

Oware, Kofi Mintah; Amoako, Gilbert K.

Article

CEO characteristics and disability employment of listed firms. Evidence from India

Cogent Business & Management

Provided in Cooperation with:

Taylor & Francis Group

Suggested Citation: Oware, Kofi Mintah; Amoako, Gilbert K. (2022) : CEO characteristics and disability employment of listed firms. Evidence from India, Cogent Business & Management, ISSN 2331-1975, Taylor & Francis, Abingdon, Vol. 9, Iss. 1, pp. 1-19, <https://doi.org/10.1080/23311975.2022.2119826>

This Version is available at:

<https://hdl.handle.net/10419/289240>

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.



<https://creativecommons.org/licenses/by/4.0/>

CEO characteristics and disability employment of listed firms. Evidence from India

Kofi Mintah Oware & Gilbert K. Amoako

To cite this article: Kofi Mintah Oware & Gilbert K. Amoako (2022) CEO characteristics and disability employment of listed firms. Evidence from India, Cogent Business & Management, 9:1, 2119826, DOI: [10.1080/23311975.2022.2119826](https://doi.org/10.1080/23311975.2022.2119826)

To link to this article: <https://doi.org/10.1080/23311975.2022.2119826>



© 2022 The Author(s). This open access article is distributed under a Creative Commons Attribution (CC-BY) 4.0 license.



Published online: 07 Sep 2022.



Submit your article to this journal [↗](#)



Article views: 2616



View related articles [↗](#)



View Crossmark data [↗](#)



Received: 07 August 2022
Accepted: 29 August 2022

*Corresponding author: Kofi Mintah Oware, Department of Banking Technology and Finance, Kumasi Technical University-Ghana
E-mail: owaremintah@hotmail.com

Reviewing editor:
Collins G. Ntim, Accounting,
University of Southampton,
Southampton, United Kingdom

Additional information is available at
the end of the article

ACCOUNTING, CORPORATE GOVERNANCE & BUSINESS ETHICS | RESEARCH ARTICLE

CEO characteristics and disability employment of listed firms. Evidence from India

Kofi Mintah Oware¹ and Gilbert K. Amoako²

Abstract: Using the stewardship theory and theory of fear of failure as the underlying theory, the study focuses on investigating CEO characteristics and disability employment of listed firms in India. The study employed descriptive statistics and feasible generalised least square (FGLS) assumption to analyze data from 80 Indian listed firms with 800 firm-year observations from 2010 to 2019. We find that CEO age and CEO tenure have a strong and positive correlation. The first findings show that ageing CEOs are insignificant to exhibit any levels of disability employment in

ABOUT THE AUTHOR

Kofi Mintah Oware has a PhD in Business Administration (sustainability finance and management) from Mangalore University, India and an MBA from Aberdeen Business School (Robert Gordon University-UK). He is currently a senior lecturer in the banking technology and finance department. He is also a chartered accountant with membership from the Institute of Chartered Accountants (ICA), Ghana and the Institute of Cost Executive & Accountants (ICEA)-UK. Before joining Academia, he worked in blue-chip companies for 12 years in various capacities, including chief accountant, head of finance and, general manager for finance & administration in Ghana and research consultant to Aberdeen Businesswomen network in the United Kingdom. In academia, he has 31 publications in the various journal, including three “A” s under ABDC (Meditari Accountancy Research), three “B” s under ABDC (Social Responsibility Journal & Society and Business Review), Sage publications and 17 other publications in Scopus Indexed journals.

Dr Gilbert Kwabena Amoako currently works at the Department of Accountancy and Accounting Information Systems, Kumasi Technical University. Dr Amoako Holds a PhD in Business Administration, Accounting Option from the University of Cape Coast. His research interest is in Accounting and Finance, and to his credit, 14 peer reviewed articles, of which eight have already been published, and six are under review. Dr Amoako’s current project is, “Does institutional isomorphism affect environmental management accounting techniques implementation? Evidence from Environmentally Sensitive firms in Ghana”.

PUBLIC INTEREST STATEMENT

Different peoples have concerns about the marginalisation of the minority in the workplace. One of such people with disability. This study draws the attention of managers and the society at large that disability employment is not only a welfare cost, but with the proper management attitude, their presence can contribute positively to firm performance. Using data from India, the observation from this study supports this call for the inclusion of people with disability in the workplace.

