi.org/10.22495/rgcv12i3p1>
4. Grove, H., Clouse, M., & Schaffner, L. G. (2018). Digitalization impacts on corporate governance. *Journal of Governance & Regulation*, 7(4), 51–63. https://doi.org/10.22495/jgr_v7_i4_p6
5. Jagals, M., Karger, E., & Ahlemann, F. (2021). Already grown-up or still in puberty? A bibliometric review of 16 years of data governance research. *Corporate Ownership & Control*, 19(1), 105–120. <https://doi.org/10.22495/cocv19i1art9>

6. Oliveira, M. I. S., Barros Lima, G. d. F., & Lóscio, B. F. (2019). Investigations into data ecosystems: A systematic mapping study. *Knowledge and Information Systems*, 61(2), 589–630. <https://doi.org/10.1007/s10115-018-1323-6>
7. Rey, A. (2020). Editorial: Smart technologies, sustainability, and corporate digitalization. *Corporate & Business Strategy Review*, 1(2), 4–6. <https://doi.org/10.22495/cbsrv1i2editorial>
8. Siddiqui, Z., & Rivera, C. A. (2022). FinTech and FinTech ecosystem: A review of literature. *Risk Governance and Control: Financial Markets & Institutions*, 12(1), 63–73. <https://doi.org/10.22495/rgcv12i1p5>
9. Wulfert, T., & Karger, E. (2022). A bibliometric analysis of platform research in e-commerce: Past, present, and future research agenda. *Corporate Ownership & Control*, 20(1), 185–200. <https://doi.org/10.22495/cocv20i1art17>
10. Wulfert, T., Woroch, R., Strobel, G., Seufert, S., & Möller, F. (2022). Developing design principles to standardize e-commerce ecosystems. *Electron Markets*. <https://doi.org/10.1007/s12525-022-00558-8>

SESSION 1: BOARD OF DIRECTORS' PRACTICES

**BOARD FEATURES AND AUDIT QUALITY.
DO BOARD FEATURES UPHOLD AUDIT
QUALITY? A PERSPECTIVE FROM
THE UK MARKET**Georgios C. Simitsis^{*}, Maria I. Kyriakou^{*}^{*} Department of Economics, International Hellenic University, Serres, Greece

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Abstract

The corporate governance framework acts in parallel with external audit, aiming to safeguard shareholders' interests against self-serving managerial motives. Audit provides the necessary assurance that corporate financial statements are presenting a true and fair value of the firm's financial stance. Reliable financial reporting supports investor confidence and leads to efficient market functioning.

Agency theory elaborates on the separate roles of ownership and control structures within a firm (Jensen & Meckling, 1976; Fama & Jensen, 1983). Contradicting interests between principals and agents may cause agency costs. Principals and regulators imposed several structures to control these costs. Corporate governance mechanisms evolved radically aiming to address issues of management shortfalls and self-serving actions. The board of directors, a crucial corporate structure, is empowered by shareholders to mitigate such costs and ensure the alignment of interests between managers and shareholders (Lin & Hwang, 2010). Strategic goal setting, decision-making on critical issues that set the agenda for future growth, as well as the appointment and re-appointment of external auditors are only some of the responsibilities of a firm's board (Terjesen et al., 2016).

Firm performance is reflected in the financial statements. Consequently, proper implementation of the applicable accounting standards is a prerequisite for enhanced financial reporting quality, the latter being rather important for all interested parties (shareholders, investors, regulators) (Sarhan et al., 2019). Boards demand high-quality financial reporting in a dual manner; directly by monitoring internal structures to empower the duty and indirectly by appointing qualified auditors and requesting effective and intense audit efforts (Carcello et al., 2002). Mounting research suggests that increased participation of independent board members is associated with fewer instances of financial reporting fraud (Dechow et al., 1996; Davidson et al., 2005). Independent board members demand high-quality audits driven by self-driven motives related to their reputation and employment prospects (Gilson, 1990), but also because they are considered to be rather vigilant when shareholders' interests are at stake (Carcello et al, 2002; Khalil & Ozkan, 2016). Another feature of the board of directors is its size. In this case, the evidence is unequivocal. Board size is reported to be positively related to audit quality (Lin & Hwang, 2010; Sarhan et al., 2019).

Lastly, empirical research examines the role of the chief executive officer (CEO). A dominant CEO who chairs the board of directors could easily impose a personal agenda with adverse consequences on financial reporting quality (Hudaib & Cooke, 2005). The CEO duality style of leadership compromises the board's impartiality (La Porta et al., 1999; Gelb & Zarowin, 2002). However, research is inconclusive on the role of the CEO and its implication on audit quality. When the Big 4 auditor serves as a proxy for audit quality, there is evidence suggesting a positive relationship between the CEO dual role and audit quality (Asthana et al., 2010; Ben-Hassoun et al., 2018; Lin & Liu, 2009). On the other hand, other researchers document the absence of a significant relationship (Farinha & Viana, 2009).

This study assesses certain board characteristics and their implications on audit quality. We opted for the UK market, where regulators urgently shaped a framework to address audit quality imparted in the "Audit Quality Framework" (The Financial Reporting Council [FRC], 2008). We suggest that board features have a significant impact on audit quality after controlling for widely accepted influential factors. Our results are robust even when alternative audit quality proxies are employed. Board size is, unquestionably, positively related to audit quality. Board independence upholds audit quality when the Big 4 proxy for audit quality is applied. Conversely, the role of the CEO is disputable. When we approximate audit quality by discretionary accruals terms, CEO duality seems to improve quality contrary to many other findings. However, this conclusion does not seem to be statistically significant when audit quality is approximated in terms of auditor size.

Our conclusions justify the focus on corporate governance structures as prerequisites for an increased level of audit quality. The latter

contributes to the well-functioning of the financial markets and supports investor confidence. Our work adds to the extant literature on the subject and can act as an evaluation tool for the regulatory intervention applied in the competitive UK market.

REFERENCES

1. Asthana, S. C., Balsam, S., & Krishnan, J. (2010). Corporate governance, audit firm reputation, auditor switches, and client stock price reactions: The Andersen experience. *International Journal of Auditing*, 14(3), 274–293. <https://doi.org/10.1111/j.1099-1123.2010.00417.x>
2. Ben-Hassoun, A., Aloui, C., & Ben-Nasr, H. (2018). Demand for audit quality in newly privatized firms in MENA region: Role of internal corporate governance mechanisms audit. *Research in International Business and Finance*, 45, 334–348. <https://doi.org/10.1016/j.ribaf.2017.07.167>
3. Carcello, J. V., Hermanson, D. R., Neal, T. L., & Riley, R. A., Jr. (2002). Board characteristics and audit fees. *Contemporary Accounting Research*, 19(3), 365–384. <https://doi.org/10.1506/CHWK-GMQ0-MLKE-K03V>
4. Davidson, R., Goodwin-Stewart, J., & Kent, P. (2005). Internal governance structures and earnings management. *Accounting & Finance*, 45(2), 241–267. <https://doi.org/10.1111/j.1467-629x.2004.00132.x>
5. Dechow, P. M., Sloan, R. G., & Sweeney, A. P. (1996). Causes and consequences of earnings manipulation: An analysis of firms subject to enforcement actions by the SEC. *Contemporary Accounting Research*, 13(1), 1–36. <https://doi.org/10.1111/j.1911-3846.1996.tb00489.x>
6. Fama, E. F., & Jensen, M. C. (1983). Separation of ownership and control. *The Journal of Law & Economics*, 26(2), 301–325. <https://www.jstor.org/stable/725104>
7. Farinha, J., & Viana, L. F. (2009). Board structure and modified audit opinions: Evidence from the Portuguese Stock Exchange. *International Journal of Auditing*, 13(3), 237–258. <https://doi.org/10.1111/j.1099-1123.2009.00394.x>
8. Gelb, D. S., & Zarowin, P. (2002). Corporate disclosure policy and the informativeness of stock prices. *Review of Accounting Studies*, 7(1), 33–52. <https://doi.org/10.1023/A:1017927530007>
9. Gilson, S. C. (1990). Bankruptcy, boards, banks, and blockholders. *Journal of Financial Economics*, 27(2), 355–387. [https://doi.org/10.1016/0304-405X\(90\)90060-D](https://doi.org/10.1016/0304-405X(90)90060-D)
10. Hudaib, M., & Cooke, T. E. (2005). The impact of managing director changes and financial distress on audit qualification and auditor switching. *Journal of Business Finance & Accounting*, 32(9–10), 1703–1739. <https://doi.org/10.1111/j.0306-686X.2005.00645.x>
11. Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3(4), 305–360. [https://doi.org/10.1016/0304-405X\(76\)90026-X](https://doi.org/10.1016/0304-405X(76)90026-X)
12. Khalil, M., & Ozkan, A. (2016). Board independence, audit quality and earnings management: Evidence from Egypt. *Journal of Emerging Market Finance*, 15(1), 84–118. <https://doi.org/10.1177/0972652715623701>

13. La Porta, R., Lopez-De-Silanes, F., & Shleifer, A. (1999). Corporate ownership around the world. *The Journal of Finance*, 54(2), 471–517. <https://doi.org/10.1111/0022-1082.00115>
14. Lin, J. W., & Hwang, M. I. (2010). Audit quality, corporate governance, and earnings management: A meta-analysis. *International Journal of Auditing*, 14(1), 57–77. <https://doi.org/10.1111/j.1099-1123.2009.00403.x>
15. Lin, Z. J., & Liu, M. (2009). The impact of corporate governance on auditor choice: Evidence from China. *Journal of International Accounting, Auditing and Taxation*, 18(1), 44–59. <https://doi.org/10.1016/j.intaccaudtax.2008.12.005>
16. Sarhan, A. A., Ntim, C. G., & Al-Najjar, B. (2019). Antecedents of audit quality in MENA countries: The effect of firm- and country-level governance quality. *Journal of International Accounting, Auditing and Taxation*, 35, 85–107. <https://doi.org/10.1016/j.intaccaudtax.2019.05.003>
17. Terjesen, S., Couto, E. B., & Francisco, P. M. (2016). Does the presence of independent and female directors impact firm performance? A multi-country study of board diversity. *Journal of Management & Governance*, 20(3), 447–483. <https://doi.org/10.1007/s10997-014-9307-8>
18. The Financial Reporting Council (FRC). (2008). *The audit quality framework*. <https://www.frc.org.uk/getattachment/46582304-32b1-43bb-b614-90318b295f28/The-Audit-Quality-Framework-Feb-2008.pdf>

WOMEN'S BOARD PRESENCE AND FIRM PERFORMANCE: EVIDENCE FROM A SAMPLE OF ITALIAN LISTED COMPANIES

Marina Carabelli *

* Catholic University of Sacred Heart, Piacenza, Italy



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Abstract

This study analyzes the relationship between the presence of women on the board of directors and the performance results achieved by a sample of listed companies on the Italian stock market. Although many studies have investigated the relationship between women on board and corporate governance effectiveness, research results are inconclusive regarding their impact on corporate performance. The article analyzes a set of board attributes in relation to the presence of women on the board for 47 Italian listed companies for the years 2018 and 2019. Preliminary results show a positive correlation between the participation of women on the board of directors and sampled companies' performance. Therefore, the results confirm the importance of women's presence on the board of directors in influencing the financial performance of companies.

1. INTRODUCTION

Over the past 40 years, gender equality and equal opportunity issues in the workplace have become more prominent.

In Italy, the Gender Quotas Law was passed in 2011, which required publicly traded and publicly held companies to adjust their boards of directors so that one-third are composed of women.

In more recent years, many studies have shown that gender diversity creates value for the business. Specifically, women on boards appear to have positive effects on the level of corporate organization, the percentage of attendance at board meetings, and the monitoring of board performance (Carter et al., 2002; Adams & Ferreira, 2008; Huse et al., 2009).

However, despite the fact that the latest Finance Notebook "*Boardroom gender diversity and performance of listed companies in Italy*" published by Consob in 2018, showed that the presence of women on boards of directors increases companies' profitability when the percentage of women exceeds a threshold ranging from 17% to 20% of the board, empirical research shows inconclusive results on the relationship between women directors and corporate performance, identifying positive, negative, or zero effects (Kirsch, 2018; Pletzer et al., 2017; Post & Byron, 2015; Joecks et al., 2012).

While agency theory suggests that gender diversity in the board of directors can contribute to better firm performance (Jensen & Meckling, 1976), theories of role incongruence (Eagly & Karau, 2002) and gender stereotyping by investors (Haslam et al., 2010) suggest a negative relationship between the presence of women directors and market-based firm performance.

In the Italian landscape, characterized by the presence of small to medium-sized firms with concentrated ownership in which the roles of owner, manager and top management tend to coincide, the board of directors has the important role of mitigating agency problems.

In fact, according to agency theory, managers tend to pursue their personal interests to the detriment of investors, and this is even more evident in small-to-medium family-owned firms where the manager acquires power through family status rather than knowledge or experience (Roffia et al., 2022).

In these cases, the presence of women on board is a relevant factor in having gender-balanced and more controlled governance in terms of management and decision-making.

In fact, when the number of women on board exceeds the critical threshold of 30%, there are positive effects on the management of the company, which makes it possible, on the one hand, to reduce agency problems arising from the dominant role of the family manager and, on the other hand, to protect minorities (Bannò et al., 2021). The objective of the study is to analyze whether the positive effect of women on the performance.

2. DESCRIPTIVE SAMPLE ANALYSIS

This research investigates the relationship between the presence of women on the board of directors and corporate performance. A linear regression model will be used for this purpose.

In the model, the dependent variable y is represented by the return on assets (*ROA*) ratio, which is frequently used in analyses of corporate profitability and, therefore, considered adequate to describe the performance of the firms in the sample.

The figure, for each enterprise in the sample, was collected through the use of AIDA software.

In addition, a set of independent variables x related to women directors of the sampled firms was selected such as level of education, expertise, understood as the percentage of women directors with the title of certified public accountant, average tenure, independence, and compensation committee membership.

These variables were identified by observing the recommendations of the Codes of Corporate Governance.

Finally, a number of control variables describing the characteristics of the companies under analysis were considered such as total assets, net worth, net income, and industry, distinguishing between financial and non-financial.

In this first part of the work, the descriptive analysis of the sample was carried out (for data for 2019) from which it was found that the dependent variable *ROA* has a pronounced asymmetry to the right (mean > median) a sign that more than 50% of the analyzed firms have a value below the mean.

The *education* variable has a mean value of 2.344 and is almost symmetrical, which indicates that on average women on the board of directors have a Bachelor's degree.

The *expertise* variable has a mean value of 68.29% and the distribution shows a slight skew to the right, i.e., more than 50% of women directors are also accountants, however, the variable is not normally distributed.

In addition, the mean value of occupational positions is 4.

The *independence* variable has left skewness (mean < median) and indicates that more than 50% of women in the collective are independent.

The variable related to the *presence of the compensation committee* shows a slight asymmetry to the right, indicating that more than 50% of the companies in the sample have a value slightly below the mean.

Finally, 69.44% of the firms belong to the non-financial sector.

Considering the results that emerged in this first stage of the analysis, we intend to develop a linear regression model.

Table 1. Descriptive analysis of variables related to the year 2019

> summary (dataset2019\$ROA)					
Min.	1st. Qu.	Median	Mean	3rd Qu.	Max.
-12.460	0.735	2.635	5.072	6.885	29.880
> summary (dataset2019\$Education)					
Min.	1st. Qu.	Median	Mean	3rd Qu.	Max.
1.750	2.150	2.333	2.344	2.500	3.000
> summary (dataset2019\$Expertise)					
Min.	1st. Qu.	Median	Mean	3rd Qu.	Max.
0.1429	0.5000	0.6667	0.6829	0.8750	1.000
> summary (dataset2019\$Tenure)					
Min.	1st. Qu.	Median	Mean	3rd Qu.	Max.
1.000	3.000	3.845	4.053	4.750	9.000
> summary (dataset2019\$Industry)					
0	1				
25	11				
> summary (dataset2019\$Independence)					
Min.	1st. Qu.	Median	Mean	3rd Qu.	Max.
0.5000	0.7500	1.0000	0.9042	1.000	1.000
> summary (dataset2019\$Compensation Committee)					
Min.	1st. Qu.	Median	Mean	3rd Qu.	Max.
0.0000	0.2500	0.3333	0.4156	0.6667	1.0000

REFERENCES

- Adams, R., & Ferreira, D. (2008). *Women in the boardroom and their impact on governance and performance* (ECGI Finance Working Paper No. 57/2004). European Corporate Governance Institute. <https://doi.org/10.2139/ssrn.1107721>
- Bannò, M., Coller, C., & D'Allura, C. (2021). Family firms, women, and innovation. *Sinergie: Italian Journal of Management*, 39(2), 59–74. <https://doi.org/10.7433/s115.2021.04>
- Carter, D. A., Simkins, B. J., & Simpson, W. G. (2002). *Corporate governance, board diversity, and firm performance* (Oklahoma State University Working Paper). <https://doi.org/10.2139/ssrn.304499>
- Eagly, A. H., & Karau, S. J. (2002). Role congruity theory of prejudice toward female leaders. *Psychological Review*, 109(3), 573–598. <https://doi.org/10.1037/0033-295X.109.3.573>
- Haslam, S. A., Ryan, M. K., Kulich, C., Trojanowski, G., & Atkins, C. (2010). Investing with prejudice: The relationship between women's presence on company boards and objective and subjective measures of company performance. *British Journal of Management*, 21(2), 484–497 <https://doi.org/10.1111/j.1467-8551.2009.00670.x>
- Huse, M., Nielsen, S. T., & Hagen, M. I. (2009). Women and employee-elected board members, and their contributions to board control tasks. *Journal of Business Ethics*, 89, 581–597 <https://doi.org/10.1007/s10551-008-0018-4>
- Jensen, M., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3(4), 305–360. [https://doi.org/10.1016/0304-405X\(76\)90026-X](https://doi.org/10.1016/0304-405X(76)90026-X)
- Joecks, J., Pull, K., & Vetter, K. (2012). *Gender diversity in the boardroom and firm performance: What exactly constitutes a 'Critical Mass'?* <https://doi.org/10.2139/ssrn.2009234>

9. Kirsch, A. (2018). The gender composition of corporate boards: A review and research agenda. *The Leadership Quarterly*, 29(2), 346–364. <https://doi.org/10.1016/j.leaqua.2017.06.001>
10. Pletzer, J. L., Nikolova, R., Kedzior, K. K., & Voelpel, S. C. (2017). Does gender matter? Female representation on corporate boards and firm financial performance: A meta-analysis. *Academy of Management Proceedings*, 15(1), Article 12370. <https://doi.org/10.5465/ambpp.2015.12370abstract>
11. Post, K., & Byron, K. (2015). Women on boards and firm financial performance: A meta-analysis. *Academy of Management Journal*, 58(5), 1546–1571. <https://doi.org/10.5465/ambpp.2015.12370abstract>
12. Roffia, P., Simón-Moya, V., & Sendra García, J. (2022). Board of director attributes: effects on financial performance in SMEs. *International Entrepreneurship and Management Journal*, 18, 1141–1172. <https://doi.org/10.1007/s11365-020-00715-5>

CEO'S DECISION-MAKING AND CORPORATE SOCIAL PERFORMANCE: DISENTANGLING THE ROLE OF SERENDIPITY

Francesca Romana Arduino^{*}, Giulia Spampinato^{*}

^{*} Department of Business and Management, LUISS University, Rome, Italy



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Abstract

Over the last few years, sustainability themes have attracted a lot of attention from policy-makers, investors and firms. For the purpose to enhance sustainability awareness and sensitiveness, regulations have been promulgated in many countries and, as a consequence, firms have started to increase their sustainability efforts.

In particular, firms have engaged in changing and adapting their governance structures, for instance by increasing the board independence (Ortas et al., 2017), and introducing a dedicated Corporate Social Responsibility (CSR) committee (Ricart et al., 2005).

From an upper echelon perspective, firms are the mirror reflection of their top management (Hambrick & Mason, 1984), therefore the Chief Executive Officer (CEO) selection represents a key organizational decision, having noteworthy implications on firm effectiveness and long-term success. Given the paramount role that CEOs play within firms, they are nowadays expected not only to effectively respond to the extant business complexity but to increasingly embrace the sustainability tenets.

Prior leadership literature claims that CEOs' personal characteristics and traits can affect multiple and diverse organizational

outcomes such as firm strategy and performance, as their decisions and actions are inspired by their own highly idiosyncratic skills and competencies (Cannella et al., 2008).

Previous studies have long debated the influence of CEO personal characteristics such as age, tenure, experience, education, over firm performance (Bertrand & Schoar, 2003; Gottesman & Morey, 2010; Hamori & Koyuncu, 2015; Nguyen et al., 2018), and more recently they have started to investigate their impact also on corporate social performance (Jizi, 2017; Manner, 2010; Waldman et al., 2006). In particular, some scholars claim that some characteristics of the leader may play an important role in favoring decisions oriented to sustainability (Lewis et al., 2014; Slater & Dixon-Fowler, 2010).

However, leveraging on previous research claiming that leadership effectiveness may be based on serendipity rather than skilfulness (Svensson & Wood, 2005), we argue that serendipity should be considered a critical parameter to rationalize the influence of leadership in the decision-making process, in particular in the organizational path towards sustainability.

The aim of this research is, therefore, to investigate the influence of the CEO's decision-making on corporate social performance, in particular by analyzing the role of serendipity over the CEO's decisions oriented to sustainability.

Serendipity occurs when two elements are interconnected: chance, as a set of unplanned conditions, and subjects' capability to turn these conditions in their favour. From a governance perspective, taking advantage of unexpected opportunities is something to look for, but setting up a decision-making process exclusively focused on creating serendipitous collisions is almost useless until individuals are not trained to seize opportunities arising by chance. Indeed, the ability to recognize the potential value of unexpected observations is related to the intellectual aptitude to connect an observation to formerly held knowledge.

While it is impossible to directly generate luck, it is possible to develop skills aiming at playing "the game" longer, thereby increasing the likelihood of experiencing fortuitous circumstances.

In this regard, it is hard to define to which extent serendipitous leaders influence their workgroups and results. Indeed, leadership effectiveness is often evaluated by quantitative methods referred to timespans that are too short, and thus inadequate, to analyze the inherent quality subtending organizational achievements over time (Andersen, 2006).

Therefore, in order to perform our analysis, we adopt a mixed methods research design, by combining survey data and qualitative interviews with CEOs working for firms belonging to different industries to be so cognizant of the various voices, experiences and solutions.

This study contributes to the ongoing debate about the influence of individual-level characteristics on corporate sustainability outcomes, shedding some light on the role of serendipity.

Understanding how to raise a serendipitous leader embracing sustainability tenets can be beneficial to both the firm and society.

REFERENCES

1. Andersen, J. A. (2006). Leadership, personality and effectiveness. *The Journal of Socio-Economics*, 35(6), 1078–1091. <https://doi.org/10.1016/j.socec.2005.11.066>
2. Bertrand, M., & Schoar, A. (2003). Managing with style: The effect of managers on firm policies. *The Quarterly Journal of Economics*, 118(4), 1169–1208. <https://doi.org/10.1162/003355503322552775>
3. Cannella, A. A., Finkelstein, S., & Hambrick, D. C. (2008). *Strategic leadership: Theory and research on executives, top management teams, and boards*. Oxford University Press. <https://doi.org/10.1093/acprof:oso/9780195162073.001.0001>
4. Gottesman, A. A., & Morey, M. R. (2010). CEO educational background and firm financial performance. *Journal of Applied Finance (Formerly Financial Practice and Education)*, 20(2), 70–82. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2693079
5. Hambrick, D. C., & Mason, P. (1984). Upper echelons: The organization as a reflection of its top managers. *The Academy of Management Review*, 9(2), 193–206. <https://doi.org/10.2307/258434>
6. Hamori, M., & Koyuncu, B. (2015). Experience matters? The impact of prior CEO experience on firm performance. *Human Resource Management*, 54(1), 23–44. <https://doi.org/10.1002/hrm.21617>
7. Jizi, M. (2017). The influence of board composition on sustainable development disclosure. *Business Strategy and the Environment*, 26(5), 640–655. <https://doi.org/10.1002/bse.1943>
8. Lewis, B. W., Walls, J. L., & Dowell, G. W. (2014). Difference in degrees: CEO characteristics and firm environmental disclosure. *Strategic Management Journal*, 35(5), 712–722. <https://doi.org/10.1002/smj.2127>
9. Manner, M. H. (2010). The impact of CEO characteristics on corporate social performance. *Journal of Business Ethics*, 93(1), 53–72. <https://doi.org/10.1007/s10551-010-0626-7>
10. Nguyen, P., Rahman, N., & Zhao, R. (2018). CEO characteristics and firm valuation: A quantile regression analysis. *Journal of Management & Governance*, 22(1), 133–151. <https://doi.org/10.1007/s10997-017-9383-7>
11. Ortas, E., Alvarez, I., & Zubeltzu, E. (2017). Firms' board independence and corporate social performance: A meta-analysis. *Sustainability*, 9(6), Article 1006. <https://doi.org/10.3390/su9061006>
12. Ricart, J. E., Rodríguez, M. A., & Sánchez, P. (2005). Sustainability in the boardroom: An empirical examination of Dow Jones sustainability world index leaders. *Corporate Governance*, 5(3), 24–41. <https://doi.org/10.1108/14720700510604670>
13. Shahab, Y., Ntim, C. G., Chengang, Y., Ullah, F., & Fosu, S. (2018). Environmental policy, environmental performance, and financial distress in

- China: Do top management team characteristics matter? *Business Strategy and the Environment*, 27(8), 1635–1652. <https://doi.org/10.1002/bse.2229>
14. Slater, D. J., & Dixon-Fowler, H. R. (2010). The future of the planet in the hands of MBAs: An examination of CEO MBA education and corporate environmental performance. *Academy of Management Learning & Education*, 9(3), 429–441. <https://doi.org/10.5465/amle.9.3.zqr429>
 15. Svensson, G., & Wood, G. (2005). The serendipity of leadership effectiveness in management and business practices. *Management Decision*, 43(7–8), Article 1005. <https://doi.org/10.1108/00251740510609992>
 16. Waldman, D. A., De Luque, M. S., Washburn, N., House, R. J., Adetoun, B., Barrasa, A., Bobina, M., Bodur, M., Chen, Y.-J., Debbarma, S., Dorfman, P., Dzuvichu, R. R., Evcimen, I., Fu, P., Grachev, M., Gonzalez Duarte, R., Gupta, V., Hartog, D. N. D., de Hoogh, A., ... Wilderom, C. P. M. (2006). Cultural and leadership predictors of corporate social responsibility values of top management: A GLOBE study of 15 countries. *Journal of International Business Studies*, 37, 823–837. <https://doi.org/10.1057/palgrave.jibs.8400230>

REGULATION ON GENDER QUOTAS: GAUGING THE IMPACT ON CORPORATE BOARD

Audur Arna Arnardottir^{*},
Throstur Olaf Sigurjonsson^{**}, Patricia Gabaldon^{***}

^{*} Department of Business Administration, School of Social Sciences, Reykjavik University, Reykjavik, Iceland

^{**} Faculty of Business Administration, University of Iceland, Reykjavik, Iceland;
Copenhagen Business School, Copenhagen, Denmark

^{***} IE Business School, Madrid, Spain



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Abstract

This research explores how increased gender diversity on corporate boards in Iceland, driven by applying a “hard” public policy, i.e., board gender quota legislation, has affected post-quota board directors’ perceptions of board functioning. Directors’ opinions towards board decision-making and monitoring activities are researched, as well as their effect on corporate governance practices. Results show that the initial attitude towards gender quotas was more negative among male directors than female directors but became more similar and positive over time. Strong support is found for increased female board participation leading to different viewpoints being discussed at the board table in addition to better decision-making. A similar picture emerges regarding the behavior of holding chief executive officers (CEOs) accountable and being more focused on corporate governance practices. These results were significantly the view of female directors and director’s chairing the assessed board. Male directors are more negative than their female counterparts about the short-term effect of increased female participation on board dynamics. This research indicates that

a gender quota has led to increased female board participation in addition to impacting decision-making and corporate norms, according to directors, as policymakers intended.

The study contributes to the dialogue on the policy consequences of hard law on gender equality for board dynamics by deepening the recent stream of literature on board gender diversity. An additional contribution is by analyzing the less researched individual-level data through a mixed method approach of quantitative survey methodology and qualitative semi-structured interviews. The research's dual approach enables assessment of how board directors perceive board functioning after the quota legislation was implemented and assesses their initial and later view toward corporate gender quota legislation. Policymakers who are interested in promoting commitment to governance changes and improved board dynamics should encourage the formulation of an intervention described in our findings. Practitioners should consider the positive impact on board dynamics and the benefits of greater diversity to ensuring long-term corporate governance.

REFERENCES

1. Adams, S. M., & Ferreira, D. (2009). Women in the boardroom and their impact on governance and performance. *Journal of Financial Economics*, *94*(2), 291–309. <https://doi.org/10.1016/j.jfineco.2008.10.007>
2. Alnodel, A. A., & Azid, T. (2021). The impact of the board of directors' characteristics on regulation compliance: An evaluation of the board of directors' effectiveness. *Journal of Governance & Regulation*, *10*(4), 93–103. <https://doi.org/10.22495/jgrv10i4art8>
3. Arnardottir, A. A., & Sigurjonsson, T. O. (2017). Gender diversity on boards in Iceland: Pathway to gender quota law following a financial crisis. In C. Seierstad, P. Gabaldon, & H. Mensi-Klarbach (Eds.), *Gender diversity in the boardroom. The use of different quota regulations* (pp. 75–101). Palgrave Macmillan. https://doi.org/10.1007/978-3-319-56142-4_4
4. Arnardottir, A. A., & Sigurjonsson, T. O. (2018). Restoring trust through improved corporate governance and adherence to gender quotas. In T. O. Sigurjonsson, D. L. Schwarzkopf, & M. Bryant (Eds.), *The return of trust?: Institutions and the public after the Icelandic financial crisis* (pp. 227–244). Emerald Group Publishing. <https://doi.org/10.1108/978-1-78743-347-220181017>
5. Bear, S., Rahman, N., & Post, C. (2010). The impact of board diversity and gender composition on corporate social responsibility and firm reputation. *Journal of Business Ethics*, *97*(2), 207–221. <https://doi.org/10.1007/s10551-010-0505-2>
6. Benkraiem, R., Hamrouni, A., Lakhal, F., & Toumi, N. (2017). Board independence, gender diversity and CEO compensation. *Corporate Governance*, *17*(5), 845–860. <https://doi.org/10.1108/CG-02-2017-0027>
7. Bigelow, L., Lundmark, L., Parks, J. M., & Wuebker, R. (2014). Skirting the issue: Experimental evidence of gender bias in IPO prospectus evaluations. *Journal of Management*, *40*(6), 1732–1759. <https://doi.org/10.1177/0149206312441624>

8. Boyd, B. (1990). Corporate linkages and organizational environment: A test of the resource dependence model. *Strategic Management Journal*, 11(6), 419–430. <https://doi.org/10.1002/smj.4250110602>
9. Bruna, M, Dang, R., Scotto, M.-J., & Ammari, A. (2019). Does board gender diversity affect firm risk-taking? Evidence from the French stock market. *Journal of Management and Governance* 23(4), 915–938. <https://doi.org/10.1007/s10997-019-09473-1>
10. Campbell, K., & Minguez, V. A. (2010). Female board appointments and firm valuation: Short and long-term effects. *Journal of Management & Governance*, 14(1), 37–59. <https://doi.org/10.1007/s10997-009-9092-y>
11. Dalton, D. R., & Dalton, C. M. (2011). Integration of micro and macro studies in governance research: CEO duality, board composition and financial performance. *Journal of Management*, 37(2), 404–411. <https://doi.org/10.1177/0149206310373399>
12. Dunn, P. (2012). Breaking the boardroom gender barrier: The human capital of female corporate directors. *Journal of Management & Governance*, 16(4), 557–570. <https://doi.org/10.007/s10997-010-9161-2>
13. Elstad, B., & Ladegard, G. (2012). Women on corporate boards: Key influencers or tokens? *Journal of Managerial Governance*, 16(4), 595–615. <https://doi.org/10.1007/s10997-010-9165-y>
14. European Commission. (2022, June 7). *Commission welcomes political agreement on gender balance on corporate boards* [Press release]. https://ec.europa.eu/commission/presscorner/detail/en/IP_22_3478
15. Fama, E. F., & Jensen, M. C. (1983). Agency problems and residual claims. *Journal of Law and Economics*, 26(2), 327–350. <https://doi.org/10.1086/467038>
16. Forbes, D. P., & Milliken, F. J. (1999). Cognition and corporate governance: Understanding boards of directors as strategic decision-making groups. *Academy of Management Review*, 24(3), 489–505. <https://doi.org/10.2307/259138>
17. Hillman, A. J., Cannella, A. A., Jr., & Harris, I. C. (2002). Women and racial minorities in the boardroom: How do directors differ? *Journal of Management*, 28(6), 747–763. <https://doi.org/10.1177/014920630202800603>
18. Hillman, A. J., & Dalziel, T. (2003). Boards of directors and firm performance: Integrating agency and resource dependence perspectives. *Academy of Management Review*, 28(3), 383–396. <https://doi.org/10.5465/©amr.2003.10196729>
19. Hillman, A. J., Cannella, A. A., & Paetzold, R. I. (2000). The resource dependence role of corporate directors: Strategic adaptation of board composition in response to environmental change. *Journal of Management Studies*, 37(2), 235–255. <https://doi.org/10.1111/1467-6486.00179>
20. Huse, M., Nielsen, S. T., & Hagen, I. M. (2009). Women and employee-elected board members, and their contributions to board control tasks. *Journal of Business Ethics*, 89(4), 581–597. <https://doi.org/10.1007/s10551-008-0018-4>
21. Johnson, S. G., Schnatterly, K., & Hill, A. D. (2013). Board composition beyond independence: Social capital, human capital, and demographics. *Journal of Management*, 39(1), 232–262. <https://doi.org/10.1177/0149206312463938>

22. Joshi, A., & Roh, H. (2009). The role of context in work team diversity research: A meta-analytic review. *Academy of Management Journal*, 52(3), 599–628. <https://doi.org/10.5465/amj.2009.41331491>
23. Kirsch, A. (2018). The gender composition of corporate boards: A review and research agenda. *The Leadership Quarterly*, 29(2), 346–364. <https://doi.org/10.1016/j.leaqua.2017.06.001>
24. Konrad, A., Kramer, V., & Erkut, S. (2008). Critical mass: The impact of three or more women on corporate boards. *Organizational Dynamics*, 37(2), 145–164. <https://doi.org/10.1016/j.orgdyn.2008.02.005>
25. Kusumawardani, A., Wardhani, W., Maria, S., & Yudaruddin, R. (2021). Board structure and disclosure of intellectual capital: An empirical study in an emerging market. *Journal of Governance & Regulation*, 10(3), 140–149. <https://doi.org/10.22495/jgrv10i3art12>
26. Lückerath-Rovers, M. (2013). Women on boards and firm performance. *Journal of Management & Governance*, 17(2), 491–509. <https://doi.org/10.1007/s10997-011-9186-1>
27. Machold, S., Huse, M., Hansen, K., & Brogi, M. (Eds.) (2013). *Getting women on to corporate boards: A snowball starting in Norway*. Edward Elgar Publishing. <https://doi.org/10.4337/9781782547945>
28. Marashdeh, Z., Alomari, M. W., Aleqab, M. M., & Alqatamin, R. M. (2021b). Board characteristics and firm performance: The case of Jordanian non-financial institutions. *Journal of Governance & Regulation*, 10(3), 150–159. <https://doi.org/10.22495/jgrv10i3art13>
29. Marashdeh, Z., Alomari, M. W., Khataybeh, M., & Alkhataybeh, A. (2021a). Female representation on the boards of directors of non-financial companies. *Journal of Governance & Regulation*, 10(2), 44–54. <https://doi.org/10.22495/jgrv10i2art4>
30. Mariateresa, T., Calabrò, A., & Huse, M. (2011). Women directors on corporate boards: From tokenism to critical mass. *Journal of Business Ethics*, 102(2), 299–317. <https://doi.org/10.1007/s10551-011-0815-z>
31. Minister of Social Affairs and Housing. (2013). *Minister of Social Affairs report on situation and development of equality*. http://www.velferdarraduneyti.is/media/Rit_2013/Jafnrettisskyrsla_2013.pdf
32. Ministry of Industry and Trade. (2005). *Aukin tækifæri í forystu atvinnulífsins* [Increased opportunities in business leadership]: Report of the Opportunity Committee for Industry and Minister of Commerce on the increased share of women in corporate executives. <https://www.stjornarradid.is/media/atvinnuvegaraduneyti-media/media/Acrobat/KvennaskyrslaPDF.pdf>
33. Musviyanti, U. Y., & Yudaruddin, Y. A. (2021). Women on board, firm size and cash holding: Empirical evidence from the developing country. *Journal of Governance & Regulation*, 10(3), 177–185. <https://doi.org/10.22495/jgrv10i3art16>
34. Parliamentary Document Nr. 71/ 2009-2010. Bill on changes in company law on ownership, gender ratio and operating chairs of directors. <https://www.althingi.is/altext/pdf/136/s/0606.pdf>
35. Ridgeway, C. L., & Bourc, C. (2004). Gender as status: An expectation states theory approach. In A. H. Eagly, A. E. Beall, & R. J. Sternberg (Eds.), *The psychology of gender* (pp. 217–241). Guilford Press.

36. Saggese, S., Sarto, F., & Viganó, R. (2020). Do women directors contribute to R&D? The role of critical mass and expert power. *Journal of Management and Governance*, 25, 593–623. <https://doi.org/10.1007/s10997-020-09513-1>
37. Seierstad, C., & Huse, M. (2017). Gender quotas on corporate boards in Norway: Ten years later and lessons learned. In C. Seierstad, P. Gabaldon, & H. Mensi-Klarbach (Eds.), *Gender diversity in the boardroom: The use of different quota regulations* (Vol. 1, pp. 11–45). Palgrave Macmillan. <https://doi.org/10.1007/978-3-319-56142-4>
38. Seierstad, C., Gabaldon, P., & Mensi-Klarbach, H. (2017). Setting the scene: Women on boards in countries with quota regulations. In C. Seierstad, P. Gabaldon, & H. Mensi-Klarbach (Eds.), *Gender diversity in the boardroom: The use of different quota regulations* (Vol. 1, pp. 1–10). Palgrave Macmillan. https://doi.org/10.1007/978-3-319-56142-4_1
39. Singh, V., Terjesen, S., & Vinnicombe, S. (2008). Newly appointed directors in the boardroom: How do women and men differ? *European Management Journal*, 26(1), 48–58. <https://doi.org/10.1016/j.emj.2007.10.002>
40. Special Investigation Commission (SIC). (2010). *Report of the Special Investigation Commission*. <https://www.rna.is/eldri-nefndir/addragandi-ogsakir-falls-islensku-bankanna-2008/skyrsla-nefndarinnar/english/>
41. Tabachnick, B. G., & Fidell, L. S. (2018). *Using multivariate statistics* (7th ed.). Pearson.
42. Terjesen, S., & Sealy, R. (2016). Board gender quotas: Exploring ethical tension from a multi-theoretical perspective. *Business Ethics Quarterly*, 26(2), 23–65. <https://doi.org/10.1017/beq.2016.7>
43. Terjesen, S., Aguilera, R., & Lorenz, R. (2014). Legislating a woman's seat on the board: Institutional factors driving gender quotas for boards of directors. *Journal of Business Ethics*, 128(2), 233–251. <https://doi.org/10.1007/s10551-014-2083-1>
44. Van Der Walt, N., Ingleby, C., Shergill, G. S., & Townsend, A. (2006). Board configuration: Are diverse boards better boards? *Corporate Governance*, 6(2), 129–147. <https://doi.org/10.1108/14720700610655141>
45. Vinnicombe, S., Singh, V., Burke, R. J., Bilimoria, D., & Huse, M. (Eds.) (2008). *Women on corporate boards of directors*. Edward Elgar. <https://doi.org/10.4337/9781848445192>
46. Virtanen, A. (2012). Women on the boards of listed companies: Evidence from Finland. *Journal of Management and Governance*, 16(4), 571–593. <https://doi.org/10.1007/s10997-010-9164-z>
47. Wan, D., & Ong, C. H. (2005). Board structure, process and performance: Evidence from public-listed companies in Singapore. *Corporate Governance An International Review*, 13(2), 277–290. <https://doi.org/10.1111/j.1467-8683.2005.00422.x>
48. Westphal, J. D., & Zajac, E. J. (1995). Who shall govern? CEO/board power, demographic similarity, and new director selection. *Administrative Science Quarterly*, 40(1), 60–83. <https://doi.org/10.2307/2393700>

DOES THE EDUCATION LEVEL OF BOARD MEMBERS AFFECT THE BANK'S PERFORMANCE? EVIDENCE FROM US BANKS

Paolo Capuano *

* Department of Business and Management, LUISS University of Rome, Rome, Italy



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Abstract

The scientific literature on banks' corporate governance has considered multiple characteristics of the board of directors to try to understand its effects in terms of banking performance; however, there is a gap in the literature on the effects of the quality of education of board members on the banks' performance. Indeed, there is no consensus in the literature that human capital resources can predict risk-taking or bank performance. This study seeks to reduce this gap by examining for the period 2000–2021 the impact of the quality of the education background of board members on the performance of a group of large US banks. The results of this empirical investigation may offer relevant policy implications. The Federal Reserve System may consider adopting stricter measures than those currently imposed to control the behavior of the bank's board members and reduce agency problems.

1. INTRODUCTION

The corporate governance literature includes a specific line of research that studies the association between board member training and firm performance. However, there are few studies that analyze this

relationship in the banking sector and focus mainly on the chief executive officer's (CEO) education background while neglecting all members of the board.

Furthermore, empirical studies on this topic are considered specific samples of banks. Above all, it should be pointed out that these empirical results do not lead to univocal conclusions. This study contributes to the literature in the following ways. First, the study analyzes a large sample of US banks over a long period. Studies that analyze such large samples do not seem to exist in the literature. Second, our study analyzes the education of all board members and not just the CEO.

2. DATA AND METHODS

The analysis sample was constructed considering data from different sources. Financial data relating to banking institutions was obtained from Moody's Analytics BankFocus while data relating to the education of board members were acquired from the BoardEx database. Macroeconomic data was acquired from the World Bank database. The analysis model is based on linear regression with fixed effects. The variable formation of councilors is defined as the number of members holding a master's degree or doctorate divided by the number of the council qualification of council members and the delegation of members. The most widespread performance variables in the literature (return on equity (ROE), return on assets (ROA) and Tobin's Q) were considered. The control variables include both governance variables (board size, board independence) and dimensional variables (total asset, loan to deposit).

3. PRELIMINARY EMPIRICAL RESULTS

The first results of the empirical analysis show a sufficient level of significance of the influence of the education level of the board members on the financial performance of banks. This means that the recruitment of board members must consider the education background. This study addresses these gaps in the literature. Therefore, it is interesting to expand the existing research in other countries to see if these results will be confirmed.

