Loma Mashne-Márk Szalay-László Buics

Impact of executive attributes on corporate social responsibility: A comparative study

Loma Mashne, PhD Candidate, Széchenyi István University, Győr, Hungary

Email: loma.mashne@sze.hu

Márk Szalay, Széchenyi István University, Győr, Hungary

Email: mark.szalay@sze.hu

László Buics, Assistant Professor, Széchenyi István University, Győr, Hungary

Email: buics.laszlo@sze.hu

This study, grounded in the principles of the upper echelons theory, aims to assess how the sociodemographic attributes of chief executive officers (CEOs) and the legal systems of their operating countries impact corporate social responsibility (CSR) and corporate performance. In addition, this study seeks to establish a profile of CEO attributes associated with high CSR performance among the world's best-performing corporations. The empirical analysis is based on a 5-year dataset sample of the top 100 CEOs globally, provided by Harvard Business Review for the years 2015 to 2019. The examined attributes include age, gender, tenure, engineering degree, MBA study, employment type and the legal system of the country where the CEO is operating, all in relation to CSR and corporate performance. Our empirical analysis indicates that CEOs' age, gender and tenure positively influence CSR and corporate performance. The average CEO age is 60 years, with the majority being male and having a significant tenure ranging from 12 to 15 years. Furthermore, the analysis suggests that engineering and MBA studies do not substantially influence CSR and corporate performance. Insider CEOs also show a positive impact on CSR and corporate performance. The prevalent legal system, according to our analysis, is the common law, with the United States having the highest representation. Moreover, based on our further analysis, a suggested profile of CEOs' attributes includes internally appointed male CEOs in their early sixties who do not necessarily hold an engineering or MBA degree. The distinctive aspect of this study lies in its multi-attribute approach and the offering of a CEO profile associated with high CSR and corporate performance. This approach opens avenues for future CSR research and exploration.

Keywords: Corporate social responsibility, the upper echelons theory, CEO socio-demographic attributes, CEO profile

Corporate social responsibility (CSR) nowadays is an integral aspect of corporations (Yuan et al., 2020). According to the social contract, corporations and their chief executive officers (CEOs), with their position being of particular significance, are expected to be good citizens (Aramburu–Pescador, 2019), acting in a socially responsible manner while providing economic value (Godos-Diez et al., 2020).

Research indicates that CEOs play a crucial role in corporate strategic decisions and in increasing corporate engagement and performance in terms of social and environmental aspects (Fabrizi et al., 2014). Therefore, it is reasonable to assume that CEOs' attributes have a substantial influence on CSR performance (Huang, 2013; Kang, 2017), which is in line with the upper echelons theory that states that CEOs are key players in corporate strategic decisions and have a substantial influence on corporate performance. Their decisions and the subsequent outcomes achieved can be predicted by their attributes (Hambrick–Mason, 1984, cited in Elsayih et al., 2021). In addition, research grounded in the upper echelons theory has demonstrated that CEOs have a major influence on corporate social involvement and activities (Saridakis et al., 2020), and their attributes are strongly associated with corporate engagement in CSR (Kim et al., 2020). In fact, CEOs' decisions are not solely dependent upon their attributes but rather influenced by the corporate environment, which can be supportive of CSR or otherwise (Kim et al., 2020).

Although scholars have examined the effect of several CEO attributes on corporate performance (Wang et al., 2016; Liu et al., 2018; Garcés-Galdeano-García-Olaverri, 2019; Ali et al., 2022) and CSR performance (Huang, 2013; El Ghoul et al., 2016; Chen et al., 2019; Abatecola-Cristofaro, 2020; Chu et al., 2022), the majority of their studies are narrow-focused, meaning that they have examined the effect of a single or few attributes on CSR or corporate performance (Prasad-Junni, 2017) but not a collective set of attributes and their collective effect on CSR and corporate performance concurrently. The evidence is scant thus far. This study contributes to the CSR literature by building on previous research and reassessing several one-off findings about how the socio-demographic attributes of the CEO affect CSR performance or corporate performance. Based on the upper echelons theory, this study examines the effect of multiple attributes (age, gender, tenure, engineering degree, MBA study and employment type) in addition to the country where the CEO is working on CSR and corporate performance. Moreover, this study explores the collective effect of these attributes

and proposes a CEO profile of attributes that correspond to high CSR and corporate performance, as, to our knowledge, no study has conducted such an analysis. A profile of collective attributes can provide a more accurate explanation of the cognitive framework and behavioural tendencies than a single attribute (Wang et al., 2016). This gives us a deeper insight into why our sample of best-performing corporations has a high socially responsible ranking compared with other businesses.

This empirical study uses a detailed analysis approach to examine a sample, published by Harvard Business Review (HBR), of the world's highest-performing CEOs for 5 years (HBR, 2015, 2016, 2017, 2018, 2019). This empirical study aims to address the following two questions:

- 1. Is there any significant relationship between CEO attributes (age, gender, tenure, engineering degree, MBA study, employment type and country where the CEO is working) and CSR and corporate performance?
- 2. What is the CEO profile that corresponds to high CSR and corporate performance?

The remainder of the paper is organised as follows. The subsequent section outlines the methodology, followed by a comprehensive literature review that incorporates the attributes of CEOs, along with their analysis based on the HBR dataset. This is followed by further analysis of the dataset. Finally, we present the conclusions drawn from this empirical study.

1. Methodology

The dataset is the world's best-performing CEOs published in the HBR for 5 years (2015–2019) for corporations listed in the S&P Global 1200 and includes corporations in North America, Europe, Asia, Latin America and Austria. In contrast to rankings that are based on subjective opinions or short-term measurements, HBR's lists are based on objective measurements of CEOs' performance throughout their tenure. The lists include CEOs who have held their position for at least 2 years to ensure a proper track record for evaluation; moreover, exclude those who have been arrested or convicted of a crime.

For financial data, the HBR lists are based on daily financial data for every corporation, as compiled by Datastream and Worldscope, from the start of the CEO's work through 30 April of the study year. Returns for the few CEOs who began before 1995 were computed beginning on 1 January 1995 because historical data on prior industry-adjusted returns were not available. The HBR lists calculated

three metrics for every CEO's tenure: the total shareholder return (TSR) (including dividend reinvested) adjusted by country to counterbalance a surge in return that is attributed to only an increase in the local stock market; TSR adjusted by industry to counterbalance a surge in return caused by an increase in the industry; and change in market capitalisation (adjusted for dividends, share issues and repurchases). The overall financial ranking is calculated by averaging the three rankings.

For nonfinancial performance, HBR obtained data from two sources: Sustainalytics, a global leader in environmental, social and governance (ESG) research, and CSRHub, a consensus ESG ratings company.

The final ranking is determined by combining the overall financial ranking and nonfinancial ranking (the two ESG rankings) as follows: For the year 2015, the overall financial ranking was weighted at 80%, and the ESG ranking at 20%. For the years 2016–2018, the overall financial ranking was weighted at 80%, and the two ESG rankings were weighted at 10% each. For the year 2019, the overall financial ranking was weighted at 70%, and the two ESG rankings were weighted at 15% each.