India. This study suggests that ageing CEOs do not see disability employment as a welfare cost or employment that can lead to a consequential profit. The second findings show that firms with long-tenured CEOs exhibit a higher level of disability employment. This outcome does not conflict with the assumption that the CEO has a sense of responsibility to achieve what is right and protect the firm's assets. Lastly, the study shows that female CEOs exhibit higher levels of disability employment in India. The study is limited to firms with data on people with disabilities. Using the Indian stock market as the only study source may affect the study's generalisation. Also, small firms that employ disabled persons are not on the stock market and may potentially undermine the study's scope. Examining CEO characteristics (CEO age, CEO tenure and CEO gender) on disability employment deepens disability studies in emerging markets.

Subjects: Accounting; Corporate Governance; Corporate Social Responsibility & Business Ethics

Keywords: CEO characteristics; Disability employment; Theory of fear of failure; Stewardship theory; India; Paper type -Research paper

1. Introduction

Disability occurs when people with a health condition interact with a particular environmental context (Ministry of Law, 2014). According to the law on disability in India (Ministry of Law, 2014), people with disabilities have equal rights as any country citizen. However, the requirements for large listed firms regarding the employment of people with disability is not mandatory in the Companies Act, 2013, section 135 (Ministry of Corporate Affairs, 2009, 2013). Nonetheless, firms in India benefit from tax incentives, including tax exemptions as stated in Section 41 of the Persons with Disabilities Act 1995, now amended to The Rights of Persons with Disabilities Act, 2016. Also another benefit is through firm CSR activities (Dezan Shira & Associates, 2017; "Incentives to private sector for employing persons with disability," 2014; Ministry of Law, 2014), which reduces the state welfare cost on disability. The act of the employment of people with disabilities, therefore, portrays firms as dutiful to the rule of law, which can win regulatory support and more remarkable forbearance from the state on areas where (and when) the firm may be at fault. Given the associated benefits for the engagement of people with disabilities, there is still an indication of low employment of people with disabilities in India (National Sample Survey Office, 2016). Disability employment is a requirement in the Sustainable Development Goal (SDG) 2030, and understanding the factors contributing to its increase or decrease is relevant to this study. A previous study in Pizza Hut corporation argued the relevance of CEO leadership in the employment of disability, which resulted in a positive consequence to financial benefit to the firm (Zivolich & Weiner-Zivolich, 1997). However, to the best of the authors of this study, the replication of such a study is yet to be examined in an Indian context. This study uses the independent variables of CEO age, CEO tenure and CEO gender to represent CEO leadership characteristics in analysing corporate decisions (i.e. decision to employ disabled persons) in India. CEO age is the years from birth (Ng & Sears, 2012). CEO tenure is the fiscal year minus the year the CEO has joined the board of directors (Garcia-Blandon et al., 2019). CEO gender measures female and male CEOs (Jadiyappa et al., 2021; Kaur & Singh, 2019; De Silva & Banda, 2022). Given the motivation of this study due to the associated benefits, this study seeks to fill the study gaps, where there are no studies that use secondary data to examine CEO characteristics on disability employment. Also, we are yet to encounter a study that uses stewardship theory and the theory of fear to interpret the relationship between CEO characteristics and disability employment. Therefore, this study aims to examine the effect of CEO characteristics on the disability employment of listed firms in an Indian context.

The female gender brings different advantages to the firm, such as diverse opinions and addressing social issues better than male CEOs. Thus, where the female gender is in charge, the firm contribution to social performance increases. Viewing disability employment from that perspective, their employment can contribute to a firm's performance and create a moral capital for the firm in the eyes of the regulators and governments. We can see the characteristics of gender to be significant in increasing disability employment. Conversely, an ageing CEO has conservativeness in decision-making and might choose short-term decisions over long-term decisions. Decisions like disability employment, which has long-term benefits, might be unpopular with ageing CEOs. Similarly, where there is an ageing CEO, the firm is more likely to have long-tenure CEOs because it has been observed in previous studies that there is a correlation between CEO age and CEO tenure (Gupta et al., 2018). Long-tenured CEOs become accustomed to the old ways of doing things. They may become reluctant to contribute to the growing need for firms to address the employment of people with disabilities. Understanding a CEO's age, tenure, and gender characteristics can manage the government's challenges in convincing firms to employ more people with disabilities. Less is known about CEO leadership in disability employment.