REFERENCES

1. Alzuod, M. A., & Alqhaiwi, L. A. (2022). The role of strategic flexibility in enhancing crisis management in the commercial banking sector during the COVID-19 pandemic. *Corporate Governance and Organizational Behavior Review*, 6(2), 104–112. <https://doi.org/10.22495/cgobrv6i2p10>
2. Berger, A., Kick, T., & Schaeck, K. (2014). Executive board composition and bank risk taking. *Journal of Corporate Finance*, 28, 48–65. <https://doi.org/10.1016/j.jcorpfin.2013.11.006>

3. Cheung, K. Y., & Chung, C. V. (2022). Board characteristics and audit committee diversities: Evidence from Hong Kong. *Corporate Ownership & Control*, 19(4), 17–29. <https://doi.org/10.22495/cocv19i4art2>
4. De Jonghe, O., Disli, M., & Schoors, K. (2012). Corporate governance, opaque bank activities, and risk/return efficiency: Pre- and post-crisis evidence from Turkey. *Journal of Financial Services Research*, 41(1-2), 51–80. <https://doi.org/10.1007/s10693-011-0115-x>
5. Elsharkawy, M., Paterson, A. S., & Sherif, M. (2018). Now you see me: Diversity, CEO education, and bank performance in the UK. *Investment Management and Financial Innovations*, 15(1), 277–291. [https://doi.org/10.21511/imfi.15\(1\).2018.23](https://doi.org/10.21511/imfi.15(1).2018.23)
6. Gottesman, A. A., & Morey, M. R. (2006). Manager education and mutual fund performance. *Journal of Empirical Finance*, 13(2), 145–182. <https://doi.org/10.1016/j.jempfin.2005.10.001>
7. Graham, J., & Harvey, C. (2001). The theory and practice of corporate finance: Evidence from the field. *Journal of Financial Economics*, 60(2–3), 187–243. [https://doi.org/10.1016/S0304-405X\(01\)00044-7](https://doi.org/10.1016/S0304-405X(01)00044-7)
8. Hau, H., & Thum, M. (2010). *Subprime crisis and board (in) competence: Private vs. public banks in Germany* (INSEAD Working Paper No. 2010/45/FIN). INSEAD, Fontainebleau. <https://doi.org/10.2139/ssrn.1627921>
9. King, T., Srivastav, A., & Williams, J. (2016). What's in an education? Implications of CEO education for bank performance. *Journal of Corporate Finance*, 37, 287–308. <https://doi.org/10.1016/j.jcorpfin.2016.01.003>
10. Minton, B. A., Taillard, J. P., & Williamson, R. (2014). Financial expertise of the board, risk taking, and performance: Evidence from bank holding companies. *Journal of Financial and Quantitative Analysis*, 49(2), 351–380. <https://doi.org/10.1017/S0022109014000283>
11. Nguyen, D. D., Hagendorff, J., & Eshraghi, A. (2015). Which executive characteristics create value in banking? Evidence from appointment announcements. *Corporate Governance: An International Review*, 23(2), 112–128. <https://doi.org/10.1111/corg.12084>
12. Pereira, V. M., & Filipe, J. A. C. B. (2018). Quality of board members' training and bank financial performance: Evidence from Portugal. *International Journal of Economics & Business Administration*, 6(3), 47–79. <https://doi.org/10.35808/ijeba/164>
13. Pereira, V. M., & Filipe, J. A. C. B. (2022). Board members' educational background and financial performance: Evidence from Eurozone banks. *Journal of Central Banking Theory and Practice*, 11(3), 203–227. <https://doi.org/10.2478/jcbtp-2022-0030>
14. Saerang, D. P. E., Tulung, J. E., & Ogi, I. W. J. (2018). The influence of executives' characteristics on bank performance: The case of emerging market. *Journal of Governance & Regulation*, 7(4), 13–18. https://doi.org/10.22495/jgr_v7_i4_p2
15. Setiyono, B., & Tarazi, A. (2018). Does diversity of bank board members affect performance and risk? Evidence from an emerging market. In B. Diaz, S. Idowu, & P. Molyneux (Eds.), *Corporate governance in banking and investor protection* (pp. 185–218). Springer. https://doi.org/10.1007/978-3-319-70007-6_9
16. Yaseen, H., Al-Amarnah, A., & Iskandrani, M. (2018). Board diversity and social responsibility: The case of Jordanian commercial banks. *Corporate Ownership & Control*, 15(2-1), 139–147. <https://doi.org/10.22495/cocv15i2c1p1>

SESSION 2: AUDITING, ACCOUNTING AND EARNINGS
MANAGEMENTASSESSING EARNINGS MANAGEMENT:
A COMPARATIVE STUDYKanellos Toudas^{*}, Paraskevi Boufounou^{**},
Dimitra Tsogka^{**}^{*} Department of Agribusiness and Supply Chain Management,
Agricultural University of Athens, Athens, Greece^{**} Department of Economics, National and Kapodistrian University of Athens, Athens, Greece

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Abstract

Earnings management, defined by Schipper (1989) as the purposeful intervention by management in the earnings determination process, usually to satisfy its own objectives, is one of the most important issues in modern corporate governance literature. Earnings management is one of the most commonly used methods of creative accounting, defined as “the exploitation of weaknesses in various accounting rules and laws, or even their violation, in order for a company to present financial statements to its advantage” (Baralexis, 2004). Data mining techniques used for detecting fraudulent financial statements include decision trees (Ngai et al., 2011; Sharma & Panigrahi, 2013), neural networks (Chen et al., 2009; Kirkos et al., 2007), the naïve-bayes classifier (Phua et al., 2010), the Bayesian belief networks (Heckerman, 1997; Pearl, 1988; Kotsiantis et al., 2006), the support vector machines (Cortes & Vapnik, 1995; Cecchini et al., 2010), the logistic regression models (Hosmer & Lemeshow, 2000), the classifier ensembles (Perols, 2008), the genetic algorithms (Hoogs et al., 2007, Javadian Kootanaee et al., 2021), the k-nearest neighbor classifier (Sorkun & Toraman, 2017; Moepya et al., 2014; Abdelmoula, 2015). Amongst the logistic regression methods,

the most commonly used for earnings management detection, are the Spathis' Z-score model (Spathis, 2002) and the Beneish M-score model (Beneish, 1999). The purpose of this study was to provide a critical evaluation of these two techniques. Two models were applied to data from listed companies in the Athens Stock Exchange in 2018 (the last year before the covid pandemic). Although both methods demonstrated that the earnings management probabilities are low, their estimates for individual companies do not always agree. Given the importance of estimating the existence of earnings management for analysts, investors, and supervisory authorities assessing corporate governance, it would be appropriate to extend this study by comparing these findings to those estimated using alternative methods.

REFERENCES

1. Abdelmoula, A. K. (2015). Bank credit risk analysis with k-nearest-neighbor classifier: Case of Tunisian banks. *Journal Accounting and Management Information Systems*, 14(1), 79–106. https://cig.ase.ro/jcig/art/14_1_4.pdf
2. Baralexis, S. (2004). Creative accounting in small advancing countries: The Greek case. *Managerial Auditing Journal*, 19(3), 440–461. <https://doi.org/10.1108/02686900410524427>
3. Beneish, M. D. (1999). The detection of earnings manipulation. *Financial Analysts Journal*, 55(5), 24–36 <https://doi.org/10.2469/faj.v55.n5.2296>
4. Cecchini, M., Aytug, H., Koehler, G. J., & Pathak, P. (2010). Detecting management fraud in public companies. *Management Science*, 56(7), 1146–1160. <https://doi.org/10.1287/mnsc.1100.1174>
5. Chen, W. S., & Du, Y. K. (2009). Using neural networks and data mining techniques for the financial distress prediction model. *Expert systems with applications*, 36(2), 4075–4086. <https://doi.org/10.1016/j.eswa.2008.03.020>
6. Cortes, C., & Vapnik, V. (1995). Support-vector networks. *Machine learning*, 20(3), 273–297. <https://doi.org/10.1007/BF00994018>
7. Cox, D. R., & Snell, E. J. (1968). A general definition of residuals. *Journal of the Royal Statistical Society: Series B (Methodological)*, 30(2), 248–265. <https://doi.org/10.1111/j.2517-6161.1968.tb00724.x>
8. Heckerman, D. (1997). Bayesian networks for data mining. *Data Mining and Knowledge Discovery*, 1(1), 79–119. <https://doi.org/10.1023/A:1009730122752>
9. Hoogs, B., Kiehl, T., Lacombe, C., & Senturk, D. (2007). A genetic algorithm approach to detecting temporal patterns indicative of financial statement fraud. *Intelligent Systems in Accounting, Finance & Management*, 15(1–2), 41–56. <https://doi.org/10.1002/isaf.284>
10. Hosmer, D. W., & Lemeshow, S. (2000). *Applied logistic regression* (2nd ed.). John Wiley & Sons. <https://doi.org/10.1002/0471722146>
11. Javadian Kootanaee, A., Poor Aghajan, A. A., & Hosseini Shirvani, M. (2021). A hybrid model based on machine learning and genetic algorithm for detecting fraud in financial statements. *Journal of Optimization in Industrial Engineering*, 14(2), 169–186. <https://doi.org/10.22094/JOIE.2020.1877455.1685>
12. Kirkos, E., Spathis, C., & Manolopoulos, Y. (2007). Data mining techniques for the detection of fraudulent financial statements. *Expert Systems with Applications*, 32(4), 995–1003. <https://doi.org/10.1016/j.eswa.2006.02.016>

13. Kotsiantis, S., Koumanakos, E., Tzelepis, D., & Tampakas, V. (2006). Predicting fraudulent financial statements with machine learning techniques. In G. Antoniou, G. Potamias, C. Spyropoulos, & D. Plexousakis (Eds.), *SETN 2006: Advances in artificial intelligence* (pp. 538–542). Springer. https://doi.org/10.1007/11752912_63
14. McCullagh, P., & Nelder, J. A. (1989). Binary data. In *Generalized linear models* (pp. 98–148). Chapman & Hall.
15. Moepya, S. O., Akhoury, S. S., & Nelwamondo, F. V. (2014, December). Applying cost-sensitive classification for financial fraud detection under high class-imbalance. In *Proceedings of the IEEE International Conference on Data Mining Workshop* (pp. 183–192). IEEE. <https://doi.org/10.1109/ICDMW.2014.141>
16. Ngai, E. W. T., Hu, Y., Wong, Y. H., Chen, Y., & Sun, X. (2011). The application of data mining techniques in the fraud detection: A classification framework and an academic review of literature. *Decision Support Systems*, 50(3), 559–569. <https://doi.org/10.1016/j.dss.2010.08.006>
17. Pearl, J. (1988). Embracing causality in default reasoning. *Artificial Intelligence*, 35(2), 259–271. [https://doi.org/10.1016/0004-3702\(88\)90015-X](https://doi.org/10.1016/0004-3702(88)90015-X)
18. Perols, J. L. (2008). *Detecting financial statement fraud: Three essays on fraud predictors, multi-classifier combination and fraud detection using data mining* (Doctoral dissertation, University of South Florida). <https://digitalcommons.usf.edu/cgi/viewcontent.cgi?article=1448&context=etd>
19. Phua, C., Lee, V., Smith, K., & Gayler, R. (2010). *A comprehensive survey of data mining-based fraud detection research*. arXiv. <https://arxiv.org/abs/1009.6119>
20. Schipper, K. (1989). Commentary on earnings management. *Accounting Horizons*, 3(4), 91–102. <https://www.proquest.com/openview/177246e104b43553542ab048997f1a4e/1>
21. Sharma, A., & Panigrahi, P. K. (2013). A review of financial accounting fraud detection based on data mining techniques. *International Journal of Computer Applications*, 39(1), 37–47. <https://arxiv.org/ftp/arxiv/papers/1309/1309.3944.pdf>
22. Sorkun, M. C., & Toraman, T. (2017). Fraud detection on financial statements using data mining techniques. *Intelligent Systems and Applications in Engineering*, 5(3), 132–134. <https://doi.org/10.18201/ijisae.2017531428>
23. Spathis, C. (2002). Detecting false financial statements using published data: Some evidence from Greece. *Managerial Auditing Journal*, 17(4), 179–191. <https://doi.org/10.1108/02686900210424321>

FORENSIC ACCOUNTING: A STRATEGIC TOOL TO STRENGTHEN CORPORATE GOVERNANCE AGAINST FRAUD

Aggelia Xanthopoulou^{*}, Petros Kalantonis^{*},
Panagiotis Arsenos^{*}, Christos Kallandranis^{*}

^{*} University of West Attica, Athens, Greece



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Abstract

Various economic scandals involving fraud of all kinds hurt both developed and developing economies due to their negative economic impact (Bhasin, 2013). Companies in public and private sectors operate in an environment that is not free of fraud. Until 2010, the most pressing issues in the corporate world were the theft of physical assets, misuse of data due to untrue accounting reports and financial misreporting (Organisation for Economic Co-operation and Development [OECD], 2014). Today corporate fraud became more sophisticated and the biggest threat is fraudulent activities connected to technology and the internet. The technological evolution changes rapidly the nature of the modern economy and its digital transformation created great vulnerability to the economic environment (Ernst & Young [E&Y], 2018). All companies face a certain level of digital fraud which has become an essential cost of doing business (Deloitte, 2021c). According to PwC's Global Fraud Survey (PwC, 2022), cybercrime, customer fraud and asset misappropriation are the most prevalent types of fraud. As result companies began paying more attention to the effectiveness of their internal control system and corporate risk management. The need to

avoid creating opportunities for fraudsters compels them to implement risk elimination and fraud detection measures.

Corporate leaders prioritize the establishment of preventive measures and contingency plans in order to protect the company from fraudulent activities, preserve its integrity, safeguard the company's assets and ensure the efficient operation of the business. They start taking compliance with anti-corruption legislation more seriously and alter their antifraud policies in response to it. The increased concerns about the control environment effectiveness and anti-fraud policies in order to eliminate and mitigate fraud affect the quality of corporate governance. Good corporate governance yields increased investment, improved capital market access, increased asset value, job creation, economic growth and sustainable development (Inairat, 2015).

The lack of honesty, accountability and transparency in governance is one of the primary reasons for the emergence of criminal activities (Farber, 2005). Fraudulent behavior damages business financially influences negatively the decision-making process of investors and governance bodies and undermines public trust in them. The major component of dependable corporate governance to combat fraud is the implementation of an effective internal control system that includes external audit activities, internal audit function, fraud risk assessment and forensic accounting (FA) services (Rehman & Hashim, 2018). Efficient audit activities ensure the consistency of the financial reporting process, guarantee its credibility and enable companies to achieve their profitability objectives (Bhasin, 2017).

Governance bodies' commitment to control mechanisms determines the level of corporate fraud and their willingness to fight it (Eko et al., 2020). In order for a business organization to remain competitive and survive, its structure must be based on all its members' ethical and moral conduct and ensure ethical standards through its oversight activities (He et al., 2009). The structure of governance bodies affects the company's effectiveness and financial integrity concerning fraud. According to numerous studies, the occurrence of fraudulent activities is significantly related to ownership structure, board of director's and audit committee's composition and characteristics and the role of chairman and chief executive officer (CEO) (Beasley, 1996; Farber, 2005; Smaili & Labell, 2007; Sharma, 2004; Chen et al., 2006; Klein, 2002; Vafeas, 2000; Persons, 2009; Owens-Jackson et al., 2009; Mustafa & Meir, 2006; Alwi et al., 2013).

FA is the best audit option for controlling, eliminating and mitigating fraud (Rehman & Hashim, 2020). It has a proactive role in identifying deficiencies and internal control weaknesses and can successfully adopt and implement a corruption prevention plan (Siregar & Tenoyo, 2015). The use of FA techniques to analyze accounting and financial data improves the quality of the financial reporting system and strengthens audit independence (Eyisi et al., 2014). It guarantees the

reliability of economic data by identifying patterns and suspicious transactions, detecting and minimizing accounting frauds and eliminating their existence. It is responsible to oversee and conduct investigations in the business environment in order to improve governance procedures' qualities concerning fraud. Corporate leaders rely on FA to develop a consistent corporate governance system because it ensures that their policies and objectives are intertwined with the internal control system. FA is a strategic tool to strengthen corporate governance against fraud.

The aim of the present study is to highlight the framework of FA implementation to combat fraud risks and crimes and improve corporate governance's effectiveness in fraud defense. It examines the techniques, knowledge and skills and the interaction of FA and corporate governance in eliminating fraudulent activities. FA guarantees the reliability of financial reports, enhances their accountability and thus has a significant positive impact on corporate governance accountability.

REFERENCES

1. Akinbowale, O. E., Klingelhofer, H. E., & Zerihun, M. F. (2020). An innovative approach in combating economic crime using forensic accounting techniques. *Journal of Financial Crime*, 27(4), 1253–1271. <https://doi.org/10.1108/JFC-04-2020-0053>
2. Al Abbadi, M. H., Alrawashdeh, B., Dadaghia, N. M., & Darwazeh, N. R. (2021). The challenges of application of forensic accounting in Jordan. *Academy of Strategic Management Journal*, 20(2, Special Issue), 1–10. <https://www.abacademies.org/articles/the-challenges-of-application-of-forensic-accounting-in-jordan-11137.html>
3. Alwi, M., Risda, K., Gajah, A., Ismail, W. A. W., & Kamarudin, K. A. (2013). The effectiveness of audit committee in relation to financial reporting fraud. In *Proceeding of the 5th International Conference on Financial Criminology (ICFC)* (pp. 332–344).
4. Balios, D., Tantos, S., Eriotis, N., & Vasiliou, D. (2020). The conjunction of tax auditing mechanism with behavioral and institutional parameters of tax evasion: The role of accounting rules and forensic accounting. *European Journal of Accounting, Auditing and Finance Research*, 8(2), 59–80. <https://doi.org/10.37745/ejaafr/vol8.no2.pp59-80.2020>
5. Beasley, M. S. (1996). An empirical analysis of the relation between the board of director composition and financial statement fraud. *The Accounting Review*, 71(4), 443–465. <https://www.jstor.org/stable/248566>
6. Bhasin, L. M. (2013). Corporate governance and forensic accountants' role: Global regulatory action scenario. *International Journal of Accounting Research*, 1(1). https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2676468
7. Bhasin, L. M. (2017). Integrating corporate governance and forensic accounting: A study of an Asian country. *International Journal of Management Sciences and Business Research*, 6(1), 31–52. <https://ssrn.com/abstract=2912728>

8. Chen, G., Firth, M., Guo, D. N., & Rui, O. M. (2006). Ownership structure, corporate governance, and fraud: Evidence from China. *Journal of Corporate Finance*, 12(3), 424–448. <https://doi.org/10.1016/j.jcorpfin.2005.09.002>
9. Das, P. K. (2020). Forensic accounting in India. *Journal of Business and Social Science Review*, 1(5), 59–66. <https://jbsrnet.com/wp-content/uploads/2020/06/7-1.pdf>
10. Deloitte. (2021c). *The nature of fraud is changing: Act now to bear it* (Report). <https://www2.deloitte.com/uk/en/pages/financial-advisory/articles/the-nature-of-fraud-is-changing.html>
11. Deloitte. (2021a). *Global risk management survey: A moving target: Refocusing risk and resiliency amidst continued uncertainty* (12th ed.). https://www2.deloitte.com/content/dam/Deloitte/rs/Documents/risk/rs_Global-risk-management-survey-12th-edition.pdf
12. Deloitte. (2021b). *Middle East fraud survey*. https://www2.deloitte.com/content/dam/Deloitte/xs/Documents/finance/me_fraud-survey-2021.pdf
13. Eko, U. E., Adebisi, A. W., & Moses, J. E. (2020). Evaluation of forensic accounting techniques in fraud prevention/detection in banking sector in Nigeria. *International Journal of Finance and Accounting*, 9(3), 56–66. <http://article.sapub.org/10.5923.j.ijfa.20200903.02.html>
14. Ernst & Young (EY). (2018). *15th global fraud survey 2018*. https://assets.ey.com/content/dam/ey-sites/ey-com/en_gl/topics/banking-and-capital-markets/bcm-pdf/ey-global-fids-fraud-survey-2018.pdf
15. Eyisi, A. S., & Ezuwore, C. N. (2014). The impact of forensic auditors in corporate governance. *Research Journal of Finance and Accounting*, 5(8), 31–39. <https://iiste.org/Journals/index.php/RJFA/article/view/12353/12728>
16. Eze, E., & Okoye, E. I. (2019). Forensic accounting and fraud detection and prevention in Imo State Public sector. *Accounting and Taxation Review*, 3(1), 12–26. https://www.atreview.org/admin/12389900798187/ATR%203_1_2012-26_pdf.pdf
17. Farber, D. B. (2005). Restoring trust after fraud: Does corporate governance matter? *The Accounting Review*, 80(2), 539–561. <https://doi.org/10.2308/accr.2005.80.2.539>
18. Hashem, F. (2021). The role of forensic accounting techniques in reducing cloud-based accounting risks in the Jordanian five stars hotels. *WSEAS transactions on business and economics*, 18, 434–443. <https://doi.org/10.37394/23207.2021.18.44>
19. He, L., Labelle, R., Piot, C., & Thornton, D. B. (2009). Board monitoring, audit committee effectiveness, and financial reporting quality: Review and synthesis of empirical evidence. *Journal of Forensic & Investigative Accounting*, 1(2), 1–41. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1159453
20. In'airat, M. (2015). The role of corporate governance in fraud reduction — A perception study in the Saudi Arabia business environment. *Journal of Accounting and Finance*, 15(2), 119–128. http://www.m.www.na-businesspress.com/JAF/In_airatM_Web15_2_.pdf
21. Khersiat, O. M. (2018). The role of forensic accounting in maintaining public money and combating corruption in the Jordanian public sector. *International Business Research*, 11(3), 66–75. <https://doi.org/10.5539/ibr.v11n3p66>

22. Klein, A. (2002). Audit committee, board of director characteristics, and earnings management. *Journal of Accounting and Economics*, 33(3), 375–400. [https://doi.org/10.1016/S0165-4101\(02\)00059-9](https://doi.org/10.1016/S0165-4101(02)00059-9)
23. KPMG. (2019). *Global banking fraud survey 2019: The multi-faceted threat of fraud: Are banks up to the challenge?* <https://home.kpmg/ua/en/home/insights/2019/12/fraud-banking.html>
24. KPMG. (2022a, January). *A triple threat across the Americas: Fraud outlook*. <https://assets.kpmg/content/dam/kpmg/xx/pdf/2022/01/fraud-survey.pdf>
25. KPMG. (2022b, February). *Fraud barometer 2021: A snapshot of fraud in the UK*. <https://assets.kpmg/content/dam/kpmg/uk/pdf/2022/02/fraud-barometer-2022.pdf>
26. Lamba, J., & Jain, E. (2020). Forensic accounting: A way to fight, deter and detect fraud. *International Research Journal*, 10(1), Article 8280. <https://doi.org/10.51611/iars.irj.v10i1.2020.106>
27. Mustafa, S. T., & Meier, H. H. (2006). Audit committees and misappropriation of assets: Publicly held companies in the United States. *Canadian Accounting Perspectives*, 5(2), 307–333. <https://doi.org/10.1506/CCWW-JRWB-ECUE-YMMN>
28. Organisation for Economic Co-operation and Development (OECD). (2014). *Risk management and corporate governance*. <https://doi.org/10.1787/9789264208636-en>
29. Owens-Jackson, L. A., Robinson, D., & Shelton, S. W. (2009). The association between audit committee characteristics, the contracting process and fraudulent financial reporting. *American Journal of Business*, 24(1), 57–66. <https://doi.org/10.1108/19355181200900005>
30. Ozili, K. P. (2020). *Forensic accounting theory* (MPRA Paper No. 102566). Munich Personal RePEc Archive. https://mpra.ub.uni-muenchen.1/102566/1/MPRA_paper_102566.pdf
31. Perduv, V. V., Ceklic, J., & Ceklic, B. (2018). The role of forensic accounting in corporate governance for economic societies. *Business Studies*, 10(19–20), 119–131. <https://poslovnestudije.com/arhiva/radovi2018eng/vedrana.vukovic.perduv2018eng.pdf>
32. Persons, O. S. (2009). Audit committee characteristics and earlier voluntary ethics disclosure among fraud and no-fraud firms. *International Journal of Disclosure and Governance*, 6, 284–297. <https://doi.org/10.1057/jdg.2008.29>
33. Polycarp, S. U. (2019). The role of forensic accounting in detecting economic crimes. *Research Journal of Finance and Accounting*, 10(16), 98–107. <https://doi.org/10.7176/RJFA/10-16-11>
34. PwC. (2020, September 24). *Gaps in the facade: Three actions business should take to fight fraud*. <https://www.pwc.com.au/digitalpulse/global-economic-crime-fraud-survey-2020.html>
35. PwC. (2022). *PwC's global economic crime and fraud survey*. <https://www.pwc.com/gx/en/services/forensics/economic-crime-survey.html>
36. Rehman, A., & Hashim, F. (2018). Literature review: Preventive role of forensic accounting and corporate governance maturity. *Journal of Governance and Integrity*, 1(2), 61–82.
37. Rehman, A., & Hashim, F. (2019). Impact of mature corporate governance on detective role of forensic accounting: Case of public listed companies in Oman. In *KnE Social Sciences, FGIC 2nd Conference on Governance and Integrity* (pp. 637–665). <https://doi.org/10.18502/kss.v3i22.5080>

38. Rehman, A., & Hashim, F. (2020). Can forensic accounting impact sustainable corporate governance? *Corporate Governance*, 21(1), 212–227. <https://doi.org/10.1108/CG-06-2020-0269>
39. Sahdan, M. H., Crowton, C. J., & Drake, J. E. (2020). Forensic accounting services in English local government and the counter-fraud agenda. *Public Money & Management*, 40(9), 1–10. <https://doi.org/10.1080/09540962.2020.1714208>
40. Sharma, V. D. (2004). Board of director characteristics, institutional ownership, and fraud: Evidence from Australia. *Auditing: A Journal of Practice and Theory*, 23(2), 105–117. <https://doi.org/10.2308/aud.2004.23.2.105>
41. Siregar, S. V., & Tenoyo, B. (2015). Fraud awareness survey of private sector in Indonesia. *Journal of Financial Crime*, 22(3), 329–349. <https://doi.org/10.1108/JFC-03-2014-0016>
42. Smaili, N., & Labelle, R. (2007). *Preventing and detecting accounting irregularities: The role of corporate governance* (Working paper, HEC). <http://ssrn.com/abstract=1324143>
43. Vafeas, N. (2000). Board structure and the informativeness of earnings. *Journal of Accounting and Public Policy*, 19(2), 139–160. [https://doi.org/10.1016/S0278-4254\(00\)00006-5](https://doi.org/10.1016/S0278-4254(00)00006-5)

INTERNAL AUDIT'S ASSISTANCE TO LOCAL GOVERNMENT ORGANIZATIONS' E-SERVICES SECURITY PROCEDURES: THE GREEK CASE

Stergios Galanis^{*}, Michail Pazarskis^{*}

^{*} Department of Economics, International Hellenic University, Serres, Greece



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Abstract

The way local government organizations (LGOs) function has changed recently as a result of the ongoing developments in technology and the economy, making the need for internal audit critical (Pazarskis et al., 2022a; Pazarskis et al., 2022b; Pazarskis et al., 2020; Nerantzidis et al., 2022). LGOs like businesses must adapt to the risks and uncertainty present in an uncertain environment, hence internal audit participation is essential (Zeng et al., 2021; Lois et al., 2020; Ferry et al., 2017). Internal audit must, therefore, actively contribute to safeguarding the security of organizations' online services and operations given that its role has developed in step with modern developments (Abu-Musa, 2008). Following certain studies from the private sector, as in the public, there is a lack of research, Clark and Harrell (2013), have concentrated on corporate boards' contributions to security and concluded contributions of corporate boards to security and come to the conclusion that the corporation as a whole should invest in security. Thompson (1998) focused on cyber risks and the role of the legal system in ensuring security as he also discussed cybercrime in Australia. Information

security was advised to be approached holistically by Fielden (2011), taking into consideration both social and technological factors. To preserve the security of information systems that handle sensitive data, an internal audit is seen as essential (Eling & Schnell, 2016; Steinbart et al., 2018). In the public sector where there are no comparable studies to offer insights on LGOs, there is a research interest in carrying out practical analysis globally on the topic of internal audit-related factors and how they influence the security of information systems, thus adding to the already-existing global literature on internal audit and its significance. In the current study, we look at the elements that impact internal auditing while also affecting the security of electronic operations in LGOs. We conducted live, unstructured interviews with twelve Greek municipal executives and asked them several questions. Overall, the findings of this study demonstrate how important it is for all LGOs to ensure the security of electronic services and information systems in an era where everything is digital. Internal audit duties have expanded and altered, and it is now required to make a variety of contributions to the security of electronic services. Moreover, large LGOs do experience breaches occasionally, and they tend to get worse over time. Elected officials in LGOs pointed out that there is a great need for synergy between internal audit and the IT department to avoid attacks on the organization's e-services. The majority of employees in LGOs admitted that internal audit controls over security policies and standards demonstrate that, despite having a documented information security policy, they don't properly follow some of the essential security standards and frameworks. Last but not least, the majority of finance directors in LGOs indicated that internal auditors do not ensure that information and training programs are required and no training is given to workers even while organizations have sufficiently detailed policies on how to utilize e-services properly.

REFERENCES

1. Abu-Musa, A. A. (2008). Information technology and its implications for internal auditing. *Managerial Auditing Journal*, 23(5), 436–466. <https://doi.org/10.1108/02686900810875280>
2. Betti, N., & Sarens, G. (2021). Understanding the internal audit function in a digitalised business environment. *Journal of Accounting & Organizational Change*, 17(2), 197–216. <https://doi.org/10.1108/JAOC-11-2019-0114>
3. Clark, M., & Harrell, C. E. (2013). Unlike chess, everyone must continue playing after a cyber-attack. *Journal of Investment Compliance*, 14(4), 5–12. <https://doi.org/10.1108/JOIC-10-2013-0034>
4. Drogalas, G., Karagiorgos, T., & Arampatzis, K. (2015). Factors associated with internal audit effectiveness: Evidence from Greece. *Journal of Accounting and Taxation*, 7(7), 113–122. <https://doi.org/10.5897/JAT2015.0182>

5. Drogalas, G., Petridis, K., Petridis, N., & Zografidou, E. (2020). Valuation of the internal audit mechanisms in the decision support department of the local government organizations using mathematical programming. *Annals of Operations Research*, 294, 267–280. <https://doi.org/10.1007/s10479-020-03537-4>
6. Eling, M., & Schnell, W. (2016). What do we know about cyber risk and cyber risk insurance? *The Journal of Risk Finance*, 17(5), 474–491. <https://doi.org/10.1108/JRF-09-2016-0122>
7. Ferry, L., Zakaria, Z., Zakaria, Z., & Slack, R. (2017). Watchdogs, helpers or protectors? — Internal auditing in Malaysian local government. *Accounting Forum*, 41(4), 375–389. <https://doi.org/10.1016/j.accfor.2017.10.001>
8. Fielden, K. (2011). An holistic view of information security: A proposed framework. *International Journal of Infonomics*, 4(1–2), 427–434. <https://doi.org/10.20533/iji.1742.4712.2011.0047>
9. Islam, M. S., Farah, N., & Stafford, T. F. (2018). Factors associated with security/cybersecurity audit by internal audit function: An international study. *Managerial Auditing Journal*, 33(4), 377–409. <https://doi.org/10.1108/MAJ-07-2017-1595>
10. Kahyaoglu, S. B., & Caliyurt, K. (2018). Cyber security assurance process from the internal audit perspective. *Managerial Auditing Journal*, 33(4), 360–376. <https://doi.org/10.1108/MAJ-02-2018-1804>
11. Lois, P., Drogalas, G., Petridis, K., & Doulereridis, K. (2020). Critical variables in the implementation of risk-based internal audit: A theoretical and empirical investigation on Greek companies. *Journal of Operational Risk*, 15(4), 15–36. <https://doi.org/10.21314/JOP.2020.242>
12. Nerantzidis, M., Pazarskis, M., Drogalas, G., & Galanis, S. (2022). Internal auditing in the public sector: A systematic literature review and future research agenda. *Journal of Public Budgeting, Accounting & Financial Management*, 34(2), 189–209. <https://doi.org/10.1108/JPBAFM-02-2020-0015>
13. Pazarskis, M., Koutoupis, A., Kyriakou, M., & Galanis, S. (2020). Corporate governance and internal audit at Greek municipalities in the COVID-19 era. In S. Sylos Labini, A. Kostyuk, & D. Govorun (Eds.), *Corporate governance: An interdisciplinary outlook in the wake of pandemic* (pp. 142–145). <https://doi.org/10.22495/cgiowp>
14. Pazarskis, M., Lazos, G., & Galanis, S. (2022a). The role of internal audit and its contribution to fraud detection and effective corporate governance. In *Proceedings of the International Conference on Business & Economics of the Hellenic Open University*. http://icbe-hou.eap.gr/ocs2022/index.php/ICBE-HOU_2022/ICBE-HOU_2022/paper/view/419
15. Pazarskis, M., Tavellaris, G., & Galanis, S. (2022b). The internal audit function in Greek local government organisations: Critical factors of success. *International Journal of Critical Accounting*, 13(1), 60–74. <https://doi.org/10.1504/IJCA.2022.10051475>
16. Petridis, K., Drogalas, G., & Zografidou, E. (2021). Internal auditor selection using a TOPSIS/non-linear programming model. *Annals of Operations Research*, 296, 513–539. <https://doi.org/10.1007/s10479-019-03307-x>
17. Stafford, T., Deitz, G., & Li, Y. (2018). The role of internal audit and user training in information security policy compliance. *Managerial Auditing Journal*, 33(4), 410–424. <https://doi.org/10.1108/MAJ-07-2017-1596>

18. Steinbart, P. J., Raschke, R. L., Gal, G., & Dilla, W. N. (2012). The relationship between internal audit and information security: An exploratory investigation. *International Journal of Accounting Information Systems*, 13(3), 228–243. <https://doi.org/10.1016/j.accinf.2012.06.007>
19. Steinbart, P. J., Raschke, R. L., Gal, G., & Dilla, W. N. (2015). *The influence of internal audit on information security effectiveness: Perceptions of internal auditors*. <https://doi.org/10.2139/ssrn.2685943>
20. Steinbart, P. J., Raschke, R. L., Gal, G., & Dilla, W. N. (2018). The influence of a good relationship between the internal audit and information security functions on information security outcomes. *Accounting, Organizations and Society*, 71, 15–29. <https://doi.org/10.1016/j.aos.2018.04.005>
21. Thompson, D. (1998). 1997 computer crime and security survey. *Information Management & Computer Security*, 6(2), 78–101. <https://doi.org/10.1108/09685229810209414>
22. Zeng, H., Yang, L., & Shi, J. (2021). Does the supervisory ability of internal audit executives affect the occurrence of corporate fraud? Evidence from small and medium-sized listed enterprises in China. *International Journal of Accounting & Information Management*, 29(1), 1–26. <https://doi.org/10.1108/IJAIM-02-2020-0020>

SESSION 3: CORPORATE GOVERNANCE AND SUSTAINABILITY

ESG SOCIETY WITH EDUCATION
VALUES: TRUST

Shirley Mo Ching Yeung *

* School of Business, Gratia Christian College, Hong Kong, China



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Abstract

Through qualitative analysis of visual impacts and sustainable materials with experiential learning of logo design for environmental, social, and governance (ESG) society, the main takeaway of this study is to realise the importance of developing talents with 3 As (Accommodation, Adaptation, Adjustment) mindset with Trust for ESG-related initiatives. Developing a 3 As mindset with pioneer actions to change, accept others' mistakes, and learn from the mistakes/experiences for developing a stronger power of learning. Besides, we need to think about the triangulation among 3 As and Trust (education values with social and governance) and the use of sustained materials (environmental mindset) in educating the community about the meaning of ESG.

1. INTRODUCTION

Based on recent research of the author, the side event "*Metaverse Mindset via Transformative Business Exposure — SDG and NFT*" (side event of United Nations Office for South-South Cooperation (UNOSSC) EXPO) about a survey about transformative servant leadership in business management from September 2021 to January 2022 with subjects included people working in business management and students studying business management (a total of 310 responses are collected) that "*self-management with team work and empowerment of others to*

serve the society” is the key elements for transformative servant business leaders.

The author designed a theme for the UNOSSC EXPO side event on *metaverse mindset and transformative business exposure* to develop feasible solutions with immersive experience to reconnect and co-create platform to learn, unlearn and relearn.

Expected outcomes of the project is to identify relevant SDGs in relation to the theme of the side event “*Metaverse Mindset with Transformative Business Exposure*” for mindset change with feasible actions for entrepreneurial activities and training opportunities.

2. LITERATURE REVIEW

To determine related factors that were connected to the dependent variable, *art elements in business model*, research was performed. Nine articles published from 2002 to 2022 were studied. Several related factors were discovered, including the *creation of collaborative arts business teams, avoid loss of art in commercial use, entrepreneurial spirit in business model, policy of art in product promotion, label visual culture, pattern appealing to users, transformation rules, innovative use of colors to match products, materials benefit to customers, and business success with aesthetics.*

By using NVivo, a text search was conducted for the factors above to acquire a more accurate point of view regarding the keywords’ relationships to the topic. The search result showed that some of the keywords such as *avoid loss of art in commercial use* and *creation of collaborative arts business teams* showed up more frequently with 568 and 559 times respectively, while *materials benefit to customers* was cited less often (Table 1).

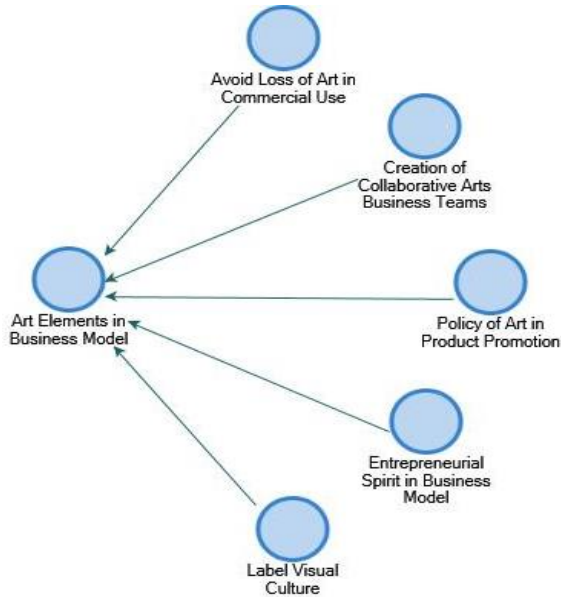
Table 1. Findings of the keywords search

<i>Factors</i>	<i>Sources</i>	<i>References</i>
<i>Avoid loss of art in commercial use</i>	9	568
<i>Creation of collaborative arts business teams</i>	9	559
<i>Policy of art in product promotion</i>	9	474
<i>Entrepreneurial spirit in business model</i>	9	471
<i>Label visual culture</i>	9	417
<i>Pattern appealing to users</i>	7	268
<i>Transformation rules</i>	5	262
<i>Innovative use of colors to match products</i>	9	167
<i>Business success with aesthetics</i>	9	147
<i>Materials benefit to customers</i>	6	29

By further investigating the interrelationships among the factors, it appears that some keywords such as *avoid loss of art in commercial use, creation of collaborative arts business teams, policy of art in product*

promotion, entrepreneurial spirit in business model, and label visual culture connect the most to the topic of *art elements in business model*. A graphical depiction was created from the data based on the findings (Figure 1).

Figure 1. Model of the factors



3. RESEARCH METHODOLOGY

3.1. Wellness and responsible business

In the past three years, what we have experienced is how to apply technology to our lives easier and stay with our communities. Based on United Nations Sustainable Development Goals (UNSDG) #3 wellness and #9 innovations, there is room for relearning the use of technology for improving our mental and spiritual well-being.

Under COVID-19, people feel uncertain, with emotions going up and down as there is a change in their daily activities — a new normal of work, life and play. It is observed that more and more people love to be involved in the art and creation business. The design of brand products has been finetuned with the use of colors to create a fresher and more appealing package design to boost the sales volume. It is worthwhile to study and apply visual art to package design, media promotion, fashion

events and the concept of art-life-business has emerged as mentioned by Yeung and Song (2020).

A lot of Korean and Japanese personal care brand products have been using a new design, promoting sustainability, sustainable lifestyle for increasing the awareness of potential customers and retaining their existing consumers. Hence, we need to re-think and re-design how to use logos to convey a message that wellness and sustainability are integrated into our daily lives. As a responsible product/service producer, it is a good opportunity to educate the community on SDG#3 wellness, #9 innovations and #12 responsible production and consumption via #4.7 knowledge transfer.

3.2. Logo design for ESG society

We are living on the same planet, the same group with humanity and diversity. We need to understand how to embrace nature and let our community realise the interdependence of the planet and community development with social capital and development. That is the rationale of having "S" – Social inside the "E" — Environment.

People are unique and have their own subjective feelings. The way how people interpret messages is based on their past experiences and perceptions.

For the "G" – Governance, it carries a certain weightage in the "ESG" logo design. The timeliness, relevancy and suitability of policy are closely linked to social development with environmental impacts.

A good policy probably needs to be changed, revised, and finetuned to make the community develop in a healthy and supportive way, leading to a better living and working environment on the planet. In fact, cultural elements are embedded within social development. We need to have the "G" ("Governance") decision-making with the relevance of policy, linking up with the "S" ("Social") and then we're all living in the same umbrella groups. That's why there will be a "line — link" between "E", "G", & "S" and "E" & "G".

Based on NVivo analysis of the art business model, creative art may link up for business impacts with policy in product promotion and application of entrepreneurial spirit into a business model. Through the meaningful design of "E", "S", "G" logos, the association of ESG-related activities for impacts may go into the minds of the community. Last, but not the least, the logo may trigger people to take actions, leading people to think about how to transform and how to innovate.

3.3. What is the core value for society?

For the sustainable development of a society, the 3 As concept is necessary. That is:

1) *Accommodations* — never have “blame” in “mind”. We need to look forward and take actions to bridge the gaps that we have identified.

2) *Adaptation* — never feel rejected. We need to be open and flexible to adapt ourselves, change ourselves, our mindset, attitude and behaviour to immerse ourselves into the situation, whether it is familiar or unfamiliar with cultural differences:

- upkeep the values of righteousness, harmony, peace with a “co-learn” spirit;
- be humble at a low profile state with confidence;
- build a positive self-concept.

3) *Adjustment* — never stay at your own viewpoint for a long time without empathy. Try to adjust yourself and create awareness of diversity and maintain the core values of a society.

All the values to support the growth of a society are based on inner peace, peace for cultural differences, and organisational effectiveness with effort and energy to co-create a win-win partnership.

4. FINDINGS: SUSTAINABLE MATERIALS

Qualitative research was performed in order to examine potential factors that contribute to sustained materials. Eight articles published from 2009 to 2021 in total were studied. According to the findings, several factors were especially more relevant to the subject, including *food packaging method*, *materials used to extend shelf life*, *choice of packaging material*, *applications of desirable packages for food*, *dependence* and *level of permeability of food being packaged*.

By conducting a keyword text search with NVivo, the relationship between the eleven factors above and sustained materials was tested. The test results showed that some of the factors such as *food packaging method* and *choice of packaging material* were particularly mentioned more frequently with 1615 and 1119 times correspondingly. Meanwhile, one of the keywords namely *dependence* was comparatively cited less frequently (Table 2).

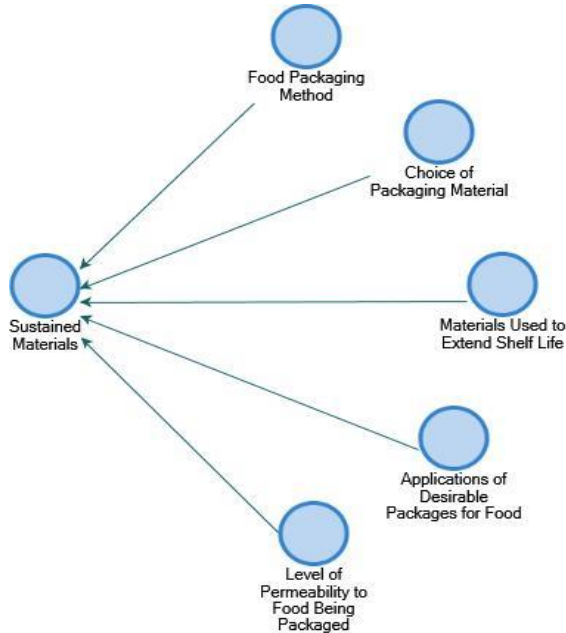
Table 2. Findings of sustainable materials search

<i>Factors</i>	<i>Sources</i>	<i>References</i>
<i>Food packaging method</i>	8	1615
<i>Choice of packaging material</i>	7	1119
<i>Materials used to extend shelf life</i>	8	1033
<i>Applications of desirable packages for food</i>	8	1028
<i>Level of permeability of food being packaged</i>	8	916
<i>Dependence</i>	2	3

With the qualitative research findings above, most of the mentioned keywords obviously had a significant relationship with the topic, including *food packaging method*, *choice of packaging material*, *materials*

used to extend shelf life, applications of desirable packages for food, and level of permeability of food being packaged. A model was constructed based on the research result (Figure 2).