2. Literature review and CEO attributes based on the HBR dataset

CSR is defined as a corporate's strategic behaviour in social and environmental activities towards its society that goes beyond legal obligations and other considerations to fulfil the needs and expectations of societies and human beings (Ferrell et al., 2019). Nowadays, corporations, while creating their economic values, are requested to be good citizens by enhancing the well-being of societies and meeting their needs and expectations, to guarantee that their effects and achievements align with the concept of sustainability on both environmental and economic parameters (Gatti et al., 2019). CSR has attracted considerable attention in both academic research and the practical world (Zaid et al., 2020), as it plays a major role in boosting corporate value and image, thereby increasing corporate finance performance (Fatemi et al., 2018). It improves branding image, corporate reputation, sales and employee loyalty and productivity (Mousiolis et al., 2015). In addition, CSR enhances operating performance, mitigates business-related risks and offers financial market benefits (Ghardallou, 2022). A properly implemented CSR policy often yields higher internal and external stakeholder satisfaction, which results in higher corporate financial performance (Okafor et al., 2021). Corporations can directly generate wealth for shareholders when they fulfil the

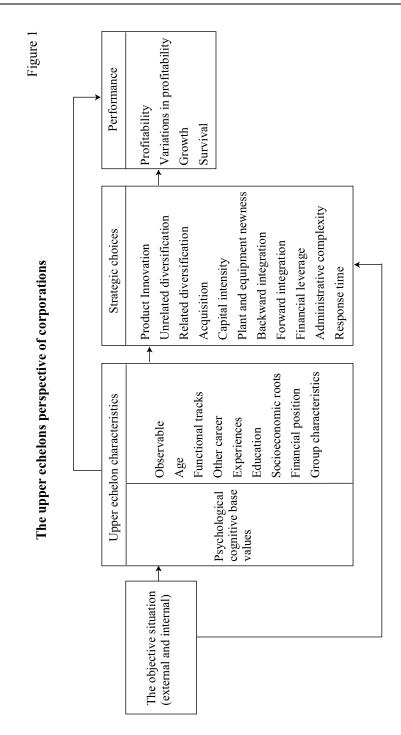
requirements and desires of other stakeholders (*Eccles et al., 2014*). Conversely, neglecting stakeholders' needs and requirements may destroy shareholders' value and threaten the business' existence owing to consumer boycotts, challenges in acquiring and retaining skilled employees, the expenses imposed by regulatory agencies and government restrictions (*Baumol, 2016*).

CSR performance is a significant tool for the board of directors to interpret CEO contributions to corporate performance (*Chen et al., 2019*) and may result in termination for those whose CSR performance is unsatisfactory (*Chiu–Sharfman, 2018*).

2.1 The upper echelons theory

In 1984, Hambrick and Mason presented the upper echelons theory: 'The organisation as a reflection of its top managers' (Hambrick–Mason, 1984, p. 193). The theory postulates two interrelated paths. First, executives make decisions based on their perception of reality. Second, this perception is based on the cognitive processes, beliefs, personality attributes and ethical manner of these executives. The theory indicates that strategic decisions are a typical instance of complex decisions, defined by the limited human rationality of the decisionmakers, various (and occasionally conflicting) aims and a substantial number of choices. CEOs' attributes serve as valid representations of their mental models (Abatecola-Cristofaro, 2020) and have a substantial influence on corporate strategic decisions and corporate performance (Park-Gould, 2017). Strategic decision-making processes are a result of a combination of personal attributes and environmental elements that both impact and shape how individuals think and behave (De Jong et al., 2017). The theory's core concepts are based on the constrained rationality theory, which argues that people's decisions are not always based on rational motives, as they cannot obtain and evaluate all contextual information. Consequently, they mainly base their decisions on psychological and behavioural factors. How corporations respond to diverse stakeholder demands is determined by key decision-makers' perspectives and value systems (Abatecola-Cristofaro, 2020).

According to the upper echelons theory, strategic decisions are generally a reflection of the CEOs' attributes. These attributes indicate the values and cognitive system of decision-makers and represent the unique qualities responsible for decision-makers' choices (*Hambrick–Mason*, 1984). This implies that the more complex a decision is, the more influential these attributes become (*Zhang et al.*, 2021), which is the case for CSR decisions (*Hrazdil et al.*, 2021). Figure 1 shows the general perspective of the upper echelons theory (*Hambrick–Mason*, 1984).



Earlier studies on the relationship between a CEO's attributes, as interchangeable terms for psychological qualities (*Neely et al., 2020*), and CSR focused on analysing the most pertinent attributes, including age, gender and tenure (*Huang, 2013*). However, these studies examined the effect of single attributes separately and without addressing their combined effect on CSR decisions, which resulted in contradictory findings and incomplete suppositions (*Jain–Jamali, 2016; Wang et al., 2016*). Given the significant impact of CEOs on CSR engagement and performance (*Kutzschbach et al., 2020*), this study aims to address a gap in CSR research and contribute to the CSR literature by investigating the impact of various attributes (age, gender, tenure, engineering degree, MBA study and employment type) on CSR and corporate performance. Recognising that CEOs' decisions are not made in isolation but within the context of their operating environment, we will also explore the influence of the country's legal system on CSR and corporate performance. Furthermore, this study will delineate a profile of attributes associated with elevated CSR and corporate performance.

This study focuses on socio-demographic attributes for several reasons. First, these attributes are visible, quantifiable and fundamentally associated with the upper echelons theory assumption of the CEO's impact on corporate decisions and performance (Wang et al., 2016; Abatecola–Cristofaro, 2020), unlike psychological attributes, which are difficult to quantify and measure (Kang, 2017). Second, they are the most common attributes that have been examined in terms of their effect on strategic decisions (Neely et al., 2020). Third, socio-demographic attributes are the most significant indicators of a person's cognition and values, which in turn may generate specific group capabilities and inclinations, resulting in decision-making patterns (Ji, 2015).

2.1.1 Age

Age is a significant attribute that influences CEOs' strategic decisions and performance. It influences their mindset, interests, desire and conduct (*Li et al.*, 2019). The association between a CEO's age and CSR has been explored and provided inconsistent findings. Some studies indicate a positive correlation between executives' age and CSR performance (*McCarthy et al.*, 2017) and find that senior CEOs, who are often more concerned with maintaining their image and safeguarding the validity of their corporations, are more driven to engage in CSR (*Li et al.*, 2019) and have an incentive to boost share prices in the period preceding their retirement (*Cassell et al.*, 2013). Others find that as CEOs age and approach retirement, they tend to be more cautious, risk-averse and less motivated to pursue strategic investments owing to a fear of bearing any negative consequences associated with such investments and often become less devoted to engaging in

CSR (Oh et al., 2016). Meanwhile, other studies indicate that CEOs' age and CSR are not related (Huang, 2013; Chen et al., 2019). Therefore, we argue that CEOs' age is an attribute that influences CSR and corporate performance; however, its effect is not yet well determined. Hence, we will investigate its effect and include it in our study of the CEO profile of attributes associated with high CSR and corporate performance.

As shown in Table 1, using the HBR dataset spanning 2015–2019, our statistical analysis reveals that the median age of CEOs during the examined period was approximately 60 years. The age distribution ranged from a minimum of 43 in 2015 to a maximum of 89 in 2018. Notably, half of the CEOs fell within the age range of 55 to 65 years, as indicated by the quartiles.

Table 1

Age distribution of CEOs based on the HBR dataset

Age	2015	2016	2017	2018	2019
Mean	59.77	60.32	60.84	60.40	60.11
St deviation	6.23	6.77	6.59	6.86	5.62
Mode	56.00	57.00	58.00	59.00	60.00
Median	60.00	59.50	60.00	59.50	59.50
Q1	56.00	56.00	57.00	55.00	56.00
Q3	64.00	64.00	64.25	65.00	63.00
Min	43.00	44.00	45.00	46.00	47.00
Max	79.00	88.00	88.00	89.00	75.00

2.1.2 Gender

In relation to gender, studies suggest that female CEOs tend to be more conventional, avoid risky considerations when making decisions (Singh et al., 2020) and are superior at representing the interests of corporate stakeholders than their male counterparts (Cooper, 2017). With respect to CSR, research suggests the existence of a relationship between CEOs' gender and CSR decisions and performance (Lim-Chung, 2021; Theis-Nipper, 2021). Female CEOs are perceived to be emotionally sensitive, value human relationships and be more concerned with the well-being of others (Theis-Nipper, 2021). In addition, they are more socially concerned, as they are more willing to participate in and devote themselves to CSR than their male counterparts (Lim-Chung, 2021; Theis-Nipper, 2021). According to Saridakis et al. (2020), the presence of a female CEO is required when corporations place limited emphasis on CSR diversity concerns, particularly if the rest of the CSR aspects are mostly dominated by male CEOs. However, further analysis of the gender attribute based on the concept of the upper

echelons theory is required, as practical findings support the notion that gender disparities are not ubiquitous (Singh et al., 2020). Therefore, we opted to investigate its impact on CSR and corporate performance and incorporate it into our study of the CEO profile of attributes associated with high CSR and corporate performance.