The present literature has established a link between CEO characteristics and corporate decisions (Bui et al., 2020; Dang et al., 2017; Garcia-Blandon et al., 2019; Goergen et al., 2015; Minh Ha et al., 2021; Naseem et al., 2020; Withisuphakorn & Jiraporn, 2017; Yim, 2013). Also, factors contributing to disability employment are examined by previous authors (Kaye, Jans and Jones, 2011; Gold et al., 2012; Gröschl, 2013) but not from the context of CEOs' characteristics. Accordingly, the present study focused on investigating the CEO characteristics on disability employment of listed firms in India. The study collected data from 80 Indian listed firms with 800 firm-year observations from 2010 to 2019 and used descriptive statistics and panel regression with fixed and random effect assumptions to interpret the study findings.

The study contributes to the existing knowledge. Previous studies have identified factors responsible for influencing the employment of disabled persons, which include logistical challenges, poor awareness and high cost of accommodation (Kaye, Jans and Jones, 2011; Gold et al., 2012; Gröschl, 2013). Also, other studies showed that the employment of people with disabilities could lead to profitability (Siperstein et al., 2006; Zivolich & Weiner-Zivolich, 1997) and a low retention ratio of labour employment (Araten-Bergman, 2016; Motilal, 2017). Examining CEO characteristics (CEO age, CEO tenure and CEO gender) on disability employment deepens disability studies in emerging markets and adds a new perspective. The second contribution of the study adds new knowledge to the application of stewardship theory and the theory of fear of failure. Previous studies using the two theories examined CEO characteristics and firm performance (Li et al., 2021; Waheed & Malik, 2019; Zandi et al., 2021). However, there are no studies as we know that used stewardship theory and theory of fear of failure to interpret the relationship between CEO characteristics and disability employment.

2. Literature review and hypotheses

Stewardship theory assumes the CEO has a sense of responsibility to achieve what is right for the firm and seeks to protect the firm's assets (Donaldson & Davis, 1991; Zandi et al., 2021). In other words, the CEO and managers of a firm are assumed to have a positive intention, which motivates increased performance and possesses a unit of command in decision-making (Donaldson & Davis, 1991; Li et al., 2021). The decisiveness in decision-making is consistent with these study objectives, where the CEO needs to decide whether to engage people with disabilities or not. Different studies have examined CEO characteristics and corporate decisions using stewardship theory to interpret the relationship (Li et al., 2021; Waheed & Malik, 2019; Zandi et al., 2021). Even though stewardship theory suggests no ulterior motives from the agents in exercising their responsibilities towards firm performance, the likely case where the manager is unable to protect corporate assets can form an underlying cause in CEOs' decision-making. The theoretical definition of such as cause is the theory of fear of failure.

The fear of failure occurs when “persistent and irrational anxiety about failing to measure up to the standards and goals set by oneself or others” (American Psychological Association, 2007). There is psychological behaviour underlines the chief executive officers’ corporate decision-making. One such decision is whether the employment of people with disabilities serves the firm’s interest or not. However, fear of failure can motivate entrepreneurial activity to happen (Hunter et al., 2021). It is observed in another study that disability employment can reduce taxpayer spending on the general welfare cost of the country (Zivolich & Weiner-Zivolich, 1997). Also, some studies have established a direct link between disability employment to firm performance (Siperstein et al., 2006). Another benefit to the firms is the low retention rate for disability employment (Araten-Bergman, 2016; Motilal, 2017). The benefits of disability employment are consistent with a stewardship theory (Donaldson & Davis, 1991; Zandi et al., 2021). However, other studies advocate disability employment as a cost to the employer (Domzal et al., 2008). We perceive that the mixed findings from the employment of people with disabilities cause CEOs to fear failure, which can undermine their performance targets. Nonetheless, there is a possible benefit associated with disability employment. Respect for the rule of law serves as a moral capital for the firm, which can shield it when it encounters a problem with its operations or faults with regulators. Thus, disability employment can serve as positive support for continuous firm operations, which can significantly benefit the firm’s performance. Therefore, examining disability employment in fear of failure and stewardship theory is appropriate.