Figure 2. Model of of sustainable materials search



5. CONCLUSION AND DISCUSSION

A mindset of 3 As can be developed from exposure to the real world with transformations and innovations. For young people aged from 20 to 50, they may be concerned about their career and family planning, which 3 As may lead them to have empathy, understanding of the survival elements for quality of life, organizational effectiveness, and global success. For those aged from 50 to 70, a mindset of 3 As helps them to accept reality with openness to change and accept the situation while thinking a way out for contributions with happiness.

However, the obstacles hindering the development of a 3 As mindset may be on two perspectives: 1) limited resources — it is not easy to develop a mindset of 3 As as we have been subjective and need to set the priority for making a living with self-interest; and 2) sharing/green economy. In order to combat the challenge of limited resources to developing a mindset of 3 As, a platform with shared resources may be needed for reaching 20/80 rules, 20% of resources that you use, and you

can generate 80% of the impact, one of the concepts of total quality management (TQM).

Based on the experiences of the author and stakeholders in her community in the past 10 to 20 years, the impact is creating an understanding and application platform with entrepreneurial spirit for success and/or in life, for example, UNOSSC entrepreneurship academy with student participants from around 20 countries to become alumni and stay in a community with shared values to grow and shine. The main quality for developing talents with 3 As mindset is: Trust with a passion to develop 3 As mindset with pioneer actions to change, accept other's mistakes, and learn from the mistakes/experiences for developing a stronger power of learning. Besides, we need to think about the triangulation among 3 As and Trust (education values with social and governance) and the use of sustained materials (environmental mindset) in educating the community about the meaning of ESG.

REFERENCES

1. Acretoaie, V., Störrle, H., & Strüber, D. (2018). VMTL: A language for end-user model transformation. *Software & Systems Modeling*, 17, 1139–1167. <https://doi.org/10.1007/s10270-016-0546-9>
2. Association of Cities and Regions for Recycling (ACRR), Association of Plastics Manufacturers in Europe (APME), European Council of Vinyl Manufacturers (ECVM), European Plastics Recyclers (EuPR), & European Plastics Converters (EuPC). (2004). *Good practices guide on waste plastics recycling a guide by and for local and regional authorities*. <https://docplayer.net/21479700-Good-practices-guide-on-waste-plastics-recycling-a-guide-by-and-for-local-and-regional-authorities.html>
3. Duncan, T. (2011). Applications of nanotechnology in food packaging and food safety: Barrier materials, antimicrobials and sensors. *Journal of Colloid and Interface Science*, 363(1), 1–24. <https://doi.org/10.1016/j.jcis.2011.07.017>
4. Fisher, R. (2007). Putting the "Team" in the fine arts team: An application of business management team concepts. *Arts Education Policy Review*, 108(4), 25–32. <https://doi.org/10.3200/AEPR.108.4.25-32>
5. Giskes, I., Baziuk, J., Pragnell-Raasch, H., & Perez Roda, A. (2022). *Report on good practices to prevent and reduce marine plastic litter from fishing activities*. GloLitter Partnerships. <https://www.fao.org/publications/card/en/c/CB8665EN/>
6. Gross, K. M. (2020). Visual arts content literacy: A partnership between art educators and special educators. *TEACHING Exceptional Children*, 52(3), 157–165. <https://doi.org/10.1177/0040059919894269>
7. Hahladakis, J., Velis, C., Weber, R., Iacovidou, E., & Purnell, P. (2018). An overview of chemical additives present in plastics: Migration, release, fate and environmental impact during their use, disposal and recycling. *Journal of Hazardous Materials*, 344(15) 179–199. <https://doi.org/10.1016/j.jhazmat.2017.10.014>
8. Kozhevnikova, M., Kozhevnikov, M., Chen, J., & Blazhenkova, O. (2013). Creativity, visualization abilities, and visual cognitive style. *British Journal of Educational Psychology*, 83(2), 196–209. <https://doi.org/10.1111/bjep.12013>

9. Liu, Y., Liang, C., Xu, H., Wang, F., Hao, Y., Dong, J., Dong, Y., Guo, D., Sun, T., & Yu, P. (2022). Digital art pattern design based on visual material colouring intelligent programming system. *Mathematical Problems in Engineering*, 2022, Article 2450074. <https://doi.org/10.1155/2022/2450074>
10. Mannathoko, M. (2020). Bringing entrepreneurship into visual arts and music classrooms: An evaluation of basic education arts curriculum implementation strategies. *Teaching Artist Journal*, 18(3–4), 121–134. <https://doi.org/10.1080/15411796.2020.1851134>
11. Marsh, K., & Bugusu, B. (2007). Food packaging-roles, materials, and environmental issues. *Journal of Food Science*, 72(3), 39–55. <https://doi.org/10.1111/j.1750-3841.2007.00301.x>
12. Nikiema, J., & Asiedu, Z. (2022). A review of the cost and effectiveness of solutions to address plastic pollution. *Environmental Science and Pollution Research*, 29, 24547–24573. <https://doi.org/10.1007/s11356-021-18038-5>
13. Stankiewicz, M. (2004). A dangerous business: Visual culture theory and education policy. *Arts Education Policy Review*, 105(6), 5–14 <https://doi.org/10.3200/AEPR.105.6.5-14>
14. The Legislative Council. (2021). *Measures to curb disposable plastic tableware* (ISE22/20-21). <https://www.legco.gov.hk/research-publications/english/essentials-2021ise22-measures-to-curb-disposable-plastic-tableware.htm>
15. Tuchner, J. (2004). Can the visual arts bring success to business? *The Art Book*, 11(1), 33–33. <https://doi.org/10.1111/j.1467-8357.2004.00373.x>
16. United Nations Industrial Development Organization (UNIDO). (2019). *Addressing the challenge of marine plastic litter using circular economy methods: Relevant considerations*. https://www.unido.org/sites/default/files/files/2019-06/UNIDO_Addressing_the_challenge_of_Marine_Plastic_Litter_Using_Circular_Economy_0.pdf
17. Yeung, S. M. C., & Song, Y. (2020). *Art life business (SYART + SYED) via UNSDGs*. LAP LAMBERT Academic Publishing.
18. Zhuang, X. (2022). A study on the application of visual perception in art design based on industrial mathematics models. *Mathematical Problems in Engineering*, 2022, Article 1774839 <https://doi.org/10.1155/2022/1774839>

A STATISTICAL INSIGHT ANALYSIS ON HOW THE ENVIRONMENTAL TAXATION AFFECTS GREEN GROWTH IN THE EU

Georgios L. Thanasas^{*}, Aikaterini Slimistinou^{**},
Georgia Kontogeorga^{***}, Nektarios Karapanagiotis^{*}

^{*} Department of Management Science and Technology, University of Patras, Patras, Greece

^{**} University of Western Macedonia, Kozani, Greece

^{***} Hellenic Court of Audit, Athens, Greece



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Abstract

Until the first negative consequences of the interaction of human activity in nature and the environment were presented there was no concern, but over the years and with the great increase in population the consequences had a negative impact and the risk and concern for the future were constantly increasing. In recent decades, there has been a great joint effort, at the international level, to promote and implement the values and norms of green development and the need to solve environmental problems, such as climate change and pollution. green growth is an integral part of the policy implemented by the European Union and invites all its member states to participate in this effort for the environment and natural resources, with environmental taxation as the main tool. Environmental taxation facilitates, through the rules of the European Union, the achievement of the goal of green growth within the EU. Environmental taxes are characterized by transparency, while they are revenues for the countries. Through the study and research of environmental indicators, the course of the countries of the European Union from 2002 to 2020, as well as Greece, will be analyzed compared to the average of the European Union. The study found that environmental taxation is a measurement for increasing the revenues of state funds and

reducing environmental problems at the global level. According to the EU indicator, Environmental taxes as a percentage of the total revenue from taxes and social contributions (TSC, %) the large dispersion that exists between the EU countries was reflected. This occurs mainly because of the large enlargement of the EU in 2004. It was found that the taxes imposed for energy, exceed 50% in relation to the revenues of other environmental taxes such as transport and pollution taxes. Specifically, in the case of Greece, the country is above the EU average and the amounts collected by environmental taxes are mainly state revenues. The main environmental taxes in Greece are a tax on fuels, taxes on electricity and natural gas and a tax on plastic bags.

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REFERENCES

1. Bassi, S., Ten Brink, P., & Pallemarts, M. (2009). *Feasibility of implementing a radical ETR and its acceptance* (Report). Institute for European Environmental Policy (IEEP). http://minisites.ieep.eu/assets/636/Final_part_c_radical_ETR_december_2_2009_FINAL.pdf
2. Daugbjerg, C., & Svendsen, G. T. (2003). Designing green taxes in a political context: From optimal to feasible environmental regulation. *Environmental Politics*, 12(4), 76–95. <https://doi.org/10.1080/09644010412331308384>
3. De Miguel, C., Montero, M., & Bajona, C. (2015). Intergenerational effects of a green tax reform for a more sustainable social security system. *Energy Economics*, 52(1), 117–129. <https://doi.org/10.1016/j.eneco.2015.08.025>
4. Ekins, P. (2015, January 28). *Implementing environmental fiscal reform in Europe* [Paper presentation]. UCL Institute for Sustainable Resources, Brussels. https://ec.europa.eu/environment/integration/green_semester/pdf/29_01_2015/side%20event.pdf
5. Ekins, P., & Speck, S. (2000). Proposals of environmental fiscal reforms and the obstacles to their implementation. *Journal of Environmental Policy & Planning*, 2(2), 93–114. <https://doi.org/10.1080/714038548>
6. European Commission. (2019). *Communication from the Commission: The European green deal*. <https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1588580774040&uri=CELEX%3A52019DC0640>
7. European Environment Agency (EEA). (2006). *Annual report 2005*. EEA. https://www.eea.europa.eu/publications/report_2005_0802_115659
8. Eurostat. (2020). *Environmental tax revenues*. https://ec.europa.eu/eurostat/cache/metadata/en/env_ac_tax_esms.htm
9. Eurostat. (2022). *Environmental tax statistics*. https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Environmental_tax_statistics#Environmental_taxes_in_the_EU
10. Eurostat. (2013). *Environmental taxes — A statistical guide*. <https://ec.europa.eu/eurostat/documents/3859598/5936129/KS-GQ-13-005-EN.PDF.pdf/706eda9f-93a8-44ab-900c-ba8c2557ddb0?t=1414782946000>
11. Eurostat. (2015) *Eurostat regional yearbook 2015*. <https://ec.europa.eu/eurostat/documents/3217494/7018888/KS-HA-15-001-EN-N.pdf>

12. Faure, M. G., & Weishaar, S. E. (2012). *The role of environmental taxation: Economics and the law* (University of Groningen Faculty of Law Research Paper No. 2014/04). <https://ssrn.com/abstract=2370360>
13. Kosonen, K., & Nicodème, G. (2009). *The role of fiscal instruments in environmental policy* (CESifo Working Paper Series No. 2719). CESifo Economic Studies. <https://doi.org/10.2139/ssrn.1437501>
14. Organisation for Economic Co-operation and Development (OECD). (2006). *The political economy of environmentally related taxes*. <https://doi.org/10.1787/9789264025530-en>
15. Organisation for Economic Co-operation and Development (OECD). (2011). *Towards green growth*. <https://doi.org/10.1787/9789264111318-en>
16. Parry, I., Norregaard, J., & Heine, D. (2012). *Environmental tax reform: Principles from theory and practice to date* (IMF Working Paper. No. 12/180). International Monetary Fund. <https://doi.org/10.5089/9781475505283.001>
17. Stavins, R. N. (2003). Experience with market-based environmental policy instruments. In K.-G. Mäler & J. Vincent (Eds.), *Handbook of environmental economics* (pp. 355–435). Elsevier. https://scholar.harvard.edu/files/stavins/files/handbook_chapter_on_mbi.pdf
18. Sterner, T. (2012). Distributional effects of taxing transport fuel. *Energy Policy*, 41, 75–83. <https://doi.org/10.1016/j.enpol.2010.03.012>
19. Ward, H., & Cao, X. (2012). Domestic and international influences on green taxation. *Comparative Political Studies*, 45(9), 1078–1100. <https://doi.org/10.1177/0010414011434007>

SUSTAINABLE AND INNOVATIVE PUBLIC PROCUREMENT IN ITALY: THE CASE OF SCR PIEMONTE

Paola Vola^{*}, Lorenzo Gelmini^{*}, Stefano Rossa^{*}

^{*} DISSTE Department, University of Eastern Piedmont, Vercelli, Italy



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Abstract

Public procurement represents an activity with consistent impact, both in general and with particular reference to Italy. In the European Union, in effect, public procurement is highly represented, covering about 14% of the gross domestic product (GDP), an amount confirmed when looking at Italy only, whereas public procurement covers about 10% of the GDP (Fregonara et al., 2022).

Particular emphasis recently has been given, within public procurement activities, to the so-called sustainable public procurement (SPP), a central tile in the mosaic of European procurement law, which is not an awarding procedure *per se* representing, *contra*, a specific approach to procurement.

This approach is deemed to integrate environmental protection (green public procurement) and social aspects (socially responsible public procurement) into public procurement through the use of appropriate procedural procurement strategies

According to Berg et al. (2022), SPP is a process by which public authorities seek to achieve the appropriate balance between the economic, social and environmental aspects when procuring goods, services and works; put in those terms, of course, SPP is closely related to green public procurement, which refers to the public purchase of goods, services and works with a reduced environmental impact

throughout their life cycle when compared with goods, services and works with the same primary function which would otherwise be procured (European Commission, 2021).

Further, it is related to socially responsible public procurement, which pays attention to achieving positive social outcomes from public contracts (Tepper et al., 2020).

The Italian Procurement Code, among other things, provides for an additional, particularly appreciable form of procurement, such as the so-called innovative procurement (IP).

In relation to IP, innovation is related to the ability to satisfy a need that the market, through its products or services, is unable to satisfy at present, a need that is typically expressed in compliance with environmental and social parameters. If a procurement process succeeds in developing a new product or service for which there is a need, or in profoundly improving it to that end, but which the market for various reasons cannot at that precise moment provide, then that procurement is an IP.

Our study, after a brief presentation of the normative framework in Italy, examines the SPP and IP strategies of one of the most important Italian central purchasing bodies (SCR Piemonte), including through a series of semi-structured interviews with company managers and governance members (board directors and auditors), aimed at capturing the governance and organizational factors that either fuel or mitigate the propensity to SPP and IP (Wijayasundara et al., 2022).

The main contributions of the research are twofold: the first is represented by the managerial and organizational outcomes, since we trace some strategic levers that, in an increasingly pressing logic of sustainable development goals (SDGs) and business ethics, virtuously nurture public procurement toward social and environmental issues; the second is regulatory and legislative, that is the Italian instrument of IP.

If in "traditional" procurements the mechanisms of SPP acts "downstream" of the procurement procedure, in the sense that the various sustainability clauses and criteria are included in a pre-existing procedure, which is logically distinct from the sustainability criteria and not dependent on it, it can be seen that, on the other hand, the same is not the case in "innovative" procurements.

In them, especially in the case of innovation partnership and pre-commercial procurement, it is possible to protect sustainable development already "upstream", at the stage of research and development of the product or service, creating is worth a good or service whose characteristics are sustainable by themselves, that is, inherently conforming to the principle of environmental and social sustainability.

REFERENCES

1. Berg, A., Alhola, K., Peltomaa, J., & Tietari, S. (2022). Developing together: The Finnish way of promoting sustainable public procurement. *Journal of Public Procurement*, 22(4), 245–264. <https://doi.org/10.1108/JOPP-11-2021-0072>
2. European Commission. (2021). *Green public procurement: FAQs*. https://ec.europa.eu/environment/gpp/faq_en.htm
3. Fregonara, E., Ferrando, D. G., & Tulliani, J. M. (2022). Sustainable public procurement in the building construction sector. *Sustainability*, 14(18), Article 11616. <https://doi.org/10.3390/su141811616>
4. Tepper, Y., Porat, N., & Bar-Oz, G. (2020). Sustainable farming in the Roman-Byzantine period: Dating an advanced agriculture system near the site of Shivta, Negev Desert, Israel. *Journal of Arid Environments*, 177, Article 104134. <https://doi.org/10.1016/j.jaridenv.2020.104134>
5. Wijayasundara, M., Polonsky, M., Noel, W., & Vocino, A. (2022). Green procurement for a circular economy: What influences purchasing of products with recycled material and recovered content by public sector organisations? *Journal of Cleaner Production*, 377, Article 133917. <https://doi.org/10.1016/j.jclepro.2022.133917>

THE EVOLUTION OF PERFORMANCE MEASUREMENT SYSTEMS IN PUBLIC HEALTH ORGANIZATIONS: A PRELIMINARY ANALYSIS

Francesco Capalbo^{*}, Adelaide Ippolito^{**},
Margherita Smarra^{*}, Marco Sorrentino^{**}

^{*} University of Molise, Campobasso, Italy

^{**} Pegaso Telematic University, Naples, Italy



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Abstract

In a world increasingly dominated by the logic of automation and the data-driven approach, modern management systems used in companies, both private and public, require progressively the adoption of digital technologies capable of influencing the performance of the activities carried out, affecting them, but, above all, favoring their measurement and assessment.

As far as the public sector is concerned, the organizations that operate there always have more need to develop effective management and control systems (Trucco & Marchi, 2017) in relation to both internal and external pressures. Internal pressures are predominantly associated with the ever-increasing complexity of the processes carried out by public organizations, which require constant attention to the level of efficiency in the use of resources and effectiveness in achieving the set objectives (Simonen et al., 2012), but also one their adequacy in terms of their ability to respond to the real needs of citizens with an adequate range of services (Balducci et al., 1997). External pressures, on the other hand, are exerted by various phenomena, such as the difficulties generated by

the competitive context within the sector public and, more generally, in the economic and social environment (Molteni, 2004) and continuous solicitations generated by the legislator, who periodically submits, updates and redefines the regulatory framework within which these organizations operate. The set of internal and external pressures to which organizations are subject public, as has been happening for some time for private companies operating in dynamic areas, creates a situation of environmental complexity such as to make now the adoption of performance measurement systems inevitable and unpostponable effective for management and control (Purbey et al., 2007; Elg et al., 2013). In the category of public companies, healthcare companies have characteristics, in terms of performance measurement and evaluation, quite peculiar; they are in fact calls to ensure effective and efficient management of the entire performance complex they provide, with reference not only to those relating to the treatment process but also to resources used for administrative management (Kontio et al., 2013).

Within this context, the aim of this work is to carry out a theoretical analysis of the processes of change over the years recent have characterized performance measurement systems in the public sector, with particular reference to health organizations.

Technological innovations in systems performance measurements refer, in particular, to new information technologies developed in health information systems (data warehouse, business intelligence, cloud, enterprise resource planning (ERP) and other advanced technologies) capable of handling large amounts of economic and health data effectively and efficiently in the structure of a healthcare organization while providing tangible results in terms of information useful for decision making (Mathew & Pillai, 2015; Krause, 2015). The strengths of these technologies lie in their ability to:

- provide an integrated overview of performance, enabling healthcare organizations to create a wide-ranging information system that favors knowledge sharing (Adler-Milstein et al., 2019; Lehoux et al., 2018);
- provide reliable and real-time performance measurements (Alfian et al., 2018).

According to Adler-Milstein et al. (2019), the implementation of performance management systems in healthcare organizations (in terms of knowledge management systems) should give due consideration to the critical role of three domains: policies/processes, technology and people. Obviously, the implementation of an innovative performance management system in healthcare organizations requires the re-engineering of information flows and processes (Agarwal & Garg, 2012; Garefalakis et al., 2016; Chiarini et al., 2018), bearing in mind the compatibility of these innovative systems with operational processes and pre-existing technology (Kontio et al., 2013; Foshay & Kuziemyky,

2014). Moreover, an issue that is recurrent in the implementation of technological innovations in the healthcare sector is motivating and training the staff and the physicians in the adoption of the new systems (Garg & Agarwal, 2014; Abukhader, 2015; Almajali & Tarhini, 2016). This problem is particularly acute in healthcare organisations given the variety of staff present, which "includes a large spectrum of professionals that can be characterised by possessing expertise, power, and autonomy" and who, therefore, could resist change (Agarwal & Garg, 2012, p. 159).

REFERENCES

1. Abukhader, S. M. (2015). ERP implementation in the private hospitals of Saudi Arabia. *International Journal of Healthcare Management*, 8(2), 77–88. <https://doi.org/10.1179/2047971914Y.0000000092>
2. Adler-Milstein, J., Nong, P., & Friedman, C. P. (2019). Preparing healthcare delivery organizations for managing computable knowledge. *Learning Health Systems*, 3(2), Article e10070. <https://doi.org/10.1002/lrh2.10070>
3. Agarwal, D., & Garg, P. (2012). ERP implementation in hospitals: A case study. *International Journal of Electronic Healthcare*, 7(2), 157–180. <https://doi.org/10.1504/IJEH.2012.049876>
4. Alfian, G., Syafrudin, M., Ijaz, M. F., Syaekhoni, M. A., Fitriyani, N. L., & Rhee, J. (2018). A personalized healthcare monitoring system for diabetic patients by utilizing BLE-based sensors and real-time data processing. *Sensors*, 18(7), Article 2183. <https://doi.org/10.3390/s18072183>
5. Almajali, D. A., & Tarhini, A. (2016). Antecedents of ERP systems implementation success: A study on Jordanian healthcare sector. *Journal of Enterprise Information Management*, 29(4), 549–565. <https://doi.org/10.1108/JEIM-03-2015-0024>
6. Balducci, M. (Ed.). (1997). *Managerialità e sussidiarietà: Due sfide per il governo locale*. Franco Angeli.
7. Chiarini, A., Vagnoni, E., & Chiarini, L. (2018). ERP implementation in public healthcare, achievable benefits and encountered criticalities — An investigation from Italy. *International Journal of Services and Operations Management*, 29(1), 1–17. <https://doi.org/10.1504/IJSOM.2018.088460>
8. Elg, M., Palmberg Broryd, K., & Kollberg, B. (2013). Performance measurement to drive improvements in healthcare practice. *International Journal of Operations & Production Management*, 33(11–12), 1623–1651. <https://doi.org/10.1108/IJOPM-07-2010-0208>
9. Foshay, N., & Kuziemy, C. (2014). Towards an implementation framework for business intelligence in healthcare. *International Journal of Information Management*, 34(1), 20–27. <https://doi.org/10.1016/j.ijinfomgt.2013.09.003>
10. Garefalakis, A., Mantalis, G., Vourgourakis, E., Spinthiropoulos, K., & Lemonakis, C. (2016). Healthcare firms and the ERP systems. *Journal of Engineering Science & Technology Review*, 9(1), 139–144. <https://doi.org/10.25103/jestr.091.021>
11. Garg, P., & Agarwal, D. (2014). Critical success factors for ERP implementation in a Fortis hospital: An empirical investigation. *Journal of Enterprise Information Management*, 27(4), 402–423. <https://doi.org/10.1108/JEIM-06-2012-0027>

12. Kontio, E., Lundgren-Laine, H., Kontio, J., Korvenranta, H., & Salanterä, S. (2013). Information utilization in tactical decision making of middle management health managers. *CIN: Computers, Informatics, Nursing*, 31(1), 9–16. <https://doi.org/10.1097/NXN.0b013e318261f192>
13. Krause, D. D. (2015). Data lakes and data visualization: An innovative approach to address the challenges of access to health care in Mississippi. *Online Journal of Public Health Informatics*, 7(3), 1–10. <https://doi.org/10.5210/ojphi.v7i3.6047>
14. Lehoux, P., Roncarolo, F., Silva, H. P., Boivin, A., Denis, J. L., & Hébert, R. (2019). What health system challenges should responsible innovation in health address? Insights from an international scoping review. *International Journal of Health Policy and Management*, 8(2), 63–75. <https://doi.org/10.15171/ijhpm.2018.110>
15. Mathew, P. S., & Pillai, A. S. (2015, March 19–20). Big data solutions in healthcare: Problems and perspectives. In *Proceedings of the International Conference on Innovations in Information, Embedded and Communication Systems (ICIIECS)*. IEEE. <https://doi.org/10.1109/ICIIECS.2015.7193211>
16. Molteni, M. (2004). *Responsabilità sociale e performance d'impresa. Per una sintesi socio-competitiva*. Vita e pensiero.
17. Purbey, S., Mukherjee, K., & Bhar, C. (2007). Performance measurement system for healthcare processes. *International Journal of Productivity and Performance Management*, 56(3), 241–251. <https://doi.org/10.1108/17410400710731446>
18. Simonen, O., Viitanen, E., & Blom, M. (2012). Factors relating to effectiveness data use in healthcare management. *International Journal of Productivity and Performance Management*, 61(7), 752–764. <https://doi.org/10.1108/17410401211263845>
19. Trucco, S., & Marchi, L. (2017). La comunicazione al mercato delle performance economico-finanziarie: Il ruolo del controllo di gestione. *Management Control*, 3, 55–78. <https://doi.org/10.3280/MACO2017-003005>

THE BANKING MANAGEMENT OF SUSTAINABILITY: ASSESSING THE INTEGRATION OF ESG FACTORS AT GOVERNANCE LEVEL

Teresa Izzo^{*}, Gianluca Risaliti^{*},
Ludovica Evangelista^{*}

^{*} Department of Management and Economics, Parthenope University of Naples, Naples, Italy



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Abstract

In the last decades, investors and stakeholders at large have been increasingly concerned with social and environmental matters and have pressured companies to provide greater accountability and transparency of their commitment to sustainability (Owen et al., 2001). These concerns also affected the financial sector, with policymakers and regulators worldwide working on consultation proposals, guidelines and legislative frameworks to integrate the environmental, social and governance (ESG) factors into credit risk assessment (Committee of Sponsoring Organizations of the Treadway Commission [COSO] & World Business Council for Sustainable Development [WBCSD], 2018; United Nations [UN], 2016; UN, 2022). In this perspective, the recent implementation of the guidelines on loan origination and monitoring, finalised by the European Banking Authority (EBA, 2020), acquires particular relevance, as they explicitly introduce the ESG logic in the regulatory framework for banks. Thus, financial institutions should be more likely to disclose information extensively on their ESG practices. However, in absence of a uniform requirement for ESG disclosure, banks produce

heterogeneous reports and information contents, depending on the executive decisions made by corporate governance.

In effect, for banks, sustainability is not just an ethical problem, but may soon enough also become an economic and existential question for fostering future profitability. Undoubtedly, the banking sector can play a key role in promoting a sustainable process of value creation and more responsible individual behaviour (Eremia & Stancu, 2006). First, banks can directly contribute to the reduction of environmental damage through the rationalisation and reorganisation of their resources, activities, and structures (prudent use of paper, lighting, air conditioning, as well as the development of e-banking services for payments, fund transfer, account statements, etc.). Furthermore, their indirect impact could be even more coherent in social and economic terms. In fact, banks can support consistent initiatives toward a clean environment (Miah et al., 2021), by influencing industries and businesses through their financing and their innovations in product design, pricing and sales decisions. For instance, they can encourage clients' sustainable investments by setting lower-rate loans for greener investments (Chitra & Gokilavani, 2020) or granting credits with a requirement of environmental standards (Zhang et al., 2011).

In the financial sector, the adoption and implementation of sustainability strategies have taken manifold forms and have led to various types of practices. However, all these forms and practices of green banking can be meaningful only if ESG awareness is supported at a corporate governance level (Liang et al., 2018). In fact, to address sustainability challenges, banks have to take social and environmental issues into consideration when developing their own corporate strategies and evaluating business performance (Siueia et al., 2019). They have to balance competitiveness and sustainable requirements and transparently report on the risks related to the management of their assets and liabilities.

Surely, the banking management of sustainability could be complex and costly, but it also represents an opportunity for financial institutions to innovate and attract investors. In this regard, previous studies found a positive correlation between the adoption of sustainable banking practices and a bank's profitability (Bhardwaj & Malhotra, 2013; Cornett et al., 2016; La Torre et al., 2021).

Given these premises, this study aims to contribute to green banking literature, which represents an emerging and quite unripe research field. To this end, the analysis will focus on a selected sample of Italian listed banks, included in the FTSE MIB index.

The level of ESG disclosure will be assessed through systematic content analysis (Weber, 1990; Krippendorff, 2013), which is an established and empirically valid method in the research on social, environmental (Guthrie & Abeysekera, 2006; Maali et al., 2006; Amini et al., 2018) and financial relationships (Beattie, 2005). In particular, we will evaluate the amount and the quality of ESG information considering financial statements, integrated and sustainability reports, as well as

other forms of corporate disclosure published on the websites of the banks sampled. The documentary analysis will be conducted manually for greater accuracy (Anastasiei & Georgescu, 2020) and will cover a time span of 4 years, from 2017 to 2021. This range is significant as the European Union Directive 2014/95 on non-financial and diversity information has been implemented in Italy from 2017 onwards (Ahern, 2016; Monciardini, 2016; Korca & Costa, 2021). A longitudinal approach will allow us to observe the evolution of the same constructs multiple times, in order to reveal patterns in the adoption of sustainable business activities and models by the banks sampled (Deegan & Rankin, 1996; Ritala et al., 2018).

Furthermore, an ESG disclosure index will be developed tracing the most relevant items of each ESG dimension. This index will be used to quantify whether materiality-related ESG information is effectively mentioned and well-detailed. Consistent with the material information framework developed by the Sustainability Accounting Standard Board (SASB) for the banking industry, we consider the principle of materiality as an essential filter for the dissemination of ESG information, which is supposed to be "material" if they can significantly change investors' assessment or are useful for the economic decisions of users. Starting from these considerations, the purpose of this work is to provide an assessment model for measuring the integration of ESG factors in the banking industry.

REFERENCES

1. Ahern, D. (2016). Turning up the heat? EU sustainability goals and the role of reporting under the non-financial reporting directive. *European Company and Financial Law Review*, 13(4), 599–630. <https://doi.org/10.1515/ecfr-2016-5007>
2. Amini, M., Bienstock, C. C., & Narcum, J. A. (2018). Status of corporate sustainability: A content analysis of Fortune 500 companies. *Business Strategy and the Environment*, 27(8), 1450–1461. <https://doi.org/10.1002/bse.2195>
3. Anastasiei, I. D., & Georgescu, M. R. (2020). Automated vs manual content analysis — A retrospective look. *Scientific Annals of Economics and Business*, 67(Special Issue), 57–67. <http://saeb.feaa.uaic.ro/index.php/saeb/article/view/1195>
4. Beattie, V. (2005). Moving the financial accounting research front forward: The UK contribution. *The British Accounting Review*, 37(1), 85–114. <https://doi.org/10.1016/j.bar.004.09.004>
5. Bhardwaj, B. R., & Malhotra, A. (2013). Green banking strategies: Sustainability through corporate entrepreneurship. *Greener Journal of Business & Management Studies*, 3(4), 180–193. <https://pdfs.semanticscholar.org/6e1b/80a0faac55b0c46b9b8dc09ef6137fb859a9.pdf>
6. Bukhari, S. A. A., Hashim, F., & Amran, A. (2020). Green banking: A road map for adoption. *International Journal of Ethics and Systems*, 36(3), 371–385. <https://doi.org/10.1108/IJOES-11-2019-0177>

7. Chitra, V., & Gokilavani, R. (2020). Green banking trends: Customer knowledge and awareness in India. *International Journal of Management*, 8(1), 54–60. <https://pdfs.semanticscholar.org/5410/e9197207fbc6804bf2f4b87df6b99c3e5fc1.pdf>
8. Committee of Sponsoring Organizations of the Treadway Commission (COSO), & World Business Council for Sustainable Development (WBCSD). (2018). *Enterprise risk management: Applying enterprise risk management to environmental, social and governance-related risks*. <https://www.coso.org/Shared%20Documents/COSO-WBCSD-ESGERM-Executive-Summary.pdf>
9. Cornett, M. M., Erhemjamtsa, O., & Tehraniab, H. (2016). Greed or good deeds: An examination of the relation between corporate social responsibility and the financial performance of U.S. commercial banks around the financial crisis. *Journal of Banking & Finance*, 70, 137–159. <https://doi.org/10.1016/j.jbankfin.2016.04.024>
10. Deegan, C. & Rankin, M. (1996). Do Australian companies report environmental news objectively? An analysis of environmental disclosures by firms prosecuted successfully by the environmental protection authority. *Accounting, Auditing & Accountability Journal*, 9(2), 50–67. <https://doi.org/10.1108/09513579610116358>
11. Eremia, A., & Stancu, I. (2006). Activitatea bancară pentru dezvoltare durabilă [Banking Activity for Sustainable Development]. *Theoretical and Applied Economics*, 6(6(501)), 23–32. <http://store.ectap.ro/articole/107.pdf>
12. European Banking Authority (EBA). (2020). *Final report: Guidelines on loan origination and monitoring*. https://www.nbb.be/doc/cp/nl/2021/eba_gl_202006_finalreport.pdf
13. Guthrie, J., & Abeysekera, I. (2006). Content analysis of social, environmental reporting: What is new? *Journal of Human Resource Costing & Accounting*, 10(2), 114–126. <https://doi.org/10.1108/14013380610703120>
14. Korca, B., & Costa, E. (2021). Directive 2014/95/EU: Building a research agenda. *Journal of Applied Accounting Research*, 22(3), 401–422. <https://doi.org/10.1108/JAAR-05-2020-0085>
15. Krippendorff, K. (2013). *Content analysis: An introduction to its methodology*. SAGE Publications.
16. La Torre, M., Leo, S., & Panetta, C. (2021). Banks and environmental, social and governance drivers: Follow the market or the authorities? *Corporate Social Responsibility and Environmental Management*, 28(6), 1620–1634. <https://doi.org/10.1002/csr.2132>
17. Liang, L. W., Chang, H. Y., & Shao, H. L. (2018). Does sustainability make banks more cost efficient? *Global Finance Journal*, 38, 13–23. <https://doi.org/10.1016/j.gfj.2018.04.005>
18. Maali, B., Casson, P., & Napier, C. (2006). Social reporting by Islamic banks. *Abacus*, 42(2), 266–289. <https://doi.org/10.1111/j.1467-6281.2006.00200.x>
19. Miah, M. D., Rahman, S. M., & Mamoon, M. (2021). Green banking: The case of commercial banking sector in Oman. *Environment, Development and Sustainability*, 23, 2681–2697. <https://doi.org/10.1007/s10668-020-00695-0>
20. Monciardini, D. (2016). The 'coalition of the unlikely'driving the EU regulatory process of non-financial reporting. *Social and Environmental Accountability Journal*, 36(1), 76–89. <https://doi.org/10.1080/0969160X.2016.1149302>
21. Owen, D. L., Swift, T., & Hunt, K. (2001). Questioning the role of stakeholder engagement in social and ethical accounting, auditing, and reporting. *Accounting Forum*, 25(3), 264–282. <https://www.tandfonline.com/doi/abs/10.1111/1467-6303.00066>

22. Ritala, P., Huotari, P., Bocken, N., Albareda, L., & Puumalainen, K. (2018). Sustainable business model adoption among S&P 500 firms: A longitudinal content analysis study. *Journal of Cleaner Production*, *170*, 216–226. <https://doi.org/10.1016/j.jclepro.2017.09.159>
23. Siueia, T. T., Wang, J., & Deladem, T. (2019). Corporate social responsibility and financial performance: A comparative study in the Sub-Saharan Africa banking sector. *Journal of Cleaner Production*, *226*, 658–668. <https://doi.org/10.1016/j.jclepro.2019.04.027>
24. United Nations (UN). (2016). *Principles for responsible investment*. <https://www.unpri.org/download?ac=10948>
25. United Nations. (2022). *Principles for responsible banking: Guidance document*. United Nations Environment Programme Finance Initiative (UNEP FI). <https://www.unepfi.org/wordpress/wp-content/uploads/2022/04/PRB-Guidance-Documents-Jan-2022-D3.pdf>
26. Weber, R. P. (1990). *Basic content analysis* (2nd ed.). SAGE Publications. <https://www.daneshnamehicsa.ir/userfiles/files/1/9-%20Basic%20Content%20Analysis,%201990,%20Sage%20Publications.pdf>
27. Zhang, B., Yang, Y., & Bi, J. (2011). Tracking the implementation of green credit policy in China: Topdown perspective and bottom-up reform. *Journal of Environmental Management*, *92*(4), 1321–1327. <https://doi.org/10.1016/j.jenvman.2010.12.019>

CONTROL ENVIRONMENT AND INTEGRITY MANAGEMENT IN EDUCATIONAL SYSTEM IN GREECE

Stavros Chaidemenos^{*}, Panagiotis Kyriakogkonas^{**},
Evangelia Pappa^{***}

^{*} 77th Elementary School of Athens, Athens, Greece

^{**} School of Economics, Business and Computer Science, Neapolis University, Pafos, Cyprus

^{***} European University Cyprus, Nicosia, Cyprus; Open University of Cyprus, Nicosia, Cyprus



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Abstract

The education sector should promote ethical principles, values and generally accepted moral norms. Education staff should act as a real exemplar for youth so governance mechanisms that strengthen the control environment of educational units should be in place and should be promoted. Control environment should protect educational units and promote integrity that includes prudent use of resources, how teaching staff treat each other and how the interests of the educational unit are respected since violation of integrity leads to unethical behavior. The purpose of the research is twofold. First, to recognize and analyze the types of unethical behavior among the educational staff of any level of public education units in Greece. For this reason, a web-based questionnaire was deployed based on Kaptein (2003). Respondents rated the frequency of occurrence of different types of unethical behavior that do not promote integrity. Exploratory factor analysis generated 10 scales of unethical behavior primarily related to corruption, fraud and theft, conflict of Interest, abuse of authority, misuse of information, discrimination against colleagues, sexual harassment, indecent treatment of co-employees, waste and abuse of organizational resources

and last but not least, misconduct. Second, to identify elements of control environment that are in place and promote ethical conduct and set the tone at the educational unit level. For this reason, a second questionnaire was sent to the management of selective educational units that attempted to recognize the existence and the application of instruments that promote ethical behavior like a code of conduct, clear reporting lines, a chart of authority and responsibility, whistleblowing reporting lines, etc. Our results could provide the basis for targeted enhancements of the control environment of the various educational units and facilitate the drawing of centralized strategies that will promote integrity through principled-based codes of conduct and clear lines of responsibility, etc. Our research attempts to provide useful results and conclusions for further elaboration and analysis that will, hopefully, promote ethical conduct among the key stakeholders of the educational process, and of course, in any case, will set the basic seeds for ethical conduct from the members of future societies.

REFERENCES

1. Brozzetti, M. (2016). Guardians of integrity: internal audit can provide insight into corporate integrity and people-related risks. *Internal Auditor*, 73(2), 52–57. <https://link.gale.com/apps/doc/A450695663/AONE?u=googlescholar&sid=bookmark-AONE&xid=6b502c11>
2. Kabir, M. R., Sobhani, F. A., Mohamed, N., & Ashrafi, D. M. (2022). Impact of integrity and internal audit transparency on audit quality: The moderating role of blockchain. *Management & Accounting Review*, 21(1), 203–233. <https://doi.org/10.24191/MAR.V21i01-09>
3. Kaptein, M. (2003). Business ethics in the Netherlands: A survey. *Business Ethics, the Environment and Responsibility*, 12(2), 172–178. <https://doi.org/10.1111/1467-8608.00316>
4. Kwarteng, J. T. (2022). Breaches of integrity in teacher administration in Ghana. *International Journal for Educational Integrity*, 18(1), Article 13. <https://doi.org/10.1007/s40979-022-00106-z>
5. Pappa, E., Filos, J., Garefalakis, A., & Kyriakogkonas, P. (2022) Implementing strategic management via code of ethics: A quantitative research on private sector in Greece. *Theoretical Economics Letters*, 12(4), 1126–1136. <https://doi.org/10.4236/tel.2022.124061>
6. Reznik, S. (2021). Internal audit of school activities as a tool to manage the quality of education. *Economics & Education*, 6(4), 23–27. <https://doi.org/10.30525/2500-946X/2021-4-3>
7. Weiss, J. W. (2021). *Business ethics: A stakeholder and issues management approach*. Berrett-Koehler Publishers.

THE INFLUENCE OF SUSTAINABILITY ASPECTS ON B2B PURCHASING DECISIONS: THE SPECIAL CASE OF THE HEALTHCARE INDUSTRY

Patrick Ulrich^{*}, Simone Häußler^{**}

^{*} Aalen University, Aalen, Germany; University of Bamberg, Bamberg, Germany

^{**} Aalen University, Aalen, Germany



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Abstract

Companies are increasingly under pressure to report not only on their financial performance but also on their social and environmental performance in their entire supply chain. Regulations such as ISO 14001 or the *new supply chain* act provide a normative framework for sustainable corporate practices. Though, evidence on how sustainability aspects influence purchasing decisions is yet still limited. This research takes up from this point and investigates the influence of sustainability aspects on B2B purchasing decisions in German listed firms. Hence, we conducted a quantitative survey using a set of criteria. The goal of the survey was to determine 1) the level of sustainability maturity in general, as well as 2) the level of integration of sustainability into B2B purchasing decisions. We find that the respondents are already aware of the need to integrate sustainability aspects into different business areas, but sustainability aspects have no significant impact on B2B purchasing decisions yet. As a result, price and quality still play a crucial role in B2B purchasing decisions. Our findings shed new light on this under-researched area of B2B purchasing and could be of interest to policy-makers, companies and stakeholders.

1. INTRODUCTION

Supply chains are often dispersed around the globe. Companies are increasingly under pressure to report not only on their financial performance but also on their social and environmental performance in their entire supply chain (Johnsen et al., 2017; Schulze et al., 2018). Regulations such as ISO 14001 or the *new supply chain act* provide a normative framework for sustainable corporate practices. In this regard, one key topic is the field of sustainable purchasing of goods and services, as purchasing is crucial for a company's competitiveness (Locker & Grosse-Ruyken, 2019, p. 9). Sustainable purchasing, including ordering, sourcing, buying, receiving and selecting suppliers is one of the eight practices for supply chain sustainability (Silva et al., 2022).

According to Walker et al. (2012), sustainable purchasing involves mainstreaming sustainable development goals into the entire procurement and supply process. Miemczyk et al. (2012) define sustainable purchasing as *"[...] the consideration of environmental, social, ethical and economic issues in the management of the organization's external resources in such a way that the supply of all goods, services, capabilities and knowledge that are necessary for running, maintaining and managing the organization's primary and support activities provide value not only to the organization but also to society and the economy"* (p. 489).

The number of scientific publications on the field of sustainable purchasing has increased in recent years, post 2010, with a strong focus on environmental aspects (Rajeev et al., 2017). In the past, systematic literature reviews have shown that all 3 pillars of sustainability (economic, social and environmental) are rarely considered in the context of sustainable supply chain management publications, specifically, research addressing social issues are scarce (Seuring & Müller, 2008; Miemczyk et al., 2012; Rajeev et al. 2017). Recently, Silva et al. (2022) confirm these findings and quantify that environmental aspects are mostly observed in the literature (38% of total, n = 232), whereby the range of papers that mention mixed dimensions of sustainability count 20% of total. Silva et al. (2022) emphasize that social aspects in particular continue to be given low priority. It is also noticeable, that there are many studies on sustainable B2B purchasing decisions (Gazzola et al., 2017; Eberhart & Naderer, 2017; Simon-Kucher & Partners, 2021), but in contrast, the strategic area of B2B purchasing is scarcely explored (Zolkiewski et al., 2017).

This research aims to identify the current implementation status of the consideration of sustainability aspects in B2B procurement.