Table 2 Gender distribution of CEOs based on the HBR dataset

Gender	2015	2016	2017	2018	2019
Male	98	98	98	97	96
Female	2	2	2	3	4
Sum	100	100	100	100	100

Table 2 presents the gender distribution of CEOs based on the HBR dataset spanning 2015–2019. The results indicate that there is a notable gender disparity among best-performing CEOs. The majority of CEOs were male (96%–98%), whereas a minority were female (2%–4%), highlighting a substantial gender gap in CEO representation on the list.

2.1.3 Tenure

Tenure is a differentiating characteristic among CEOs, influencing their strategic decisions and performance as they establish distinct behavioural models over time (Ali et al., 2022). At the initial stages of their tenure, CEOs have less power and are motivated to participate in strategic investments that may increase their knowledge, skills and experience and thus positively increase their performance. They demonstrate significant interest in their profession by seeking information and showing a willingness to learn, despite their limited knowledge of the corporation and its environment (Ali et al., 2022). However, as time passes, their confidence grows, and they become excessively secure in their positions and less inclined to acquire new knowledge because of their risk-avoiding tendency and lack of learning inclination, which may affect their investment decisions and performance (Ali et al., 2022). In some cases, the tenure of a CEO can have a positive or negative correlation with corporate performance. In cases where tenure generates a higher level of resistance to change and a lower level of innovation propensity, it may demonstrate a negative correlation with corporate performance. Conversely, in cases where CEOs' tenure generates a higher level of experience and reputation, particularly in terms of funding, then it may demonstrate a positive correlation with corporate performance (Abatecola-Cristofaro, 2020).

CEOs' tenure has a significant impact on CSR decisions and performance (Ali-Zhang, 2015; Oh et al., 2018). However, few studies have investigated this impact, and the findings are still equivocal. Some studies indicate that early in a CEO's tenure, both board members and the market are sceptical of their capabilities. Thus, CEOs tend to perform better to overcome scepticism and reap future benefits such as reappointment, higher pay and greater autonomy. Such long-term CSR engagement will allow CEOs to reap the benefits of these investments later in their tenure (Ali-Zhang, 2015; Chiu-Sharfman, 2018). Similarly, Chen et al. (2019) postulate a negative correlation between CEO tenure and CSR performance and suggest that CEOs are incentivised to exploit CSR performance to demonstrate their capacity to alleviate career difficulties. They have more time than senior CEOs approaching the end of their tenure to invest in strategies such as CSR that can yield profitability and long-term advantages for their corporation as well as for them (Chen et al., 2019). Moreover, senior CEOs have greater rigidity, which may hinder them from investing in CSR (Oh et al., 2018). Other studies indicate that a positive correlation exists, claiming that senior CEOs who have been in control for an extended period of time may have greater authority and can build on previous successful strategic decisions, which can improve CSR performance (Tran-Adomako, 2021). In addition, they acquire a high level of skills, knowledge and influence during their long tenure, including a thorough understanding of corporate culture, management, capabilities and its stakeholders. Thus, they will be in a better position to incorporate stakeholder demands into corporate strategies and easily influence board members to invest in CSR (Huang, 2013; Oh et al., 2018). We believe that tenure is an attribute that impacts CSR and corporate performance, and its effect is not yet well determined. Hence, we will investigate its effect and include it in our study of the CEO profile of attributes associated with high CSR and corporate performance.

Table 3
Tenure distribution of CEOs based on the HBR dataset

Tenure	2015	2016	2017	2018	2019
Mean	15.56	17.31	17.01	16.18	15.10
St deviation	10.15	10.98	10.03	9.23	9.28
Mode	6	11	12	13	7
Median	12	15	14	14	13
Q1	8	10	10	9	8
Q3	20.25	22	22	22	20.25
Min	2	3	4	2	3
Max	52	66	54	47	48

Table 4

Table 3 presents the tenure distribution of CEOs based on the HBR dataset spanning 2015–2019. Our statistical analysis reveals that the median period of tenure was approximately 12–15 years, with a minimum time of 2 years in 2015 and 2018 and a maximum time of 66 years in 2016. The mean tenure was approximately 15.10–17.31 years of work experience.

2.1.4 Engineering studies

Education is frequently perceived as a proxy for intellectual capacity. It influences CEOs' cognition, behaviour and social capital, which influence their strategic decisions and performance. CEOs' educational backgrounds outline their values, beliefs and, consequently, decisions. Because of the varying skills and knowledge acquired, CEOs' behaviour may vary based on their level of education (Hambrick–Mason, 1984).

Concerning engineering studies, CEOs with engineering degrees exhibit distinct cognitive behaviours in their reasoning, strategic decisions and performance (Hambrick–Mason, 1984). Some studies indicate a positive relationship between CEOs with engineering backgrounds, often possessing high technical capabilities, and CSR performance, as socially responsible practices often require innovations and technologies (Huang, 2013; Ghardallou, 2022). Similarly, engineers' CEOs with engineering backgrounds enjoy a higher level of technology and innovation (Tyler–Steensma, 1998, cited in Kutzschbach et al., 2020) and are more inclined to engage in research and development (R&D), which influences the types of investments they choose (Barker–Mueller, 2002, cited in Kutzschbach et al., 2020). We believe that a CEO's engineering degree may impact CSR and corporate performance. However, its true effect has not yet been well determined owing to a lack of research on this topic (Velte, 2020). Hence, we will investigate its effect and include it in our study of the CEO profile of attributes associated with high CSR and corporate performance.

Engineering degree of CEOs based on the HBR dataset

Engineering degree	2015	2016	2017	2018	2019
Yes	24	24	32	34	32
No	76	75	68	64	68
N/A	0	1	0	2	0
Sum	100	100	100	100	100

Table 4 presents the engineering degree distribution of CEOs based on the HBR dataset spanning 2015–2019. Our analysis shows that most CEOs on the list did

not hold an engineering degree (64%-76%), whereas only 24%-34% possessed a degree in engineering. It is noteworthy that this percentage increased by almost 10% from 2015 to 2019.

2.1.5 MBA study

MBA education provides pragmatic, complicated and effective higher managerial training by combining theories and practices (Sun et al., 2021). Research provides mixed findings regarding the impact of MBA education on CEOs' performance. According to Miller and Xu (2019), MBA programme teachings may lead to an emphasis on short-term success over innovation and development. In terms of CSR, some studies indicate that MBA CEOs may have more egocentric behavioural issues and a limited concern regarding sustainability (Wei et al., 2018) or altruistic issues (Garcia-Blandon et al., 2019). Furthermore, studies show that MBA CEOs invest less in R&D and are more likely to make short-term investments, in contrast to the CSR concept, which emphasises long-term investments (Wei et al., 2018; Miller-Xu, 2019). In contrast, other studies indicate that MBA study has a positive impact on CSR performance, arguing that MBA CEOs are more capable in strategic decision-making and act more proactively towards CSR (Huang, 2013; Sun et al., 2021). Similarly, Kutzschbach et al. (2020) demonstrate that MBA CEOs may pursue economic profit through investing in nonfinancial performance. We believe that MBA study is an attribute that may impact CSR and corporate performance, and its effect is not yet well determined (Miller-Xu, 2019). Hence, we will investigate its effect and include it in our study of the CEO profile of attributes associated with high CSR and corporate performance.