2.1. CEO age

CEO age is the years from birth (Ng & Sears, 2012). A CEO’s age is characteristic of a CEO, and this trait bears on the corporate decisions taken in the management of firms. A study showed that CEO age is significantly and negatively related to firm value and operating performance (Cline & Yore, 2016). Likewise, studies of CEOs’ age and stock return volatility showed a negative relationship between CEO age and stock return volatility (Serfling, 2014). Similarly, a Chinese study shows no significant association between CEO age and firm performance (Liu & Jiang, 2020). However, another study showed a positive association between CEO age and CSR disclosure (Malik et al., 2020). Likewise, we also see that the CEO’s age can positively influence other variables. For example, a study showed that CEO age positively correlates with earnings and related information to stock market analysts (Haider et al., 2019). Another characteristic of CEO age is related to firm performance (i.e. short-term or long-term) or personality traits. It is argued that an ageing CEO undertaking corporate decisions is likely to be short-term rather than long-term. Also, ageing CEOs concentrate on personality traits (Minniti & Nardone, 2007; Warner, 2010) and become conservative in decision-making (Gibbons & Murphy, 1992). Such conservatism can be associated with fear of failure, as indicated in a study that age difference contributes to fear of failure (Gómez-López et al., 2021). A previous survey confirms our assertion, which showed a negative association between CEO age and corporate investments (Gupta et al., 2018). However, younger CEOs are risk takers (Gupta, 2022).

We see that firms grow faster when managed by young CEOs (Barba Navaretti et al., 2022). Included in corporate decisions is disability employment, which sometimes has a long-term benefit than a short-term benefit. Some benefits of disability employment are low retention rates, which can cause a firm’s profitability (Araten-Bergman, 2016; Motilal, 2017), and the consequence is a positive economic impact on the firm. Similarly, it was observed in a study on Pizza Hut corporations that disability employment led to financial benefits in tax credits (Zivolich & Weiner-Zivolich, 1997). Even though the engagement of CEOs has stewardship responsibilities to stakeholders, the uncertainty surrounding the impact of disability employment on firm performance tends to cause fear, especially when the CEO age nears their exit from the firm. In light of the above, we proposed a conditional statement stating that firms with ageing CEOs may exhibit higher fear of failure leading to lower employment levels for people with disabilities. We, therefore, propose the hypotheses that:

H1: Firms with ageing CEOs are likely to exhibit a lower level of disability employment.

2.2. CEO tenure

CEO tenure is the fiscal year minus the year the CEO has joined the board of directors (Garcia-Blandon et al., 2019). The tenure of CEOs affects corporate decisions (Ahamed, 2015; Altarawneh et al., 2022; Firdiansjahc et al., 2020). Studies showed that long-tenured CEOs prioritise personal interest in strategic financial decisions (Naseem et al., 2020). However, other studies argued that long-tenured CEOs in India reflect strong networks with important stakeholders, especially when deciding on debt acquisition (Kaur & Singh, 2021). We also see a positive association between CEO tenure and firm performance (Ahamed, 2015; Kramarić & Miletić, 2022). However, when the context is corporate social responsibility, a CEO with a more extended stay reduces investment in social performances in a Korean study in the context of listed firms (Choi et al., 2020). CEO with longer tenure is associated with safety agendas than risky objectives (Naseem et al., 2020). A consequence of the trait of long-tenured CEO showed a negative association between longer tenure CEOs and firm performance (Zahra, 2005). The tenure of a CEO affects a firm's performance. The employment of people with disabilities has its uncertainties. The uncertainties can contribute to the fear of failing to achieve high firm performance from disability employment. Given the argument that long-tenure CEOs do not support social performance, it is reasonable to perceive that they are less likely to support disability employment, which is a social issue. Consequently, we propose the hypothesis which states that:

H2: Firms with long-tenured CEOs are likely to exhibit a lower level of disability employment.

2.3. CEO gender

Literature shows a difference between male and female viewing risk (Alqatamin et al., 2017; Khidmat et al., 2022; Withisuphakorn & Jiraporn, 2017). The difference between female and male CEOs affects corporate decisions (Darmadi, 2013; Jadiyahpa et al., 2021; Kaur & Singh, 2019). For example, studies showed a negative association between female CEO and firm performance (Jadiyahpa et al., 2021; Kaur & Singh, 2019). Also, top female executives are negatively associated with a firm's performance (Darmadi, 2013). Similarly, other studies also showed a negative association between CEO gender and earning management decisions (Putri & Rusmanto, 2019). However, other studies showed a positive association between female CEOs and firm performance (Ahmad et al., 2022; Eduardo & Poole, 2016). From a male perspective, evidence supports a positive association between male CEOs and the firm performance of Indian commercial banks (Gupta & Mahakud, 2020). Nonetheless, female directors or CEOs show resilience in leadership (Cherneski, 2020) and have a paternalistic leadership style (Zhang & Liu, 2020), which may make them good coordinators.