The major objectives of this study are to address the following gaps:

- to date, all dimensions of sustainability have rarely been considered in the context of sustainable procurement;

- there is little evidence of sustainability in B2B purchasing decisions and, following on from this;
- how barriers can be countered.

Hence, a survey was conducted aiming to collect and analyse data 1) to determine the level of sustainability maturity in general, and 2) the level of integration of sustainability into B2B purchasing decisions. The survey, running from April to May was accomplished in 2022.

Hereafter, the research methodology is described while some initial results are displayed. Distinctive features of B2B procurement will be outlined. Some suggestions for future research conclude the study.

2. METHODOLOGY

The healthcare industry was chosen as an example to conduct the survey as it is crucial for the overall development of the German economy and as it contributes 12% of the gross domestic product (GDP) (Federal Ministry for Economic Affairs and Climate Action of Germany, 2021, p. 2).

For this purpose, a written survey of healthcare stakeholders was conducted. The survey was addressed separately to different groups (clinics, general practitioners, drugstores, retailers) in order to examine the different facets of the question of the importance of sustainability for purchasing decisions.

The survey has been running since April 24, 2022, and is still ongoing. Currently, with approximately 12,000 organizations contacted, there is a net response of 154 companies. The survey was open until May 30, 2022.

The share of the total sample returned is distributed among the various channels as follows: 20 percent nursing homes, 50 percent clinics, remainder retail and physicians.

3. SURVEY STRUCTURE

The written company survey was focused on the following aspects:

- general information about the company;
- strategic importance of sustainability in the company (definition, maturity level, drivers);
- purchasing process in the company;
- costs and benefits of different product categories;
- future development of sustainability.

4. FIRST RESULTS AND OUTLOOK

The survey data showed that although sustainability is in principle on the agenda of B2B purchasing organizations in the healthcare sector, this criterion has so far played only a minor role in purchasing

decisions *per se*. The companies surveyed generally rate the maturity of their sustainability management as rather low on a scale of 1–5, with a mean value of 1.87. The reasons for dealing with sustainability were asked on a 0–1 scale. The organizations most frequently mention their own motivation (mean 0.42) and regulatory issues (0.40). In the context of concrete purchasing criteria, the following categories play a role: high delivery reliability (on a scale of 1–5, a mean value of 2.97), high product safety (2.83), quality (2.80), ensuring human rights (2.10) and sustainable image (1.73). In this respect, sustainability aspects do not yet seem to play a major role, at least in general.

By the time of the conference, further statistical analyses will have been carried out and the remaining questions of the questionnaire will have been evaluated, especially with regard to specific purchasing characteristics and price willingness.

REFERENCES

1. Eberhart, A. K., & Naderer, G. (2017). Quantitative and qualitative insights into consumers' sustainable purchasing behaviour: A segmentation approach based on motives and heuristic cues. *Journal of Marketing Management*, 33(13–14), 1149–1169. <https://doi.org/10.1080/0267257X.2017.1371204>
2. Federal Ministry for Economic Affairs and Climate Action of Germany. (2021). *Gesundheitswirtschaft Fakten & Zahlen, Daten 2020*. https://www.bmwk.de/Redaktion/DE/Publikationen/Wirtschaft/gesundheitswirtschaft-fakten-und-zahlen-2020.pdf?__blob=publicationFile&v=16
3. Gazzola, P., Colombo, G., Pezzetti, R., & Nicolescu, L. (2017). Consumer empowerment in the digital economy: Availing sustainable purchasing decisions. *Sustainability*, 9(5), 693. <https://doi.org/10.3390/su9050693>
4. Johnsen, T. E., Miemczyk, J., & Howard, M. (2017). A systematic literature review of sustainable purchasing and supply research: Theoretical perspectives and opportunities for IMP-based research. *Industrial Marketing Management*, 61, 130–143. <https://doi.org/10.1016/j.indmarman.2016.03.003>
5. Locker, A., Grosse-Ruyken, P. T. (2019). Finanzen in Einkauf und Supply Chain. In *Chefsache Finanzen in Einkauf und Supply Chain* (pp. 1–35). Springer Gabler. https://doi.org/10.1007/978-3-658-17538-2_1
6. Miemczyk, J., Johnsen, T. E., & Macquet, M. (2012). Sustainable purchasing and supply management: A structured literature review of definitions and measures at the dyad, chain and network levels. *Supply Chain Management*, 17(5), 478–496. <https://doi.org/10.1108/13598541211258564>
7. Rajeev, A., Pati, R. K., Padhi, S., & Govindan, K. (2017). Evolution of sustainability in supply chain management: A literature review. *Journal of Cleaner Production*, 162, 299–314. <https://doi.org/10.1016/j.jclepro.2017.05.026>
8. Schulze, H., Bals, L., & Johnsen, T. E. (2019). Individual competences for sustainable purchasing and supply management (SPSM): A literature and practice perspective. *International Journal of Physical Distribution & Logistics Management*, 49(3), 287–304. <https://doi.org/10.1108/IJPDLM-01-2018-0036>

9. Seuring, S., & Müller, M. (2008). From a literature review to a conceptual framework for sustainable supply chain management. *Journal of Cleaner Production*, 16(15), 1699–1710. <https://doi.org/10.1016/j.jclepro.2008.04.020>
10. Silva, M. E., Fritz, M. M., & El-Garaihy, W. H. (2022). Practice theories and supply chain sustainability: A systematic literature review and a research agenda. *Modern Supply Chain Research and Applications*, 4(1), 19–38. <https://doi.org/10.1108/MSRA-01-2021-0001>
11. Simon-Kucher & Partners. (2021). *Global sustainability study 2021: Consumers are key players for a sustainable future*. https://www.simon-kucher.com/sites/default/files/studies/Simon-Kucher_Global_Sustainability_Study_2021.pdf
12. Tacheva, Z., Simpson, N., & Ivanov, A. (2020). Examining the role of top management in corporate sustainability: Does supply chain position matter? *Sustainability*, 12(18), Article 7518. <https://doi.org/10.3390/su12187518>
13. Villena, V. H., & Gioia, D. A. (2018). On the riskiness of lower-tier suppliers: Managing sustainability in supply networks. *Journal of Operations Management*, 64(1), 65–87. <https://doi.org/10.1016/j.jom.2018.09.004>
14. Walker, H., Miemczyk, J., Johnsen, T., & Spencer, R. (2012). Sustainable procurement: Past, present and future. *Journal of Purchasing and Supply Management*, 18(4), 201–206. <https://doi.org/10.1016/j.pursup.2012.11.003>
15. Zolkiewski, J., Story, V., Burton, J., Chan, P., Gomes, A., Hunter-Jones, P., O'Malley, L., Peters, L. D., Raddats, C., & Robinson, W. (2017). Strategic B2B customer experience management: The importance of outcomes-based measures. *Journal of Services Marketing*, 31(2), 172–184. <https://doi.org/10.1108/JSM-10-2016-0350>

SESSION 4: CORPORATE GOVERNANCE RELATED ISSUES

**BALANCING CO-OP FIRMS'
MULTIFACED GOALS TO SMOOTH
GOVERNANCE ISSUES:
A BSC APPROACH**

Silvia Macchia *

* Department of Economic and Business Sciences, University of Cagliari, Cagliari, Italy



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Abstract

Co-op firms are peculiar organisations whose complex objectives often challenge management and governance. Studying their decision-making process, investigating the sometimes-conflicting utility function of co-op members against managers, and considering how performance measurement systems (PMS) may affect management issues increase context base studies which are valuable for researchers and practitioners.

Co-op firms are a form of collective action in which individuals join together on what would be more costly or impossible to achieve individually, generating so-called mutuality (Melis, 1989; Congiu, 2005). Mutuality is the exchange between a co-op and its members (Borzaga & Tortia, 2004; Zamagni, 2005) that goes beyond financial flows to encompass educational and social services. Co-op members provide the central organisation with resources for business implementation to receive, in turn, benefits, such as secure job positions, better conditions, or goods and services at affordable prices. It has been said that co-ops have a dual function: they simultaneously serve economic and social

purposes. For this reason, they fit uncomfortably into existing organisational paradigms.

Pursuing the co-op mutual purpose over time requires the adoption of a management attitude oriented to the creation of economic value for co-op members, that are privileged stakeholders, without sacrificing the needs of survival, development and strengthening of the co-op organisation itself (considered as an autonomous entity) (Matacena, 1990). An adequate remuneration of co-op members and their involvement in the co-op's strategic decision-making usually smooth governance issues by stimulating more collaboration in pursuing business goals, greater responsibility and a sense of belonging to the corporate reality (Charreaux & Desbrières, 2001; Melis, 1983; Freeman et al., 2010). Increased motivation and members' loyalty, in turn, define a more stable social structure in which the low members turnover favours the maintenance of production standards and supports business continuity (Gertler, 2001; Novkovic & Power, 2005). These opportunities are threatened when dissatisfied members gradually withdraw from the co-op, triggering a risky productive instability or even remaining in it but acting opportunistically and challenging the corporate mission.

Previous research has proved that PMSs are fundamental to achieving companies' missions (Kaplan & Norton, 2000; Hatry, 2006). Moreover, effective PMSs influence agency costs and managerial opportunism (Holmstrom, 1989; Songini & Gnan, 2015; Alfadhli & Alabdullah, 2016; Muneer et al., 2017; Quinn et al., 2018). According to Matacena (1990), effective management among co-op strategy, expected goals, and PMS are strategic for preserving a co-op firm's distinctive value. More specifically, for these organisations, a PMS should be able to:

- coordinating, at the strategic planning stage, social goals and financial goals;
- qualifying and quantifying social aims achieved and eventually their links with economic and financial aspects of co-op business;
- allowing internal and external stakeholders to assess and evaluate the financial and social performance of the co-op.

Looking specifically at co-op firms, patrons must become informed about the firm's operations to exercise effective control over the co-op management. Meanwhile, since collective decision-making processes may yield inefficient choices that do not maximise aggregate patron surplus, managers need to educate patrons and guide their decision-making to the best strategic solution. Previous studies have confirmed that accountability issues become relevant when co-op dimensions widen and complexity increases (Narver & Slater, 1990; Gertler, 2001). Therefore, investing in PMSs may reduce co-ops' slack performance and decrease governance conflicts between patrons and managers. Besides this, evidence shows that engaging in comprehensive strategic planning and control mechanisms is still a current issue for co-op firms (Quinn et al., 2018; Mikami, 2018).

Based on these considerations, this study aims to define and discuss a PM framework suitable to be adopted by co-op organisations engaged in agricultural activities (dairy, crops production, honey, vegetable production, etc.), marketing of their members’ products and agricultural input supply.

We choose to develop our PM model drawing on the balanced scorecard (BSC) model (Kaplan & Norton, 1996, 2000), which has been partly amended and integrated to cover co-ops’ specific PM and governance issues. The BSC has been selected due to its popularity worldwide and its alleged merit to clarify the interlinks among stakeholders’ strategic objectives to allow balanced achievements between them. It consists of an integrated business performance management system that promises to align strategic planning and performance control. While previous research on BSC application in investor-owned firms is broad, little attention has been given to BSC development for co-op businesses. Using a system thinking (ST) approach, we draw a model of cause-and-effect interconnections among co-op goals that drive the reasoning for the BSC modelling.

Findings show that the ST approach allows a profound reflection on co-op multifaced goals and cause-and-effect dynamics among strategic objectives. Such an approach leads to a more precise BSC modelling to reflect the peculiar features of co-ops’ performance (Figure 1). ST helps clarify interconnections among members and the co-op’s utility functions, increasing the opportunity to reconcile a different set of incompatible goals at first sight.

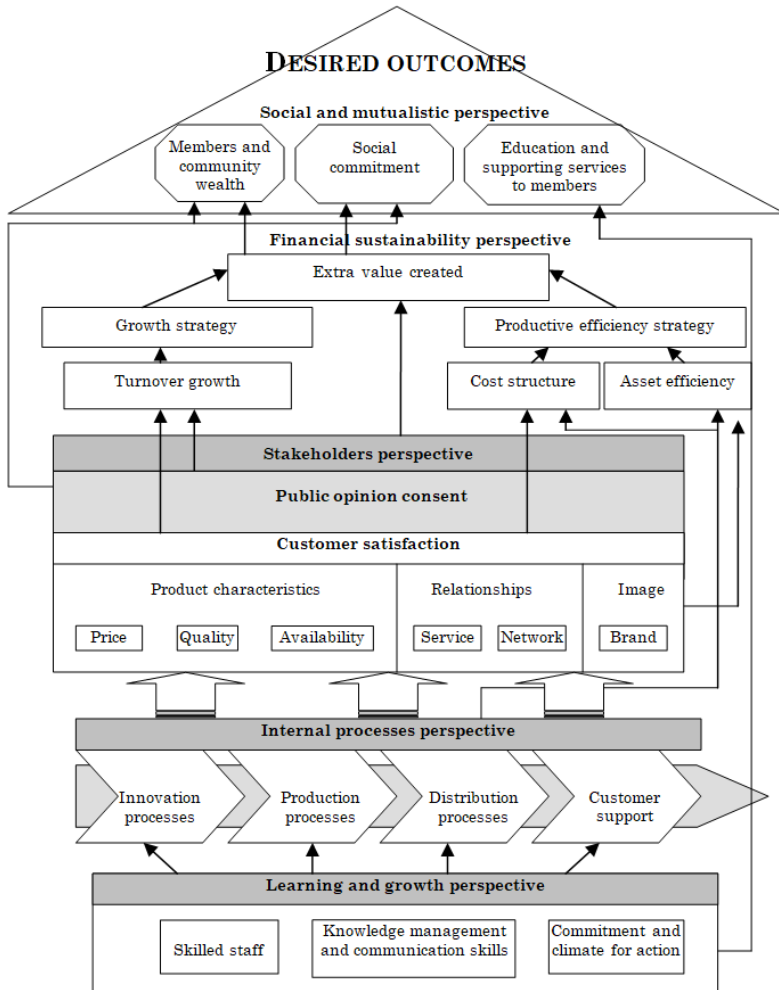
Figure 1. Causal relationships among co-op’s strategic objectives



Source: Author's elaboration.

It is relevant to consider that the process that we are suggesting for BSC development in co-op firms concentrates on making explicit the mental maps of the co-op's decision-makers, members and managers, sharing them, challenging their internal consistency and aligning them. Our BSC model identifies the central interconnections between social and financial priorities and organises activity around the crucial co-op's performance drivers (Figure 2).

Figure 2. A general framework for co-op's strategy map



Source: Author's elaboration based on Kaplan and Norton (2000, p. 11).

In our modified BSC, a new perspective is created for social and mutualistic goals which are prioritised over financial goals; the financial perspective is revised to refer to financial sustainability, while the customer perspective is widened to look at the public opinion as a strategic stakeholder sensitive to co-op strategy.

While amongst the existing PM tools, usually, financial systems record business activities that generate income while qualitative measures account for stakeholders' feedback and assess social impact, the model presented in this study offers a framework for combining both outcomes.

However, our study presents some limitations that future studies may iron out. The first limitation is related to the theoretical nature of this research. Our BSC framework is based on our interpretation of co-op performance issues and governance-related frictions as they have emerged from our literature review. For this reason, our model is not generalisable. Additionally, our BSC framework relies on the ST approach; therefore, our reasoning strongly depends on the methodology we have chosen to develop the BSC framework.

However, several alternative approaches exist to support the designing process of a BSC. Therefore, follow-up research is required to evaluate the feasibility of the BSC model presented in the current study. Action research and case studies using ST or other methodologies that rely on visualisation techniques for causal linkages will improve BSC development and produce additional knowledge on co-op decision-making and PM-related issues.

REFERENCES

1. Alfadhli, M. M. A., & Alabdullah, T. T. Y. (2016). Agency cost and management behavior: The role of performance as a moderator. *International Journal of Science and Research (IJSR)*, 5(1), 1858–1864. <https://doi.org/10.21275/v5i1.NOV153199>
2. Borzaga, C., & Tortia, E. (2004). *Dalla cooperazione mutualistica alla cooperazione sociale* (AICCON Working Paper No. 6-2004). Associazione Italiana per la Cultura della Cooperazione e del Non Profit. <https://www.aiccon.it/wp-content/uploads/2017/03/WP-6.pdf>
3. Charreaux, G., & Desbrières, P. (2001). Corporate governance: Stakeholder value versus shareholder value. *Journal of Management & Governance*, 5(2), 107–128. <https://doi.org/10.2139/ssrn.262902>
4. Congiu, P. (2005). *Il bilancio d'esercizio delle imprese cooperative*. Giuffrè.
5. Freeman, R. E., Harrison, A. C., Wicks, A. C., Parmar, B. L., & De Colle, S. (2010). *Stakeholder theory: The state of the art*. Cambridge University Press. <https://doi.org/10.1017/CBO9780511815768>
6. Gertler, M. (2001). *Rural co-operatives and sustainable development*. Centre for the Study of Co-ops, University of Saskatchewan. <https://usaskstudies.coop/documents/books,-booklets,-proceedings/rural-co-ops-sustainable-dev.pdf>

7. Hatry, H. P. (2006). *Performance measurement: Getting results*. The Urban InSTITUTE.
8. Holmstrom, B. (1989). Agency costs and innovation. *Journal of Economic Behavior & Organization*, 12(3), 305–327. [https://doi.org/10.1016/0167-2681\(89\)90025-5](https://doi.org/10.1016/0167-2681(89)90025-5)
9. Kaplan, R. S., & Norton, P. D. (1996). Using the balanced scorecard as a strategic management system. *Harvard Business Review*, 74(1), 75–85. <https://hbr.org/2007/07/using-the-balanced-scorecard-as-a-strategic-management-system>
10. Kaplan, R. S., & Norton, P. D. (2000). *The strategy-focused organization: How balanced scorecard companies thrive in the new business environment*. Harvard Business Review Press.
11. Maticena, A. (1990). *Impresa cooperativa: Obiettivi finalizzanti. Risultati gestionali e bilancio d'esercizio*. Clueb.
12. Melis, G. (1983). *Il bilancio di esercizio nell'impresa cooperativa*. Cedam.
13. Melis, G. (1989). *Gli indici di bilancio delle imprese cooperative*. Cedam.
14. Mikami, K. (2018). Are cooperative firms a less competitive form of business? Production efficiency and financial viability of cooperative firms with tradable membership shares. *Economic Systems*, 42(3), 487–502. <https://doi.org/10.1016/j.ecosys.2017.11.005>
15. Muneer, S., Ahmad, R. A., & Ali, A. (2017). Impact of financial management practices on SMEs profitability with moderating role of agency cost. *Information Management and Business Review*, 9(1), 23–30. <https://doi.org/10.22610/imbr.v9i1.1593>
16. Narver, J. C., & Slater, S. F. (1990). The effect of a market orientation on business profitability. *Journal of Marketing*, 54(4), 20–35. <https://doi.org/10.1177/002224299005400403>
17. Novkovic, S., & Power, N. (2005). Agricultural and rural cooperative viability: A management strategy based on cooperative principles and values. *Journal of Rural Cooperation*, 33(1), 67–77. <https://doi.org/10.22004/ag.econ.59695>
18. Quinn, M., Hiebl, M. R., Moores, K., & Craig, J. B. (2018). Future research on management accounting and control in family firms: Suggestions linked to architecture, governance, entrepreneurship and stewardship. *Journal of Management Control*, 28(4), 529–546. <https://doi.org/10.1007/s00187-018-0257-1>
19. Songini, L., & Gnan, L. (2015). Family involvement and agency cost control mechanisms in family small and medium-sized enterprises. *Journal of Small Business Management*, 53(3), 748–779. <https://doi.org/10.1111/jsbm.12085>
20. Zamagni, S. (2005). *Per una teoria economico-civile dell'impresa cooperativa* (AICCON Working Paper No. 10-2005). Associazione Italiana per la Cultura della Cooperazione e del Non Profit. <https://www.aiccon.it/wp-content/uploads/2017/03/WP-10.pdf>

ENTERING THE ERA OF DECENTRALIZATION: AN INVESTIGATION OF NEW TRENDS IN DATA MANAGEMENT

Erik Karger^{*}, Marvin Jagals^{*}

^{*} Chair of Information Systems and Strategic IT Management, University of Duisburg-Essen,
Essen, Germany



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Abstract

Data build the foundation for many modern technologies like artificial intelligence. Data are of increasing relevance for companies. Nowadays, however, the management of data is no longer only an intraorganizational phenomenon. To get access to more data, companies are increasingly willing to share their own data with other organizations. Furthermore, decentralized technologies like blockchain are supposed to have potentials for the management, storage, or sharing of data. This study aims to investigate three current trends of decentralization within data management: Interorganizational data governance, data ecosystems, and blockchain-based data management. We provide an initial overview of these developments and present avenues for future research.

1. INTRODUCTION

A lot of different sources increasingly generate data. According to a report published by the World Economic Forum in 2019, it is estimated that 200 exabytes of data will be produced every day in 2025

(Desjardins, 2019). One major reason for this boost in data generation speed in recent years is the emergence of smart devices and connected networks, resulting in a rising spread of the IoT (Khan et al., 2016; Silva et al., 2019, p. 14; Silva et al., 2018). For companies, data can have significant advantages when analyzed, leading to the metaphor of data being the new oil (Hartmann et al., 2016, p. 1382; Wiener et al., 2020).

In the last decade, technologies to analyze data, like artificial intelligence (AI) and big data analytics, experienced exponential growth (Günther et al., 2017, p. 191; Wiener et al., 2020, p. 66). Some researchers believe that big data “offer unprecedented opportunities” (Wiener et al., 2020, p. 66) for companies and that it is “one of the most significant technology disruptions for businesses since the meteoric rise of the Internet and the digital economy” (Chen et al., 2017, p. 19). By supporting, for example, the optimization of supply chain management or setting optimal prices for products and services, big data furthermore is believed to help achieve more efficient and effective operations (Chen et al., 2012; Davenport et al., 2012; McAfee & Brynjolfsson, 2012).

The increasing relevance of data for companies has also led to more trends that exhibit decentralization characteristics. To benefit from multiple sources of data, and to enable the exchange of data between several companies, organizations are increasingly willing to soften organizational boundaries. This makes it necessary to govern data not only within one company but across different organizations, leading to developments such as interorganizational data governance (Jagals & Karger, 2021) and data ecosystems. Furthermore, the blockchain technology is increasingly investigated in relation to data, for example, for the management of AI data (Karger et al., 2021) or for enhancing inter-organizational data governance (Jagals et al., 2021). We aim to shed light on these recent data management developments characterized by decentralization. Hereby, we aim to provide interested researchers and practitioners with an overview of these new trends and outline avenues for future research. Hence, we address the following research question:

RQ: What are relevant and recent decentralized developments in data management?

In total, this study deals with three decentralized developments of data. First, the potential of blockchain for data management will be investigated. Furthermore, data ecosystems will be presented as a recent manifestation of interorganizational networks and ecosystems. Finally, we introduce interorganizational data governance.

2. FOUNDATIONS — DATA IN COMPANIES

Companies have already tried to use and analyze the available data for a long time to gain benefits, insights, and competitive advantages.

In the beginning, data were first utilized for automated data processing for specialized operations in companies. Thus, data were seen from a functional viewpoint, with data management as a subset of data administration on certain database systems (Aiken et al., 2013). The second business data management phase can be dated to the late 1980s and 1990s. In these years, integrated information systems were introduced. Furthermore, data was progressively exchanged across end-to-end processes rather than being confined to discrete company activities (Grover & Teng, 1991). In the 2010s, internal and external data were increasingly used for digital business models or data-driven services (Buhl et al., 2013; Lycett, 2013; Wixom & Ross, 2017). Due to the increasing relevance of data, technological and organizational skills for handling and using the data became increasingly relevant. For organizations, it is not only important to be able to gather and store increasing volumes of diverse data. Also, the ability to utilize modern and advanced analytics technologies is nowadays crucial for companies (Abbasi et al., 2016; Müller et al., 2016).

3. BLOCKCHAIN FOR DATA MANAGEMENT

To the best of our knowledge, no common definition for the term "blockchain" exists because blockchain is nowadays a complex technology with many different facets and manifestations. In this article, we follow the definition proposed by Treiblmaier (2018) and define blockchain as "[...] a digital, decentralized and distributed ledger in which transactions are logged and added in chronological order to create permanent and tamper-proof records" (p. 547). This definition already contains the essential criteria and characteristics from which the blockchain obtains its uniqueness. First, a blockchain network is decentralized and distributed. No central authority or instance is required to maintain or run the blockchain network (Nakamoto, 2008; Raval, 2016). Furthermore, the blockchain's blocks are cryptographically linked to each other with hash functions. When data in one of the blocks are changed, this is immediately recognized when these blocks are distributed within the network. This fact leads to resistance to data modification (Narayanan et al., 2016). A blockchain's basic units are transactions stored together in one block. These transactions can be linked to payment processes or simply contain information (Treiblmaier, 2018, p. 546). According to Iansiti and Lakhani (2017, p. 125):

- *Distributed database*: The whole database and its complete history are available for each blockchain party. No single party controls the data and information, and all parties can verify the transactions without using an intermediary.
- *Peer-to-peer transmission*: The network peers can communicate without a central node. This includes the storing and forwarding of information to all other peers.

- *Transparency with pseudonymity*: Transactions and their associated values are visible to everyone within a blockchain network. The single nodes on a blockchain have an alphanumeric address as a clear identifier, and transactions occur between these blockchain addresses.

- *Irreversibility of records*: Once a transaction is part of the blockchain, it cannot be altered or changed, because a transaction is linked to each transaction carried out beforehand. Various approaches and algorithms ensure transactions' permanence and correct order.

- *Computational logic*: The blockchain's computational logic makes it possible to program on the blockchain. Users can set up algorithms and rules that automatically trigger transactions between nodes.

There are different ideas and proposals on how blockchain might be used in data and data governance. For example, blockchain might serve as a foundation for interorganizational data governance (Jagals et al., 2021). Apart from data governance, blockchain is also discussed for the management or storage of AI data (Karger et al., 2021). The potential advantages and benefits of using blockchain for AI data management are long. One problem is that data can be easily hacked or tampered with when stored centralized (Salah et al., 2019). As it allows for distributed storage, the decentralized blockchain might be an advantage against this threat (Karger et al., 2021). Furthermore, by using smart contracts that enable an access control that allows making the data accessible to authorized users only, blockchain can help to ensure the data owner's privacy (Johnson et al., 2019; Karger et al., 2021; Passerat-Palmbach et al., 2019).

REFERENCES

1. Abbasi, A., Sarker, S., & Chiang, R. H. L. (2016). Big data research in information systems: Toward an inclusive research agenda. *Journal of the Association for Information Systems*, 17(2), 1–32. <https://doi.org/10.17705/1jais.00423>
2. Aiken, P., Gillenson, M., Zhang, X., & Rafner, D. (2013). Data management and data administration: Assessing 25 years of practice. In K. Siau (Ed.), *Innovations in database design, web applications, and information systems management* (pp. 289–309). IGI Global. <https://doi.org/10.4018/978-1-4666-2044-5.ch011>
3. Buhl, H. U., Röglinger, M., Moser, F., & Heidemann, J. (2013). Big data. *Business & Information Systems Engineering*, 5, 65–69. <https://doi.org/10.1007/s12599-013-0249-5>
4. Chen, H., Chiang, R. H. L., & Storey, V. C. (2012). Business intelligence and analytics: From big data to big impact. *MIS Quarterly*, 36(4), 1165–1188. <https://doi.org/10.2307/41703503>
5. Chen, H.-M., Schutz, R., Kazman, R., & Matthes, F. (2017). How Lufthansa capitalized on big data for business model renovation. *MIS Quarterly Executive*, 16(1), 19–34. <https://aisel.aisnet.org/misqe/vol16/iss1/4/>

6. Davenport, T. H., Barth, P., & Bean, R. (2012). How 'big data' is different. *MIT Sloan Management Review*, 54(1), 43–46. <https://sloanreview.mit.edu/article/how-big-data-is-different/>
7. Desjardins, J. (2019, April 17). How much data is generated each day? *World Economic Forum*. <https://www.weforum.org/agenda/2019/04/how-much-data-is-generated-each-day-cf4bddf29f/>
8. Grover, V., & Teng, J. T. C. (1991). How effective is data resource management? Reassessing strategic objectives. *Information System Management*, 8(3), 16–20. <https://doi.org/10.1080/07399019108964992>
9. Günther, W. A., Rezazade Mehrizi, M. H., Huysman, M., & Feldberg, F. (2017). Debating big data: A literature review on realizing value from big data. *The Journal of Strategic Information Systems*, 26(3), 191–209. <https://doi.org/10.1016/j.jsis.2017.07.003>
10. Hartmann, P. M., Zaki, M., Feldmann, N., & Neely, A. (2016). Capturing value from big data: A taxonomy of data-driven business models used by start-up firms. *International Journal of Operations & Production Management*, 36(10), 1382–1406. <https://doi.org/10.1108/IJOPM-02-2014-0098>
11. Iansiti, M., & Lakhani, K. R. (2017). The truth about blockchain. *Harvard Business Review*, 95(1), 118–127. <https://hbr.org/webinar/2017/02/the-truth-about-blockchain>
12. Jagals, M., & Karger, E. (2021). Inter-organizational data governance: A literature review. *ECIS 2021 Research Papers*, 57. https://aisel.aisnet.org/ecis2021_rp/57
13. Jagals, M., Karger, E., Ahlemann, F., & Brée, T. (2021). Enhancing inter-organizational data governance via blockchain-shaping scopes and research avenues. In *Proceedings of the International Conference on Information Systems (ICIS 2021)*, 7. <https://aisel.aisnet.org/ecis2021/governance/governance/7>
14. Johnson, M., Jones, M., Shervey, M., Dudley, J. T., & Zimmerman, N. (2019). Building a secure biomedical data sharing decentralized app (DApp): Tutorial. *Journal of Medical Internet Research*, 21(10), Article e13601. <https://doi.org/10.2196/13601>
15. Karger, E., Jagals, M., & Ahlemann, F. (2021). Blockchain for AI data — State of the art and open research. In *Proceedings of the International Conference on Information Systems (ICIS 2021)*, 2. <https://aisel.aisnet.org/ecis2021/fintech/fintech/2>
16. Khan, M., Silva, B. N., & Han, K. (2016). Internet of things based energy aware smart home control system. *IEEE Access*, 4, 7556–7566. <https://doi.org/10.1109/ACCESS.2016.2621752>
17. Lycett, M. (2013). 'Datafication': Making sense of (big) data in a complex world. *European Journal of Information Systems*, 22(4), 281–386. <https://doi.org/10.1057/ejis.2013.10>
18. McAfee, A., & Brynjolfsson, E. (2012). Big data: The management revolution. *Harvard Business Review*, 90(10), 60–68. <https://hbr.org/2012/10/big-data-the-management-revolution>
19. Müller, O., Junglas, I., vom Brocke, J., & Debortoli, S. (2016). Utilizing big data analytics for information systems research: Challenges, promises and guidelines. *European Journal of Information Systems*, 25(4), 289–302. <https://doi.org/10.1057/ejis.2016.2>

20. Nakamoto, S. (2008). *Bitcoin: A peer-to-peer electronic cash system*. <https://bitcoin.org/bitcoin.pdf>
21. Narayanan, A., Bonneau, J., Felten, E., Miller, A., & Goldfeder, S. (2016). *Bitcoin and cryptocurrency technologies: A comprehensive introduction*. Princeton University Press.
22. Passerat-Palmbach, J., Farnan, T., Miller, R., Gross, M. S., Flannery, H. L., & Gleim, B. (2019). *A blockchain-orchestrated federated learning architecture for healthcare consortia*. arXiv. <https://arxiv.org/pdf/1910.12603>
23. Raval, S. (2016). *Decentralized applications: Harnessing bitcoin's blockchain technology* (1st ed.). O'Reilly Media. <https://dl.acm.org/doi/10.5555/3074145>
24. Salah, K., Rehman, M. H. U., Nizamuddin, N., & Al-Fuqaha, A. (2019). Blockchain for AI: Review and open research challenges. *IEEE Access*, 7, 10127–10149. <https://doi.org/10.1109/ACCESS.2018.2890507>
25. Silva, B. N., Diyan, M., & Han, K. (2019). Big data analytics. In M. Khan, B. Jan, & H. Farman (Eds.), *Deep learning: Convergence to big data analytics* (pp. 13–30). Springer. https://doi.org/10.1007/978-981-13-3459-7_2
26. Silva, B. N., Khan, M., & Han, K. (2018). Internet of things: A comprehensive review of enabling technologies, architecture, and challenges. *IETE Technical Review*, 35(2), 205–220. <https://doi.org/10.1080/02564602.2016.1276416>
27. Treiblmaier, H. (2018). The impact of the blockchain on the supply chain: A theory-based research framework and a call for action. *Supply Chain Management*, 23(6), 545–559. <https://doi.org/10.1108/SCM-01-2018-0029>
28. Wiener, M., Saunders, C., & Marabelli, M. (2020). Big-data business models: A critical literature review and multiperspective research framework. *Journal of Information Technology*, 35(1), 66–91. <https://doi.org/10.1177/0268396219896811>
29. Wixom, B. H., & Ross, J. W. (2017). How to monetize your data. *MIT Sloan Management Review*. <https://sloanreview.mit.edu/article/how-to-monetize-your-data/>

USING AUGMENTED REALITY FOR ORGANIZATIONAL LEARNING: AN OVERVIEW OF POSSIBLE APPLICATIONS AND POTENTIALS

Dustin Syfuß *, Erik Karger **

* consenso Consulting GmbH, Bielefeld, Germany

** Chair of Information Systems and Strategic IT Management, University of Duisburg-Essen,
Essen, Germany



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Abstract

Organizations and enterprises face a fast-paced and rapidly changing environment today. To be able to keep up with the environment's changes, organizational learning is important. Augmented reality (AR) might be a technology that can help to improve the efficiency and possibilities of organizational learning. AR offers a technical possibility to extend the real environment with additional information. Teaching is one of the various areas in AR that might make sense for. Here, the added value from AR, such as an increase in learning success and motivation, has been identified. At the same time, collaborative learning and working on virtual models are possible through AR. In this process, people can understand contexts more efficiently through real-time feedback, as well as a different perspective on objects and processes. Despite its potential, the application of AR for organizational learning is a topic that is underexplored. This study aims to shed light on the potential that AR can have for educational purposes. Based on a review of existing literature, we show different applications of AR for learning and outline and summarize the results of prior studies.

1. INTRODUCTION

Organizations and enterprises face a fast-paced and rapidly changing environment today. Reasons are, among others, technological developments, changing regulations, and the increasing relevance of sustainable behavior. To keep up with all the recent developments and to stay competitive, companies need the ability to adapt quickly to the changes that occur. However, to be able to remain flexible and to enable organizational change, organizational learning is necessary. Organizational learning is important for organizations and a precondition and preparation for organizational change, or as Tu and Wu (2021) state, by "integrating resources and creating new knowledge, organizational learning is key to carrying out business strategies and achieving sustainable competitive advantage" (p. 504). Organizational learning is a field that has been explored a lot in existing research. Topics that have been investigated include, among others, the role of organizational learning to improve an enterprises' green innovation capabilities (Tu & Wu, 2021), or their potential for high-tech enterprises (Lin et al., 2020) or SMEs (Abbas et al., 2020).

The impact and potential of digital technologies for teaching and organizational learning have already been subject to research (Nair et al., 2022; Nimmi et al., 2022). One technology that might offer several opportunities in the context of education is augmented reality (AR). Although the potential of AR has been investigated for education purposes already, its application for organizational learning remains underexplored. To the best of our knowledge, there is no comprehensive review that summarizes existing research on AR applied in organizational learning and outlines its potential. Given the benefits of AR for organizational learning, this lack of research is surprising. We believe that a structured review and summary of the existing knowledge could not only help practitioners to get an overview of this promising AR application. Additionally, we believe that a systematic review of literature can serve scholars as a platform for future research (Paul & Criado, 2020). We, therefore, aim to investigate AR's potential for organizational learning by addressing the following research question:

RQ: How can AR be used for organizational learning and education purposes and what are resulting benefits and applications?

To answer the research question, we conduct a literature review and systematically collect and analyze existing research on this topic. The search was conducted in both Scopus and Web of Science, which are the largest and best-known scientific databases (Forliano et al., 2021). We identified different articles that are presented in the study at hand.

2. FOUNDATIONS OF AR

To better classify the term augmented reality, Milgram et al. (1995) introduced the reality-virtuality continuum. The reality-virtuality continuum aims to answer the question of how AR is connected to virtual reality (VR). While AR has a real environment, AV has a virtual one. Milgram et al. (1995) define the shared space of AR and AV as mixed reality (MR). A definition for the term AR is offered by Azuma (1997). He defines AR as any system that has the following three properties. The three properties are combining real and virtual, being interactive in real time, and existing in three-dimensional space. This definition does not limit AR to a specific technology, but to existing properties. Lee (2012) states that the environment is real, but augmented with information and images from the system. However, this limits the augmented information to the visual domain. FitzGerald et al. (2013), on the other hand, criticize the need to pay much more attention to the development of digital media, which allow us to augment or enrich our environment with further information. Thereby there is visual, auditory or haptic information (FitzGerald et al., 2013). van Krevelen and Poelman (2019) state that besides the previously mentioned senses, smell is not excluded as augmentation.

Wang et al. (2018) divide the devices for using AR into three different mobility categories. They distinguish wearable, handheld, and fixed devices. Head-mounted displays (HMD), such as the Microsoft HoloLens, are mentioned as attractable devices by Wang et al. (2018). Gesture-recognizing devices are embodied, for example, by pinch gloves (gloves with built-in sensors). The category of handheld devices includes all mobile devices, such as tablets, smartphones, and other ways of holding a display in the hand. Likewise, personal digital assistants and laptops are considered mobile devices. Furthermore, according to van Krevelen and Poelman (2019), handheld transportable projectors are included (FitzGerald et al., 2013; Freitas & Campos, 2008; van Krevelen & Poelman, 2019; Wang et al., 2018).

The third category is the locally fixed devices, such as a computer screen (Wang et al., 2018). The nature of the devices again offers three different forms of visualization (van Krevelen & Poelman, 2019). In the so-called video see-through method, one or more cameras are first used to record the field of view. This is subsequently augmented by the computer and then played back in the display, providing the user with additional information. This method is currently the cheapest and easiest to implement (Azuma, 1997; van Krevelen & Poelman, 2019). Furthermore, there are optical see-throughs. In this case, optical fiber combiners are placed in front of the user's eyes. Through these, the information is projected to the correct locations in the field of view.

This technique has the advantage over the video see-through method of being parallax-free since the projecting letters are transparent. A disadvantage, however, is the price (Azuma, 1997; van Krevelen & Poelman, 2019). Projective visualization, on the other hand, does not require devices directly in front of the user's eyes but rather uses one or more projectors that augment the information into the environment. Disadvantages are that the projectors have to be recalibrated when the environment is changed and they are not usable in outdoor areas, where the conditions for brightness and contrast are not for brightness and contrast are not given (van Krevelen & Poelman, 2019).

3. FINDINGS

In a study by Chiang et al. (2014), the influence of AR on the learning success of fourth-grade students in biology was tested. The study was conducted with the aid of a tablet and the haptic gesture control provided via it. The students were asked to look for specific plants on the school grounds and were given directions to selected locations via GPS. The possible locations were augmented into the overall image of the camera as small image sections so that the students had the various targets and the real environment in front of their eyes. At the previously defined locations, the students could then compare the available plants with those of the image sections. To secure the results, photos of the respective plant were uploaded via the Internet and the task was marked as completed. Further, links presented on the screen could be used to obtain more information. It was found that AR significantly increases learning success and motivation. Furthermore, it was found that cognitive load was not significantly increased by AR (Chiang et al., 2014). This may be due to the fact that supportive information could be retrieved at any time when it was needed.

In a similar study, Esposito-Betan and Santos (2017) investigated the use of tablets to provide information about books in a library. In this process, a book could be augmented with digital information. To do this, the book first had to be scanned with the camera, then a comparison was made with a database, which returned the information to be displayed as an augmentation on the book. A wide variety of media could be used as information, including links to further information-giving pages. Most study participants indicated that AR assisted them in finding information and helped them learn more about the library's resources. In this regard, 75 percent of study participants indicated that no prior technical knowledge was necessary to use the AR application. To this end, it should be noted that a large portion of the study subjects was under the age of 30. Over 94 percent of the respondents indicated that they would like to see this system on a larger scale for the library.

REFERENCES

1. Abbas, J., Zhang, Q., Hussain, I., Akram, S., Afaq, A., & Shad, M. A. (2020). Sustainable innovation in small medium enterprises: The impact of knowledge management on organizational innovation through a mediation analysis by using SEM approach. *Sustainability*, 12(6), Article 2407. <https://doi.org/10.3390/su12062407>
2. Azuma, R. T. (1997). A survey of augmented reality. *Presence: Teleoperators and Virtual Environments*, 6(4), 355–385. <https://doi.org/10.1162/pres.1997.6.4.355>
3. Chiang, T. H. C., Yang, S. J. H., & Hwang, G.-J. (2014). An augmented reality-based mobile learning system to improve students' learning achievements and motivations in natural science inquiry activities. *Educational Technology & Society*, 17(4), 352–365. <https://drive.google.com/file/d/1UoXcALKOMC0qesxZPm5QxNEoOkuWjF5N/view>
4. Esposito-Betan, S. M. S., & Santos, J. F. (2017, June 18–22). Advantages and challenges of using augmented reality for library orientations in an academic/research library setting. In *Proceedings of the 38th Annual IATUL Conference*, 7. Free University of Bozen-Bolzano. <https://docs.lib.purdue.edu/iatul/2017/challenges/7/>
5. FitzGerald, E., Ferguson, R., Adams, A., Gaved, M., Mor, Y., & Thomas, R. (2013). Augmented reality and mobile learning. *International Journal of Mobile and Blended Learning*, 5(4), 43–58. <https://doi.org/10.4018/ijmbl.2013100103>
6. Forliano, C., De Bernardi, P., & Yahiaoui, D. (2021). Entrepreneurial universities: A bibliometric analysis within the business and management domains. *Technological Forecasting and Social Change*, 165, Article 120522. <https://doi.org/10.1016/j.techfore.2020.120522>
7. Freitas, R., & Campos, P. (2008, September 1–5). SMART: A System of augmented reality for teaching 2nd grade students. In *Proceedings of the Conference: People and Computers XXII Culture, Creativity, Interaction (HCI)*. BCS Learning & Development. <https://doi.org/10.14236/ewic/HCI2008.26>
8. Lee, K. (2012). Augmented reality in education and training. *TechTrends*, 56(2), 13–21. <https://doi.org/10.1007/s11528-012-0559-3>
9. Lin, R., Xie, Z., Hao, Y., & Wang, J. (2020). Improving high-tech enterprise innovation in big data environment: A combinative view of internal and external governance. *International Journal of Information Management*, 50, 575–585. <https://doi.org/10.1016/j.ijinfomgt.2018.11.009>
10. Milgram, P., Takemura, H., Utsumi, A., & Kishino, F. (1995, December 21). Augmented reality: A class of displays on the reality-virtuality continuum. In H. Das (Ed.), *SPIE Proceedings, Telemanipulator and Telepresence Technologies* (pp. 282–292). SPIE. <https://doi.org/10.1117/12.197321>
11. Nair, S., Mathew, J., & Ravikumar, T. (2022). Levelling up organisational learning through gamification: Based on evidence from public sector organisations in India. *South Asian Journal of Human Resources Management*. Advance online publication. <https://doi.org/10.1177/23220937221082772>

12. Nimmi, P. M., Vilone, G., & Jagathyraj, V. P. (2022). Impact of AI technologies on organisational learning: Proposing an organisation cognition schema. *Development and Learning in Organizations*, 36(5), 7–9. <https://doi.org/10.1108/DLO-08-2021-0148>
13. Paul, J., & Criado, A. R. (2020). The art of writing literature review: What do we know and what do we need to know? *International Business Review*, 29(4), Article 101717. <https://doi.org/10.1016/j.ibusrev.2020.101717>
14. Tu, Y., & Wu, W. (2021). How does green innovation improve enterprises' competitive advantage? The role of organizational learning. *Sustainable Production and Consumption*, 26, 504–516. <https://doi.org/10.1016/j.spc.2020.12.031>
15. Van Krevelen, D. W. F., & Poelman, R. (2019). A survey of augmented reality technologies, applications and limitations. *International Journal of Virtual Reality*, 9(2), 1–20. <https://doi.org/10.20870/IJVR.2010.9.2.2767>
16. Wang, M., Callaghan, V., Bernhardt, J., White, K., & Peña-Rios, A. (2018). Augmented reality in education and training: pedagogical approaches and illustrative case studies. *Journal of Ambient Intelligence and Humanized Computing*, 9(5), 1391–1402. <https://doi.org/10.1007/s12652-017-0547-8>

AFFECTING FACTORS INTEREST IN STABLECOIN AS THE DIGITAL MONEY

Peerapat Wattanasin^{*}, Tanpat Kraiwanit^{*},
Somchai Virunhaphol^{*}

^{*} Faculty of Economics, Rangsit University, Lak Hok, Pathum Thani, Thailand



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Abstract

This research aims to study the factors influencing interest in stablecoins using convenience sampling from a nationwide sample by collecting data through online Google Forms distributed on platforms such as Facebook and Line. This research selected 460 samples from the general public and analyzed them with the analysis of covariance (ANCOVA) model. The results showed that living space affected interest in stablecoins at a significance level of 0.05. Living in a residential area in Bangkok also had an impact on interest in stablecoins. Other factors such as age, education level, and income were not significantly related at 0.05. Government digital currency service providers could use these results to develop a plan for disseminating knowledge among the target groups for maximum efficiency. This could also be applied to the government's knowledge dissemination regarding central bank digital currency (CBDC), which would be the first step in Thailand's move towards becoming a digital economy. It could also be used as a basis for further research to explore the reasons why people living in Bangkok are more interested in stablecoins than those in other provinces.