ME

	Table 5
BA degree of CEOs based on the HBR dataset	

MBA	2015	2016	2017	2018	2019
Yes	26	24	26	32	39
No	74	76	74	68	61
Sum	100	100	100	100	100

Table 5 presents the MBA degree distribution of CEOs based on the HBR dataset spanning 2015-2019. Our analysis indicates that a significant proportion of CEOs (61%–76%) did not possess MBA degrees, with 24%–39% holding such degrees. Moreover, there is a notable increase of 23% from 2015 to 2019.

2.1.6 Employment type

Employing a CEO is a crucial decision with significant ramifications for business. There are limited empirical studies examining the impact of CEOs' employment (insiders versus outsiders) on strategic decisions (Jiang et al., 2013). Insider and outsider CEOs exhibit different patterns of behaviour in terms of strategies; such distinctions may be manifested in their inclination towards strategic transformation (Sun et al., 2021). Insider CEOs may enjoy certain possible benefits represented by their knowledge of the corporation and its stakeholders (Rose, 2019). However, outsider CEOs may bring new knowledge, skills and perspectives, which can justify their hiring, particularly for poor-performing corporations (Jiang et al., 2013). The number of outsider CEOs has been increasing among the leading worldwide corporations (Garcia-Blandon et al., 2019). In terms of CSR, some studies indicate that outsider CEOs often exhibit a willingness to change current business practices and may make board members more attentive to CSR, which may have a substantial positive impact on CSR decisions and performance (Zhang et al., 2021). We believe that the CEOs' employment type is an attribute that impacts CSR and corporate performance, and its effect is not yet well determined. Hence, we will investigate its effect and include it in our study of the CEO profile of attributes associated with high CSR and corporate performance.

Table 6
Insider/outsider origin of CEOs based on the HBR dataset

Insider/outsider	2015	2016	2017	2018	2019
Insider	86	84	81	87	86
Outsider	14	16	19	13	14
Sum	100	100	100	100	100

Table 6 presents the distribution of CEOs by insider/outsider origin based on the HBR dataset spanning 2015–2019. The analysis shows that most CEOs were insiders in every examined year (81%–87%), with only a minority of them being outsiders (13%–19%).

2.1.7 Country legal system

CEOs' decisions are not made in a vacuum but are influenced by the environment in which they operate. Environmental factors such as country legal systems significantly influence corporate practices, strategies and economic outcomes (*La Porta et al., 2008*, cited in *Becchetti et al., 2020*). CEOs operating in different

countries under different legal systems will likely perform differently (Ling et al., 2015; Wei et al., 2018). Individualism, the level of acceptance of uncertainties and the shareholding system are correlated with management discretion and style, posing different internal and external pressures to implement CSR strategies (Becchetti et al., 2020). Civil law and common law are two distinct country legal systems with two distinct cultures (La Porta et al., 2008, cited in Becchetti et al., 2020). Countries with civil law are found to have stronger government ownership and regulation than those with common law, which are characterised by greater judicial independence, a stronger contract enforcement mechanism and greater protection of property rights. Compared with civil law countries, common law countries offer greater shareholder and creditor protection, as well as better-funded stock exchanges. Following the classification by La Porta et al. (2008, cited in Becchetti et al., 2020), the common law regions include the United States, the United Kingdom, Hong Kong, Canada, Australia and Papua New Guinea, and the civil law regions encompass France, Spain, Brazil, Mexico, Belgium, the Netherlands, Argentina, Germany, Denmark, Sweden, Japan, Taiwan and Switzerland.

Studies demonstrate the existence of a relationship between countries where CEOs operate and CSR decisions and performance (Frynas–Yamahaki, 2016). According to Becchetti et al. (2020), corporations operating in civil law countries perform better in human resources issues, whereas those operating in common law countries excel in corporate governance and social participation. In addition, no substantial disparities exist in terms of environmental preservation practices between the two systems. Other studies indicate that in civil law countries, CEOs are required to consider all corporate stakeholders. Thus, they tend to be more inclined towards CSR strategies and more likely to have higher CSR performance (García-Sánchez et al., 2013). We believe that working under different legal systems affects CSR and corporate performance. However, empirical evidence on the influence is lacking (Kim et al., 2017). Thus, we will investigate its effect and include this variable in our study.

Table 7 presents the distribution of CEOs by their country of origin based on the HBR dataset spanning 2015–2019. The analysis reveals the presence of 27 countries, with the highest proportions of CEOs located in the United States (43.2%), which is a common law country. This is followed by France (10%), which is a civil law country; the United Kingdom (6.8%), which is a common law country; and Japan (5.4%) and Germany (4.4%), which are civil law countries.

Table 7 Country of origin of CEOs based on the HBR dataset

Country	2015	2016	2017	2018	2019	Sum
Argentina	1	1	1	1	1	5
Australia	2	2	0	1	3	8
Austria	1	0	0	0	0	1
Belgium	3	3	3	4	2	15
Brazil	2	2	1	1	0	6
Canada	5	5	4	4	6	24
Chile	0	0	1	1	0	2
China	0	0	1	1	1	3
China/Hong Kong	2	3	2	3	3	13
Denmark	2	3	2	1	2	10
Finland	0	0	0	0	1	1
France	9	9	12	9	11	50
Germany	8	3	3	3	5	22
Italy	1	0	1	2	0	4
Japan	4	4	7	5	7	27
Mexico	0	2	3	3	1	9
Netherlands	1	1	0	1	4	7
Norway	1	0	0	0	1	2
Papua New Guinea	0	1	0	0	0	1
Singapore	0	0	0	0	1	1
South Korea	0	0	1	0	0	1
Spain	3	4	3	4	4	18
Sweden	4	3	1	1	1	10
Switzerland	0	1	0	1	2	4
Taiwan	1	2	1	2	0	6
United Kingdom	9	8	7	3	7	34
United States	41	43	46	49	37	216
Sum	100	100	100	100	100	500

3. Further analysis

Based on our analysis throughout the examined 5-year period of the dataset, the data illustrate that the average age of CEOs was their early 60s. A majority of them were male and internally appointed, and the majority did not hold degrees in

engineering or MBA. In addition, the prevalence of CEOs was in common law countries, particularly in the United States.

-		-				
Industry	2015	2016	2017	2018	2019	Sum
Automobile	7	2	4	3	4	20
Consumer Goods	13	17	10	8	11	59
Consumer Services	4	5	9	5	0	23
Energy	2	2	1	2	1	8
Financial Services	13	16	12	11	17	69
Health Care	13	10	10	11	9	53
Industrials	10	12	9	9	10	50
Information Technology	9	11	15	22	17	74
Materials	8	7	7	7	8	37
Retail	12	10	8	8	2	40
Telecommunication	4	2	4	2	0	12
Transportation	4	3	3	3	2	15
Utilities	1	2	2	2	3	10
Information Services	0	1	1	0	0	2
Real Estate	0	0	5	7	6	18
Commercial Services	0	0	0	0	2	2
Communication	0	0	0	0	8	8
Sum	100	100	100	100	100	500

Table 8 illustrates the industry sectors of the best-performing CEOs based on the HBR dataset spanning 2015–2019. The analysis indicates that the highest proportions were in the information technology sector (14.8%), followed by financial services (13.8%), consumer goods (11.8%), healthcare (10.6%) and industrial sectors (10%). It is noteworthy that not every CEO remained on the list throughout the examined period; some joined by replacing previous CEOs or by introducing new companies to the list.