The stewardship theory ensures better coordination from a central point with fewer ulterior motives (Ahmadi et al., 2018; Donaldson & Davis, 1991). Stewardship theory is a good fit in explaining the characteristics of a gender CEO gender towards decision making. The employment of people with disability and their contribution to firm performance is sometimes difficult to quantify. Nonetheless, its economic impact on the firm needs emphasis. Given that an average female CEO does better when a firm is faced with challenges (Papangkorn et al., 2021), it is arguable to suggest that female CEO are better suited to employ people with disability than male CEOs. It can also be inferred that female CEOs are perceived as high achievers, and fear of failure can motivate their decision-making (Hunter et al., 2021). The consequence of female CEO factors affects the economic impact of the associated firms (Chen et al., 2021; Francoeur et al., 2022; Setiawan & Gestanti, 2022; Zhang et al., 2018). For example, women directors economically impact positively on firm donations leading to high performance from the associated firms (Zhang et al., 2018). However, from a social perspective, it is also notable in Asian countries that female entrepreneurs get worried about the shame associated with a business failure which may account

for lower levels of female business ownership (Schröder et al., 2021). Nonetheless, we expect female CEOs to employ more people with disabilities than male CEOs. In light of the above, we propose the below hypothesis that states that:

H3: Firms with female CEOs will exhibit a higher level of disability employment than firms with male CEOs.

3. Research design and methodology

3.1. Data and sample

Green Clean organisation and Sustainability outlook report on all firms in India that submit sustainability reports (BRR and Sustainability Report Tracker for Listed Companies, 2019; Green Clean Guide, 2011), and as of 2019, the database contained 131 firms that consistently prepared and reported on the sustainability performance of the firms. This is based on the top 100 firms with required market capitalisation, which started sustainability reporting using BRR guidelines in 2012 and increased in 2015 to 500 listed firms. Subsequent analysis removed missing data, and banking format reporting reduced the sample size from 131 to 80 firms for this study. The description of the study population and sample (see Appendix B) reflects the study's observations. The financial data is from the annual accounts, and the annual sustainability report has information on disability employment. The financial and non-financial information is extracted from each firm's website, which contains a repository of each year's integrated financial reports and matches with 80 firms generated from the sustainability database in India. We cross-reference each firm's integrated financial reports from the firm's website with the Indian stock market (Bombay Stock Exchange and National Stock Exchange) data repository.

3.2. Model specification

To examine the effect of CEO characteristics and disability employment of listed firms, we specify the following economic model:

$$DISA_{it} = \alpha + \beta_1 CEOChar_{it} + \beta_2 Lgdisa_{it-1} + \sum \phi CTRL_{it} + \mu_{it} \quad (1)$$

Where i and t denote the cross-sectional units and period, respectively. $DISA_{it}$ represents a dependent variable of disability employment of listed firms. $CEOChar_{it}$ represents CEO age, CEO tenure and CEO gender. $Lgdisa_{it-1}$ represents one year lag of disability employment. $CTRL_{it}$ defines the control variables of financial leverage, firm size, type of industry, Tobin's q , CSR expenditure, CSR disclosure and mandatory CSR reporting.

3.3. Dependent variable

$DISA_{it}$ represents a dependent variable of disability employment of listed firms. Disability employment (DISA) is the natural logarithm of total employees with disabilities captured in the firms' integrated financial reporting sustainability reports. The natural logarithm application reduces the measurements' outliers and is consistent with previous research studies (Heath & Babu, 2017).

3.4. Independent variables

CEO Characteristics represent CEO age, CEO tenure and CEO gender. CEO characteristics in this study also measure personality factors such as prejudice and biases or perception. CEO age is the years from birth (Ng & Sears, 2012). CEO tenure is the fiscal year minus the year the CEO has joined the board of directors (Garcia-Blandon et al., 2019). CEO gender measures female and male CEOs, and a binary of one is for male CEOs, and female CEOs represent the otherwise (Jادیyappa et al., 2021; Kaur & Singh, 2019).