1. INTRODUCTION

The advancement of information and communication technologies (ICT), as well as the spread of the Internet, have all contributed to globalization entering a qualitatively new stage of development. The computer and

newly generated ICTs are the main technological attributes of the current stages of globalization, uniting the world into a single communication system, creating an integrated financial and information space. In addition, the economy is primed for new and emerging forms of consumption. This is the result of a convergence of technological, economic, and sociocultural phenomena that is currently changing traditional forms of commercial exchange. All of these occurrences highlight the significance of the new trend in the development of the society's socioeconomic structure (Limna et al., 2022a). Humans have used a wide range of mediums of exchange in the past, from objects and rare metals to banknotes and coins. In this era, with the arrival of globalization, countries in each region are connected. This has been accompanied by the great leaps in technology that have been developed by many organizations. Furthermore, the financial industry has also created an innovation called digital money to reduce the restrictions on banknotes and coins, such as ease of portability and the speed of cross-border transfers (Bank of Thailand, 2017). Digital money is widely known, but another type of exchange, in the form of digital currency or cryptocurrency, is also gaining attention. Cryptocurrencies are different from standard currency because these funds do not necessarily relate to the local currency and are generated through a complex mathematical encryption process. Since these cryptocurrencies do not need asset backing, their value is based on supply and demand, resulting in price volatility ("Getting to know cryptocurrency", 2020; Limsakul & Kraiwanit, 2020). Despite the widespread adoption of cryptocurrencies, the stability of the currency is still important. A type of digital currency with the addition of local currency backing its value is known as a stablecoin. A stablecoin is a digital currency that has a mechanism for maintaining value. For example, this may include its value being pegged to the world's major currencies, being backed up by commodities or being throttled by computer mechanisms (Mita et al., 2019; Jenweeranon, 2022). In addition, stablecoins are similar to money because of their ability to maintain their value. Therefore, stablecoins are increasingly being used as a medium of payment (Bolt et al., 2022; Morgan, 2022). The type of stablecoin studied in this study was the fiat-collateralized stablecoin backed by money, which is one of the most fundamental concepts. Moreover, the deposit of the world's currencies with an intermediary corresponds to the value of the asset collateral. Hence, it is critical to investigate the factors that influence an individual's interest in stablecoin as a digital currency. This study investigates the factors influencing an individual's interest in stablecoins as a digital currency in Thailand. This study may aid government digital currency service providers to develop plans and disseminate knowledge to the target audience. It could also be applied to the government's central bank digital currency (CBDC) knowledge dissemination, which

would be Thailand’s first step toward becoming a digital economy society and beyond.

The objectives of the study are:

1. To study the factors related to interest in stablecoins.
2. To allow government digital currency service providers to use the study results to develop a plan for disseminating knowledge to the target group in the most efficient way possible.

Scope of research is as follows:

1. *Content scope*: This study used an analysis of covariance (ANCOVA) technique. Demographic factors were used as independent variables, interest in stablecoins as the dependent one, and knowledge of cryptocurrencies as the covariate. The independent variables were sex, age, education, income, and area of residence.

2. *Population scope*: The target population was unknown. The samples were Thai people using stablecoin as digital money. A sample of 460 Thai people was utilized.

3. *Scope of time and area*: The researcher collected the data between July and August 2022. The study area was Thailand, assessing through online communication.

2. LITERATURE REVIEW

Stablecoins can be traded. Users can easily and quickly conduct financial affairs despite tax difficulties and restrictive laws. Stablecoins also have a significant risk in that if they are not accepted by any country in the world, they may not be able to function effectively, and there is also a risk that users may be cheated by the developers (Li & Shen, 2021; Lyons & Viswanath-Natraj, 2020). However, even if countries accept it, users face the difficulty of the rules in each country. Stablecoins affect banks by potentially gaining market share with credit cards and more convenient payments than banks in some respects (Adrian & Griffoli, 2019). In the future, there may be a CBDC or stablecoin managed by a central bank. CBDCs have the same properties as stablecoins and the same currency status in that country. This could eliminate more legal hassles and corruption problems with the proof-of-concept system. Banks and domestic systems will support the difficult process of solving the various problems of stablecoin until it can be used effectively and is widely accepted (Dell’Erba, 2019; Kasemrat & Kraiwant, 2022).

Stablecoins play a vital role (Lipton et al., 2020). Stablecoins, a new generation of cryptocurrencies, may be able to provide a digital cash equivalent pegged to a major national currency or a basket of currencies or assets. Stablecoins would thus combine the benefits of traditional bank money (in terms of value stability) with the benefits of cryptocurrencies (in terms of lack of bank intermediation and hence greater privacy and potentially lower transaction costs). In 2019, Facebook announced the formation of a consortium with other major

players in the payments system and other sectors (technology, communications, venture capital, and even nonprofit), with the goal of launching a stablecoin called Libra (Fantacci & Gobbi, 2021). Several factors may influence an individual's interest in using Libra. Libra offers ease of payment. It provides a simple method for purchasing any goods or services online, so users can use Libra as easily as they would send a message. When Libra becomes a global currency, money exchange will be unnecessary. Libra can be used in any country and no cash is required. When Libra becomes available, taxation, which requires financial institution statements, will become more complicated. Libra users will have more bargaining power; as a result, commercial banks will need to develop financial transaction systems and services that meet the needs of their customers (Limsakul & Kraiwanit, 2020).

Furthermore, many pioneering online retailers, such as Overstock, have begun to accept cryptocurrency payments. However, the extreme price volatility of traditional cryptocurrencies (e.g., Bitcoins) prevents their widespread adoption as regular payment tools. Stablecoins, which are commonly backed by real assets, are proposed to make cryptocurrencies more acceptable in daily payments. Nonetheless, significant short-term volatility in stablecoins may deter consumers from purchasing when the product's valuation is uncertain. For instance, if consumers discover low ex-post valuation, the short-term volatility of returned stablecoins would be disutility for risk-averse consumers who need to convert stablecoins to fiat currency before exiting the market. In this case, online retailers can use blockchain traceability to reduce return risks by disclosing reliable product information (Li & Shen, 2021; Zhang et al., 2022).

3. METHODOLOGY

3.1. Data collection and the sample

The researchers collected the data using self-administered online questionnaires and employed convenience sampling. According to Limna et al. (2022a), a typical survey has a 95% confidence level. At $p = 0.5$, a minimum of 385 cases must be collected using stratified random sampling, with a sample error of 5% and a precision level of 95%. As a result, 460 participants from Thailand were recruited, using convenience sampling. The data were gathered through questionnaires created with Google Forms and distributed through various online channels such as Facebook and LINE applications.

3.2. Tool creation and quality inspection

For the process of develop research tool can be described by the following stages:

1. Examination of articles, books, and research related to stablecoins and cryptocurrency to formulate the concepts and guide the creation of questionnaires.

2. Creation of a questionnaire divided into sections and consider the content in accordance with the hypothesis, objectives, and conceptual framework.

3. Consultation with an advisor for advice on the revision of the completed questionnaire. This step was to make the data more accurate.

4. Trialing of the questionnaire with a similar simple group of 30 people and testing for reliability before collecting the actual data. The questionnaires were pre-tested to check the content's completeness. The researchers tested the questionnaire with a group of people who were similar to the sample group and then assessed the data for reliability using Cronbach's alpha coefficient. According to Nasution et al. (2020) and Sitthipon et al. (2022), in the reliability of the measurements, the alpha coefficients of Cronbach are needed to overcome all constructs of 0.7. Therefore, this test was able to be implemented.

3.3. Data analysis and statistics

This study examined the factors affecting interest in stablecoins using quantitative research methods and an approach based on ANCOVA analysis, a model that uses multiple independent variables, one independent variable and one dependent variable. The study used demographic factors as independent variables, *interest in stablecoins* as the dependent variable, and covariates as cognitive variables in cryptocurrencies. The independent variables were *sex, age, education, income* and *area of residence*.

4. FINDINGS

The sample of 479 people was classified by gender, and the majority were female, with 268 or 59.5% women, and 211 or 44.1% males. The sample included 342 people or 71.4% aged 21–30 years, 116 people or 24.2% aged 21–30 years, 10 people or 2.1% aged 31–40 years, and 11 people or 2.3% 41 years or older. With regard to educational level, 30 people or 6.3%, had a level lower than the vocational certificate or lower than Mathayom (high school), 6,142 people or 29.6% a level equivalent to a vocational certificate or Mathayom (high school) 6,294 people or 61.4% had a vocational education level and Bachelor's degree, and 13 people or 2.7% had a Master's degree or higher. When asked about income, 364 people or 76% had an income less than 10,000 baht, 70 people or 14.6% an income in the range of 10,001–15,000 baht, 18 people or 3.8% an income of 15,001–20,000 baht, 18 people or 3.8% an income of 25,001–45,000 baht,

and 9 people or 1.9% an income of more than 45,000 baht. There were 164 people living in Bangkok, or 34.2%, and 315 people or 65.8% outside of Bangkok. There were 328 people or 68.5% interested in stablecoins. 151 people or 31.5% expressed disinterest in stablecoins.

Table 1. The error variances test using Levene's test of equality of error variances

<i>F</i>	<i>df1</i>	<i>df2</i>	<i>Sig.</i>
2.533	10	468	.006

Note: Dependent variable: Interest in stablecoins.

As for the analysis of factors affecting interest in stablecoins, the results of the ANCOVA analysis are shown in the table. It was determined that the error variances of the independent variables were different, which did not conform to the ANCOVA, according to the error variances test, where there must be no difference between each error variance. The statistical hypothesis was still tested in this study.

Table 2. The hypothesis test by using tests of between-subjects effects

<i>Source</i>	<i>Type III sum of squares</i>	<i>df</i>	<i>Mean square</i>	<i>F</i>	<i>Sig.</i>
Intercept	20.577	1	20.577	96.706	0.000
Sex	0.091	1	0.091	0.435	0.510
Age	0.169	1	0.169	0.808	0.369
Education	0.078	1	0.078	0.374	0.541
Income	0.692	1	0.692	3.307	0.070
Area of residence	1.566	1	1.566	7.482	0.006
Score in test	3.726	10	0.373	1.780	0.062

Note: Dependent variable: Interest in stablecoins.

The ANCOVA analysis used *interest in stablecoins* as the dependent variable. The demographic factors were the independent variables and from Levene's test of equality of error table, it can be concluded that the samples had a sig. value of less than 0.05. But the researcher collected more data than the specified quantity. The sample was workable and thus the data from the sig. values were discussed and it was concluded that the residential area resulted in significant interest in stablecoins at less than 0.05.

5. CONCLUSION AND DISCUSSION

Studies have shown that the main factor affecting interest in stablecoins is living in a residential area. People who live in Bangkok are more likely to be interested in stablecoins than those who do not. It is possible that the population of Bangkok is more likely to be informed than those living

elsewhere. Therefore, having a residence in Bangkok makes people more interested in stablecoins.

In addition to the factor concerning living area, other factors such as age, educational level and income have no significant correlation, contrary to the theory that:

1. Gender differences cause people to have different communication behaviors. That is to say, females are more likely to want to send and receive news than males, while males do not only want to communicate but also want to build good relationships. In addition, the two sexes have significant differences in thinking, values and attitudes.

2. Age is a factor that affects thinking and behavior due to different life experiences and varying ways of using journalism.

3. Education is a factor that results in people having different opinions, values, attitudes and behaviors. Higher education can be good for receiving information because of the breadth of knowledge and thorough thinking involved.

4. Socioeconomic status refers to the occupation, income and social status of an individual. It has a significant influence on audiences with different cultures, experiences, attitudes, values and goals.

Due to the news of the TerraUSD or stablecoin collapse, stablecoins are viewed negatively and the data collection may not be entirely accurate. The collapse has involved amending laws and penalizing digital asset operators. This may have resulted in less interest in the stablecoin assessed in the sample.

6. SUGGESTIONS

The researchers have the following recommendations based on the results of this study. For policy suggestions, government digital currency service providers can use the study results to develop plans and disseminate knowledge to the target audience for maximum efficiency. This may also be applied to the government's CBDC knowledge dissemination, which would be the first step in Thailand's move towards becoming a digital economy society. Moreover, it can also be used as further research to deepen the reasons why people living in Bangkok are more interested in stablecoins than in other provinces. For future research suggestions, technology is rapidly changing and cryptocurrencies are a new innovation that can be greatly improved. Those interested in further research should focus on the accuracy of the data in terms of whether past data can be used today. It is suggested that they do so in relation to government-sponsored cryptocurrencies to allow for more impartial data collection. Qualitative research, such as interviews or focus group discussions, could provide more insight into future research. Next research should study the influence of regulation on the sphere and the awareness of the respondent on the stablecoin topic.

REFERENCES

1. Adrian, M. T., & Griffoli, M. T. M. (2019). The rise of digital money. *FinTech Notes, 1*. International Monetary Fund. <https://doi.org/10.5089/9781498324908.063>
2. Bank of Thailand. (2017). Libra Kāb xnākht kār pēn skul ngein dicithal radaḅ lok? [Libra and future of global currency?]. *BOTMagazine*. <https://www.bot.or.th/Thai/BOTMagazine/Pages/256204Knowledge04.aspx>
3. Bolt, W., Lubbersen, V., & Wierts, P. (2022). Getting the balance right: Crypto, stablecoin and central bank digital currency. *Journal of Payments Strategy & Systems, 16*(1), 39–50. <https://www.ingentaconnect.com/content/hsp/jpss/2022/00000016/00000001/art00005>
4. Dell’Erba, M. (2019). Stablecoins in cryptoeconomics: From initial coin offerings to central bank digital currencies. *New York University Journal of Legislation and Public Policy, 22*(1), 1–47. <https://nyujlpp.org/wp-content/uploads/2019/12/DellErba-Stablecoins-in-Cryptoeconomics-22-nyujlpp-1.pdf>
5. Fantacci, L., & Gobbi, L. (2021). Stablecoins, central bank digital currencies and US dollar hegemony: The geopolitical stake of innovations in money and payments. *Accounting, Economics, and Law: A Convivium*, Article 20200053. <https://doi.org/10.1515/ael-2020-0053>
6. Getting to know cryptocurrency. (2020). *Depa*. www.depa.or.th/th/article-view/getting-know-cryptocurrency
7. Jenweeranon, P. (2022). Cryptocurrency, stablecoins, and blockchain. In H. Y. Chen, P. Jenweeranon, & N. Alam (Eds.), *Global perspectives in FinTech* (pp. 117–154). Palgrave Macmillan Cham. https://doi.org/10.1007/978-3-031-11954-5_7
8. Kasemrat, R., & Kraivanit, T. (2022, April 29). Potential acceptance of upcoming Thai retail CBDC (central bank digital currency) in Thailand. In *Proceedings of the RSU International Research Conference 2022* (pp. 241–250). Rangsit University. <https://rsucon.rsu.ac.th/files/proceedings/RUSOC2022/IN22-004.pdf>
9. Li, C., & Shen, Y. (2021). The potential impacts and risks of global stablecoins. *China Economic Journal, 14*(1), 39–51. <https://doi.org/10.1080/17538963.2021.1872167>
10. Limna, P., Kraivanit, T., & Siripipattanakul, S. (2022a). *The relationship between cyber security knowledge, awareness and behavioural choice protection among mobile banking users in Thailand*. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4268205
11. Limna, P., Kraivanit, T., & Siripipattanakul, S. (2022b). *The growing trend of digital economy: A review article*. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4183686
12. Limsakul, A., & Kraivanit, T. (2020). Libra as a digital currency and its impacts on the Thai economy. *AU-EJournal of Interdisciplinary Research, 5*(2), 110–118. <http://www.assumptionjournal.au.edu/index.php/eJIR/article/view/4807>
13. Lipton, A., Sardon, A., Schär, F., & Schüpbach, C. (2020). Stablecoins, digital currency, and the future of money. In A. Pentland, A. Lipton, & T. Hardjono (Eds.) *Building the new economy*. MIT Press. <https://wip.mitpress.mit.edu/pub/17h9tjq7/release/4>

14. Lyons, R. K., & Viswanath-Natraj, G. (2020). *What keeps stablecoins stable?* (NBER Working Paper 27136). National Bureau of Economic Research. <https://www.nber.org/papers/w27136>
15. Mita, M., Ito, K., Ohsawa, S., & Tanaka, H. (2019). What is stablecoin?: A survey on price stabilization mechanisms for decentralized payment systems. In *Proceedings of the 2019 8th International Congress on Advanced Applied Informatics (IIAI-AAI)* (pp. 60–66). IEEE. <https://doi.org/10.1109/IIAI-AAI.2019.00023>
16. Morgan, J. (2022). Systemic stablecoin and the defensive case for central bank digital currency: A critique of the Bank of England’s framing. *Research in International Business and Finance*, 62, Article 101716. <https://doi.org/10.1016/j.ribaf.2022.101716>
17. Nasution, M. I., Fahmi, M., & Prayogi, M. A. (2020). The quality of small and medium enterprises performance using the structural equation model-part least square (SEM-PLS). *Journal of Physics: Conference Series*, 1477(5), Article 052052. <https://doi.org/10.1088/1742-6596/1477/5/052052>
18. Sitthipon, T., Limna, P., Jaipong, P., Siripipattanakul, S., & Auttawechasakoon, P. (2022). Gamification predicting customers’ repurchase intention via e-commerce platforms through mediating effect of customer satisfaction in Thailand. *Review of Advanced Multidisciplinary Sciences, Engineering & Innovation*, 1(1), 1–14. <https://ijbmcjournals.org/ramsey-volume-1-issue-1-apr-2022/>
19. Zhang, K., Choi, T.-M., Chung, S.-H., Dai, Y., & Wen, X. (2022). *Managing product returns with blockchain adoption: Stablecoins and traceability*. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4178813

EXPLORING THE BEST CORPORATE GOVERNANCE PRACTICES IN THE PUBLIC SECTOR ORGANIZATIONS IN GHANA: THE CHALLENGES, ISSUES, AND PROSPECTS

John MacCarthy^{*}, Nicholas Adoboe-Mensah^{*}

^{*} Accounting Department, University of Professional Studies, Accra, Ghana



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Abstract

The study aims to explore the corporate governance practices in the public sector entities in Ghana to identify weaknesses for improvement based on appointments to the boards, conflicts between CEOs and the boards, etc. The results confirm structural weaknesses in corporate governance practices in the public sector entities in Ghana and require drastic improvement to be aligned with the advanced economies. Based on the findings, the study recommends that the President desists from appointing the CEOs and allows the boards to appoint the CEO.

1. BACKGROUND

The level of corporate governance practices in the public sector organizations in Ghana has become a topical issue and concern for practitioners and academics in recent times. The public sector is entrusted with the management of the economic resources in Ghana, making it the agents (i.e., government) and principal (i.e., the citizens of Ghana). But the contradictions in most corporate governance manual and practices is that government appointees who the government has

delegated powers and management function account to the government, who is not the true owners of the economic resources in Ghana but the caretaker of the economic resources on behalf of Ghanaians. A need for proper accountability to the principal is paramount to the citizens of every country. The poor corporate governance structures in developing countries have made performance in the public sector ineffective, inefficient, and uneconomical (Uddin & Hopper, 2001, 2003; Rahaman & Lawrence, 2001) and, therefore, unable to have proper accountability to the principal or the citizens.

The role played by public sector organizations in society is very essential and pivotal to every society. In most jurisdictions, the public sector expenditure accounts for a significant part of the gross domestic product of every country. Therefore, establishing robust corporate governance structures in the public sector will create an environment of trustworthiness, transparency, and accountability needed to foster long-term investment, financial stability, and integrity, thereby supporting more robust growth and a more inclusive business society (Organisation for Economic Co-operation and Development [OECD], 2015). Bad management due to bad corporate governance has led to corruption, inefficiencies, and ineffectiveness in the public sector and, in some cases, outright intuitional failures (Collier, 2008; Dahlström & Lapuente, 2017; Moore, 2001). The adverse effect of bad corporate in the public sector has necessitated the International Monetary Fund (IMF) to develop a comprehensive long-term National Public Sector Reform Strategy (NPSRS) as one of the structural reform benchmarks of Ghana's three-year Extended Credit Facility programme, 2015–2018. The NPSRS aims to improve the performance of the public sector to be responsive to the needs of citizens and the private sector for sustained national development. Additionally, the public sector has also seen some initiatives to enhance corporate governance and control in the public sector organizations in Ghana, bypassing the State Interests and Governance Authority Act (SIGA) 2019 (Act 990). The purpose of Act 990 is to: 1) promote within the framework of government policy the efficient or, where applicable profitable operations of specified entities; and 2) ensure the specified entities adhere to good corporate governance practices.

2. THEORETICAL LITERATURE: THE STAKEHOLDER THEORY

The stakeholder theory is premised that organizations serve a broader social purpose than merely maximizing the shareholders' wealth, despite the reason for setting the organization being to create wealth for the owners (Rashid & Islam, 2013). The stakeholder theory assumed that public interest groups within and outside the organizations such as trade associations, employees, customers, shareholders, and competitors whose interests are equally important as that of the shareholders. The theory

assumes that the organizations are social entities whose activities affect the welfare of the stakeholders, the action of the organization to achieve its objective affects the stakeholders and, therefore, the achievement of the organization should also affect the stakeholders (Albu & Girbina, 2015; Chen & Zhang, 2014; Donaldson & Preston, 1995). A successful organization is often judged by how much value it has added to the stakeholders (Al-Janadi et al., 2013) and it ensures the long-term sustainability of that organization. The stakeholders are instrumental to the organizational success and, therefore, the organization has moral and legal obligations to the stakeholders (Rashid & Islam, 2013). When stakeholders get what they want from the organization, they return to the organization to fulfill their obligations to the organization (Allegrini & Greco, 2013; Azam et al., 2011; Freeman, 2010; Kousalya et al., 2013). This is the reason behind corporate leaders' consideration of the welfare of their stakeholders when making corporate decisions. Allowing the stakeholders to participate in corporate decision-making enhances efficiency and reduces conflicts in the organization (Ayuso, et al., 2014; Basu et al., 2016; Mosunova, 2014). The stakeholders can only participate in the decision-making process only when the right information is available at the right time through adequate disclosures, quality, and transparent reportage to the stakeholders. The theory relies on two main assumptions. The theory assumes that stakeholder behaviours are important because they influence the types of governance structures adopted, particularly incentive mechanisms (Al-Ghamdi & Rhodes, 2015).

3. METHODOLOGY

This study is a qualitative research method involving a case study approach to delve deeper into issues, challenges and prospects of corporate governance in the public sector entities in Ghana. To achieve this purpose, the researcher conducted semi-structured interviews with board members of five public sector organizations at locations convenient to the participants and with the consent of participants to gather relevant data for this study. Data analysis is done using content and thematic analysis. Thematic analysis is a process of interpreting data collected systematically by identifying patterns that illuminate the description of the phenomenon (Tesch, 2013).

4. FINDINGS

The key findings are obtained from the participants through the interviews and were analyzed to identify the thematic areas for this study.

4.1. Board size and board composition

There is no clear guideline for the board size in the corporate governance manual for public sector entities and the directors are appointed to the board without clear guidelines of the criteria used to select them for the board. Many corporate governance regulations stipulate several conditions needed to appoint a director to a board (i.e., composition) and the number of directors to be appointed (i.e., size), and the skills of the appointees (i.e., qualification). All these regulations are lacking in the corporate governance manual for the public sector in Ghana, contributing to the ineffectiveness of the public sector performance in Ghana. The outcome is consistent with Nana Yaw Simpson (2012) who opined that board structure and board size are not specified in the corporate governance manual for the reason that optimal board size and structure vary from entity to entity.

4.2. Checks and balance in the public sector

There is a weak system of checks and balances involving accountability, transparency, and public participation in corporate governance in the public sector. The corporate governance manual in Ghana spilled out how the board should account for their stewardship to the stakeholders of the public sector in Ghana. The data obtained from the participants revealed that annual statements are prepared and submitted to the Ministry of Finance following Financial Administration Act, 2003 (Act 654) and Financial Administration Regulation, 2004 (LI 1802). Article 41 of Act 654 states that within three months, or such other period as Parliament may by resolution appoint, after the end of each financial year, shall be prepared and transmitted to the Auditor-General, the Minister and the Controller and Accountant-General in the financial year, accounts which shall comprise:

- a balance sheet showing the assets and liabilities as at the end of the year,
- a statement of revenue and expenditure for the year,
- a cash flow statement for the year, and
- notes that form part of the accounts which shall include particulars of the extent to which the performance criteria specified in the estimate concerning the provision were specified.

The quality of the annual statement of accounts submitted by the public sector is not much to be desired. The Auditor-General reported financial irregularities amounting to GH¢3, 008,187,888.15 for the year ended 2019. The financial irregularities represent either losses that had been incurred by the state through the impropriety or lack of probity in the actions and decisions of the public officer or the savings that could be made if the public officials and organizations had duly followed

the public financial management framework put in place to guide the conduct and safeguard national assets. There is the need to hold the perpetrator responsible through a surcharge by the Auditor General. The frequent revelation of Auditor-General report without holding perpetrators responsible for the financial irregularities has caused the Coalition for Democratic Governance (Citizen Coalition) to petition Mr. Johnson Akuamoah Asiedu, Auditor-General to surcharge persons and institutions implicated in the Auditor-General report on the public organizations.

4.3. Conflict between the CEO and the board

The study revealed that the politicization of appointments of CEOs and to the boards is the major cause of the CEO-boards conflicts. The normal practice is for the board to appoint the CEO but when the CEO is appointed by the President it bleeds conflict between the CEO and the board. This may create a personal antagonism that is commonly referred to as "who is who" between the CEO and the board. Whenever there is a conflict between the CEO and the board it affects the independence of the board to enforce accountability from the CEO. A case in point was the misunderstanding between the CEO and board on the allegation of corruption, award of contract, and construction without due process and prior approval from the Minister of Energy (i.e., the sector Minister) at the Ghana Cylinder Manufacturing Company in Ghana. According to the May 18, 2018, issue of graphic online, the CEO was accused by the board chairman of making baseless accusations, malpractices, and management.

4.4. Board appointment, responsibility, and tenure

The appointment of directors onto the board must be transparent in terms in terms of procedures and responsibilities for the board. Even though Article 70(1) (d) (iii) of the 1992 Constitution states "the President shall acting in consultation with the Council of State, appoint the Chairmen and other members of the governing bodies of public corporations". Most directors appointed to the board are non-executive directors (NED) without the relevant "soft" attributes. This outcome is consistent with the conclusion of Nana Yaw Simpson (2012) who averred that are no clear criteria for appointing members to the board and most often those appointed to boards are self-styled politicians.

5. CONCLUSION AND RECOMMENDATIONS

Corporate governance practice in public sector organizations is in its infancy when compared with colleagues in advanced countries. Most of

the problems of bad corporate governance in the public sector are rooted in unclear and inadequate corporate governance provisions in Ghana. There is a need for clear and better corporate governance structures to protect and account better to citizens than what is currently prevailing now.

Secondly, the recent establishment of SIGA as an autonomous board to promote corporate governance practices in the Public Services Commission and to streamline corporate governance practices in Ghana is laudable. The autonomous board is essential to respond to the numerous requests from the public service. However, there are keys that will make corporate governance practices in Ghana effective as in modern times. The areas that need modifications are:

- The guidelines should contain qualifications for the board of directors along with the duties and guidelines for professional conduct.
- Establishment of board committees, such as audit committee, remuneration committee, risk committee, etc.
- Composition of the board of directors and functions of board committees.
- The specific sanction for breaches for any breaches in corporate guidelines is to be enacted.

Last but not the least, the ownership policy in the public section: There is no clear and distinct policy on ownership in the public sector organization. Many appointees assume to be accountable to the president creating room for boot-licking. A clear ownership policy would clarify the responsibilities of the government towards minority stakeholders and major stakeholders such as employees, vendors, customers and communities to be accounted to.

REFERENCES

1. Albu, C. N., & Girbina, M. M. (2015). Compliance with corporate governance codes in emerging economies. How do Romanian listed companies "comply-or-explain"? *Corporate Governance*, 15(1), 85–107. <https://doi.org/10.1108/CG-07-2013-0095>
2. Al-Ghamdi, M., & Rhodes, M. (2015). Family ownership, corporate governance and performance: Evidence from Saudi Arabia. *International Journal of Economics and Finance*, 7(2), 78–89. <https://doi.org/10.5539/ijef.v7n2p78>
3. Ali, C. B. (2014). Corporate governance, principal-principal agency conflicts, and disclosure. *Journal of Applied Business Research*, 30(2), 419–432. <https://doi.org/10.19030/jabr.v30i2.8412>
4. Alimehmeti, G., & Paletta, A. (2012). Ownership concentration and effects over firm performance: Evidence from Italy. *European Scientific Journal*, 8(22), 67–75. <https://ejournal.org/index.php/esj/article/view/418>
5. Al-Janadi, Y., Rahman, R. A., & Omar, N. H. (2013). Corporate governance mechanisms and voluntary disclosure in Saudi Arabia. *Research Journal of Finance and Accounting*, 4(4), 36–42. <https://www.iiste.org/Journals/index.php/RJFA/article/view/4974>

6. Allegrini, M., & Greco, G. (2013). Corporate boards, audit committees and voluntary disclosure: Evidence from Italian listed companies. *Journal of Management & Governance*, 17(1), 187–216. <https://doi.org/10.1007/s10997-011-9168-3>
7. Ayuso, S., Rodríguez, M. A., García-Castro, R., & Ariño, M. A. (2014). Maximizing stakeholders' interests: An empirical analysis of the stakeholder approach to corporate governance. *Business & Society*, 53(3), 414–439. <https://doi.org/10.1177/0007650311433122>
8. Azam, M., Usmani, S., & Abassi, Z. (2011). The impact of corporate governance on firm's performance: Evidence from oil and gas sector of Pakistan. *Australian Journal of Basic and Applied Science*, 5(12), 2978–2983. <http://ajbasweb.com/old/ajbas/2011/December-2011/2978-2983.pdf>
9. Basu, N., Paeglis, I., & Rahnamaei, M. (2016). Multiple blockholders, power, and firm value. *Journal of Banking & Finance*, 66, 66–78. <https://doi.org/10.1016/j.jbankfin.2016.01.001>
10. Chen, C. P., & Zhang, C. Y. (2014). Data-intensive applications, challenges, techniques and technologies: A survey on big data. *Information Sciences*, 275, 314–347. <https://doi.org/10.1016/j.ins.2014.01.015>
11. Collier, P. (2008). *The bottom billion: Why the poorest countries are failing and what can be done about it* (1st ed.). Oxford University Press.
12. Creswell, J. W. (2013). *Steps in conducting a scholarly mixed methods study* [Presentation]. Discipline-Based Education Research Group, University of Nebraska. <https://digitalcommons.unl.edu/dberspeakers/48>
13. Creswell, J. W., Klassen, A. C., Plano Clark, V. L., & Smith, K. C. (2013). Best practices for mixed methods research in the health sciences. *Office of Behavioral and Social Sciences Research*. https://obsr.od.nih.gov/sites/obsr/files/Best_Practices_for_Mixed_Methods_Research.pdf
14. Dah, M. (2016). Governance and firm value: The effect of a recession. *Research in International Business and Finance*, 37, 464–476. <https://doi.org/10.1016/j.ribaf.2016.01.013>
15. Dahlström, C., & Lapuente, V. (2017). *Organizing leviathan: Politicians, bureaucrats, and the making of good government*. Cambridge University Press. <https://doi.org/10.1017/9781316822869>
16. Darko, J., Darko, J., Aribi, Z. A., Aribi, Z. A., Uzonwanne, G. C., & Uzonwanne, G. C. (2016). Corporate governance: The impact of director and board structure, ownership structure and corporate control on the performance of listed companies on the Ghana stock exchange. *Corporate Governance*, 16(2), 259–277. <https://doi.org/10.1108/CG-11-2014-0133>
17. Donaldson, L., & Davis, J. H. (1991). Stewardship theory or agency theory: CEO governance and shareholder returns. *Australian Journal of Management*, 16(1), 49–64. <https://doi.org/10.1177/031289629101600103>
18. Donaldson, T., & Preston, L. E. (1995). The stakeholder theory of the corporation: Concepts, evidence, and implications. *Academy of Management Review*, 20(1), 65–91. <https://doi.org/10.2307/258887>
19. Freeman, R. E. (2010). *Strategic management: A stakeholder approach*. Cambridge University Press. <https://doi.org/10.1017/CBO9781139192675>
20. Kousalya, P. R., Revathi, D., & Mohan, T. (2013). Corporate governance models around the world. *Global Journal for Research Analysis*, 2(3), 117–118. <https://www.worldwidejournals.com/global-journal-for-research-analysis-GJRA/article/corporate-governance-models-around-the-world/NjEw/?is=1>

21. McCourt, W. (2008). Public management in developing countries. *Public Management Review*, 10(4), 467–479. <https://doi.org/10.1080/14719030802263897>
22. Moore, G. (2001). Corporate social and financial performance: An investigation in the UK supermarket industry. *Journal of Business Ethics*, 34(3), 299–315. <https://doi.org/10.1023/A:1012537016969>
23. Mosunova, N. (2014). The content of accountability in corporate governance. *Russian Law Journal*, 2(3), 116–129. <https://doaj.org/article/f4bd8547290f4228a74c4b4b540138a4>
24. Nana Yaw Simpson, S. (2014). Boards and governance of state-owned enterprises. *Corporate Governance*, 14(2), 238–251. <https://doi.org/10.1108/CG-08-2012-0063>
25. National Development Planning Commission (NDPC). (2016). *National development planning (system) regulations, 2016 (L. I. 2232)*. https://ndpc.gov.gh/media/National_Development_Planning_System_Regulations_2016_L.I._2232.pdf
26. Ohemeng-Mensah, D., & Ohemeng, F. (2019, June 26–28). The problems of corporate governance: Exploring the impact of the conflict between boards and CEOs of public sector agencies on performance in Ghana. Paper presented at the *4th International Conference on Public Policy (ICPP4)*. <https://www.ippapublicpolicy.org/file/paper/5d0f6a0249cbe.pdf>
27. Organisation for Economic Cooperation and Development (2015). *G20/OECD principles of corporate governance* (Updated). OECD Publishing. <https://doi.org/10.1787/9789264236882-en>
28. Organisation for Economic Cooperation and Development (OECD). (2019, June 8–9). *Report to G20 on the implementation of the G20/OECD Principles of Corporate Governance*. OECD Publishing. <https://www.oecd.org/daf/ca/G20-Report-Implementation-Corporate-Governance-Principles-2019.pdf>
29. Rahaman, A. S., & Lawrence, S. (2001). A negotiated order perspective on public sector accounting and financial control. *Accounting, Auditing & Accountability Journal*, 14(2), 147–165. <https://doi.org/10.1108/09513570110389297>
30. Rashid, K., & Islam, S. M. N. (2013). Corporate governance, complementarities, and the value of a firm in an emerging market: The effect of imperfections. *Corporate Governance*, 13(1), 70–87. <https://doi.org/10.1108/14720701311302422>
31. Tesch, R. (2013). *Qualitative research: Analysis types and software*. Routledge. <https://doi.org/10.4324/9781315067339>
32. Uddin, S., & Hopper, T. (2001). A Bangladesh soap opera: Privatisation, accounting, and regimes of control in a less developed country. *Accounting, Organizations and Society*, 26(7–8), 643–672. [https://doi.org/10.1016/S0361-3682\(01\)00019-8](https://doi.org/10.1016/S0361-3682(01)00019-8)
33. Uddin, S., & Hopper, T. (2003). Accounting for privatisation in Bangladesh: testing World Bank claims. *Critical Perspectives on Accounting*, 14(7), 739–774. [https://doi.org/10.1016/S1045-2354\(02\)00188-0](https://doi.org/10.1016/S1045-2354(02)00188-0)

THE POLITICAL ROLE OF LOCAL GOVERNMENT CORPORATE OWNERSHIP: AN INTERDISCIPLINARY OUTLOOK BASED ON BENFORD'S LAW

Luca Galati *

* Department of Economics, University of Molise, Campobasso, Italy;
School of Business, University of Wollongong, Wollongong, Australia



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Abstract

“People always find the law to be interesting because we like learning secrets and the fact that there is some underlying order to what seems like chaos is like discovering a secret code” (Nigrini, 2012, p. 313).

In an exponentially evolving world that is increasingly relying on enormous amounts of data flowing into every area of the economy, having a tool that can spot fraudulent financial numbers on divided subsets of these 'big data', becomes an efficiency priority. Since those wrong numbers are frequently thought to be 'round numbers' (Nigrini, 2018), what would be certainly useful is a structured way of looking at irregularities in numerals' occurrence, without trying to bet. Benford's (1938) law is a mathematical phenomenon that helps in detecting white-collar crimes, when it comes to manipulated financial statements, through an analytical procedure that uncovers anomalies in certain digit patterns. Forensic accountants, auditors, or even judicial bodies that aim to protect public finance balances, can adopt Benford's law as an analytical instrument to discover processing inefficiencies, frauds, or manipulative biases.

Capalbo (2016) identify a potential framework of Italian companies that needs particular attention as the government struggles to monitor the progress of the firms with prevalent state participation, whose control has been severely hampered by the ability to generate itself at all government levels. Companies resulting from the so-called state capitalism, referred to as state-owned enterprises (SOEs), are historically present in delicate and central sectors of the economy. More recently, we have also seen a proliferation of entities created by local administrations. These, however, have proved, in many cases, "to be mere extensions of the participating administration, devoid of any autonomous capacity for survival on the market, serial accumulators of negative results, and, in many cases, genetically condemned to insolvency" (Capalbo, 2016, pp. 117). Therefore, this research examines the earnings quality of those Italian municipally-owned entities (MOEs) by adopting the analytical procedure based on Benford's law to spot any red flags of accounting data manipulation.

There is a formidable body of accounting literature that examine 'cosmetic earnings management' (hereafter CEM) with the use of Benford's law. This includes studies examining listed companies in New Zealand (Carshaw, 1988), the USA (Thomas, 1989; Guan et al., 2006), the UK (Van Caneghem, 2002, 2004), Finland (Niskanen & Keloharju, 2000), Japan (Skousen et al., 2004), Taiwan (Lin & Wu, 2014), Korea (Lacina et al., 2018), Romania (Istrate, 2019), and even in 18 different countries (Kinnunen & Koskela, 2003). Although a number of studies commonly approach the detection of earnings management¹ (EM) through the estimation of normal not publicly observed accruals (Jones, 1991), the last three decades have seen a dramatic growing trend towards the new digits-distribution examination method for assessing managerial efforts on reported earnings. There are two parallel streams of research examining the potentially noisy accrual estimation: one examines those accounting numerals patterns to address issues related to the managers' incentives in avoiding losses, earnings declines or shortfalls under market expectation (Das & Zhang, 2003); the other views the valuative and contracting incentives perspectives by assuming managerial efforts around reported earnings through rounding up behaviour when those are slightly below key cognitive reference points (Carshaw, 1988; Thomas, 1989).

In this study, however, the purpose is not to evaluate the merits of the Benford's law approach to the detection of fraudulent accounting data *per se*, but, instead, is to extend prior research on the use of Benford's law as an analytical procedure to spot CEM to unlisted companies and, in particular, to the public sector context. This research,

¹ Earnings management is intended as the strategic exercise, with or without restrictions, of the discretion given to managers over accounting numbers (Watts & Zimmerman, 1986).

therefore, aims to use the unique dataset of Capalbo et al. (2021) on Italian municipally-owned utilities (hereafter MOUs) to prove the usefulness of Benford's law in spotting accounting data manipulation within public sector organisations. In doing so, the study also examines the political role played by the corporate ownership of those local government-owned firms to emphasise whether MOUs' financial statements are a vehicle of local election attention. Specifically, the data are gathered to provide evidence of political connections in state ownership by documenting a positive relationship between MOUs' earnings management activities and elections. The found evidence is consistent with the political cost hypothesis of Watts and Zimmerman (1978) which corroborates the findings of Capalbo et al. (2021): Italian MOUs managers manipulate their financial statements referred to the year before a local election occurs as a consequence of the raising political cost. This implies that incumbent politician behaviour willing to improve SOEs' economic performance in order to alter voters' perception of their governing efficiency is a pressure perceived by managers of those entities during such delicate periods.

Finally, this investigation is of interest for several reasons. First, it is intended to extend prior research examining CEM through a Benford's law-based approach (Van Caneghem, 2002; Das & Zhang, 2003; Kinnunen & Koskela, 2003; Skousen et al., 2004; Guan et al., 2006), by analysing a context that has never been treated before with this interdisciplinary method, namely the public sector case of local government-owned entities in Italy. Second, unlike the bulk of these previous studies mentioned above, it provides evidence not only of cosmetic earnings management but also of political factors on those unusual patterns happening in Italian MOUs reported earnings. Third, unlike most prior studies, this research uses a unique dataset with total revenues as a control variable.

In the empirical analysis, the dataset of Capalbo et al. (2021) is used, collected from the AIDA (*Analisi Informatizzata delle Aziende Italiane*) database. The unique dataset consists of balance sheet items, the name of the municipality (i.e., the locality of the state-owned firms) and the recorded CCIAA code number, the day, month, and year of the election held in the local municipality. However, the study focuses on the total revenue numbers, consistent with the model of Stubben (2010), of 506 firms, which are those with a total amount of shares held by a single municipality above 50%. Indeed, this is the case where the control over the entity is expected to come from the municipality, since "when a municipality has a majority in the shareholders' meeting, both the ability of the incumbents to influence MOEs managers' accounting decisions and the perspective of political costs are likely to increase" (Capalbo et al., 2021, p. 11). The Italian municipally-owned

entities identified are those majorly operating in the utility sector (and sub-sectors), where Capalbo et al. (2021) again expect a greater political component in terms of visibility and relevance for the users/voters.