Table 9 Number of years in CEO position based on the HBR dataset (2015–2019)

Year	CEO	Percentage
1	111	47.23
2	45	19.15
3	39	16.60
4	21	8.94
5	19	8.09
Sum	235	

Table 9 presents the distribution of CEOs based on the number of years they have led their corporation during the examined period. Of the total 235 CEOs in the HBR dataset spanning 2015–2019, 43.23% were present for only 1 year, whereas 8.09% served as CEOs for the entire 5-year period under examination.

Table 10

Overall rank of CEOs based on the HBR dataset

CEO	Company	2015	2016	2017	2018	2019
Elmar Degenhart	Continental	4	8	9	5	13
Florentino Pérez Rodríguez	ACS	13	13	10	24	66
Jacques Aschenbroich	Valeo	14	10	4	7	21
Benoît Potier	Air Liquide	15	9	16	20	18
Mark Parker	Nike	21	11	8	14	20
Johan Thijs	KBC	23	19	7	8	8
Martin Bouygues	Bouygues	26	15	6	10	31
Tadashi Yanai	Fast Retailing	35	46	42	35	54
Debra Cafaro	Ventas	47	43	50	56	29
Robert Iger	Walt Disney	60	32	24	32	55
Paolo Rocca	Tenaris	62	62	29	23	65
Daniel Amos	Aflac	69	32	33	37	80
Richard Fairbank	Capital One	70	44	31	27	34
Frederick Smith	Fedex	75	49	34	28	53
Masayoshi Son	Softbank	78	73	65	55	96
Shigenobu Nagamori	Nidec	80	42	41	30	43
Leonard Schleifer	Regeneron Pharmaceuticals	85	67	55	53	93
Douglas Baker Jr.	Ecolab	98	41	39	52	38
Fabrizio Freda	Estée Lauder	53	27	25	19	38

Table 10 presents the annual fluctuations in the overall ranking of CEOs within the HBR dataset. The analysis indicates that the CEOs' overall rankings vary from year to year.

Table 11 illustrates the yearly changes in the overall rankings of CEOs within the HBR dataset, distinguishing between increases (+) and decreases (-). Our analysis reveals that most fluctuations are within 10 positions. Notably, Johan Thijs experienced the largest increase (+12) from 2016 to 2017, whereas Florentino Pérez Rodríguez saw the most significant decrease (-42) from 2018 to 2019.

 $\label{thm:thm:thm:change} Table~11$ Overall rank change of CEOs based on the HBR dataset

-						
CEO	Company	2015	2016	2017	2018	2019
Elmar Degenhart	Continental	4	-4	-1	+4	-8
Florentino Pérez Rodríguez	ACS	13	0	+3	-14	-42
Jacques Aschenbroich	Valeo	14	+4	+6	-3	-14
Benoît Potier	Air Liquide	15	+6	-7	-4	+2
Mark Parker	Nike	21	+10	+3	-6	-6
Johan Thijs	KBC	23	+4	+12	-1	0
Martin Bouygues	Bouygues	26	+11	+9	-4	-21
Tadashi Yanai	Fast Retailing	35	-11	+4	+7	-19
Debra Cafaro	Ventas	47	4	-7	-6	27
Robert Iger	Walt Disney	60	28	8	-8	-23
Paolo Rocca	Tenaris	62	0	33	6	-42
Daniel Amos	Aflac	69	37	-1	-4	-43
Richard Fairbank	Capital One	70	26	13	4	-7
Frederick Smith	Fedex	75	26	15	6	-25
Masayoshi Son	Softbank	78	5	8	10	-41
Shigenobu Nagamori	Nidec	80	38	1	11	-13
Leonard Schleifer	Regeneron Pharmaceuticals	85	18	12	2	-40
Douglas Baker Jr.	Ecolab	98	57	2	-13	14
Fabrizio Freda	Estée Lauder	53	26	2	6	-19

Table 12 **ESG rank of CEOs based on the HBR dataset**

CEO	Company	2015	2016	2017	2018	2019
Elmar Degenhart	Continental	120	153	121	74	153
Florentino Pérez Rodríguez	ACS	280	225	176	173	626
Jacques Aschenbroich	Valeo	62	81	21	33	92
Benoît Potier	Air Liquide	123	142	200	302	61
Mark Parker	Nike	265	304	272	405	522
Johan Thijs	KBC	134	51	90	17	36
Martin Bouygues	Bouygues	255	178	209	259	479
Tadashi Yanai	Fast Retailing	509	436	440	470	486
Debra Cafaro	Ventas	522	503	513	626	415
Robert Iger	Walt Disney	563	400	358	407	570
Paolo Rocca	Tenaris	504	282	198	214	329
Daniel Amos	Aflac	668	551	518	643	671
Richard Fairbank	Capital One	692	623	566	616	560
Frederick Smith	Fedex	662	408	374	459	319
Masayoshi Son	Softbank	762	716	682	674	703
Shigenobu Nagamori	Nidec	718	506	516	599	501
Leonard Schleifer	Regeneron Pharmaceuticals	794	608	521	539	682
Douglas Baker Jr.	Ecolab	350	283	316	450	492
Fabrizio Freda	Estée Lauder	360	360	284	422	585

Table 12 presents the annual fluctuations in the ESG ranking of CEOs within the HBR dataset. Our analysis indicates that the CEOs' overall rankings vary from year to year.

Table 13 **ESG rank change of CEOs based on the HBR dataset**

CEO	Company	2015	2016	2017	2018	2019
Elmar Degenhart	Continental	120	-33	+32	+47	-79
Florentino Pérez Rodríguez	ACS	280	+55	+49	+3	-453
Jacques Aschenbroich	Valeo	62	-19	+60	-12	-59
Benoît Potier	Air Liquide	123	-19	-58	-102	241
Mark Parker	Nike	265	-39	+32	-133	-117
Johan Thijs	KBC	134	+83	-39	+73	-19
Martin Bouygues	Bouygues	255	+77	-31	-50	-220
Tadashi Yanai	Fast Retailing	509	+73	-4	-30	-16
Debra Cafaro	Ventas	522	+19	-10	-113	+211
Robert Iger	Walt Disney	563	+163	+42	-49	-163
Paolo Rocca	Tenaris	504	+222	+84	-16	-115
Daniel Amos	Aflac	668	+117	+33	-125	-28
Richard Fairbank	Capital One	692	+69	+57	-50	+56
Frederick Smith	Fedex	662	+254	+34	-85	+140
Masayoshi Son	Softbank	762	+46	+34	+8	-29
Shigenobu Nagamori	Nidec	718	+212	-10	-83	+98
Leonard Schleifer	Regeneron Pharmaceuticals	794	+186	+87	-18	-143
Douglas Baker Jr.	Ecolab	350	+67	-33	-134	-42
Fabrizio Freda	Estée Lauder	360	0	+76	-138	-163

Table 13 illustrates the yearly changes in the ESG rankings of CEOs within the HBR dataset, distinguishing between increases (+) and decreases (-). Our analysis reveals that most fluctuations are less than 100 positions. Notably, Frederick Smith experienced the largest increase (+254) from 2015 to 2016, whereas Florentino Pérez Rodríguez saw the most significant decrease (-453) from 2018 to 2019.