3.5. Control variables

The variable *CTRL* represents the control variables, which include firm size, financial leverage, industry type, mandatory CSR reporting, CSR disclosure, CSR expenditure and Tobin's *q*

- (1) Firm size measures a firm's capacity to undertake CSR activities and is calculated as the natural logarithm of the firm's total assets (Clarkson et al., 2008; Mishra & Suar, 2010). CEOs' pursuance of CSR activities depends on the firm's size, and therefore undertaking the employment of disabled persons is significant to the firm's size.
- (2) Financial leverage measures the total liabilities ratio to total assets (Clarkson et al., 2008; Cormier et al., 2011; Mishra & Suar, 2010). The firm's ability to meet its obligations affects CEOs' ability to hire disabled people. The research showed that disability employment has a cost with a short-term effect on performance because of its nature as a welfare cost.
- (3) Some industries are more prone to hazardous waste than others and take the value of 1 if the firm is hazardous and zero for the rest (Jackson & Apostolakou, 2010; Shabana et al., 2017). Hazardous firms are identified to reflect manufacturing firms whose activities negatively impact the environment. An example is an oil extraction company. The nature of the job influences disabled people's employment. Service industries are more likely to engage disabled people than construction firms (Motilal, 2017) and thereby affect the study objectives.
- (4) *Mandatory CSR reporting* use binary variables and is consistent with many studies (Cai et al., 2012), and its implementation has influenced the employment of people with disability which is categorised as CSR activity
- (5) *CSR disclosure* is a proxy for social performance and is assigned one if present and zero otherwise. The measurement approach is consistent with other research studies (Kamel & Shahwan, 2014; Shahwan, 2015; Shahwan & Hassan, 2013).
- (6) *CSR expenditure* is the amount a firm commits to undertake CSR activities and the total cost captured in a firm's sustainability report (Geetika & Shukla, 2017; Nakamura, 2015). The CSR expenditure converted into a natural logarithm to remove outliers
- (7) *Tobin's q* measures firm value, consistent with long-term firm performance. Previous studies argue a relationship between CEO characteristics and the firm value of listed firms (Cline & Yore, 2016) and, therefore, have implications for CEOs' decision-making. Hiring persons with disabilities is likely to lead to considerable costs in the short term, and the market often responds to welfare values in the long term. Institutional investors are less likely to prefer disability-hiring firms. Therefore, the impact of Tobin's *q*, which measures long-term performance, is factored in as a control variable of this study

3.6. Methodology

We present descriptive statistics and feasible generalized least square (FGLS) assumptions to examine CEO characteristics and disability employment. Also, the standard errors are robust to address heteroskedasticity issues in standard errors (Baltagi, 2005). Also, the results are analysed with Stata 15.0 software application.

4. Empirical results and discussions

The study presents the empirical analysis in [Tables 1, 2 and 3](#). The following subsections show the study's descriptive statistics, correlation analysis, and regression results.

4.1. Descriptive statistics and correlation matrix

[Table 1](#) presents the descriptive statistics of variables. Disability employment is the natural logarithm of total disabled people employed annually by listed firms. Disability employment has a mean of 2.223 and a standard deviation of 2.134. It indicates that disability employment is not even among firms in these industries. The average CEO age in a listed firm in India is 54.4 years, and the minimum age of a CEO is 28 years. The average CEO tenure is 8.4 years. Studies at a Harvard law school forum on corporate governance showed that the average CEO tenure has

Table 1. Descriptive statistics

	Sign	Obs.	Mean	Std. Dev.	Min.	Max
Disability employment	DISA	800	2.224	2.134	0	6.860
CEO age	CEOA	800	54.403	8.284	28	82
CEO tenure	CEOT	800	8.441	9.605	1	53
CEO gender	CEOG	800	0.938	0.242	0	1
Financial leverage	FL	800	0.442	0.183	0.039	1.018
Firm size	FS	800	11.753	1.486	7.593	15.864
Type of industry	DIND	800	0.200	0.400	0	1
Tobin's q	TOB	800	3.589	3.496	0	25.151
CSR expenditure	CSRE	800	4.659	2.048	0	9.047
CSR disclosure	CSRD	800	0.448	0.203	0	1
Mandatory CSR reporting	MAR	800	0.600	0.490	0	1
Lag of disability employment	LgDISA	800	2.005	2.137	0	6.861

fallen from 7.5 years to 7.2 years between 2013 and 2017 (Ahamed, 2015; Marcec, 2018), indicating that CEO tenure in India is high compared to global listed firms. CEO gender shows that 93.8% of the CEOs are male, meaning that listed firms in India are male-dominated. Nonetheless, the percentage of female CEOs is higher in India than in other countries like Jordan and UAE, which showed lower than 5% (Alqatamin et al., 2017).