Over a 5-year period from 2009 to 2014, the final panel sample is based on 3036 observations of 506 MOUs, while the 8 election dates identified include time periods between 2010 and 2015. Those election dates involve 422 municipally-owned companies, distributed as 28 firms experiencing an election in 2010, 68 in 2011, 59 in 2012, 36 in 2013, 135 in 2014 and 36 in 2015. By using this data, the current study set out to investigate a particular type of earnings management — the so-called cosmetic earnings management (CEM) — depicted by companies' tendency toward small rounding behaviours of reported total revenue numbers before local elections. Specifically, the analysis examined the digits distributions of those firms experiencing an election soon after their financial statements were approved by the board of directors, and, therefore, published at the shareholders' meeting, finding an overuse of 88s and 42s as first-two digits of revenues amounts. While no significant evidence of managed earnings has been found in the full sample and in the one regarding those companies not facing an 'election year', statistical tests have shown that political links may influence the managerial decisions of entities prevalently participated by public administrations. Results, hence, have illustrated a positive relationship between elections and earnings management of MOUs, although this study does not attempt to prove politicians' involvement in these practices, but rather charges ultimately the managers of such responsibilities. Nevertheless, as Capalbo et al. (2021) argue, there is a reasonable doubt as to whether pre-electoral earnings manipulation, derived from growth in MOEs income numbers, might be due to the political opportunity of incumbents in altering voters' perception of their efficiency in governing.

Overall, this research contributes to the growing stream of literature on the integral approach based on Benford's law analysis, by documenting persuasive evidence of earnings manipulation in accounting digits distribution within public sector organisations. Around election periods from 2010 to 2015, Italian MOUs' managers have incentives to round reported total revenues the year just before elections are held (from 2009 to 2014). The empirical methodology adopted appears to well detect unusual patterns in those financial statements' numbers. This can be seen in the fact that the full MOUs revenues sample perfectly fit into Benford's distribution. Moreover, the approach outlined in this research may not be considered an accurate fraud detector, but it is still a great tool that can spot red flags and provide a first indicator of irregularities, errors, or processing inefficiency.

A number of limitations need to be noted regarding the present study. First, it cannot export its findings to the broad context of state ownership (and so to SOEs). Second, there could be an easily explained attribute of the accounting data that can lead the digits of these numbers to abnormally repeat themselves (Nigrini, 2020). In this case, Benford's law may not be useful in spotting CEM. Third, the time period examined might not be representative of the norm, or, more precisely, a single short time horizon might produce a biased result. Last, the leaking ambiguity raised by contrasting statistical conclusions that arose from the different tests performed in this work should still be addressed.

To conclude, there are several potential future research directions one can take to extend this contribution by also referring to its constraints. Further works could: 1) deeply examine whether the firms' earnings have certain unusual patterns due to features such as standardise commercial contracts, in order to prevent any biases in the overuse of digits; 2) take into account a longer time window, first to avoid the dangerousness of the period representation issue, and second to hopefully overcome the contrasting results ambiguity problem; 3) try to prove whether incumbent politicians effectively have opportunistic behaviours influencing managers earnings decisions and strategically exercise pressure on controlled MOEs. What is also needed is general research on how to use the digits distribution law without facing statistical ambiguity in diverse testing approaches. However, the Benford-based analysis on Italian pre-electoral MOUs' earnings management carried out so far provides some useful first indications. A policy implication also lies in urging institutional and judicial bodies, such as the Italian Corte dei Conti, to adopt such an intriguing analytical instrument, along with other tools, so as to prevent those opportunistic behaviours from happening in such crucial and delicate periods like political local elections. This, of course, would lead to an increasingly more efficient way of protecting public finance balances.

REFERENCES

1. Benford, F. (1938). The law of anomalous numbers. *Proceeding of the American Philosophical Society*, 78(4), 551–572. <https://www.jstor.org/stable/984802>
2. Capalbo, F. (2016). Le società a partecipazione pubblica in Italia e all'estero: Numeri e incidenza sull'economia. In F. Fimmanò & A. Catricalà (Eds.), *Le società pubbliche* (pp. 117–135). Edizioni Scientifiche Italiane. <https://www.researchgate.net/publication/311103599>
3. Capalbo, F., Lupi, C., Smarra, M., & Sorrentino, M. (2021). Elections and earnings management: Evidence from municipally-owned entities. *Journal of Management and Governance*, 25, 707–730. <https://doi.org/10.1007/s10997-020-09523-z>

4. Carslaw, C. A. P. N. (1988). Anomalies in income numbers: Evidence of goal oriented behavior. *The Accounting Review*, 63(2), 321–327. <https://www.jstor.org/stable/248109>
5. Das, S., & Zhang, H. (2003). Rounding-up in reported EPS, behavioral thresholds, and earning management. *Journal of Accounting and Economics*, 35(1), 31–50. [https://doi.org/10.1016/S0165-4101\(02\)00096-4](https://doi.org/10.1016/S0165-4101(02)00096-4)
6. Guan, L., He, D., & Yang, D. (2006). Auditing, integral approach to quarterly reporting, and cosmetic earnings management. *Managerial Auditing Journal*, 21(6), 569–581. <https://doi.org/10.1108/02686900610674861>
<https://www.proquest.com/openview/7d019c616546c4c5da54cba2c85d136d/1?pq-origsite=gscholar&cbl=31718>
7. Istrate, C. (2019). Detecting earnings management using Benford's law: The case of Romanian listed companies. *Journal of Accounting and Management Information Systems*, 18(2), 198–223. <https://doi.org/10.24818/jamis.2019.02003>
8. Jones, J. J. (1991). Earnings management during import relief investigation. *Journal of Accounting Research*, 29(2), 193–228. <https://doi.org/10.2307/2491047>
9. Kinnunen, J., & Koskela, M. (2003). Who is Miss World in cosmetic earnings management? A cross-national comparison of small upwards rounding of net income numbers among eighteen countries. *Journal of International Accounting Research*, 2(1), 39–68. <https://doi.org/10.2308/jiar.2003.2.1.39>
10. Lacina, M., Lee, B. B., & Kim, D. W. (2018). Benford's law and the effects of the Korean financial reforms on cosmetic earnings management. *Journal of International Accounting, Auditing and Taxation*, 30, 2–17. <https://doi.org/10.1016/j.intaccudtax.2017.12.002>
11. Lin, F., & Wu, S. (2014). Comparison of cosmetic earnings management for the developed markets and emerging markets: Some empirical evidence from the United States and Taiwan. *Economic Modelling*, 36, 466–473. <https://doi.org/10.1016/j.econmod.2013.10.002>
12. Nigrini, M. J. (2012). *Benford's law: Applications for forensic accounting, auditing and fraud detection*. John Wiley & Sons. <https://doi.org/10.1002/9781119203094>
13. Nigrini, M. J. (2018). Round numbers: A fingerprint of fraud. *Journal of Accountancy*, 225(4), 36–42. <https://www.journalofaccountancy.com/issues/2018/may/fraud-round-numbers.html>
14. Nigrini, M. J. (2020). *Forensic analytics: Methods and techniques for forensic accounting investigations* (2nd ed.). Wiley.
15. Niskanen, J., & Keloharju, M. (2000). Earnings cosmetics in tax-driven accounting environment: Evidence from Finish public firms. *The European Accounting Review*, 9(3), 443–452. <https://doi.org/10.1080/09638180020017159>
16. Skousen, C. J., Guan, L., & Wetzels, T. S. (2004). Anomalies and unusual patterns in reported earnings: Japanese managers round earnings. *Journal of International Financial Management & Accounting*, 15(3), 212–234. <https://doi.org/10.1111/j.1467-646X.2004.00108.x>
17. Stubben, S. R. (2010). Discretionary revenues as a measure of earnings management. *The Accounting Review*, 85(2), 695–717. <https://doi.org/10.2308/accr.2010.85.2.695>
18. Thomas, J. (1989). Unusual patterns in reported earnings. *The Accounting Review*, 64(4), 773–787. <https://www.jstor.org/stable/247861>

19. Van Caneghem, T. (2002). Earnings management induced by cognitive reference points. *British Accounting Review*, 34(2), 167–178. <https://doi.org/10.1006/bare.2002.0190>
20. Van Caneghem, T. (2004). The impact of audit quality on earnings rounding-up behaviours: Some UK evidence. *European Accounting Review*, 13(4), 771–786. <https://doi.org/10.1080/0963818042000216866>
21. Watts, R. L., & Zimmerman, J. L. (1978). Towards a positive theory of the determination of accounting standards. *The Accounting Review*, 53(1), 112–134. <https://ssrn.com/abstract=928684>
22. Watts, R. L., & Zimmerman, J. L. (1986). *Positive accounting theory*. Prentice-Hall.

RECONCILING SHAREHOLDER THEORY IN THE AGE OF ESG

Morris Danielson^{*}, Karen M. Hogan^{*},
Gerard T. Olson^{**}

^{*} Department of Finance, Haub School of Business, St. Joseph's University, PA, the USA

^{**} Department of Finance and Real Estate, Villanova School of Business,
Villanova University, PA, the USA



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Abstract

In August 2019, the Business Roundtable released a new Statement on the Purpose of a Corporation, signed by 181 CEOs, in which it endorsed the proposition that companies should pursue policies designed to create benefits for all stakeholder groups, including customers, employees, suppliers, communities, and shareholders. The 2019 Statement superseded all previous pronouncements issued by the Business Roundtable since its founding in 1972, in which it had consistently endorsed the principle of shareholder primacy. The Business Roundtable's new position appears to have popular support, as most polls reveal that a majority of respondents agree that managers should consider stakeholder and societal interests when making business decisions.

The discussions regarding the misalignment of stakeholder and shareholder theory are well documented (Karpoff, 2021; Denis, 2016; Chassagnon & Hollandts, 2014; Jackson, 2011). Environmental, social, and governance (ESG) strategies and their relation to shareholder value are not new and have been a major evolving component in the modern corporate governance arena (Wirawan et al., 2020). As affirmed by the 2019 Roundtable Statement, ESG is no longer looked at as a siloed approach with mostly costs for the firm and little benefit for shareholders

but can be combined in a companies' analysis of strategic, operational, and financial risks and opportunities to bring value to the firm.

All stakeholders, including shareholders, are interested in ESG and its impact on firm value and social good. The idea that ESG and shareholder theory are incongruent is a fallacy. To reconcile shareholder theory to stakeholder theory, we model the corporate decision-making process using a holistic risk management approach. This approach reveals that ESG considerations do not necessarily conflict with shareholder theory. Firms will include considerations whose benefits bring value to the firm when looking at all types of risks and opportunities, not just financial ones.

According to Segal (2012), operational and strategic risks need to be included in addition to the traditional models of financial risk in assessing a value-based approach to managing a firm's risks. Using a holistic approach that includes strategic, operational, and financial risks allows companies to incorporate those strategies like ESG that historically are hard to quantify and yet if ignored could result in catastrophic losses in the value of the firm. The key to understanding how to analyze those risks is to include a group of educated stakeholders that would have key knowledge of those variables and how they could affect firm value.

The goal of this study is to construct a framework where we reconcile shareholder theory, as traditionally defined, with stakeholder theory and the goals of the ESG movement. Within this framework, the main prescription of maximizing expected shareholder value remains unchanged. Our investigation should be interesting to both researchers and corporations alike.

REFERENCES

1. Chassagnon, V., & Hollandts, X. (2014). Who are the owners of the firm: Shareholders, employees or no one? *Journal of Institutional Economics*, 10(1), 47–69. <https://doi.org/10.1017/S1744137413000301>
2. Denis, D. (2016). Corporate governance and the goal of the firm: In defense of shareholder wealth maximization. *The Financial Review*, 51(4), 467–480. <https://doi.org/10.1111/fire.12115>
3. Jackson, K. (2011). Towards a stakeholder-shareholder theory of corporate governance: A comparative analysis. *Hastings Business Law Journal*, 7, Article 4. https://repository.uchastings.edu/cgi/viewcontent.cgi?article=1165&context=hastings_business_law_journal
4. Karpoff, J. M. (2021). On a stakeholder model of corporate governance. *Financial Management*, 50(2), 321–343. <https://doi.org/10.1111/fima.12344>
5. Segal, S. (2012). *Corporate value of enterprise risk management: The next step in business management*. Wiley. <https://doi.org/10.1002/9781119200741>
6. Wirawan, A. W., Falah, L. J., Kusumadewi, L., Adhariani, D., & Djakman, C. (2020). The effect of corporate social responsibility on the firm value with risk management as a moderating variable. *Journal of Asia-Pacific Business*, 21(2), 143–160. <https://doi.org/10.1080/10599231.2020.1745051>

MERGERS IN HIGHER EDUCATION INSTITUTIONS, NEW PUBLIC MANAGEMENT AND CORPORATE GOVERNANCE: SOME EVIDENCE FROM GREECE

Nikolaos Giovanis^{*}, Aikaterini Chasiotou^{*}

^{*} Department of Business Administration, International Hellenic University,
Thessaloniki, Greece



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Abstract

While there are a considerable objective variety and management strategies, the public sector's corporate governance differs from the private sector due to the differing legal framework, financial accountability and organizational structure of public businesses. Additionally, the absence of a sizable corpus of research on corporate governance in the public sector sets it apart from that in the private sector. To address issues in the public sector, particularly one of possible accountability, corporate governance of the public sector was introduced and further debated in the beginning of the 1990s. Thus, people, process, performance, and purpose — the four P's of corporate governance — are adjusted and applied to the unique characteristics of the public sector. Good corporate governance in the public sector aims to determine the ways to reach the most effective strategic decisions, to ensure transparency, which in turn ensures a strong and balanced economic development for the organization. Good corporate governance matches the interests of owners-shareholders, management, directors, employees,

and establishes transparent rules and controls, and offers leadership advice. It encourages long-term financial sustainability and a distinct understanding of an organization's course.

The New Public Management (*Nouvelle Bonne Gouvernance*) was also implemented in the 1990s to encourage decentralized budgeting, flexibility in the implementation of public budgeting, and performance evaluation in public services. The main tenets of the New Public Management place a significant emphasis on budgetary management, value for money, and increasing efficiency. The use of a command-and-control style of operation, creating and specifying goals, and ongoing performance monitoring are essential components. Each person takes on responsibility for the delivery, monitoring, and assessment of this element. Making administrators responsible for their actions and process delivery is another important aspect of New Public Management. Every society now demands efficient administrative systems and the right protocols for developing and implementing efficient management policies, as well as public accounting knowledge of the public sector actions. Law No. 3871/2010 is regarded in Greece as the foundation for implementing the ideals of the New Public Management. In this regard, any public organization is able to implement realistic targets for public revenues and budgets (objectives that are being implemented), putting more of an emphasis on the costs of results rather than inputs.

Mergers and synergies between higher education institutions are frequent processes, both worldwide and in Europe. There are a sizable number of published scientific publications and studies that discuss the recording and investigation of merger and integration processes. Gaining critical mass, enhancing institutions' academic performance, achieving financial efficiency via the co-management of all resources, and improving performance through promoting social and economic growth are the most common aims of mergers.

The present study focuses on the above referred issues, on the recent merger (three years ago) between the International Hellenic University (IHU) and three Technological Educational Institutions located in Central and Eastern Macedonia — Thrace. The new IHU now has the form of four main poles as follows: one in Serres, one in Kavala and two in Thessaloniki (East and West), current headquarters of the four institutions and will have additional departments in four other cities of Greece: Katerini, Kilkis, Drama and Didymoteicho. The visionary goal of the new IHU is to emphasize and encourage innovation in teaching and research, as well as the international nature of the studies it will offer. Also, important elements of the merger and integration were the restructuring of all the services with their consolidation and the establishment of new ones — where it was necessary. Last, there was an effort for increased financial efficiency through co-management of all combined resources. In order to examine the present situation with the level of the merger's success and evaluate

any possible impact from New Public Management and Corporate Governance, we have conducted ten interviews with professors — members of the teaching staff and discussed a series of questions (in unstructured live interviews).

The results of our study provide evidence that the innovative features of the new IHU, after the integration process, were the osmosis of the different approaches and experiences between the members of the teaching staff and employees of the institutions involved. Following the basic principles of New Public Management and Corporate Governance, a systematic effort is made to save public resources, as not only are existing infrastructures and administrative services satisfactory utilized than newly created wider structures but economies of scale are started to be realized too. The new university can be included in terms of ranking as a large, innovative and experimental new university, as it is already the third largest in Greece in terms of a number of students. However, although in the European area and worldwide the number of university mergers has increased significantly in the last two decades, in Greece there were not similar particularly large-scale projects, nor many years of preparation for such a thing. For this reason and as an unprecedented experience in size for the institutions involved, significant difficulties arose in recent years that had to be addressed at IHU. Also, further emphasis needs to be given to issues of organizational functioning in the existing situation, in order to upgrade the competitiveness of the new institution at the international level and achieve a better position in international university ranking lists.

REFERENCES

1. Aarrevaara, T., & Dobson, I. (2016). Merger mania? The Finnish higher education experience. In R. Pinheiro, L. Geschwind, & T. Aarrevaara (Eds.), *Mergers in higher education: The experience from Northern Europe* (Vol. 46, pp. 59–72). Springer. https://doi.org/10.1007/978-3-319-21918-9_4
2. Benner, M., & Geschwind, L. (2016). Conflicting rationalities: Mergers and consolidations in Swedish higher education policy. R. Pinheiro, L. Geschwind, & T. Aarrevaara (Eds.), *Mergers in higher education: The experience from Northern Europe* (Vol. 46, pp. 43–58). Springer. https://doi.org/10.1007/978-3-319-21918-9_3
3. Cai, Y., & Yang, X. (2016). Mergers in Chinese higher education: lessons for studies in a global context. *European Journal of Higher Education*, 6(1), 71–85. <https://doi.org/10.1080/21568235.2015.1099458>
4. Cartwright, S., Tytherleigh, M., & Robertson, S. (2007). Are mergers always stressful? Some evidence from the higher education sector. *European Journal of Work and Organizational Psychology*, 16(4), 456–478. <https://doi.org/10.1080/13594320701606391>
5. Contreras, I., & Lozano, S. (2022). Size efficiency, splits and merger gains, and centralized resource reallocation of Spanish public universities. *Socio-Economic Planning Sciences*, 81, Article 101190. <https://doi.org/10.1016/j.seps.2021.101190>

6. Czarniawska, B. (2020). Mergers and acquisitions: The latest university fashion? *Qualitative Research in Accounting and Management*, 17(1), 18–32. <https://doi.org/10.1108/QRAM-01-2019-0003>
7. De Boer, H., Enders, J., & Schimank, U. (2007). On the way towards new public management? The governance of university systems in England, the Netherlands, Austria, and Germany. In D. Jansen (Ed.), *New forms of governance in research organizations* (pp. 137-152). Springer. https://doi.org/10.1007/978-1-4020-5831-8_5
8. Eastman, J., & Lang, D. (2001). *Mergers in higher education: Lessons from theory and experience*. University of Toronto Press. <https://doi.org/10.3138/9781442677258>
9. Frolich, N., & Stensaker, B. (2021). Mergers and missions: Investigating consequences for system diversity. *Higher Education*, 82(2), 411–434. <https://doi.org/10.1007/s10734-021-00730-7>
10. Giovanis, N., Pantelidis, P., Chasiotou, A., Pazarskis, M. (2020). Corporate governance and new public management in Greek tax authority: The COVID-19 experience. In S. Sylos Labini, A. Kostyuk, & D. Govorun (Eds.), *Corporate Governance: An Interdisciplinary Outlook in the Wake of Pandemic* (pp. 178–181). Virtus Interpress. <https://doi.org/10.22495/cgiowp>
11. Giovanis, N., Pantelidis, P., Pazarskis, M., & Tairi, E. (2017). Assessing employment effects of mergers using accounting measures: Some evidence from Greece in the period of economic crisis. *Journal of Accounting and Taxation*, 9(10), 131–138. <https://doi.org/10.5897/JAT2017.0284>
12. Goedegebuure, L. C. (1994). *Mergers in higher education: A comparative perspective*. Lemma Publishers.
13. Goedegebuure, L. C. J., & Meek, V. L. (1994). A resource dependence perspective on mergers: Comparing institutional amalgamations in Australia and the Netherlands. In L. C. J. Goedegebuure & F. A. van Vught (Eds.), *Comparative policy studies in higher education* (Vol. 19, pp. 127–164). Lemma Publishers. <https://research.utwente.nl/en/publications/a-resource-dependence-perspective-on-mergers-comparing-institutio>
14. Harman, G., & Harman, K. (2008). Strategic mergers of strong institutions to enhance competitive advantage. *Higher Education Policy*, 21(1), 99–121. <https://doi.org/10.1057/palgrave.hep.8300172>
15. Hatton, E. J. (2002). Charles Sturt University: A case study of institutional amalgamation. *Higher Education*, 44, 5–27. <https://doi.org/10.1023/A:1015504909483>
16. Hood, C. (1995). The 'New Public Management' in the 1980s: Variations on a theme. *Accounting, Organizations and Society*, 20(2–3), 93–109. [https://doi.org/10.1016/0361-3682\(93\)E0001-W](https://doi.org/10.1016/0361-3682(93)E0001-W)
17. Hu, Y., & Liang, W. (2008). Malmquist index analysis of the dynamic changes in scientific research productivity of a few Chinese universities before and after merger. *Frontiers of Education in China*, 3(3), 429–447. <https://doi.org/10.1007/s11516-008-0028-0>
18. Jansen, E. P. (2008). New public management: Perspectives on performance and the use of performance information. *Financial Accountability and Management*, 24(2), 169–191. <https://doi.org/10.1111/j.1468-0408.2008.00447.x>
19. Kang, Y., & Liu, R. (2021). Does the merger of universities promote their scientific research performance? Evidence from China. *Research Policy*, 50(1), Article 104098. <https://doi.org/10.1016/j.respol.2020.104098>

20. Kyvik, S., & Stensaker, B. (2013). Factors affecting the decision to merge: The case of strategic mergers in Norwegian higher education. *Tertiary Education and Management*, 19(4), 323–337. <https://doi.org/10.1080/13583883.2013.805424>
21. Kyvik, S., & Stensaker, B. (2016). Mergers in Norwegian higher education. In R. Pinheiro, L. Geschwind, & T. Aarevaara (Eds.), *Mergers in higher education: The experience from Northern Europe* (Vol. 46, pp. 29–42). Springer. https://doi.org/10.1007/978-3-319-21918-9_2
22. Liu, Q., Patton, D., & Kenney, M. (2018). Do university mergers create academic synergy? Evidence from China and the Nordic Countries. *Research Policy*, 47(1), 98–107. <https://doi.org/10.1016/j.respol.2017.10.001>
23. Locke, W. (2007). Higher education mergers: Integrating organisational cultures and developing appropriate management styles. *Higher Education Quarterly*, 61(1), 83–102. <https://doi.org/10.1111/j.1468-2273.2006.00339.x>
24. Norgard, J. D., & Skodvin, O. J. (2002). The importance of geography and culture in mergers: A Norwegian institutional case study. *Higher Education*, 44, 73–90. <https://doi.org/10.1023/A:1015513111300>
25. Pazarskis, M., Giovanis, N., Koutoupis, A., & Chasiotou, A. (2022). Merger decisions, accounting information and performance stability inside and outside of economic crisis periods: Evidence from Greece. *Journal of Business Economics and Management*, 23(5), 1170–1193. <https://doi.org/10.3846/jbem.2022.17697>
26. Pinheiro, R., Aarevaara, T., Berg, L. N., Geschwind, L., & Torjesen, D. O. (2017). Strategic mergers in the public sector: Comparing universities and hospitals. In S. Tarba, R. Cooper, & C. Sarala (Eds.), *Mergers and acquisitions in practice* (pp. 44–68). Routledge. <https://www.routledge.com/Mergers-and-Acquisitions-in-Practice/Tarba-Cooper-Sarala-Ahammad/p/book/9780367253837>
27. Skodvin, O. J., & Stensaker, B. (1998). Innovation through merging? *Higher Education Management*, 10(3), 73–86.
28. Sulkowski, L., Fijałkowska, J. & Dżimińska, M. (2019). Mergers in higher education institutions: A proposal of a novel conceptual model. *Managerial Finance*, 45(10–11), 1469–1487. <https://doi.org/10.1108/MF-01-2018-0048>
29. Wan, Y., & Peterson, M. (2007). A case study of a merger in Chinese higher education: The motives, processes, and outcomes. *International Journal of Educational Development*, 27(6), 683–696. <https://doi.org/10.1016/j.ijedudev.2006.07.007>
30. Wollscheid, S., & Røsdal, T. (2021). The impact of mergers in higher education on micro-level processes — A literature review. *Tertiary Education and Management*, 27(3), 257–280. <https://doi.org/10.1007/s11233-021-09074-4>

CORPORATE DIPLOMACY ACTIONS IN THE EXTRACTIVE INDUSTRIES

Robert J. McDonald^{*}, Jaime Rivera-Camino^{**}

^{*} Faculty of Economics, San Ignacio de Loyola University, Lima, Peru;
St. Antony's College, University of Oxford, Oxford, UK

^{**} Faculty of Business Economics, University Carlos III Madrid, Madrid, Spain



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Abstract

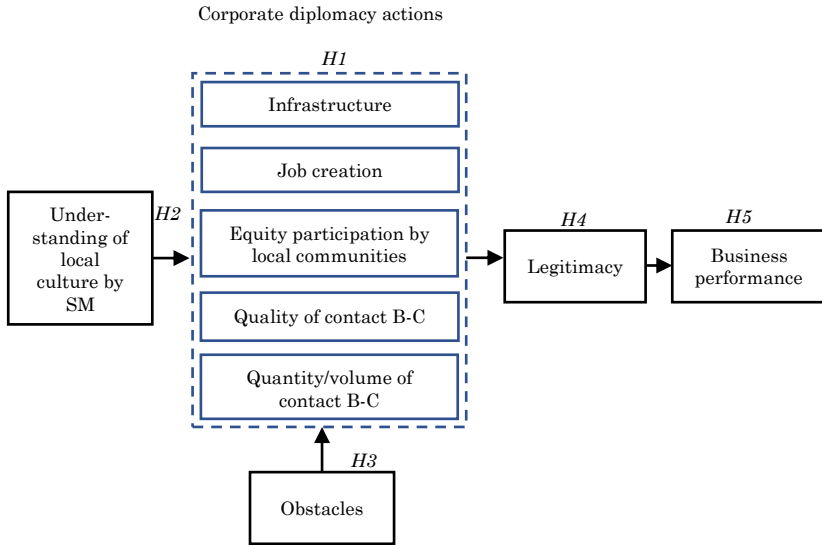
Based on empirical information from the Peruvian mining, hydrocarbons and electricity sectors, a model is proposed that empirically relates the influence of management actions on organizational variables that impact the financial and social performance of the firms in the extractive sector. On an organizational level, this study analyses the effects of corporate diplomacy actions (CDA) on legitimacy, as well as legitimacy on business performance.

From a corporate governance perspective, it also seems relevant to study the influence of organizational obstacles to implementing CDA.

The study empirically confirms the social and economic relationships between extractive companies, communities and stakeholders at large, and guides managers, politicians, and authorities to prevent conflicts and allow the performance of extractive industries to improve. It also contributes to closing the gap of empirical studies in less advanced countries.

It applies advanced analytical methodology like quantile regression, which proves to be significantly valuable in a study like this where the distribution of the variables is non-linear and the efforts exercised to gather data have been major.

Figure 1. Conceptual model



This study aims to validate empirically the influence of the managers on the organizational variables under their command that can condition the financial and social performance of the firms in the extractive sector. From an organizational perspective, this study analyses the effects of corporate diplomacy (CD) on legitimacy, as well as the impact of this latter variable on business performance. Also, the influence of organizational obstacles to the implementation of CD is discussed.

The scarcity of previous empirical studies that dwell on the relationships modeled in this study have led to selecting the use of two methodological levels and approaches to validate the hypothesis. At the exploratory level, the following techniques are applied: factor analysis, Pearson correlation, and Eta coefficient. At the causal level, two techniques are used: ordinary least squares in path models (PLS-SEM), and quantile regression (RC). This latter technique allows for a more exhaustive analysis of the relationship between the variables, as well as measuring their non-linear behaviours.

At an exploratory level, the hypothesis that predicted the relationships between the individual variables, the business ones, and the results of the business performance, are validated. Also, the conceptual identity of the CD is validated. However, when causal procedures of higher statistical precision are applied, the influence of only some of the indicators of the variables modeled is validated. Furthermore, it is found that the behavior of some of the variables is

non-linear, for example, the impact of the obstacles on the CDA, and the influence of the CD on legitimacy. The hypothesis that predicted the impact of legitimacy on business performance was validated from a causal perspective, as well as all indicators of this independent variable.

The principal shortcoming of this study is its capacity to be extrapolated to other contexts. The few studies that have analyzed some of the relationships integrated in this study’s model have been undertaken in countries with different cultures. Hence, it would be necessary to replicate the study in countries where their economies would also be highly dependent on these industries. Thus, it could be determined whether the results are contingent on the characteristics of the country studied, or can be extended at large to the extractive industries.

The questionnaires used to operationalize the organizational variables also constitute a valuable source of information and management tool. Not only line management, but directors and governing bodies can refer to them to align and control strategic direction with day-to-day management.

Table 1. The dimensions of corporate diplomacy

<i>Dimensions</i>	<i>Authors</i>	<i>Activities</i>
Improvement of socio-economic infrastructure	Bures (2015), Ingenhoff and Marschlich (2019), Oetzel and Doh (2009), Westermann-Behaylo et al. (2015)	The firms can exert their diplomatic efforts to promote political decisions that could strengthen the infrastructure of the community, as well as support improving services like education, health, sustainability and safety.
Adequate job creation	Bures (2015), Ingenhoff and Marschlich (2019), Ordeix-Rigo and Duarte (2009), Ross-Larson (2011), Westermann-Behaylo et al. (2015)	Develop human resources practises that generate a positive impact on the surrounding audience presenting evidence that the company cares about generating stable and secure jobs.
Equity and leadership participation by the community	Bolewski (2007, 2018), Halevy et al. (2020), Henisz (2016, 2017), Kochhar and Molleda (2014), London (1999), Sarkhanian (2017), Trice et al. (1995)	Develop actions to make the diplomatic subject matters fairer to the indigenous groups.
Quality of contact between the company and the community	Besley (2010), Mirvis et al. (2014), Mogensen (2017), Ordeix-Rigo and Duarte (2009), Wang (2011)	Develop processes that truly value the participation of all stakeholders.
Quantity of contact between the company and the community	Egea et al. (2020), Pigman (2010), Sriramesh et al. (2019), Zaharna (2008)	Develop simplified processes of communication that allow for a good understanding by all stakeholders.

REFERENCES

1. Acquah, I. S. K., Essel, D., Baah, C., Agyabeng-Mensah, Y., & Afum, E. (2021). Investigating the efficacy of isomorphic pressures on the adoption of green manufacturing practices and its influence on organizational legitimacy and financial performance. *Journal of Manufacturing Technology Management*, 32(7), 1399–1420. <https://doi.org/10.1108/JMTM-10-2020-0404>
2. Asquer, A. (2012). *What is corporate diplomacy?* <https://doi.org/10.2139/ssrn.2009812>
3. Baumgartner, R. (2014). Managing corporate sustainability and CSR: A conceptual framework combining values, strategies and instruments contributing to sustainable development. *Corporate Social Responsibility and Environmental Management*, 21(5), 258–271. <https://doi.org/10.1002/csr.1336>
4. Besley, J. C. (2010). Public engagement and the impact of fairness perceptions on decision favorability and acceptance. *Science Communication*, 32(2), 256–280. <https://doi.org/10.1177/1075547009358624>
5. Bolewski, W. (2007). New participants and corporate diplomacy: Symbiosis of diplomacy and transnational companies. In *Diplomacy and international law in globalized relations* (pp. 53–67). Springer. https://doi.org/10.1007/978-3-540-71101-8_8
6. Bolewski, W. (2018). Corporate diplomacy as global management. *International Journal of Diplomacy and Economy*, 4(2), 107–138. <https://doi.org/10.1504/IJDIPE.2018.094089>
7. Bures, O. (2015). Political corporate social responsibility: Including high politics? *Journal of Business Ethics*, 129(3), 689–703. <https://doi.org/10.1007/s10551-014-2200-1>
8. Burlea, A., & Popa, I. (2013). Legitimacy theory. In S. O. Idowu, N. Capaldi, L. Zu, & A. D. Gupta (Eds.), *Encyclopedia of corporate social responsibility* (pp. 1579–1584). Springer. https://doi.org/10.1007/978-3-642-28036-8_471
9. Campbell, J. (1977). On the nature of organizational effectiveness. In P. Goodman & J. Pennings (Eds.), *New perspectives on organizational effectiveness* (pp. 36–41). Jossey-Bass.
10. Canel, E., Idemudia, U., & North, L. L. (2010). Rethinking extractive industry: Regulation, dispossession, and emerging claims. *Canadian Journal of Development Studies/Revue Canadienne D'études du Développement*, 30(1-2), 5–25. <https://doi.org/10.1080/02255189.2010.9669279>
11. Cania, L. (2014). The impact of strategic human resource management on organizational performance. *Economia. Seria Management*, 17(2), 373–383. <https://www.management.ase.ro/reveconomia/2014-2/14.pdf>
12. Curran, G. (2017). Social licence, corporate social responsibility and coal seam gas: Framing the new political dynamics of contestation. *Energy Policy*, 101, 427–435. <https://doi.org/10.1016/j.enpol.2016.10.042>
13. Dahlsrud, A. (2008). How corporate social responsibility is defined: An analysis of 37 definitions. *Corporate Social Responsibility and Environmental Management*, 15(1), 1–13. <https://doi.org/10.1002/csr.132>
14. Dalton, D., Todor, W., Spendolini, M., Fielding, G., & Porter, L. (1980). Organization structure and performance: A critical review. *Academy of Management Review*, 5(1), 49–64. <https://doi.org/10.5465/amr.1980.4288881>
15. de Carvalho Spínola, S., & Cotton, A. M. (2022). From corporate to organisational diplomacy. In S. P. Sebastião & S. d. C. Spínola (Eds.), *Diplomacy, organisations and citizens* (pp. 63–80). Springer. https://doi.org/10.1007/978-3-030-81877-7_4

16. de Vries, J. (2014). Shedding light on business diplomacy: A systematic review on typology and its implications for MNC's [Bachelor's thesis, University of Twente]. <https://purl.utwente.nl/essays/66218>
17. Deephouse, D. L., Bundy, J., Tost, L. P., & Suchman, M. C. (2017). Organizational legitimacy: Six key questions. In R. Greenwood, C. Oliver, T. B. Lawrence, & R. E. Meyer (Eds.), *The SAGE handbook of organizational institutionalism* (pp. 27–54). SAGE Publications. <https://doi.org/10.4135/9781446280669.n2>
18. Deephouse, D., & Zhang, R. (2018). Organizational legitimacy. *Oxford Bibliographies*. <https://doi.org/10.1093/obo/9780199846740-0145>
19. Demuijnck, G., & FASTERLING, B. (2016). The social license to operate. *Journal of Business Ethics*, 136(4), 675–685. <https://doi.org/10.1007/s10551-015-2976-7>
20. Dowling, J., & Pfeffer, J. (1975). Organizational legitimacy: Social values and organizational behavior. *Sociological Perspectives*, 18(1), 122–136. <https://doi.org/10.2307/1388226>
21. Egea, M. A., Parra-Meroño, M. C., & Wandosell, G. (2020). Corporate diplomacy strategy and instruments; With a discussion about “corporate diplomacy and cyclical dynamics of open innovation”. *Journal of Open Innovation: Technology, Market, and Complexity*, 6(3), Article 55. <https://doi.org/10.3390/joitmc6030055>
22. Ford, J., & Schellenberg, D. (1982). Conceptual issues of linkage in the assessment of organizational performance. *Academy of Management Review*, 7(1), 49–58. <https://doi.org/10.5465/amr.1982.4285450>
23. Frynas, J., & Stephens, S. (2015). Political corporate social responsibility: Reviewing theories and setting new agendas. *International Journal of Management Reviews*, 17(4), 483–509. <https://doi.org/10.1111/ijmr.12049>
24. Gaertner, G. H., & Ramnarayan, S. (1983). Organizational effectiveness: An alternative perspective. *Academy of Management Review*, 8(1), 97–107. <https://doi.org/10.2307/257172>
25. Gangi, F., Daniele, L. M., & Varrone, N. (2020). How do corporate environmental policy and corporate reputation affect risk-adjusted financial performance? *Business Strategy and the Environment*, 29(5), 1975–1991. <https://doi.org/10.1002/bse.2482>
26. Hair, J. F., Jr., Hult, G. T. M., Ringle, C., & Sarstedt, M. (2016). *A primer on partial least squares structural equation modeling (PLS-SEM)* (2nd ed.). SAGE Publications.
27. Halevy, N., Jun, S., & Chou, E. Y. (2020). Intergroup conflict is our business: CEOs' ethical intergroup leadership fuels stakeholder support for corporate intergroup responsibility. *Journal of Business Ethics*, 162, 229–246. <https://doi.org/10.1007/s10551-018-4013-0>
28. Henisz, J. W., Dorobantu, S., & Nartey, L. (2013). Spinning gold: The financial returns to external stakeholder engagement. *Strategic Management Journal*, 35(12), 1727–1748. <https://doi.org/10.1002/smj.2180>
29. Henisz, W. J. (2016). The dynamic capability of corporate diplomacy. *Global Strategy Journal*, 6(3), 183–196. <https://doi.org/10.1002/gsj.1121>
30. Henisz, W. J. (2017). *Corporate diplomacy: Building reputations and relationships with external stakeholders* (1st ed.). Routledge. <https://doi.org/10.4324/9781351287883>
31. Huber, G. (1981). The nature of organizational decision making and the design of decision support systems. *MIS Quarterly*, 5(2), 1–10. <https://doi.org/10.2307/249220>

32. Ingenhoff, D., & Marschlich, S. (2019). Corporate diplomacy and political CSR: Similarities, differences and theoretical implications. *Public Relations Review*, 45(2), 348–371. <https://doi.org/10.1016/j.pubrev.2019.01.002>
33. Jenkins, H., & Yakovleva, N. (2006). Corporate social responsibility in the mining industry: Exploring trends in social and environmental disclosure. *Journal of Cleaner Production*, 14(3–4), 271–284. <https://doi.org/10.1016/j.jclepro.2004.10.004>
34. Kesteleyn, J., Riordan, S., & Ruël, H. (2014). Introduction: Business diplomacy. *The Hague Journal of Diplomacy*, 9(4), 303–309. <https://doi.org/10.1163/1871191X-12341294>
35. Kim, K.-H., Kim, M., & Qian, C. (2018). Effects of corporate social responsibility on corporate financial performance: A competitive-action perspective. *Journal of Management*, 44(3), 1097–1118. <https://doi.org/10.1177/0149206315602530>
36. King, B. G., & Whetten, D. A. (2008). Rethinking the relationship between reputation and legitimacy: A social actor conceptualization. *Corporate Reputation Review*, 11(3), 192–207. <https://doi.org/10.1057/crr.2008.16>
37. Kochhar, S. K., & Molleda, J. C. (2014). The evolving links between international public relations and corporate diplomacy. In d. G. J. Golan, S.-U. Yang, & D. F. Kinsey (Eds.), *International public relations and public diplomacy: Communication and engagement* (pp. 51–72). Peter Lang.
38. Kostova, T., & Zaheer, S. (1999). Organizational legitimacy under conditions of complexity: The case of the multinational enterprise. *Academy of Management Review*, 24(1), 64–81. <https://doi.org/10.2307/259037>
39. Kumar, N., Stern, L., & Anderson, J. (1993). Conducting interorganizational research using key informants. *Academy of Management Journal*, 36(6), 1633–1651. <https://journals.aom.org/doi/10.5465/256824>
40. Lenz, R. T. (1981). ‘Determinants’ of organizational performance: An interdisciplinary review. *Strategic Management Journal*, 2(2), 131–154. <https://doi.org/10.1002/smj.4250020204>
41. Li, H., Chen, Z., & Ma, G. (2016b). Corporate reputation and performance: A legitimacy perspective. *Entrepreneurial Business and Economics Review*, 4(3), 181–193. <https://doi.org/10.15678/EBER.2016.040313>
42. London, M. (1999). Principled leadership and business diplomacy: A practical, values-based direction for management development. *Journal of Management Development*, 18(2), 170–192. <https://doi.org/10.1108/02621719910257783>
43. Martínez, N., Carabel, T., & del Castillo Feito, C. (2018). Legitimacy and reputation of organizations: Their relationship with management systems and financial performance. In E. Díez-De-Castro & M. Peris-Ortiz (Eds.), *Organizational legitimacy* (pp. 141–157). Springer. https://doi.org/10.1007/978-3-319-75990-6_9
44. Maurer, J. (1971). *Readings in organization theory: open-system approaches*. Random House.
45. Miranda, S., Cruz-Suárez, A., & Prado-Román, M. (2018). Relationship between legitimacy and organizational success. In E. Díez-De-Castro & M. Peris-Ortiz (Eds.), *Organizational legitimacy* (pp. 171–195). https://doi.org/10.1007/978-3-319-75990-6_11
46. Mirvis, P. H., Hurley, S. T., & MacArthur, A. (2014). Transforming executives into corporate diplomats: The power of global pro bono service. *Organizational Dynamics*, 43(3), 235–245. <https://doi.org/10.1016/j.orgdyn.2014.08.010>

47. Mogensen, K. (2017). From public relations to corporate public diplomacy. *Public Relations Review*, 43(3), 605–614. <https://doi.org/10.1016/j.pubrev.2017.03.011>
48. O'Donovan, G. (1999). Managing legitimacy through increased corporate environmental reporting: An exploratory study. *Interdisciplinary Environmental Review*, 1(1), 63–99. <https://doi.org/10.1504/IER.1999.053837>
49. Oetzel, J., & Doh, J. P. (2009). MNEs and development: A review and reconceptualization. *Journal of World Business*, 44(2), 108–120. <https://doi.org/10.1016/j.jwb.2008.05.001>
50. Ordeix-Rigo, E., & Duarte, J. (2009). From public diplomacy to corporate diplomacy: Increasing corporation's legitimacy and influence. *American Behavioral Scientist*, 53(4), 549–564. <https://doi.org/10.1177/0002764209347630>
51. Parsons, T. (1960). *Structure and process in modern societies*. Free Press.
52. Patriotta, G., Gond, J., & Schultz, F. (2011). Maintaining legitimacy: Controversies, orders of worth, and public justifications. *Journal of Management Studies*, 48(8), 1804–1836. <https://doi.org/10.1111/j.1467-6486.2010.00990.x>
53. Pigman, G. (2010). *Contemporary diplomacy*. Polity.
54. Porter, M., & Kramer, M. (2011). Creating shared value. *Harvard Business Review*, 89(1–2), 62–77. <https://www.communitylivingbc.ca/wp-content/uploads/2018/05/Creating-Shared-Value.pdf>
55. Richard, P. J., Devinney, T. M., Yip, G. S., & Johnson, G. (2009). Measuring organizational performance: Towards methodological best practice. *Journal of Management*, 35(3), 718–804. <https://doi.org/10.1177/0149206308330560>
56. Rivera, J. (2019). An integral model for the implementation of environmental policy strategy. *Business Strategy and the Environment*, 28(5), 909–920. <https://doi.org/10.1002/bse.2331>
57. Ross-Larson, B. (Ed.). (2011). *Improving the odds of achieving the MDGs: Heterogeneity, gaps, and challenges* (Global Monitoring Report). The World Bank. <https://www.imf.org/external/pubs/ft/gmr/2011/eng/gmr.pdf>
58. Saeidi, S., Sofian, S., Saeidi, P., Saeidi, S., & Saeidi, S. A. (2015). How does corporate social responsibility contribute to firm financial performance? The mediating role of competitive advantage, reputation, and customer satisfaction. *Journal of Business Research*, 68(2), 341–350. <https://doi.org/10.1016/j.jbusres.2014.06.024>
59. Sarkhanian, S. (2017). *Diplomatic spaces, indigenous voices, and equity in a shifting paradigm of global governance: A critical analysis on regional diplomacy to promote and protect the rights of indigenous peoples at the nexus of business and human rights* (International Human Rights Internships Program, Working Paper Series). https://www.mcgill.ca/humanrights/files/humanrights/ihri_wps_v5_n04_sarkhanian.pdf
60. Schiopoiu, A., & Popa, I. (2013). Legitimacy theory. In S. O. Idowu, N. Capaldi, L. Zu, & A. D. Gupta (Eds.), *Encyclopedia of corporate social responsibility* (pp. 1579–1584). Springer. https://doi.org/10.1007/978-3-642-28036-8_471
61. Singh, S., Darwish, T., & Potočník, K. (2016). Measuring organizational performance: A case for subjective measures. *British Journal of Management*, 27(1), 214–224. <https://doi.org/10.1111/1467-8551.12126>

62. Spiegel, S. J. (2012). Governance institutions, resource rights regimes, and the informal mining sector: Regulatory complexities in Indonesia. *World development*, 40(1), 189–205. <https://doi.org/10.1016/j.worlddev.2011.05.015>
63. Sriramesh, K., Edelman, R., Kraus, M., & Verčič, D. (2019). *The global public relations handbook: Theory, research, and practice* (3rd ed.). Routledge. <https://doi.org/10.4324/9781315173290>
64. Tallberg, J., & Zürn, M. (2019). The legitimacy and legitimation of international organizations: Introduction and framework. *The Review of International Organizations*, 14(4), 581–606. <https://doi.org/10.1007/s11558-018-9330-7>
65. Tang, Y. (2017). A summary of studies on organizational legitimacy. *Open Journal of Business and Management*, 5(3), 487–500. <https://doi.org/10.4236/ojbm.2017.53042>
66. Trice, R., Hasegawa, M., & Kearns, M. (Eds.). (1995). *Corporate diplomacy: Principled leadership for the global community*. Center for Strategic & International Studies.
67. Tse, T. (2011). Shareholder and stakeholder theory: After the financial crisis. *Qualitative Research in Financial Markets*, 3(1), 51–63. <https://doi.org/10.1108/17554171111124612>
68. Waddock, S., & Graves, S. (1997). The corporate social performance — financial performance link. *Strategic Management Journal*, 18(4), 303–319. [https://doi.org/10.1002/\(SICI\)1097-0266\(199704\)18:4<303::AID-SMJ869>3.0.CO;2-G](https://doi.org/10.1002/(SICI)1097-0266(199704)18:4<303::AID-SMJ869>3.0.CO;2-G)
69. Wang, J. (Ed.). (2011). *Soft power in China: Public diplomacy through communication*. Palgrave Macmillan.
70. Westermann-Behaylo, M. K., Rehbein, K., & Fort, T. (2015). Enhancing the concept of corporate diplomacy: Encompassing political corporate social responsibility, international relations, and peace through commerce. *Academy of Management Perspectives*, 29(4), 387–404. <https://doi.org/10.5465/amp.2013.0133>
71. Zaharna, R. S. (2008). Mapping out a spectrum of public diplomacy initiatives: Information and relational communication frameworks. In *Routledge handbook of public diplomacy* (pp. 106–120). Routledge. <https://doi.org/10.4324/9780203891520-18>

THE FAMILY CONSTITUTION AS A NEW INSTRUMENT OF CORPORATE GOVERNANCE IN GERMAN FAMILY BUSINESSES

Patrick Ulrich *

* Aalen University, Aalen, Germany; University of Bamberg, Bamberg, Germany



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Abstract

The governance of family businesses is a new and exciting field of research. Germany has a particularly large number of successful family businesses. The article discusses the basic idea of the family constitution, a mechanism of corporate governance in family businesses.