Tables 14 and 15 offer insights into constructing a profile of attributes for the highest-ranking CEOs based on the HBR dataset spanning 2015–2019. Our analysis reveals that 94.74% of these CEOs (18 individuals) were male, whereas only 5.26% (1 individual) were female. The average age of the CEOs was approximately 65 years, with Johan Thijs, at 54 years old, being the only one younger than 60. In terms of employment type, 84.21% (16 individuals) were insiders and 15.79% (3 individuals) were outsiders. Regarding educational qualifications, only one CEO (5.26%) held an MBA and five CEOs (26.32%) possessed an engineering degree. The majority of the CEOs lack either an MBA (94.74%) or an engineering degree (73.68%). Notably, 57.89% (11 individuals) had neither an MBA nor an engineering degree, and none of them had both.

Table 14 Characteristics of CEOs based on personal data

CEO	Insider/ Outsider	Age	Gender	MBA	Engineering Degree	
Elmar Degenhart	Outsider	60	Male	No	Yes	
Florentino Pérez Rodríguez	Insider	72	Male	No	Yes	
Jacques Aschenbroich	Outsider	65	Male	No	Yes	
Benoît Potier	Insider	61	Male	No	Yes	
Mark Parker	Insider	63	Male	No	No	
Johan Thijs	Insider	54	Male	No	No	
Martin Bouygues	Insider	67	Male	No	No	
Tadashi Yanai	Insider	70	Male	No	No	
Debra Cafaro	Outsider	61	Female	No	No	
Robert Iger	Insider	68	Male	No	No	
Paolo Rocca	Insider	66	Male	No	No	
Daniel Amos	Insider	68	Male	No	No	
Richard Fairbank	Insider	68	Male	Yes	No	
Frederick Smith	Insider	75	Male	No	No	
Masayoshi Son	Insider	62	Male	No	No	
Shigenobu Nagamori	Insider	75	Male	No	Yes	
Leonard Schleifer	Insider	67	Male	No	No	
Douglas Baker Jr.	Insider	60	Male	No	No	
Fabrizio Freda	Insider	62	Male	No	No	

Table 15 **Summarised characteristics of CEOs based on personal data**

Denomination		Number of	Number of rate (%)
		CEOs	
Average age: 65,47			
Gender	Male	1	8 94,74
	Female		1 5,26
Insider/Outsider	Insider	1	6 84,21
	Outsider		3 15,79
MBA	Yes		1 5,26
	No	1	8 94,74
Engineering degree	Yes		5 26,32
	No	1	4 73,68

4. Conclusion

This study, grounded in the principles of the upper echelons theory, aimed to assess how the socio-demographic attributes of CEOs and the legal systems of their operating countries impact CSR and corporate performance. In addition, this study seeks to establish a profile of CEO attributes associated with high CSR and corporate performance among the world's best-performing corporations. This empirical analysis is based on a 5-year dataset sample of the top 100 CEOs globally, provided by HBR for the years 2015 to 2019. The examined attributes include age, gender, tenure, engineering degree, MBA study, employment type and the legal system of the country where the CEO is operating, all in relation to CSR and corporate performance.

During the dataset analysis, the individual attributes of all listed CEOs were initially examined and compared. Subsequently, CEOs present on the HBR list for all 5 years were identified and further examined to determine success factors in terms of attributes and establish a profile that is associated with high CSR and corporate performance. Our empirical analysis reveals that CEOs' age influences CSR and corporate performance, with approximately half of them aged between 55 and 65 years and an average CEO age of 60 years. A significant gender gap is evident among best-performing CEOs, with the majority being male, underscoring the notable disparity in CEO representation on the list. In addition, our statistical analysis indicates a median tenure of approximately 12-15 years. Regarding educational background, the findings show that the majority of CEOs in the examined dataset lacked an engineering degree, whereas a minority held one. Similarly, a significant proportion of CEOs did not possess MBA degrees, whereas a smaller proportion did. In terms of employment type, the results indicate that the majority were insiders, with only a minority being outsiders. Moreover, our analysis reveals that the prevailing legal system for the countries is common law, with the United States having the highest proportion on the list. Further examination shows that the best-performing CEOs were primarily in the technology sector, followed by financial services, consumer goods, healthcare and industrial sectors. Throughout the 5-year period, of the total 235 CEOs, a significant portion was present for only 1 year, whereas a smaller percentage served as CEOs for the entire period. The additional analysis highlights the variability in CEOs' yearly overall ranking, with the majority changing within a 10-position range. The variability in CEOs' yearly ESG ranking is also notable, with the majority changing by less than 100 positions.

Finally, to establish a profile of CEOs' attributes associated with high CSR and corporate performance, we conducted an analysis of the attributes of the 19

identified CEOs present on the list for all 5 years. The findings indicate a predominance of male CEOs, with only a small fraction being female, supporting the results of some studies that indicate CSR aspects are mostly dominated by male CEOs (Saridakis et al., 2020). The average age of the CEOs was approximately 65 years, which is in line with some studies indicating a positive correlation between executives' age and CSR performance (McCarthy et al., 2017). They find that senior CEOs, often more concerned with maintaining their image and safeguarding the validity of their corporations, are more driven to engage in CSR (Li et al., 2019) and have an incentive to boost share prices in the period preceding their retirement (Cassell et al., 2013). The majority of the CEOs were insiders, aligning with studies suggesting that insider CEOs may enjoy certain benefits owing to their knowledge of the corporation and its stakeholders (Rose, 2019). Surprisingly, our findings indicate that the majority of CEOs did not hold an engineering degree, contradicting the results of some studies suggesting a positive relationship between engineering backgrounds and CSR performance (Huang, 2013; Ghardallou, 2022). Moreover, our results show that only a few of the examined CEOs possessed an MBA degree, and notably, none held both engineering and MBA degrees. This aligns with studies indicating that MBA CEOs may exhibit more egocentric behavioural issues and demonstrate a limited concern regarding sustainability (Wei et al., 2018) or altruistic matters (Garcia-Blandon et al., 2019). In addition, they tend to invest less in R&D and are more inclined towards short-term investments, contrasting with the CSR concept, which emphasises long-term commitments (Wei et al., 2018; Miller-Xu, 2019).

Therefore, based on our further analysis, our suggested profile of CEOs' attributes associated with high CSR and corporate performance includes internally appointed male CEOs in their early 60s who do not necessarily hold an engineering or MBA degree.

The distinctive aspect of this study lies in its multi-attribute approach and the offering of a CEO profile associated with high CSR and corporate performance. This approach opens avenues for future CSR research and exploration.

However, this study is not without limitations, prompting avenues for further research. First, as this work is grounded in the upper echelons theory, it primarily focuses on visible and measurable attributes. Future research could benefit from incorporating psychological attributes when examining the CEO's profile associated with high CSR and corporate performance. Second, this study relies on a secondary dataset sample published by HBR. Incorporating additional data sources, such as semi-structured interviews with some of the best-performing CEOs on the list or increasing the sample size for more comprehensive insights, would be intriguing. Lastly, although there is no unique answer or a single profile for a CEO's attributes associated with high CSR and corporate performance, this

study emphasises the importance of studying attributes collectively and the concept of a profile. This provides a deeper understanding of why a group of best-performing CEOs exhibits higher CSR and corporate performance.

References

- Abatecola, G.—Cristofaro, M. (2020): Hambrick and Mason's "Upper Echelons Theory": evolution and open avenues. *Journal of Management History*, 26(1), 116–136. https://doi.org/10.1108/JMH-02-2018-0016
- Ali, A.–Zhang, W. (2015): CEO tenure and earnings management. *Journal of Accounting and Economics*, 59(1), 60–79. https://doi.org/10.1016/j.jacceco.2014.11.004
- Ali, R.-Rehman, U. R.-Suleman, S.-Ntim, C. G. (2022): CEO attributes, investment decisions, and firm performance: New insights from upper echelons theory. *Managerial and Decision Economics*, 43(2), 398–417. https://doi.org/10.1002/mde.3389
- Aramburu, I. A.–Pescador, I. G. (2019): The Effects of Corporate Social Responsibility on Customer Loyalty: The Mediating Effect of Reputation in Cooperative Banks Versus Commercial Banks in the Basque Country. *Journal of Business Ethics*, 154(3), 701–719. https://doi.org/10.1007/s10551-017-3438-1
- Baumol, W. J. (2016): On the Appropriate Social Responsibilities of Successful Entrepreneurs. Business and Society, 55(1), 14–22. https://doi.org/10.1177/0007650314523087
- Becchetti, L.-Ciciretti, R.-Conzo, P. (2020): Legal origins and corporate social responsibility. Sustainability (Switzerland), 12(7), 1–34. https://doi.org/10.3390/su12072717
- Cassell, C. A.-Huang, S. X.-Sanchez, J. M. (2013): Forecasting without consequence? Evidence on the properties of retiring CEOs' forecasts of future earnings. *Accounting Review*, 88(6), 1909–1937. https://doi.org/10.2308/accr-50526
- Chen, W. (Tina)—Zhou, G. (Stephen)—Zhu, X. (Kevin) (2019): CEO tenure and corporate social responsibility performance. *Journal of Business Research*, 95(August 2018), 292–302. https://doi.org/10.1016/j.jbusres.2018.08.018
- Chiu, S. C.-Sharfman, M. (2018): Corporate Social Irresponsibility and Executive Succession: An Empirical Examination. *Journal of Business Ethics*, 149(3), 707–723. https://doi.org/10.1007/s10551-016-3089-7
- Chu, H.-L.-Liu, N.-Y.-Chiu, S.-C. (2022): CEO power and CSR: the moderating role of CEO characteristics. *China Accounting and Finance Review*. https://doi.org/10.1108/cafr-03-2022-0027
- Cooper, E. (2017): Article information: Corporate Social Responsibility, Gender and CEO Turnover. *Managerial Finance*, 43(5), 1–32.
- De Jong, A.-van der Poel, M.-Wolfswinkel, M. (2017): The changing relation between CEOs and shareholders: A case study on Royal Philips NV, 1971–2001. *Journal of Management History*, 23(4), 375–400. https://doi.org/10.1108/JMH-04-2017-0021
- Eccles, R. G.-Ioannou, I.-Serafeim, G. (2014): The impact of corporate sustainability on organizational processes and performance. *Management Science*, 60(11), 2835–2857. https://doi.org/10.1287/mnsc.2014.1984
- El Ghoul, S.-Guedhami, O.-Wang, H.-Kwok, C. C. Y. (2016): Family control and corporate social responsibility. *Journal of Banking and Finance*, 73, 131–146. https://doi.org/10.1016/j.jbankfin.2016.08.008

- Elsayih, J.–Datt, R.–Hamid, A. (2021): CEO characteristics: do they matter for carbon performance? An empirical investigation of Australian firms. *Social Responsibility Journal*, 17(8), 1279–1298. https://doi.org/10.1108/SRJ-04-2020-0130
- Fabrizi, M.-Mallin, C.-Michelon, G. (2014): The Role of CEO's Personal Incentives in Driving Corporate Social Responsibility. *Journal of Business Ethics*, 124(2), 311–326. https://doi.org/10.1007/s10551-013-1864-2
- Fatemi, A.-Glaum, M.-Kaiser, S. (2018): ESG performance and firm value: The moderating role of disclosure. *Global Finance Journal*, 38, 45–64. https://doi.org/10.1016/j.gfj.2017.03.001
- Ferrell, O. C.-Harrison, D. E.-Ferrell, L.-Hair, J. F. (2019): Business ethics, corporate social responsibility, and brand attitudes: An exploratory study. *Journal of Business Research*, 95, 491–501. https://doi.org/10.1016/j.jbusres.2018.07.039
- Frynas, J. G.—Yamahaki, C. (2016): Corporate social responsibility: Review and roadmap of theoretical perspectives. *Business Ethics*, 25(3), 258–285. https://doi.org/10.1111/beer.12115
- Garcés-Galdeano, L.-García-Olaverri, C. (2019): The hidden value of intangibles: do CEO characteristics matter? *International Journal of Manpower*, 40(6), 1075–1091. https://doi.org/10.1108/IJM-06-2018-0199
- Garcia-Blandon, J.—Argilés-Bosch, J. M.—Ravenda, D. (2019): Exploring the relationship between CEO characteristics and performance. *Journal of Business Economics and Management*, 20(6), 1064–1082. https://doi.org/10.3846/jbem.2019.10447
- García-Sánchez, I. M.-Rodríguez-Ariza, L.-Frías-Aceituno, J. V. (2013): The cultural system and integrated reporting. *International Business Review*, 22(5), 828–838. https://doi.org/10.1016/j.ibusrev.2013.01.007
- Gatti, L.–Seele, P.–Rademacher, L. (2019): Grey zone in greenwash out. A review of greenwashing research and implications for the voluntary-mandatory transition of CSR. *International Journal of Corporate Social Responsibility*, 4(1), 1–15. https://doi.org/10.1186/s40991-019-0044-9
- Ghardallou, W. (2022): Corporate Sustainability and Firm Performance: The Moderating Role of CEO Education and Tenure. Sustainability (Switzerland), 14(6): 3513. https://doi.org/10.3390/su14063513
- Godos-Díez, J. L.-Cabeza-García, L.-Fernández-Gago, R.-Nieto-Antolín, M. (2020): Does CEO media exposure affect corporate social responsibility? *Corporate Social Responsibility and Environmental Management*, 27(2), 825–840. https://doi.org/10.1002/csr.1847
- Hambrick, D. C.-Mason, P. A. (1984): Upper Echelons: The Organization as a Reflection of Its Top Managers. Academy of Management Review, 9(2), 193–206. https://doi.org/10.5465/amr.1984.4277628
- Harvard Business Review (staff) (HBR) (2015): The best-performing CEOs in the world. *Harvard Business Review*, 93(11), 49–59.
- Harvard Business Review (staff) (HBR) (2016): The best-performing CEOs in the world. *Harvard Business Review*, 94(11), 41–57.
- Harvard Business Review (staff) (HBR) (2017): The best-performing CEOs in the world. *Harvard Business Review*, 95(6), 77–77.
- Harvard Business Review (staff) (HBR) (2018): The best-performing CEOs in the world. *Harvard Business Review*, 97(6), 37–49.
- Harvard Business Review (staff) (HBR) (2019): The best-performing CEOs in the world. *Harvard Business Review*, 98(6), 45–54.
- Hrazdil, K.-Mahmoudian, F.-Nazari, J. A. (2021): Executive personality and sustainability: Do extraverted chief executive officers improve corporate social responsibility? Corporate Social Responsibility and Environmental Management, 28(6), 1564–1578. https://doi.org/10.1002/csr.2116