1. INTRODUCTION

In recent years, research and practice in business administration have been increasingly devoted to family businesses, as they have been neglected by business administration in the past decades (Priem & Alfano, 2016). In addition to the economic and business management specifics, business management in general, financing, business succession, external management and other business management functions, papers on the specifics of corporate governance in family businesses are increasingly being published. This is of increasing interest not only in Germany but also internationally (Daspit et al., 2017).

For the German situation of family businesses, an interesting area of tension arises: on the one hand, family businesses are regarded by the public as particularly successful, good employers that operate successfully on a sustainable basis. On the other hand, cases such as

Aldi, Oetker and Tönnies have also recently become known in which disputes within the family have had a negative impact on the respective companies.

Here, both classic corporate governance instruments and special family governance instruments can help to reduce information asymmetries. One of these mechanisms is the family constitution (Ulrich & Speidel, 2017). This term is used in this paper as a collective term for documents that are referred to in practice, for example, as a family code or family mission statement and can be used as a basis for discussing structures and strategies in the family context. Several studies on family businesses have already been conducted in this regard (Fleischer, 2016; Mengers & Prigge, 2017).

In this study, the previous theoretical and empirical findings of the family variant are examined.

2. CORPORATE GOVERNANCE MECHANISMS IN FAMILY BUSINESSES

Basically, corporate governance in family businesses works differently than in non-family businesses because the additional system "family: is added to the established systems "business" and "management". As a result, this leads to changed principal-agent constellations, which depend on the number of persons, but also on the number of generations, family relationships and the distribution of rights of disposal. Basically, three sets of interests can be distinguished (Becker & Ulrich, 2008):

- In the owner company, which is managed by one person who holds all shares in the company, there are no principal-agent conflicts.
- In the family business, where $n > 1$ person from the family/multiple family trunks are involved in ownership and management, there are multiple conflicts of interest between people inside and outside the family.
- In an externally managed company, where the family has withdrawn from operational management, there are not only the "typical" principal-agent conflicts, such as the supervision of external management but also the question of which persons from the family or the participating tribes may be represented in the company.

As a result, the three situation constellations mentioned above give rise to asymmetries that have a negative impact on the company's value creation and, therefore, need to be "managed". This can be done through a catalog of governance instruments which, although themselves costly, can reduce agency costs.

In general, corporate governance is less formalized in family firms than in non-family firms (Klein, 2008). Written or formal mechanisms are partially or fully replaced by corporate culture and the cohesion of actors in the business, so the lower level of formalization of corporate governance is not a major problem for fairly simply structured family

businesses. However, with increasing complexity caused by the size of the company, the product portfolio, internationalization processes or, above all, the increasing number of conflicts of interest between family members, these informal mechanisms may reach their limits, which is why special instruments such as an advisory board, a shareholders' committee or other family-related measures (e.g., family office, family activity and family philanthropy) may be added. These instruments include the family constitution, which is briefly explained below.

3. EFFECTS OF THE FAMILY CONSTITUTION ON BUSINESS PRACTICE

The family constitution is a written document that contains the fundamental beliefs and principles of the business family. It is an identity-forming model and its principles of action are intended to regulate the relationships between family members and the interaction between the family and the company. This instrument has its origins in the Anglo-American legal system, where the term “family business protocol” has become established (Brenes et al., 2011). In German, the family constitution is often referred to as “family charter”, “family protocol”, or “ownership or family strategy” (Kirchdörfer & Lorz, 2011).

The family constitution is informal. It is not legally binding or enforceable in the first step and is not formulated with legal precision. It is formulated in general terms and can rather be declared as a declaration of intent with at most a moral binding effect. In its nature and function, it is to be distinguished from the social contract. It precedes other contracts. Thus, many of its rules lead to partnership, inheritance or marriage contracts and make them legally binding and enforceable. In order to avoid problems with the legal interaction of rules with different legal statuses, the content of the family constitution should be clearly formulated and, if possible, appear in identical form in contractual agreements. In the event of deviations, the family constitution naturally has no legal binding force. However, it often has an indirect influence on the interpretation of other contracts and can thus possibly influence their provisions.

The family constitution is a way for the entrepreneurial family to reach a consensus (Zellweger & Kammerlander, 2015). Raising awareness of agreed-upon goals strengthens the family. But understanding conflicting goals can also be used to clarify conflicts and prevent disputes. All family members are involved. Decision-making autonomies are reduced, arbitrariness and abuse of power are reduced (Baus, 2013).

The path to a family constitution involves further risks. There is a risk that the family constitution will be filled with complex issues that should be reserved for the bylaws and that it will be seen as a substitute for them. The provisions of the family constitution then run into the void

due to their legal non-binding nature and are not necessarily effective. Moreover, differences between the family constitution and the articles of association can also lead to legal problems. Another danger is that goals are set without reference to entrepreneurial reality or that regulations overshoot the mark. As positive as breaking down the metrics of the information system is, individuals can lose in the process. They may have less power, a different position, or less financial support as a result of the new regulations.

According to the results of an empirical study by the INTES Institute, older and larger family businesses with a diversified shareholder structure and external management and supervisory boards have a family constitution (Schween et al., 2011).

4. RECOMMENDATIONS FOR ACTION AND CONCLUSION

This research provides an overview of existing theoretical and empirical evidence on family governance and family constitutions.

From a theoretical point of view, the study shows that the situation often assumed in the literature that stewardship theory prevails over principal-agent theory in family firms is not necessarily correct, as the family constitution can also be interpreted as a reaction to an increase in principal-agent conflicts within the family (Siebels & Knyphausen-Aufseß, 2012).

For practice, several conclusions can be drawn from the remarks in this investigation. The family constitution has arrived in the practice of larger family businesses. Whether this is always the case in smaller family businesses as well was questioned by the study participants, who cited a high degree of complexity and the presence of multiple generations as basic requirements for it to make sense.

Nevertheless, the question arises whether and to what extent the informal mechanisms of trust in family firms are influenced by the family constitution. In addition to the new theoretical approach to socioemotional wealth, this problem area should be a focus for further research on family governance and family registration.

REFERENCES

1. Alvesson, M. (2003). Beyond neopositivists, romantics, and localists: A reflexive approach to interviews in organizational research. *Academy of Management Review*, 28(1), 13–33. <https://doi.org/10.5465/amr.2003.8925191>
2. Baus, K. (2013). Die Familiencharta. In *Die Familienstrategie* (pp. 133–148). Springer Gabler. https://doi.org/10.1007/978-3-658-02824-4_9
3. Becker, W., & Ulrich, P. (2008). Corporate governance in mittelständischen Unternehmen: Ein Bezugsrahmen. *Zeitschrift für Corporate Governance*, 6, 261–267. <https://doi.org/10.37307/j.1868-7792.2008.06.06>

4. Brenes, E. R., Madrigal, K., & Requena, B. (2011). Corporate governance and family business performance. *Journal of Business Research*, 64(3), 280–285. <https://doi.org/10.1016/j.jbusres.2009.11.013>
5. Daspit, J. J., Chrisman, J. J., Sharma, P., Pearson, A. W., & Long, R. G. (2017). A strategic management perspective of the family firm: Past trends, new insights, and future directions. *Journal of Managerial Issues*, 29(1), 6–29. <https://www.researchgate.net/publication/313469153>
6. Fleischer, H. (2016). Das Rätsel Familienverfassung: Realbefund — Regelungsnatur — Rechtswirkungen. *ZIP: Zeitschrift für wirtschaftsrecht*, 37(32), 1509–1519. <https://dialnet.unirioja.es/servlet/articulo?codigo=5995891>
7. Kirchdörfer, R., & Lorz, R. (2011). Corporate Governance in Familienunternehmen, Familienverfassungen und Schnittstellen zum Gesellschaftsvertrag. *Zeitschrift für Familienunternehmen und Stiftungen*, 3, 97–106. https://www.hennerkes.de/wp-content/uploads/2016/07/Beitrag_Kirchdoerfer_Lorz_FuS_3_2011.pdf
8. Klein, S. B. (2008). Corporate governance in familienunternehmen. *ZfKE – Zeitschrift für KMU und Entrepreneurship*, 56(1–2), 18–35. <https://elibrary.duncker-humboldt.com/article/4691/corporate-governance-in-familienunternehmen>
9. Mengers, K., & Prigge, S. (2017). Die Familienverfassung aus betriebswirtschaftlicher Perspektive. In H. Fleischer, S. Kalss, & H. U. Vogt, (Eds.), *Recht der Familiengesellschaften* (pp. 71–98). Mohr Siebeck.
10. Priem, R. L., & Alfano, F. (2016). Setting new directions for the management discipline through family business research. *Journal of Family Business Strategy*, 7(1), 58–62. <https://doi.org/10.1016/j.jfbs.2016.01.001>
11. Schween, K., Koeberle-Schmid, A., Bartels, P., & Hack, A. (2011). *Die Familienverfassung: Zukunftssicherung für Familienunternehmen*. INTES Akademie für Familienunternehmen. <https://store.pwc.de/de/publications/die-familienverfassung-zukunftssicherung-fuer-familienunternehmen>
12. Siebels, J. F., & zu Knyphausen-Aufseß, D. (2012). A review of theory in family business research: The implications for corporate governance. *International Journal of Management Reviews*, 14(3), 280–304. <https://doi.org/10.1111/j.1468-2370.2011.00317.x>
13. Ulrich, P., & Speidel, S. (2017). Die Familienverfassung als Instrument der Corporate Governance in Familienunternehmen. *Zeitschrift für Corporate Governance*, 12(5), 197–201. <https://doi.org/10.37307/j.1868-7792.2017.05.03>
14. Zellweger, T., & Kammerlander, N. (2015). Family, wealth, and governance: An agency account. *Entrepreneurship Theory and Practice*, 39(6), 1281–1303. <https://doi.org/10.1111/etap.12182>

CONFERENCE FORUM DISCUSSION

BOARD FEATURES AND AUDIT QUALITY. DO BOARD FEATURES UPHOLD AUDIT QUALITY? A PERSPECTIVE FROM THE UK MARKET

by *Georgios C. Simitsis and Maria I. Kyriakou*

Alexander Kostyuk: Dear Georgios and Maria, it is great to see your contribution to our conference forum. I see several very interesting findings made by you. The most interesting is about the role of the CEO duality. You mentioned that “Conversely, the role of the CEO is disputable. When we approximate audit quality by discretionary accruals terms, CEO duality seems to improve quality contrary to many other findings”. Could you explain this issue in detail as your findings surprise a lot?

Georgios C. Simitsis: Thank you for giving us the opportunity to present our work.

Tariq Ismail: Dear Georgios, thanks for your paper. I do recommend carrying out further tests to consider the endogeneity problem. You can use the GMM or 2SSL. Additionally, a robustness test is needed using different proxies of the dependent variable. I believe that would enrich your results and findings.

Georgios C. Simitsis: Thank you for your comments. This, in fact, is our initial approach on the issue. We have already planned to process the data with alternative methodologies.

Stergios Tasios: Dear Georgie and Maria, congratulations on your work. Literature suggests that auditor choice may be interpreted by signalling theory. Do you believe that firms choose high-quality auditors to signal the quality of their financial reports or this signalling effect applies only in the case of sophisticated investors, who have the knowledge and expertise in financial matters? Adding ownership aspects in your control variables could possibly further improve your research model.

Le Chen: The guarantee of the independence of the external audit is the prerequisite for the external audit to carry out the audit activity fairly and objectively and make an objective and fair evaluation of the review results. Otherwise, if independence is not guaranteed, external audit cannot work with corporate governance to furtherly optimize the company’s management and performance. Certainly, there are many factors such as the board of directors which highly impact financial performance and corporates’ management. Your study has revealed that board features have a significant impact on audit quality which is very interesting but also very important for the media-large corporation’s rethinking of optimization of their board construction and the emphasis on audit quality. Dear Georgios C. Simitsis and Maria I. Kyriakou, thank you for your fantastic contribution!

**WOMEN'S BOARD PRESENCE AND FIRM PERFORMANCE:
EVIDENCE FROM A SAMPLE OF ITALIAN LISTED COMPANIES**

by Marina Carabelli

Alexander Kostyuk: Dear Marina, welcome at our conference forum. Could you provide more details about the findings related to such variable as "director expertise"? Do you consider "expertise" as a residual from education or just from practice? Do not you think that expertise could be strengthened by experience of the director too?

Valentina Santolamazza: Dear Marina, thank you for the opportunity to read your draft. The topic is interesting, even if it is not a new one. I think it could be useful a better justification of the research gap you aim to fill. In the methodology part, I suggest to improve the sample selection description. It could be interesting to understand what is your context.

Generally speaking, considering also the new recommendations of the *Nuovo Codice di Corporate Governance*, it could be interesting to perform an analysis before (2019, 2020) and after the introduction (2021). Finally, have a look at this chapter:

- Paoloni, M., Tutino, M., Mattei, G., & Paoloni, N. (2020). Gender and identity of BoD members: The influence on CSR and financial performance. In P. Paoloni & R. Lombardi (Eds.), *Gender studies, entrepreneurship and human capital*. Springer International Publishing. <https://www.springerprofessional.de/en/gender-and-identity-of-bod-members-the-influence-on-csr-and-fina/18160136>

Good job and good luck for your research!

Paolo Capuano: Dear Marina, your draft deals with a very interesting topic. I had already been interested in this topic applied to the banking sector for a few months. If you agree, we could work together to define a good idea and then write a joint paper.

Maria João Guedes: Hi, what are the main/new findings that you expect from your paper?

Marina Carabelli: Dear Alexander, thank you very much for your interest in my work. In the analysis conducted, I considered the variable expertise at the level of practice and work training. I think this variable can influence the performance of the company as more knowledge of board members can benefit the performance of the company, to which the experience of the director can also contribute.

Dear Valentina, thank you very much for the comments regarding my research and the insights to be able to expand and improve it.

Dear Paolo, thank you for your interest in my research, it would be my pleasure to work together.

Dear Maria, the research aims to investigate the role of women on the board. The objective is to show that a greater presence of qualified women on the board of companies has a positive effect on corporate performance results, not only in terms of turnover but also in terms of risk management. Indeed, the presence of women seems to have positive effects in terms of attendance at board meetings and involvement in decision-making processes.

Maria João Guedes: Thanks for explaining. I recommend that you read all the papers that also show that may be no effects or negative relationship with performance. Your sample is small, so the effects may be not that visible. I also recommend that you focus just on either performance or risk. Both are too many things going on in one paper. So, maybe divide it into two.

Marina Carabelli: Thank you very much for the advice, I will definitely divide the work by focusing on one topic first and then the other.

Shirley Mo Ching Yeung: Interesting. Relate to SDG 5 gender equality.

Marina Carabelli: Thank you very much, from a labor point of view important steps forward have been taken with the introduction of Gender Quotas Law. However, there is much room for improvement to achieve gender equality in the world of work.

Le Chen: The Italian constitution also clearly stipulates that “all citizens, regardless of gender” have equal status in political, economic and social life. However, in reality, women’s rights are not given enough attention. Thus, laws such as the Gender Quotas Law was set out to emphasize the gender equality and equal opportunity. Especially after the Italian female prime minister Giorgia Meloni came to power, the topic of women serving in high-level positions has been heatedly discussed again. Therefore, this study not only focused on women’s rights but also was a hot issue. According to your investigation, the presence of women on the board of directors is indeed important for companies’ performance. I am very interested in the results of the research. At the same time, 47 cases may still be quantitatively limited, and I don’t know if you agree with my humble opinion. Therefore, I look forward to your being able to further expand the number of sample portfolios to more strongly support the research result, and at the same time, be more conducive to contributing to the protection of women’s rights and gender equality. Dear Marina Carabelli, congratulations for your fantastic analysis. Wish all of you a nice discussion!

Throstur Olaf Sigurjonsson: Thanks Le Chen. Do you think that the agreement by the EU Commission this summer (June 7), will change a lot? (link here to the announcement:

https://ec.europa.eu/commission/presscorner/detail/en/IP_22_3478).

Marina Carabelli: Dear Le Chen, thank you for the intervention and for your interest in my research.

The topic of gender equality is of great topicality and importance and affects several areas, political, economic, social and ethical.

The objective of the research is to show that the role of women in the BoD is crucial to corporate performance. In particular, women appear to have, on average, a high level of educational training and an active role in board functions, attending meetings and sharing perspectives and viewpoints that contribute to a better understanding of corporate dynamics.

In the next stages of the research, I will try to increase the sample size to obtain results that can better interpret the phenomenon under study.

Thank you very much for your contribution.

Loai Ali Alsaïd: Dear Marina, thank you for your interesting paper. Although there is a rich literature on examining the effect of having women on the board of directors (BoD) on company performance, the topic — both as a theoretical and empirical argument — remains important. To enhance your theoretical contribution, it may be preferable to use a different, robust theoretical framework to explain your empirical results from different analytical angles. To enhance your empirical contribution, it may also be best to broaden your sample to some companies in developing countries where you may find field-level institutional pressures on companies (listed in particular) to have “women” on the board. From my Egyptian experience in this field, there is now regulatory compliance on companies listed on the Egyptian stock exchange to ensure “gender diversity” in their BoD, otherwise, the Central Capital Market Authority will not allow them to be listed on the stock exchange. Also, through my research, women’s board presence has affected the institutionalisation and over time the mainstreaming of new performance management and measurement practices within companies. All of these points above, I suggest, should be considered in your current study to further your arguments and contributions to the literature. I wish you all the best in developing your paper.

Marina Carabelli: Dear Loai, thank you very much for your suggestions, I will definitely follow them.

Stergios Tasios: Dear Marina, you are approaching a very interesting topic with implications for policymakers, corporations and society. Although gender board diversity has increased in the last years, women

in Europe remain rare in corporate boards. Which factors do you believe restrain women’s participation in corporate boards? Apart from ROA, have you considered using other performance measures such as ROE, Tobin’s Q and profit margin to validate your results?

Marina Carabelli: Dear Stergios, thank you for your observation. I believe that women’s participation in CDA is influenced by several factors not only corporate but also political and social. However, my research does not consider these factors. I will certainly evaluate corporate performance using other financial ratios and valuation methods to validate my results.

CEO'S DECISION-MAKING AND CORPORATE SOCIAL PERFORMANCE: DISENTANGLING THE ROLE OF SERENDIPITY

by *Francesca Romana Arduino and Giulia Spampinato*

Alexander Kostyuk: Dear Francesca and Giulia, welcome at our conference forum. Do you have any final or preliminary results of your study you could disclose? It would be very interesting to see if there is a difference related to the influence of CEO's decision making on corporate social performance in various industries.

Marina Carabelli: Dear Francesca and Giulia, very interesting. What do you expect from your research?

Francesca Romana Arduino: Dear Alexander, thank you for your interest and your comments. We are still working on our study. Indeed, I do agree that a major finding of our research can be related to the potential differences in the influence of CEO's decision making on corporate social performance across industries.

Dear Marina, thank you for your interest in the topic of our study. Our research could provide insights into the role of serendipity over CEO's decisions oriented to sustainability.

Tariq Ismail: Dear Francesca and Giulia, thanks for giving me the opportunity to read the paper abstract. I do encourage you to consider the CEO's narcissism among the characteristics that might affect the firm performance.

Loai Ali Alsaid: Dear Francesca and Giulia, thank you for your extended abstract. It seems like a starting point for a good research paper. "Sustainability" is an interesting and growing topic year after year, especially with the increasing growth in national urban development projects. However, I note that no specific theoretical framework was used to analyse your empirical findings on the potential impact of CEO decision-making on corporate social performance. I recommend that you use a specific theoretical framework (such as institutional theory, institutional logics theory, stakeholder theory, etc.) to make your empirical findings more feasible compared to previous literature. I wish you all the best with your interesting paper.

Karen M. Hogan: Dear Francesca and Giulia, thank you for the extended abstract. Board decision making and the current push toward ESG initiatives is an interesting topic. As Loai suggested it might be good to analyze in a specific framework to show its effect on CEO's

decision making relationship to CSR. Given that you are doing a survey you may want to incorporate it to see if the firm includes a holistic enterprise risk management system as part of its decision making process. I believe that using a quality enterprise risk management system which includes risk information from a host of expert stakeholders regarding all major risks associated with the particular firm/industry to lead the risk committee, of which the CEO may belong, will give the Risk Committee and the CEO ideas of which major risks could relate to CSR initiatives. By knowing which risks are important and which could shed negative light on the firm which could negatively impact brand recognition, etc., and thus the value of the firm. Firms that are thinking about those possible “killer risks” (risks that have the possibility of bringing real pain to the company) and how the possible quantitative effects of these risks (strategic, operational, and financial) allow the firm to analyze which CSR initiatives would be good for all stakeholders while using the primary stakeholder’s firm value as their guide. There is research to support that firms which use holistic erm models perform better in the market thus potentially allowing the CEO longevity.

Giulia Spampinato: Dear Tariq, thank you for your interest and your comment. We will consider your suggestion.

Dear Loai, thank you for your comment. We are going to adopt a specific theoretical lens building on prior literature.

Keith Harman: This is an interesting paper and it (in my opinion) surfaces an implicit assumption that C-Level planning and decision making is a stochastic process.

Francesca Romana Arduino: Dear Karen, thank you for your interest in our study. We appreciate your insightful comments and suggestions in relation to the CEO’s decision making process.

Dear Keith, thank you for your interest in the topic of our study and for sharing your comments about the C-Level planning and decision making processes.

REGULATION ON GENDER QUOTAS: GAUGING THE IMPACT ON CORPORATE BOARD

*by Audur Arna Arnardottir, Throstur Olaf Sigurjonsson,
and Patricia Gabaldon*

Marco Venuti: The paper is clear except on a specific point. I didn't find clear this statement: "This research indicates that a gender quota has led to increased female board participation in addition to impacting decision making and corporate norms, according to directors, as policy maker intended". In other words, if I understood rightly, the introduction by law of gender quotas causes an increase in female board participation and an impact on board decisions. From the institutional point of view, this is the normal effect of the introduction of a new regulation. Do you think that different results were possible in your case (e.g., a decrease in female board participation)? If yes, for what reason? In my opinion, the added value of your paper also depends on this answer.

Alexander Kostyuk: Dear Audur Arna, Throstur Olaf and Patricia, it is great to see your contribution to our conference forum. Gender quotas can be taken for a very important issue of corporate governance. Some countries have succeeded in this way very remarkably. I see your major statement that "Results show that the initial attitude towards gender quotas was more negative among male directors than female directors but became more similar and positive over time". Could you provide a brief retrospective to this progress in Iceland? What were the most driving and challenging issues on this way?

Imthiyas Yakuban: Dear Audur, Patricia and Throstur, I am happy to see you in our conference forum. Your research data seems to be from the primary data collected from the individuals through a mixed method approach of quantitative survey methodology and qualitative semi-structured interviews. Can you please help elaborate if there was a pilot study conducted to check the accuracy of the research data collecting instrument?

Maria João Guedes: Hi. So, do you find that the dynamics of the board changed because the boards are more balanced? Do you have examples of boards that had more women and now had to add some men? Are any changes in patterns depending on who you add to the board?

Stergios Tasios: Dear Audur, Patricia and Throstur, board gender diversity is a very interesting topic in corporate governance. Do you believe that gender diversity increases board independence and contributes more and valuable resources to a company?

Karen M. Hogan: Thanks for the paper. Gender diversity is an interest of mine. Do you feel that in Iceland females are reluctant to participate in stem programs? Does the government there do anything to get females comfortable with being successful in stem-related courses?

Loai Ali Alsaid: Dear Audur, Throstur, and Patricia, thank you for your interesting paper. However, to further develop your results, there are two points that may be useful to keep in mind:

1. It might be better if you can analyse your empirical data using a specific theoretical framework. This will help make your theoretical contribution to previous studies more visible.
2. It may also be useful to identify specific metrics by which to measure the impact of gender diversity on corporate governance practices within organisations.

I wish you all the best in developing your paper.

Throstur Olaf Sigurjonsson: Dear Marco, thank you for both reading the paper and for your question. I will try to reword what we mean here. When legislation was passed in parliament it was argued that different gender combination would affect the decision making and corporate norms. The assumptions of the policy maker had not been tested since the legislation came into effect. Our measurement of the attitude/ experience of directors gives support to those assumptions, and this we are trying to point out.

DOES THE EDUCATION LEVEL OF BOARD MEMBERS AFFECT THE BANK'S PERFORMANCE? EVIDENCE FROM US BANKS

by Paolo Capuano

Alexander Kostyuk: Dear Paolo, I am happy to see you participating in our conference forum discussion. Education background of directors in banks was a case explaining to some extent the reasons for the weak board performance of banks in the USA in 2008. Do you think that since that time banks succeeded a lot in this way, or probably we need to rely on regulation to succeed?

Imthiyas Yakuban: Dear Paolo, I am glad to see you at our conference forum. Your study analysis show there is a strong relationship between educational background of directors and financial performance of the firm. Did you have a chance to correlate their experience in the board as well with their education towards the firm's performance?

Paolo Capuano: Dear Alexander, thanks, I am very grateful to participate in this event which allows me to illustrate the research and to exchange very useful ideas. With regard to the education of bank boards, I think that after the Great International Crisis that began in 2008, there has been much more attention to this aspect but probably not enough. In fact, by comparing post-crisis data, I found that the average level of financial education has tended to increase, but not in all large banks. I think there needs to be a specific regulation response that implements the financial education of bank boards.

Dear Imthiyas, thank you, I am very pleased to participate in this interesting international conference and to share ideas and suggestions to improve research work. The initial analysis mainly concerns the impact of financial education on corporate performance but I agree with you that it would be interesting to extend it also to the financial experience of board members.

Alexander Kostyuk: Dear Paolo, I agree with you. The issue of the education of directors should be strengthened. This should concern both formal and informal education, degree based and non-degree based.

Karen M. Hogan: Thank you for the abstract and outline. This is an interesting topic. I am wondering what kind of stratifications on education you will see and how it will be laid out in the paper. Is your hypothesis that a variety of educational backgrounds will lead to higher stock valuation? Historically, in the US many banking employees were able to move up the chain without advanced degrees. I wonder if there are any differences over time.

Stergios Tasios: Dear Paolo, bank performance is a significant issue, especially in periods of financial distress. You included as control variables in your research model board size and board independence. According to resource dependence theory firms with larger boards and higher links to external environment have an improved access to various resources and consequently perform better. On the other hand, larger boards are more likely to face difficulties overseeing financial reporting and complicate decision making. An independent board may facilitate firm performance as outside directors contribute their independent ability to judge performance. What were your findings regarding the impact of board size and board independence on firm performance?

Paolo Capuano: Dear Karen, thanks for your interesting comment. I had thought of focusing the analysis of board education on academic titles in the field of corporate finance, risk management, business economics because these should be the main skills needed in the banking sector. The objective of the research is to verify whether these skills have been useful for improving banking performance.

Dear Stergios, thank you for the important comments expressed. With regard to the role of independent directors, the first results of the research seem to confirm what you said. In fact, these first results show that there is a significant impact of this variable on the performance of US banks in the period analysed. Of course, these results must be verified by testing the statistical robustness of the analysis model.

ASSESSING EARNINGS MANAGEMENT: A COMPARATIVE STUDY

by *Kanellos Toudas, Paraskevi Boufounou, and Dimitra Tsogka*

Alexander Kostyuk: Dear Kanellos, Paraskevi and Dimitra, welcome at our conference discussion forum. I see that you mentioned that you already received certain results of this study. For example, you write that “Although both methods demonstrated that the earnings management probabilities are low, its estimates for individual companies do not always agree”. What expectations (estimates) could be underlined by you as arguable in this context?

Paraskevi Boufounou: Dear Alexander, thank you for your comment.

Marina Carabelli: Dear Kanellos, Paraskevi and Dimitra, I have read your abstract and I think it is a very timely and interesting topic. Will you consider only listed companies in the research? How will you conduct the data collection?

Paraskevi Boufounou: Dear Marina. Thank you for your email. As noted, data were collected using the financial statements of listed in the Athens Stock Exchange Financial Statements.

Tariq Ismail: Dear Kanellos, Paraskevi and Dimitra, I would like to thank you for the abstract. As you may probably know, one of the most widely used techniques of earnings management is the modified Johnson model. Additionally, real earnings management is another approach that can be compared with the accrual-based approach. I do encourage you to consider such measures and approaches in testing the data. Good luck with your research.

Loai Ali Alsaid: Dear Kanellos, Paraskevi, and Dimitra, thank you for your interesting abstract. Evaluating earnings management from a comparative perspective is an interesting research topic. Based on my Egyptian experience in this research field, there are recent serious failures and irregularities revealed by some global stock exchanges for some companies in their internal earnings management practices and external disclosures. That was the rationale for developing their practices and adopting some sustainable management techniques by which (especially listed) companies can provide what is called an ‘earnings management assurance’ to ensure government legitimacy and public acceptance. For example, among others and similar to the creative accounting technique you use, these assurance practices were the creation of new (sustainable) risk management, performance management, financial management, and internal controls within these

(listed) companies. From here and going forward, I recommend highlighting some of these corporate earnings management irregularities and related corporate developments to provide earnings management assurance. I wish you all the best with your interesting paper.

Keith Harman: Enjoyed your paper on earnings management. The literature review is excellent, the constructs are parsed very well.

Luca Galati: Dear Kanellos, Paraskevi and Dimitra, thank you for sharing your interesting work. Have you considered including the Jones (1991) model, as mentioned earlier, or the modified Jones model in performing your tests?

I believe there should be a new tool that can be adapted better to today's accounting literature and perhaps works like yours could be a great start to arrive at this new contribution one day.

I know the Benford's law is a less sophisticated tool for spotting earnings management practices, but have you considered to mention that stream of literature as well in your paper? Very best of luck with your work.

Paraskevi Boufounou: Dear Luca. Thank you for your comment. We intend to use Jones model in our future research.

Dear Keith. Thank you for your comment.

Dear Loai thank you for sharing your experience.

Dear Tariq Thank you for your comment. We intend to use it in our future research.

FORENSIC ACCOUNTING: A STRATEGIC TOOL TO STRENGTHEN CORPORATE GOVERNANCE AGAINST FRAUD

*by Aggelia Xanthopoulou, Petros Kalantonis, Panagiotis Arsenos, and
Christos Kallandranis*

Alexander Kostyuk: Dear Aggelia, Petros, Panagiotis and Christos, welcome to participate in our conference. Forensic accounting is linked to the risk governance and control very close. Probably, there are specific issues how to impellent it in various industries. Could you describe certain methodological aspects of your study and the data set you used or going to use?

Aggelia Xanthopoulou: Dear Mr. Kostyuk, thank you for the opportunity that we have to present our paper in your conference, which is a systematic literature review and we try to highlight some important issues concerning the interaction of FA and CG in eliminating fraudulent activities. We deepen in bibliography in order to relate research findings and the implementation in future empirical research.

Alexander Kostyuk: I see your concept of the paper, Aggelia. Literature review would deliver the new insights to this field of research if you try to fix the evolutionary cornerstones of the previous literature and geographical shift in this research. It could be much more interesting to have such a picture.

Aggelia Xanthopoulou: Thank you for your comments and feedback. We will take them into consideration in our future research. We believe that our research findings will be applicable and can be used in future research mainly in auditing companies and in research concerning the structure of CG in various industries.

Paraskevi Boufounou: This is a very interesting topic and you have done a great job!

Teresa Izzo: Dear Aggelia, your research develops a theme of growing interest. My compliments. Do you think that the FA implementation could be more challenging in the public sector than in the private one? If yes, why?

Aggelia Xanthopoulou: FA is specialized auditing services that protect businesses by ensuring financial reports accountability, reliability and credibility. So it can be applied in public and private sectors. Besides high quality of audits leads to high quality of financial reporting and increase management accountability and dependability. But the high

cost of FA services is the barrier to their implementation as efficient control mechanisms.

The implementation of FA is expensive and public sector and many companies in private sector also don't have the resources. Their budgets do not permit such investments. They try to strike a balance between cost-cutting pressure and effective corporate governance. Auditing services particularly in public sector are underfunded.

Teresa Izzo: I see the point. Thank you for your reply.

INTERNAL AUDIT'S ASSISTANCE TO LOCAL GOVERNMENT ORGANIZATIONS' E-SERVICES SECURITY PROCEDURES: THE GREEK CASE

by *Stergios Galanis and Michail Pazariskis*

Alexander Kostyuk: Dear Stergios and Michail, it is great to see you at our conference forum. You declared that "the majority of finance directors in LGOs indicated that internal auditors do not ensure that information and training programs are required and no training is given to workers even while organizations have sufficiently detailed policies on how to utilize e-services properly". What is the board of directors in outlining the policies of their companies in the field?

Stergios Galanis: Dear Alexander, it is an honor to participate in the forum of the international conference. The truth is that internal audit as a process has been implemented only in the last few years in local government organizations in Greece and as a result, members of municipal and regional councils or members of the boards of directors of local government companies are not so familiar with internal audit systems and policies. Moreover, from a corporate governance perspective, members of municipal and regional councils of local authorities are elected, whereas members of the boards of directors of local authority companies are appointed by decision of the municipal or regional councils and are some of the members of those councils and some of the citizens of the local community. Consequently, policies on internal control and information security are for members of the above-mentioned boards an area for constructive policy-making to ensure that information and training programs are required and training is given to workers.

Loai Ali Alsaïd: Dear Stergios and Michail, thank you for your interesting paper. Internal audit and its powerful role in corporate governance are really worth examining, especially with the recent failures of many large organisations. To further develop your results, you need a specific theoretical framework for analysing your empirical findings. This will help to better understand your theoretical contribution to the literature. In addition, it may be useful to identify specific metrics to measure the effectiveness of the internal audit function in sustainable corporate governance. I wish you all the best in developing your paper.

Stergios Galanis: Dear Loai Alsaïd, thank you very much for your substantive remarks. It is true that in the public sector and specifically in local government organisations in Greece the implementation of internal control systems is at a very early stage. We have already conducted a first study (see below) and we hope to proceed to a second one on the occasion of the presentation of our extended abstract at this conference.

• Pazariskis, M., Tavellaris, G., & Galanis, S. (2022). The internal audit function in Greek local government organisations: Critical factors of success. *International Journal of Critical Accounting*, 13(1), 60–74. <https://doi.org/10.1504/IJCA.2022.127607>

ESG SOCIETY WITH EDUCATION VALUES: TRUST

by Shirley Mo Ching Yeung

Lorenzo Gelmini: I browsed your paper. Amazing! Shall we discuss some possible projects together? I work in Italy, Associate Professor in Accounting and non-financial reporting at University of Eastern Piedmont.

Alexander Kostyuk: Dear Shirley, I am glad to see you at our conference forum. ESG is a mainstream, strategic issue for many companies. Our have outlined the nature, content of this issue. What do you think about the attitude of the owners of the companies and boards of directors to ESG in Asia?

Shirley Mo Ching Yeung: Develop and implement talent development plan on circular economy with design thinking + ESG concepts. We can work with Virtus Interpress for virtual training with cert recognized by our alliance.

Alexander Kostyuk: This is a great idea, Shirley. I will think about it. Our international scholarly network has a rich background of research in ESG.

Shirley Mo Ching Yeung: Yes, *Corporate Governance and Sustainability Review* journal. We have track records on SDG and sustainable development in higher education conferences since 2014.

Alexander Kostyuk: I will get inside of this issue, Shirley.

Maria João Guedes: What is your opinion about the new trend that claims that ESG is over (e.g., Alex Edman's recent paper?)

Shirley Mo Ching Yeung: I believe not over but integrating with circular economy and SDGs. What do you think?

Maria João Guedes: I am not that sure. I think companies are showing concerns for investors but those concerns are not materializing in initiatives. So, how long will investors be fooled?

Graz Lau: Maria, that is a very interesting discussion. Which ESG principle are you referring to in particular you think is over? ESG performance indicator? Green funds? Or the ESG framework itself? Would love to hear more what different stakeholders think.

A STATISTICAL INSIGHT ANALYSIS ON HOW THE ENVIRONMENTAL TAXATION AFFECTS GREEN GROWTH IN THE EU

by *Georgios L. Thanasas, Aikaterini Slimistinou, Georgia Kontogeorga,
and Nektarios Karapanagiotis*

Aikaterini Slimistinou: Thank you for giving us the opportunity to present our work. We have prepared a ppt file explaining our main findings. We await your questions.

Dmitriy Govorun: Dear colleagues, thank you for your participation in the forum. Thank you very much for sharing your research and analysis on the taxation and "Green" topic. Please share your ideas on what next steps should we expect in terms of strengthening green development (there are still differences in regulations and national approaches in the EU and, of course, the business activities as well).

Aikaterini Slimistinou: Dear Dmitriy Govorun, We are very grateful to participate in this event that allows us to illustrate research and exchange very useful ideas. Of course, there are still many obstacles that not only the states but also the business sector will have to overcome in Europe.

In order to make progress and a greener course, the member states and consequently the business sector should be under a common framework of the European Union, follow a common strategy by creating new growth accounts, by highlighting the effects and risks that could cause problems for economic growth, the environment and sustainability.

Governments will be able to implement policy actions in a greener direction with the aim of prosperity. There should be control in the developing countries by the international organization OECD for green development and the European Union for the correct and more effective implementation of *green development*.

Finally, new jobs will be created due to the existence of the new branch of entrepreneurship that focuses on *green development* which is another incentive for the implementation of green development.

SUSTAINABLE AND INNOVATIVE PUBLIC PROCUREMENT IN ITALY: THE CASE OF SCR PIEMONTE

by *Paola Vola, Lorenzo Gelmini, and Stefano Rossa*

Dmitriy Govorun: Dear authors, thank you very much for sharing the concept of innovative procurement in Italian Code and relation to governance aspects. You've mentioned that the aim of the paper is to capture the factors, including corporate governance, in relation to tendency to SPP and IP. May you please share also which of those factors you've discovered were not obvious at the first view?

Stefano Rossa: Dear Dr. Govorun, thank you for your remarks. The company analysed in our study is an important Italian central purchasing body. European law, and consequently Italian law, promotes the use of these types of entities in the context of public procurement, in view of the benefits that can be obtained. In fact, central purchasing bodies not only allow a general reduction in the price of orders, as they aggregate public demand from different contracting stations; they also allow important savings to be made in relation to the professionalisation of the staff employed (who specialise strongly in the management of complex tenders).

The advantage, therefore, is that it is possible to direct this high degree of professionalism toward certain objectives: for example, innovation, or sustainability.

Having a clear governance direction that can firmly establish which paths the company wants to pursue (since it cannot pursue all objectives, given the not unlimited economic resources at its disposal for its action) is, therefore, fundamental. At the same time, it is crucial that those who lead these central purchasing bodies are fully aware of the potential they have.

Alexander Kostyuk: Dear Stefano, thank you for taking part in our conference discussion. You have stated that “Having a clear governance direction that can firmly establish which paths the company wants to pursue (since it cannot pursue all objectives, given the not unlimited economic resources at its disposal for its action) is, therefore, fundamental”. What are the main barriers on the way of a clear governance direction? Whom should this claim be addressed within a company? This is an applied issue.

THE EVOLUTION OF PERFORMANCE MEASUREMENT SYSTEMS IN PUBLIC HEALTH ORGANIZATIONS: A PRELIMINARY ANALYSIS

*by Francesco Capalbo, Adelaide Ippolito, Margherita Smarra,
and Marco Sorrentino*

Dmitriy Govorun: Dear colleagues, thank you very much for presenting your paper as an analysis of evolution systems in PHOs. Your findings mentioned in the abstract seem to be interesting and my question will be regarding the following statement. Implementation of performance measurement systems requires consideration in: policies/processes, technology and people. Obviously, this is related to corporate governance. You mentioned that innovative systems require re-engineering of information flows. Do we assume that there is a need for an additional governing body or a structure in corporate governance like an additional committee for data and information flows?

Margherita Smarra: Dear Dmitriy, thank you for your interest. The success of an information flow re-engineering process requires the support of the company management and, above all, incisive training of the company personnel who must be aware of the usefulness of this re-engineering.

Loai Ali Alsaid: Dear Francesco, Adelaide, Margherita, and Marco, thank you for your interesting paper. Exploring performance measurement systems in public health organisations is important, particularly with the advent of sustainability. Two important points, I see, can improve the quality of your paper:

1. Use an appropriate theoretical framework to analyse and explain your empirical results. This will help to better understand your theoretical contribution to the literature.