- Huang, S. K. (2013): The impact of CEO characteristics on corporate sustainable development. Corporate Social Responsibility and Environmental Management, 20(4), 234–244. https://doi.org/10.1002/csr.1295
- Jain, T.–Jamali, D. (2016): Looking Inside the Black Box: The Effect of Corporate Governance on Corporate Social Responsibility. Corporate Governance: An International Review, 24(3), 253–273. https://doi.org/10.1111/corg.12154
- Ji, Y. Y. (2015): Top management team pay structure and corporate social performance. *Journal of General Management*, 40(3), 3–20. https://doi.org/10.1177/030630701504000302
- Jiang, F.-Huang, J.-Kim, K. A. (2013): Appointments of outsiders as CEOs, state-owned enterprises, and firm performance: Evidence from China. *Pacific Basin Finance Journal*, 23, 49–64. https://doi.org/10.1016/j.pacfin.2013.01.003
- Kang, J. (2017): Unobservable CEO Characteristics and CEO Compensation as Correlated Determinants of CSP. Business and Society, 56(3), 419–453. https://doi.org/10.1177/0007650314568862
- Kim, B.-Moon, J. J.-Kim, E. (2020): Executive Migration Matters: The Transfer of CSR Profiles Across Organizations. *Business and Society*, 61(1), 155–190. https://doi.org/10.1177/0007650320949845
- Kim, H.-Park, K.-Ryu, D. (2017): Corporate Environmental Responsibility: A Legal Origins Perspective. *Journal of Business Ethics*, 140(3), 381–402. https://doi.org/10.1007/s10551-015-2641-1
- Kutzschbach, J.–Peetz, I.–Tanikulova, P.–Willers, K. (2020): How CEO's education impacts CSR performance An empirical analysis of publicly listed companies in Germany. *Management Studies*, 10(3), 50–63.
- Li, W.-Wang, H.-Xie, X.-Li, J. (2019): Neural mediation of greed personality trait on risk preference. 1-15.
- Lim, M. H.-Chung, J. Y. (2021): The effects of female chief executive officers on corporate social responsibility. *Managerial and Decision Economics*, 42(5), 1235–1247. https://doi.org/10.1002/mde.3304
- Ling, Y.-Wei, L.-Klimoski, R. J.-Wu, L. (2015): Benefiting from CEO's empowerment of TMTs: Does CEO-TMT dissimilarity matter? *Leadership Quarterly*, 26(6), 1066–1079. https://doi.org/10.1016/j.leaqua.2015.07.006
- Liu, D.-Fisher, G.-Chen, G. (2018): CEO attributes and firm performance: A sequential mediation process model. *Academy of Management Annals*, 12(2), 789–816. https://doi.org/10.5465/annals.2016.0031
- McCarthy, S.-Oliver, B.-Song, S. (2017): Corporate social responsibility and CEO confidence. *Journal of Banking and Finance*, 75, 280–291. https://doi.org/10.1016/j.jbankfin.2016.11.024
- Miller, D.–Xu, X. (2019): MBA CEOs, Short-Term Management and Performance. *Journal of Business Ethics*, 154(2), 285–300. https://doi.org/10.1007/s10551-017-3450-5
- Mousiolis, D. T.–Zaridis, A. D.–Karamanis, K.–Rontogianni, A. (2015): Corporate Social Responsibility in SMEs and MNEs. The Different Strategic Decision Making. Procedia – Social and Behavioral Sciences, 175, 579–583. https://doi.org/10.1016/j.sbspro.2015.01.1240
- Neely, B. H.-Lovelace, J. B.-Cowen, A. P.-Hiller, N. J. (2020): Metacritiques of Upper Echelons Theory: Verdicts and Recommendations for Future Research. *Journal of Management* 46(6). https://doi.org/10.1177/0149206320908640
- Oh, W. Y.-Chang, Y. K.-Cheng, Z. (2016): When CEO Career Horizon Problems Matter for Corporate Social Responsibility: The Moderating Roles of Industry-Level Discretion and Blockholder Ownership. *Journal of Business Ethics*, 133(2), 279–291. https://doi.org/10.1007/s10551-014-2397-z

- Oh, W. Y.-Chang, Y. K.-Jung, R. (2018): Experience-based human capital or fixed paradigm problem? CEO tenure, contextual influences, and corporate social (ir)responsibility. *Journal of Business Research*, 90 (February 2017), 325–333. https://doi.org/10.1016/j.jbusres.2018.05.034
- Okafor, A.-Adusei, M.-Adeleye, B. N. (2021): Corporate social responsibility and financial performance: Evidence from U.S tech firms. *Journal of Cleaner Production*, 292. https://doi.org/10.1016/j.jclepro.2021.126078
- Park, K. M.-Gould, A. M. (2017): The overlooked influence of personality, idiosyncrasy and eccentricity in corporate mergers and acquisitions: 120 years and six distinct waves. *Journal of Management History*, 23(1), 7–31. https://doi.org/10.1108/JMH-09-2016-0056
- Prasad, B.–Junni, P. (2017): A contingency model of CEO characteristics and firm innovativeness: The moderating role of organizational size. *Management Decision*, 55(1), 156–177. https://doi.org/10.1108/MD-02-2016-0071
- Rose, C. (2019): Stock market reactions to CEO succession announcements: inside versus outside recruitment? *Journal of Management and Governance*, 23(1), Springer US. https://doi.org/10.1007/s10997-018-9425-9
- Saridakis, C.-Angelidou, S.-Woodside, A. G. (2020): What type of CSR engagement suits my firm best? Evidence from an abductively-derived typology. *Journal of Business Research*, 108, 174–187. https://doi.org/10.1016/j.jbusres.2019.11.032
- Singh, V.-Schiebener, J.-Müller, S. M.-Liebherr, M.-Brand, M.-Buelow, M. T. (2020): Country and Sex Differences in Decision Making Under Uncertainty and Risk. Frontiers in Psychology, 11(March), 1–7. https://doi.org/10.3389/fpsyg.2020.00486
- Sun, H.-Zhu, J.-Wang, T.-Wang, Y. (2021): MBA CEOs and corporate social responsibility: Empirical evidence from China. *Journal of Cleaner Production*, 290, 125801. https://doi.org/10.1016/j.jclepro.2021.125801
- Theis, J.-Nipper, M. (2021): The Impact of Executives' Gender, Financial Incentives, and Shareholder Pressure on Corporate Social and Ecological Investments. Schmalenbach *Journal of Business Research*, 73(3–4), 307–338. https://doi.org/10.1007/s41471-021-00122-8
- Tran, M. D.-Adomako, S. (2021): How CEO social capital drives corporate social performance: The roles of stakeholders, and CEO tenure. Corporate Social Responsibility and Environmental Management, 28(2), 819–830. https://doi.org/10.1002/csr.2092
- Velte, P. (2020): Do CEO incentives and characteristics influence corporate social responsibility (CSR) and vice versa? A literature review. Social Responsibility Journal, 16(8), 1293–1323. https://doi.org/10.1108/SRJ-04-2019-0145
- Wang, G.-Holmes, R. M.-Oh, I. S.-Zhu, W. (2016): Do CEOs Matter to Firm Strategic Actions and Firm Performance? A Meta-Analytic Investigation Based on Upper Echelons Theory. *Personnel Psychology*, 69(4), 775–862. https://doi.org/10.1111/peps.12140
- Wei, J.-Ouyang, Z.-Chen, H. (Allan): (2018): CEO characteristics and corporate philanthropic giving in an emerging market: The case of China. *Journal of Business Research*, 87(January 2017), 1–11. https://doi.org/10.1016/j.jbusres.2018.02.018
- Yuan, Y.-Lu, L. Y.-Tian, G.-Yu, Y. (2020): Business Strategy and Corporate Social Responsibility. Journal of Business Ethics, 162(2), 359–377. https://doi.org/10.1007/s10551-018-3952-9
- Zaid, M.-Wang, M.-Adib, M.-Sahyouni, A.-T. F. Abuhijleh, S. (2020): Boardroom nationality and gender diversity: Implications for corporate sustainability performance. *Journal of Cleaner Production*, 251, 119652. https://doi.org/10.1016/j.jclepro.2019.119652
- Zhang, Z.-Wang, X.-Jia, M. (2021): Echoes of CEO Entrepreneurial Orientation: How and When CEO Entrepreneurial Orientation Influences Dual CSR Activities. *Journal of Business Ethics*, 169(4), 609–629. https://doi.org/10.1007/s10551-020-04553-x