2. It may also be interesting to address the influence of institutional pressures at the field level on the implementation of these performance measurement systems in public health organisations. From my Egyptian experience, there are multiple but different institutional pressures to implement performance measurement systems, and financial pressures are the most influential. Please see this paper on the influence of institutional pressures on the implementation of a performance measurement system in an Egyptian social enterprise:

- Alsaid, L. A. Z. A., & Ambilichu, C. A. (2021). The influence of institutional pressures on the implementation of a performance measurement system in an Egyptian social enterprise. *Qualitative Research in Accounting & Management*, 18(1), 53–83. <https://doi.org/10.1108/QRAM-03-2020-0027>

I wish you all the best in developing your paper.

THE BANKING MANAGEMENT OF SUSTAINABILITY: ASSESSING THE INTEGRATION OF ESG FACTORS AT GOVERNANCE LEVEL

by Teresa Izzo, Gianluca Risaliti, and Ludovica Evangelista

Imthiyas Yakuban: Dear Teresa, I am happy to see you in our conference forum. In your perspective, where does the integration of frameworks by European Banking Authority (EBA, 2020) with environmental, social and governance (ESG) factors stand globally considering the European banks have global presence?

Dmitriy Govorun: Thank you very much for taking part in the conference and sharing your ideas as to the assessment model for measuring the integration of ESG factors in the banking industry. This is true that banks have substantial influence on the economy. They may support the businesses through financing the project with more relation to ESG. Have you already developed preliminary hypotheses as to factors which should be included into the assessment model? How do you expect to measure governance factors?

Teresa Izzo: Dear Dmitriy, thank you very much for your questions. We are still analysing the results of our documentary analysis and consequently, we do not have defined the assessment model in its definitive version yet. It is clear for us that crucial factors for measuring the integration of ESG activities in the banking industry are mainly related to corporate governance system, risk assessment process, level of compliance and disclosure. In relation to the governance factors, we will consider board size, board independence, duality, presence of a specific figure on sustainability (such as CSR manager), establishment of a CSR or sustainability committee, gender diversity, audit committee, and, eventually, factors such as ten largest shareholders, managerial ownership and foreign ownership.

Dear Imthiyas, thank you very much for your intervention. The effective implementation of EBA framework is expected to have a significant impact on banks' activities, especially in relation to their risk assessment process and investing. This impact is also reinforced by the sustainable finance taxonomy (Regulation (EU) 2020/852) and "Sustainable Finance Disclosure Regulation" (Regulation (EU) 2019/2088). At the same time, the lack of a uniform approach in the regulation of banking sector at international level could mitigate this effect. However, other international initiatives (see, for example, TCFD) are gaining growing relevance and seems to "push" in the same direction.

Le Chen: Banks provide financial support for social development in all aspects of society, and are an important promoter of sustainable development strategies. The upgrading transformation from the concept of CSR to nowadays' ESG, it can be seen that the deepening of the sustainable development strategy. The banking industry has experienced the late autumn of the European debt crisis from the spring of subprime mortgages, and finally entered the cold winter of the energy crisis. Regulation for financial institutions' commitment to sustainability has been furtherly promoted which was illustrated by the fact of Basel III Finalisation of incorporating ESG factors into the EU prudential framework. Thus, the green banking initiatives have become hot issues. And this paper's data were from an important period (2017–2021) which covered pre-pandemic, pandemic, post-pandemic time period. Therefore, this provides a reference value for sustainable and specific changes and innovations in the banking industry in the future. Dear Teresa Izzo, Gianluca Risaliti and Ludovica Evangelista, thank you for your contributions and interest in sustainable development issues.

Ludovica Evangelista: Dear Le, thank you very much for your interest in our research. We hope that our analysis will offer interesting insights.

CONTROL ENVIRONMENT AND INTEGRITY MANAGEMENT IN EDUCATIONAL SYSTEM IN GREECE

*by Stavros Chaidemenos, Panagiotis Kyriakogkonas,
and Evangelia Pappa*

Dmitriy Govorun: Dear Stavros, Panagiotis and Evangelia, thank you very much for presenting your material as to control the environment in the educational system of Greece. Your approach to use two types of questionnaires seems interesting. Findings should definitely influence the governance in educational units. However, may you please share a bit more. How would you avoid the issues of multiple replies in questionnaires in case they are anonymous?

Panagiotis Kyriakogkonas: Dmitriy, thank you for your interest. We decided to participate in this conference with an abstract because every year the comments from participants are constructive and useful. We were thinking to categorize respondents to various groups according to specific criteria and further to identify trends and criteria that show a result manipulation like unusually high response rate, etc. Of course, if responses will be of a large scale we do not worry so much since any attempt to manipulate results could be a really very time-consuming effort.

Le Chen: Dear Stavros Chaidemenos, Panagiotis Kyriakogkonas, and Evangelia Pappa, your article is not only interesting but also very important for today's society in which exist various ethical problems, especially in the educational system. As an important means to promote the development of human civilization and social progress, education has very important strategic significance. Thus, we must pay enough attention to the matter of ethical conduct in education sector and to the relative control environment. The methodology is absolutely applicable. I would like to express my opinion that more countries should apply your analysis methodologies to better understand the status and the critical matters and to find solutions together. Thank you again for your fantastic contribution!

Panagiotis Kyriakogkonas: Thank you very much for your comment. Indeed, attention to education and education system is a critical factor for future societies.

Loai Ali Alsaid: Dear Stavros, Panagiotis, and Evangelia, thank you for your interesting paper. I really enjoyed reading it. However, it may be more attractive if you can consider the following two points:

1. Try to use a specific theoretical framework to analyse your empirical results. This will make your results meaningful and a contribution to the literature.
2. It may be preferable to use specific measures by which you can examine the effectiveness of the control and integrity management environment. I wish you all the best in developing your paper.

Panagiotis Kyriakogkonas: We really appreciate your comment. Since we are on work in progress phase will take it into consideration. We really thank you.

Stergios Tasios: Dear Stavros, Panos and Evangelia your article examines a very interesting topic with practical implications. The educational system faced significant challenges during the pandemic due to distance learning. Did you include parameters relating to distance learning in your research? Do you believe that the pandemic and the wider use of distance learning increased the risks for the control environment and integrity?

Panagiotis Kyriakogkonas: Dear Stergios, we have taken into consideration implication of distance learning and possible threats to control environment during the construction phase of our questionnaire. Though, your comment is very interesting for discussion and further thoughts.

Karen M. Hogan: Greetings did you consider in your questionnaire whether the university was secular or non-secular? Did all schools have ethics infused into their curriculum and if not was there a difference between those schools? This is an interesting topic and I look forward to seeing the final results.

THE INFLUENCE OF SUSTAINABILITY ASPECTS ON B2B PURCHASING DECISIONS: THE SPECIAL CASE OF THE HEALTHCARE INDUSTRY

by *Patrick Ulrich and Simone Häußler*

Dmitriy Govorun: Dear Patrick, thank you very much for participating in the conference. Thanks for sharing the paper on decision-making in B2B of a specific industry. Your preliminary findings show that the focus of companies at least in purchases is still on price than the sustainability aspects. How do you think this is related to the nature of the organizations or even in ownership structure? I mean does the purchasing decision is driven by the motives of key stakeholders?

Patrick Ulrich: Dear Dmitriy, thank you for your comment. In the study, we primarily examined an industry that is quite regulated, especially in Germany. In hospitals, in particular, purchasing decisions are made institutionally, i.e., in the group, and mostly on the basis of tenders. Sustainability has so far played only a minor role here, but there are signs of change. What surprised us, however, was this: even in pharmacies, drugstores, etc., which offer more over-the-counter products, sustainability has so far played only a subordinate role. So if we think in terms of the classic governance logic of ownership and control, it doesn't have that big an impact, at least here. I would rather think that there is a bigger influence of public governance because the state has a big influence in the German healthcare industry. Thanks for the good idea though, we could analyze the sample to that effect.

Loai Ali Alsaïd: Dear Patrick and Simone, thank you for your interesting paper. However, to further develop your results, there are two points that may be useful to keep in mind:

1. It might be better if you can analyse your empirical data using a specific theoretical framework. This will help make your theoretical contribution to previous studies more visible.
2. It may also be useful if you can identify specific metrics by which to measure the impact of sustainability aspects on B2B purchasing decisions. I wish you all the best in developing your paper.

Simone Häußler: Dear Loai, thank you for your interest in our paper and your valuable comments on it. The paper is a "work in progress" at this stage, and we welcome helpful comments for further development. Regarding the first comment, I completely agree with you, however, the topic (especially with respect to the healthcare industry) is a relatively new and not heavily researched area in which valid and established models are still lacking. Identifying specific metrics for sustainability impacts on B2B purchasing decisions would be a suitable option for further development.

BALANCING CO-OP FIRMS' MULTIFACED GOALS TO SMOOTH GOVERNANCE ISSUES: A BSC APPROACH

by *Silvia Macchia*

Dmitriy Govorun: Dear colleagues, thank you very much for presenting your ideas and the approach to the framework for co-op firms. You have used the ST approach to develop the framework. However, you've also pointed out alternatives. Which alternative approach you would see worth trying and to compare results for the same category like co-op firms?

Silvia Macchia: Dear Dmitriy, thank you very much for your interest to my work and the related question. The ST approach is very useful whenever the achievement of strategical goals impact or is driven by several factors in the control of multiple stakeholders. In the case of co-op firms balancing the interest of the co-op entity with those of members is sometimes difficult. Conflicts may be solved through negotiation or the activation of learning processes that make members aware of the benefit of a selected strategy for both parties. In this sense defining a BSC based on ST may help the learning process on the side of members and a better strategy evaluation on the side of co-op itself. Alternatively, given the complexity of co-ops' utility function, it could be used any holistic approach that goes beyond the boundaries of the co-op entity itself and investigates the interconnections in terms of value creation between the co-op and its members.

ENTERING THE ERA OF DECENTRALIZATION: AN INVESTIGATION OF NEW TRENDS IN DATA MANAGEMENT

by Erik Karger and Marvin Jagals

Dmitriy Govorun: Dear Erik and Marvin, thank you very much for your participation. Your paper on data management is in a very prospective area as data is one of key components we use, produce and it is presented in each sphere. You've mentioned that organizations try to make value of the data. Of course, they have different resources for this. What are your thoughts on the issue of data monopolization even having developed ecosystems and written procedures of data governance?

Erik Karger: Dear Dmitriy, thank you very much for your question and your interest in our research. Indeed, data monopolization is a problem that especially affects smaller companies and enterprises. These often do not have the resources to acquire and analyze large amounts of data. Aspects of the decentralization of data, however, might be suitable to address this problem and especially help these smaller companies to acquire large amounts of data. For instance, in data ecosystems, different companies can collaborate to share and exchange the data they have. By this new form of data sharing collaboration, small companies have a new possibility to get access to data. Therefore, especially data ecosystems might be an opportunity for smaller companies to address the problem of data monopolization.

Alexander Kostyuk: Dear Erik and Marvin, it is great to see you contributing to our conference forum. Data management probably is a cornerstone issue recently. Advantages are obvious. What do you think about the major risks to be associated with a fast-growing data management stream worldwide? What about cybersecurity and probably the digital skills of directors, management and employees to be upgraded?

Erik Karger: Dear Alex, thank you for your question and especially for organizing this valuable and interesting conference we are happy to contribute to! Indeed you are pointing to a very relevant point. The shortage of skilled workers that is a huge problem in IT in general is also a relevant factor for the professions dealing with data, data management, and data security. Likewise, existing knowledge workers, including directors and the management, are necessarily required to advance and develop their data skills. It is important to note and emphasize that it is not only about owning the data, but about using and understanding the data correctly. And even if you analyzed the data and received some results, people need to understand how to interpret these results and statistics. Therefore, the increasing relevance of data in all aspects of society and business definitely makes it necessary to develop new digital skills.

Marvin Jagals: Dear Alex, many thanks for your question and interest in our “hot” topic data governance! I absolutely follow the assumptions made by my colleague Erik. I would like to add one important point: change & culture for governance. 80% of all data governance building blocks are organizational and cultural issues. You have to take all employees with you on the data journey, otherwise, even the best regulatory framework or the best set of rules is of no use. Topics such as security, data protection, GDPR or similar are also relevant, but we understand these aspects as a mandatory foundation for the above-mentioned topics, since you cannot become data driven through security aspects alone.

Gladys Gamariel: Interesting research. Issues to do with cybersecurity and protection are key.

Marvin Jagals: Thanks for your thoughts, Gladys!

USING AUGMENTED REALITY FOR ORGANIZATIONAL LEARNING: AN OVERVIEW OF POSSIBLE APPLICATIONS AND POTENTIALS

by *Dustin Syfuß and Erik Karger*

Silvia Macchia: Dear authors thank you for your contribution that I find very interesting. In your paper, you stated that you “conduct a literature review and systematically collect and analyze existing research on this topic. The search was conducted in both Scopus and Web of Science, which are the largest and best-known scientific databases (Forliano, Bernardi, & Yahiaoui, 2021)”. My question is how did you select the papers of your literature review? Which have been the searching words and have you bound the search of journals to specific sectors? How many papers have been analysed to draw conclusions?

Dmitriy Govorun: Dear Dustin and Erik, welcome to the conference and thank you very much for your paper. You mentioned that augmented reality for organizational learning is underexplored. I believe the AR and CG should be also explored. Have you found in your studies analysis the influence/relationship between AR and CG? How can it be used to strengthen the CG practices?

Keith Harman: This paper on augmented reality is quite interesting. I would be interested in hearing from the authors about the relative use of augmented reality versus virtual reality.

Loai Ali Alsaid: Dear Dustin and Erik, thank you for your extended abstract. “organisational learning” is an interesting research topic, especially through training and education. To make it more interesting, I highly recommend linking organisational learning apps (or activities) and non-financial sustainability reporting. These apps are now an essential part of a company’s sustainability reporting. For example, in Egypt, I had a similar experience with a public sector urban development company contributing to a national “sustainable learning and growth” project funded by the state government. Through this project, the company’s contribution is to build advanced education and training centres within urban cities and their organisations. These centres and their advanced programmes, which reflect “augmented reality”, contribute not only to the development of organisational employees’ performance and skills but also to the skills and experiences of school and university students. These centres and programmes (represented by the “applications” in your paper) contribute to the development of the quality of corporate sustainability disclosure to meet multiple stakeholder demands and decision makers. Based on the above, it may be interesting to address the potential connection

between your topic and multi-stakeholder pressures for non-financial sustainability disclosure (of which your applications are an essential part). I wish you all the best with your interesting paper.

Dustin Syfuß: Thanks for your feedback! A concrete comparison of the relative use of augmented reality & virtual reality was not the focus of this work. However, it is an exciting follow-up topic, especially with regard to the use in the organizational field.

Erik Karger: Dear Loai, thank you very much for your valuable comment. Indeed this might be a suitable stream of research that we might take into account for our future progress of this research project.

Dear Dmitriy, and thanks for your interesting question. First, our studies' focus was on AR for organizational learning. In the studies we have found on that subject, CG is not a topic that has been investigated. Although it is not in the focus of our study, we agree that the application of AR for CG purposes might be an area worth to be investigated. We think that the application of AR or VR might play a role in future CG practices. However, it seems like research in this area is very limited. After doing a quick search on Google Scholar, searching for Augmented Reality *and* Corporate Governance, it appears that a lot of research in this area does not yet exist. Therefore, future research should investigate this topic probably by using design science research, interviews, or field experiments to do pioneering work in this area.

Gladys Gamariel: Very interesting research, and has room for further investigations.

AFFECTING FACTORS INTEREST IN STABLECOIN AS THE DIGITAL MONEY

by Peerapat Wattanasin, Tanpat Kraiwanit, and Somchai Virunhaphol

Marco Venuti: Private sector issued stable coins are nascent products that could be seen as differing from fiat currency due to their uncertain and potential short shelf-life. A 2019 Blockdata publication shows that while there were 66 operational stable coins in 2019, 24 had closed down since the first stable coin was launched in 2014. However, most failed stable coins were those that were commodities backed. Do you think that the different risk profiles of the different stable coins may affect the findings of the paper? Do you agree with the view that for stable coins to be successful, they would need to be launched and controlled by a central authority such as a Central Bank?

Tanpat Kraiwanit: Thank you and agree with your idea.

Imthiyas Yakuban: Dear Tanpat, I am happy to see you in our conference forum. What is the sampling methodology used in selecting the 460 sample size from 66, 171, 439 population?

Tanpat Kraiwanit: It used a convenience sampling technique, 400 cases, via online form. 400 is our target. But we collect more than 400 in case of completion of answers.

Dmitriy Govorun: Dear colleagues, thank you very much for sharing your research on stable coins based on Bangkok area data samples. You've mentioned some factors you've studied in your research. However, have you tried to study the influence of regulation on the sphere (its presence/absence) and the awareness of the respondent on the stable coins topic?

EXPLORING THE BEST CORPORATE GOVERNANCE PRACTICES IN THE PUBLIC SECTOR ORGANIZATIONS IN GHANA: THE CHALLENGES, ISSUES, AND PROSPECTS

by John MacCarthy and Nicholas Adoboe-Mensah

Alexander Kostyuk: Dear John and Nicholas, I am glad to see you participating in our conference forum. You issued an interesting statement that your study found that most people appointed to the board are based on their political connections rather than qualification and competence. Dependence of corporate governance on politics is a case to suppose that Ghana still suffers from this phenomenon. This destroys the fundamentals of corporate governance in the country. Is this a long story in Ghana and who to overcome this problem? Do you have any suggestions?

Loai Ali Alsaid: Dear John and Nicholas, Thank you for your interesting paper. I really enjoyed your story. However, there is an absence of using a theoretical framework. As you know, using a meaningful theoretical framework reflects your theoretical contribution and ambition. Preferably, it should use a specific theoretical framework, particularly an institutional theory framework (e.g., among others, Dillard et al., 2004), to analyse the 'dynamics' between government-level political connections and board appointment. Please see the paper by Alawattage and Alsaid (2018) on the political role of accounting in Egyptian structural reforms. In addition, it would be attractive to address how these politically-connected appointments affect internal corporate governance practices within organisations. For example, from the Egyptian urban development context, the key internal actors of a public sector company (ex-political chairman and ex-military board director) were appointed by the state government. They are seen as 'government men' within the company. Responding to government funding pressures, these actors have had to develop an internal corporate governance system through the new institutionalisation of a multi-practice sustainable governance system. Furthermore, it may be interesting to investigate how the experience of these politically-connected appointees influences internal corporate governance practices, i.e., how their experiences influence the existing rationality(ies) within organisations that over time create 'generalised practices' between different executive departments. Please see also this related paper by ter Bogt and Scapens (2019) for the development of your theoretical arguments and empirical prospects. I wish you all the best in developing your paper.

- Alawattage, C., & Alsaid, L. A. (2018). Accounting and structural reforms: A case study of Egyptian electricity. *Critical Perspectives on Accounting*, 50, 15–35. <https://doi.org/10.1016/j.cpa.2017.09.001>
- ter Bogt, H. J., & Scapens, R. W. (2019). Institutions, situated rationality and agency in management accounting: A research note extending the Burns and Scapens framework. *Accounting, Auditing & Accountability Journal*, 32(6), 1801–1825. <https://doi.org/10.1108/AAAJ-05-2016-2578>

THE POLITICAL ROLE OF LOCAL GOVERNMENT CORPORATE OWNERSHIP: AN INTERDISCIPLINARY OUTLOOK BASED ON BENFORD'S LAW

by *Luca Galati*

Dmitriy Govorun: Dear Luca, thank you very much for your participation and your approach by using forensic tools and studying the influence of the ownership and CEM. Interdisciplinary approach may give further ground for the discussion. Of course, Benford's law is a debatable tool and we should be careful concerning interpretations. However, it is a good instrument to find abnormal behavior of figures in certain transactions. You advise some institutional and judicial bodies to implement the instrument as one of the tools for analysis. What is your opinion on how to combine the direct imperative character of norms from the institutions and the variety of the interpretations? I mean the approach and methodology are quite clear, but the interpretation is always individual and where is the borderline how to do it right?

Loai Ali Alsaid: Dear Luca, thank you for your interesting paper. I am very interested in this political field of management accounting. For further development to improve your (theoretical) contribution, I would suggest using an institutional theory framework (e.g., among others, Dillard et al., 2004), with a particular focus on 'institutional dynamics' between macro-level pressures and organisational-level practices. Not only will this institutional dynamics framework reflect how management and accounting practices at the organisational level are shaped to meet institutional pressures at the field level. But it also helps explore 'recursive dynamics', which is exemplified by the potential influence of new institutionalised practices in shaping decision-making within organisations. Please see this paper on the political role of accounting in Egyptian structural reforms:

• Alawattage, C., & Alsaid, L. A. (2018). Accounting and structural reforms: A case study of Egyptian electricity. *Critical Perspectives on Accounting*, 50, 15–35. <https://doi.org/10.1016/j.cpa.2017.09.001>

I wish you all the best in developing your paper.

Luca Galati: Dear Dmitriy, thank you for your good point and for starting the conversation. It is true that we must acknowledge the subjectivity of the interpretation. However, my view supports the use of those tools as preliminary checks, which are very useful as a basis for further and deeper investigations.

It is definitely hard to make decisions on borderline interpretation, but this could be in single cases where a specific entity is scrutinized. In that scenario, the tool might lack reasoning. Ultimately, it would be

interesting to implement the analysis with more sophisticated tools to look at whether earnings management practices have led to real fraud in some circumstances.

Dear Loai, thank you so much for bringing this paper to my attention. I was looking forward to receiving some useful suggestions regarding the theoretical framework and how to implement a solid background. I will definitely have a look at it and see how I could fit it within the literature. Many thanks again.

RECONCILING SHAREHOLDER THEORY IN THE AGE OF ESG

by Morris Danielson, Karen M. Hogan, and Gerard T. Olson

Dmitriy Govorun: Dear Prof Danielson, Hogan and Olson, thank you very much for sharing the ideas concerning ESG er and shareholder theory. As I understood it right, you mentioned that firms will create value for shareholders and other stakeholders by adopting/including ESG into risks and opportunities assessment. This should lead to the balance in some meaning. However, balance also means the direction to the averaged result and looks like a conservative scenario for the firm itself. In such a situation other "players" probably may gain additional advantage by taking more risks. How should this be compensated as to your approach?

Karen M. Hogan: Dear Dmitriy, the model will include a measurement for the amount of risk that the firm is willing to take. They will include the risk assuming the risk is below a maximum pain threshold that can not be mitigated away. So the model doesn't keep firms from taking risks to achieve excess return it merely clarifies where the major risks the firm has are coming from. For example, cyber is a risk that all firms will need to deal with. A firm has a continuum of choices on how to deal with cyber. They could do the bear minimum so that they will not get fined or they will do more than the average firm so that if they are hacked they already have a plan in place so that the attack will minimize the amount of information lost, days down, etc. The model will help identify the major "killer risks" those risks that could cause severe damage to the firm. If those risks are ESG in nature the firm will not dismiss them outright because doing so could cause a major pain for the firm from behaving badly or not identifying an issue that they should have if they had information from multiple stakeholders that were closer to the potential risk. For example, we all saw in 2017 what happened to Target when one of their suppliers got hacked via social engineering and it opened the door for the black Friday hack on their POS. The idea is that this was a killer risk and wasn't elucidated until it was too late causing huge brand insecurity that lasted for a number of months and fines that racked up over years. The model will help the firm be able to identify those issues that could cause great pain to the firm. The firm can choose to take on more risk if it wants to. We are not assuming that all ESG is only costs for the firm. A firm like Chipotle is known for many good things but they are also known for a major health scare that was the exact result of their sustainability efforts. It was their lack of planning by identifying those risks that could hurt them the most. Had they identified the potential risk of operational issues with local more sustainable produce they might have already devised a plan to mitigate that risk. It was only after the risk occurred that they modified how things were done. The idea here is not to hand over profit to non-primary stakeholders the idea is to identify those risks that if they aren't done could make an ESG issue cause either a loss in reputation or a downgrade which would lead to lower values.

MERGERS IN HIGHER EDUCATION INSTITUTIONS, NEW PUBLIC MANAGEMENT AND CORPORATE GOVERNANCE: SOME EVIDENCE FROM GREECE

by Nikolaos Giovanis and Aikaterini Chasiotou

Imthiyas Yakuban: Dear Aikaterini, I am happy to see you in our conference forum. What is the optimal mix of people, process, performance, and purpose — the four P's of corporate governance in a public sector in your view?

Karen M. Hogan: Dear Aikaterini thank you for your study of this merger. I do believe this is an issue that more and more universities both public and private will see themselves in. My own university recently purchased another university that on paper had a nice footprint to help develop our offerings. Given the research on corporate mergers, it will be interesting to see as these mergers in academia continue if they will be as productive as one would hope. Not-for-profit institutes seem to be more reluctant to cut where the major synergies are. Especially, when it comes to tenured faculty. I'm sure as more is done we will learn from those that clearly benefit as in the model you discuss.

Loai Ali Alsaid: Dear Nikolaos and Aikaterini, thank you for your interesting paper. It is interesting to see the implementation of the new public management and corporate governance in the higher education sector. But it would be more interesting if you could analyse your empirical data within a specific theoretical framework. This will help make your theoretical contribution to previous studies more visible. It may also be useful to identify specific institutional pressures at the sectoral level that have necessitated the implementation of corporate governance and new public management. This will lead us to consider carefully the institutional dynamics between macro-level institutional pressures and micro-level university practices. I wish you all the best in developing your paper.

Aikaterini Chasiotou: Dear Imthiyas Yakuban, thank you for your question, and nice to see you too. Kindly note that the absence of a large body of research on corporate governance in the public sector differentiates it from that in the private sector. After introducing corporate governance in the public sector, the four Ps of corporate governance (people, process, performance and purpose) should be adapted and applied to the unique characteristics of the public sector and per entity. However, there is no exact formula for optimal combination or success in the relevant literature and no generalization can be made in the public sector, as there are several particularities on how it works and the valid legal framework each time.

Dear Ms. Karen Hogan, thank you for your comment, and happy to see you here! Yes, indeed it could be said that university merger is the latest ‘fashion’ and we are excited to delve deeper in this issue. In Greece, in the past years, several university mergers happened, and we believe that it could be for us a fruitful area of research.

Dear Loai Alsaid, thank you for your comment. In this paper, we have conducted some interviews with professors — members of the teaching staff in a Greek university and discussed a series of questions in live unstructured interviews and after the completion of mergers, by comparing the international practice and experience to Greek reality. In another part of our research, it could be very interesting to analyze several empirical (numerical) data into a specific theoretical framework, as you mentioned in your comment.

CORPORATE DIPLOMACY ACTIONS IN THE EXTRACTIVE INDUSTRIES

by Robert McDonald and Jaime Rivera Camino

Alexander Kostyuk: Dear Robert and Jaime, thank you for your contribution to our conference forum. Corporate diplomacy is grounded on the stakeholder concept of corporate governance. At the same time, the role of the board of directors is very important to implement corporate diplomacy. Do you have any insights or findings in this way?

THE FAMILY CONSTITUTION AS A NEW INSTRUMENT OF CORPORATE GOVERNANCE IN GERMAN FAMILY BUSINESSES

by *Patrick Ulrich*

Alexander Kostyuk: Dear Patrick, welcome at our conference discussion forum. Family firm governance is a much promising issue. I see your point that you underline the role of growing complexity of family business and a focus on corporate governance in the family firm as some sort of compromise between the new benefits family firm can have and the loss of direct corporate control the owners of the firm should sacrifice.

Stergios Tasios: Dear Patrick, family firms are characterized by the unification of ownership and control which raises significant corporate governance weaknesses. Do you believe that corporate governance weaknesses of family firms can be addressed by provisions in the family constitution?

Loai Ali Alsaid: Dear Patrick, thank you for your interesting paper. Family firm governance is a growing research topic, particularly with the increasing institutional complexity within these firms. I highly recommend, to further develop your contribution, that you use an appropriate theoretical framework to analyse your empirical findings. I can see 'institutional complexity theory' as an appropriate analytical angle to reflect the complex role of corporate governance in this uncommon type of family business. I wish you all the best in developing your paper.

Patrick Ulrich: Dear Stergios, Thank you for this comment. From a theoretical point of view, I think the distinction between business governance and family governance in family businesses is not so clear. I am already of the opinion that good family governance can solve certain problems in the operational business, for example, when disputes between the shareholders paralyze the operational business. However, it would be a very exciting story for the future to investigate the interactions between these spheres.

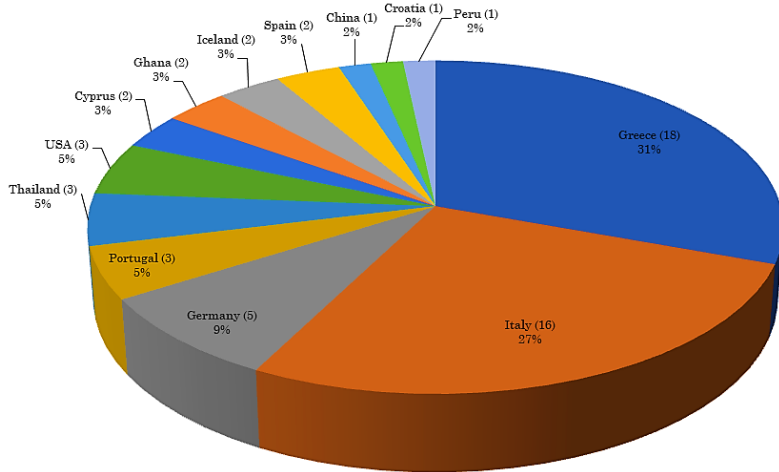
Dear Alex, thank you for this comment. Exactly, from my point of view, corporate governance of family businesses has unfortunately been given too little attention so far, especially instrumentally.

Dear Loai, thank you for this great idea. We will definitely explore this theoretical angle.

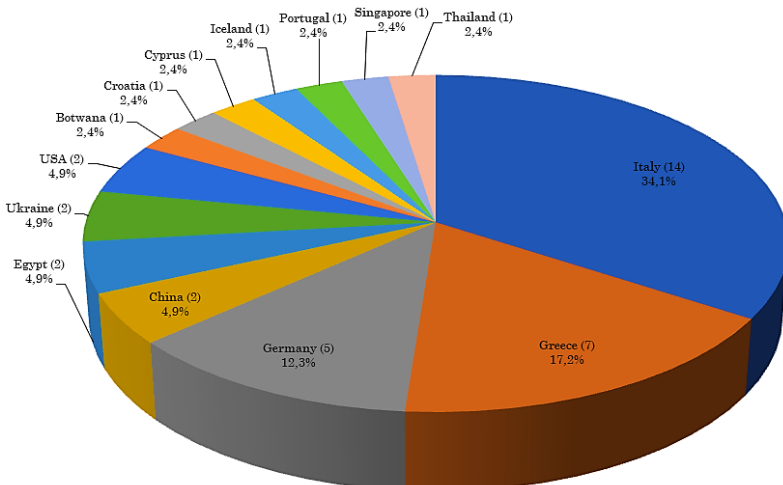
CONFERENCE INFOGRAPHICS

1. Conference forum participants, discussants, attendees

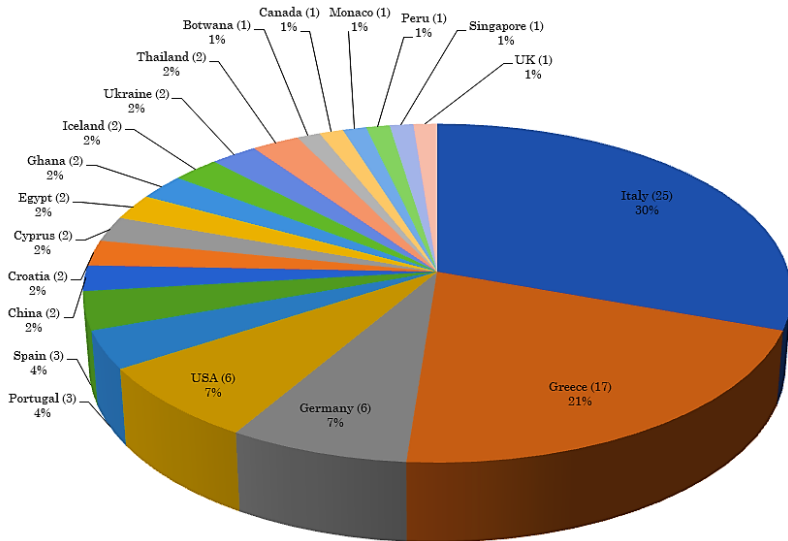
Conference forum presentations authorship — geographical representation



Conference forum comments authorship — geographical representation

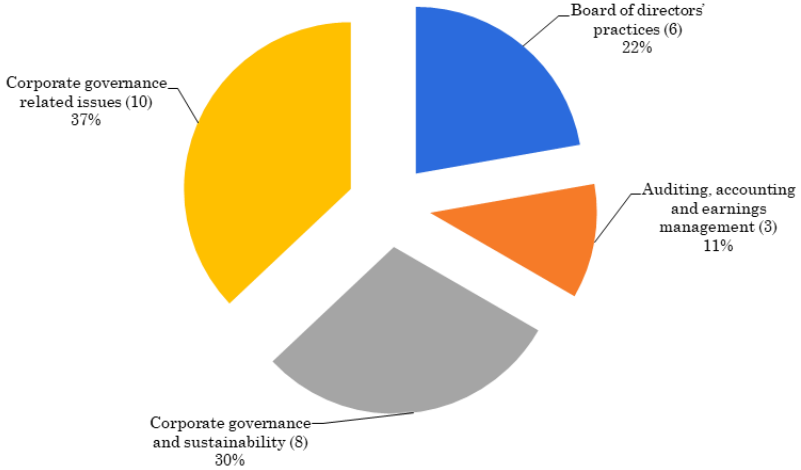


Conference forum attendees — geographical representation

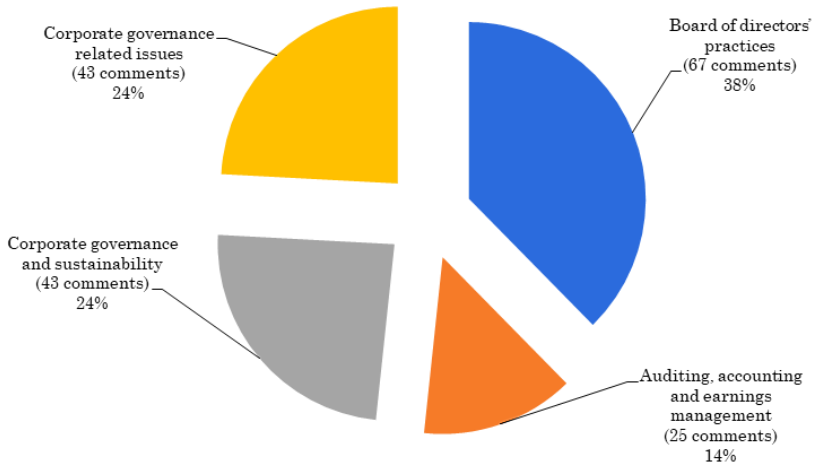


2. Conference forum presentations and comments

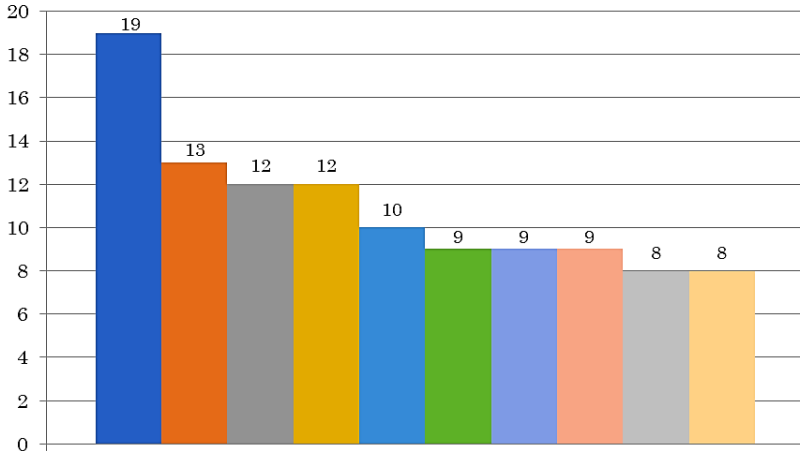
Topics of the conference forum presentations



Conference forum comments – topics discussed

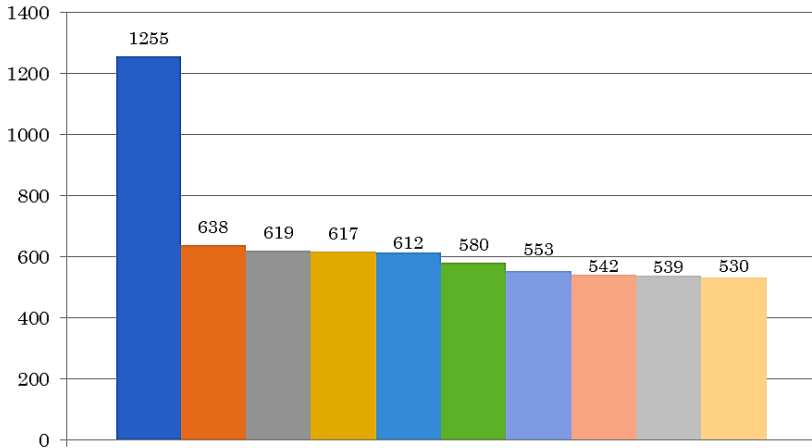


Conference forum comments — top-10 most discussed presentations (by number of comments)



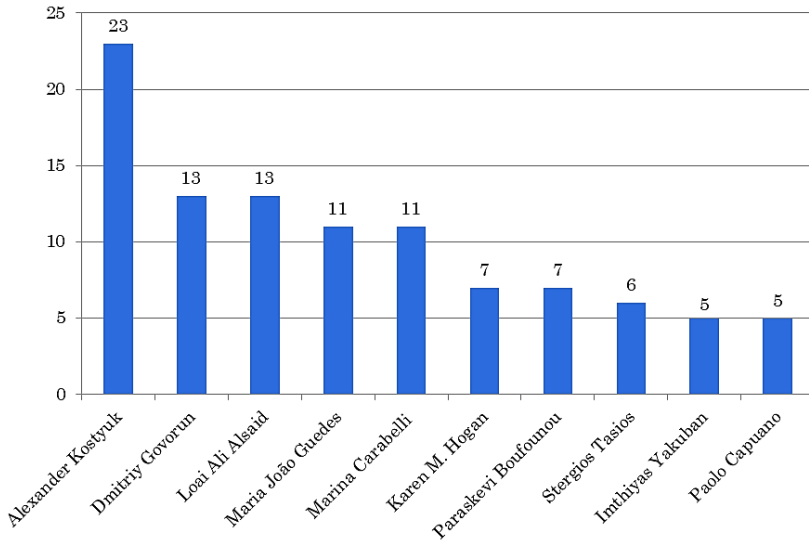
- Women’s board presence and firm performance: Evidence from a sample of Italian listed companies
- Board members’ profiles before and after legally binding quotas in Portugal
- CEO’s decision-making and corporate social performance: Disentangling the role of serendipity
- Assessing earnings management: A comparative study
- ESG society with education values: Trust
- Does the education level of board members affect the bank’s performance? Evidence from US banks
- Forensic accounting: A strategic tool to strengthen corporate governance against fraud
- Control environment and integrity management in educational system in Greece
- Regulation on gender quotas: Gauging the impact on corporate board
- Using augmented reality for organizational learning: An overview of possible applications and potentials

Conference forum comments — top-10 most discussed presentations (by volume of comments (words))

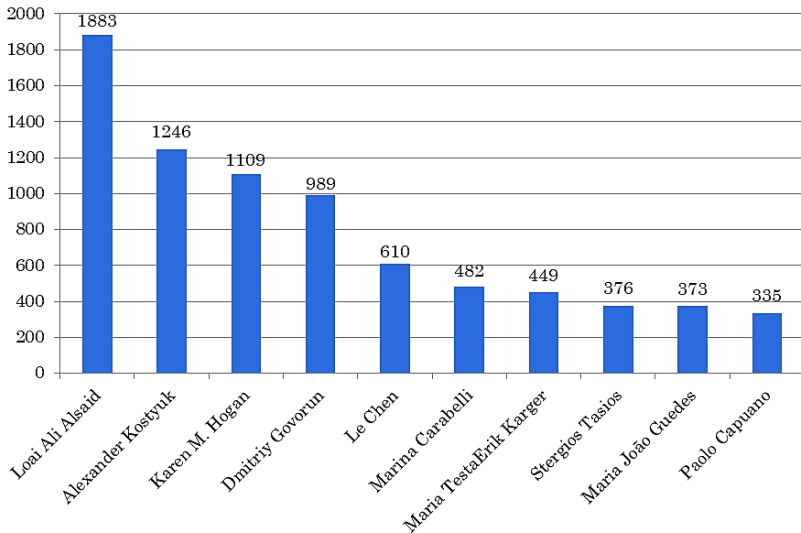


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- Reconciling shareholder theory in the age of ESG
- Control environment and integrity management in educational system in Greece
- Entering the era of decentralization: An investigation of new trends in data management
- Assessing earnings management: A comparative study

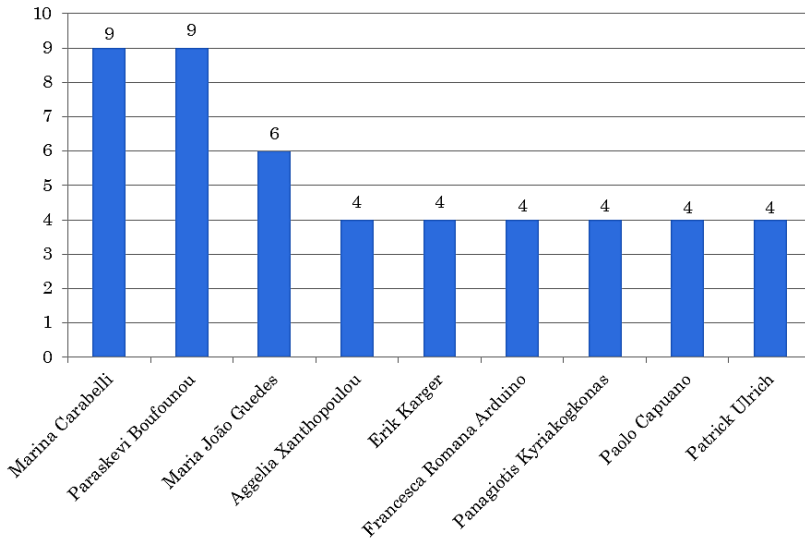
Conference forum comments — top-10 most commenting discussants (by number of comments)



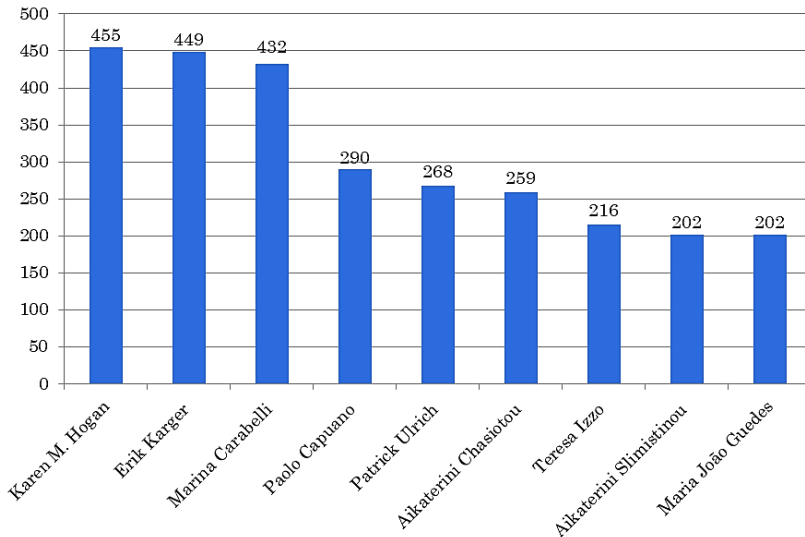
Conference forum comments — top-10 most commenting discussants (by volume of comments (words))



Conference forum comments — top most commenting presenters (by number of comments)



Conference forum comments — top most commenting presenters (by volume of comments (words))



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