Table 2 shows the correlation matrix of the variables under study. The results show that disability employment has a strong and positive correlation with firm size and CSR expenditure. Disability employment and CEO age have a weak correlation but a positive statistical significance. The study shows a positive and strong correlation between CEO age and CEO tenure (Gupta et al., 2018), indicating that an ageing CEO with a history of experience gets a longer tenure in listed firms in India. Conversely, the study shows a weak and negative correlation between CEO male gender and disability employment. This study introduced the lag variable of disability employment to address endogeneity, and the results show a strong and positive correlation between lag disability employment and disability employment. Additionally, we examine the multicollinearity between the independent variables through a pairwise correlation (see, Table 2). The results allow us to rule out the possible existence of multicollinearity between the studied model variables. The largest significant coefficient among the independent variables is 0.650 and 0.875. Also, the multicollinearity test using a variance inflation factor (VIF) carried out shows that VIFs are less than 4.0, an indication that there is no problem with multicollinearity in the study

4.2. Regression results

The regression results under feasible generalised least squares (FGLS) are in Table 3. We examine the effect of the control variables, and the study shows that firm size and mandatory reporting are positively and statistically significant with disability employment. However, CSR disclosure to stakeholders and financial leverage on a firm's disability employment is negative. The type of industry is insignificant in influencing disability employment in India. This outcome is inconsistent with previous studies, which argued that service firms are more likely to employ people with disabilities than the

Table 2. Correlation coefficients and variance inflation factor (VIF) coefficients

	1	2	3	4	5	6	7	8	9	10	11	VIF
Disability employment	1											
CEO age	0.060*	1										1.30
CEO tenure	0.030	0.350***	1									1.24
CEO gender	-0.063*	0.172***	0.085**	1								1.05
Financial leverage	-0.103**	0.006	-0.030	0.031	1							1.28
Firm size	0.520***	0.211***	-0.105**	0.084**	0.132***	1						3.35
Type of industry	0.281***	0.067*	-0.135***	-0.000	0.126***	0.422***	1					1.27
Tobin's q	-0.105**	-0.064*	0.011	-0.027	-0.178***	-0.354***	-0.185*	1				1.38
CSR expenditure	0.422***	0.045	-0.137***	0.029	-0.226***	-0.650***	0.292**	0.047	1			2.74
CSR disclosure	0.201***	0.024	0.012	0.056	-0.056	0.404***	0.153**	0.075	0.473	1		1.34
Mandatory CSR reporting	0.054	0.109**	-0.011	0.000	-0.105**	0.160***	0.000	0.078*	0.234	0.068	1	1.12
Lag of Disability employment	0.875											1.35

Note: **p < 0.05, ***p < 0.01 and *p < 0.10 level (two-tailed), N = 800. Pairwise Correlation

Table 3. Feasible Generalized Least Square—CEO characteristics and disability employment

	OLS- DISA Model 1	OLS- DISA Model 2	OLS- DISA Model 3	OLS- DISA Model 4	FGLS-DISA Model 5	FGLS-DISA Model 6	FGLS-DISA Model 7	FGLS-DISA Model 8
<i>Control variables</i>								
Financial leverage	-0.677*** [0.209]	-0.673*** [0.210]	-0.672*** [0.209]	0.678*** [0.209]	0.677*** [0.209]	-0.674*** [0.209]	-0.672*** [0.208]	-0.668*** [0.207]
Firm size	0.233*** [0.040]	0.231*** [0.041]	0.243*** [0.042]	0.241*** [0.042]	0.233*** [0.042]	0.231*** [0.041]	0.243*** [0.041]	0.249*** [0.041]
Type of industry	0.072 [0.095]	0.072 [0.095]	0.097 [0.095]	0.092 [0.095]	0.072 [0.095]	0.071 [0.094]	0.097 [0.095]	0.092 [0.094]
Tobin's q	0.007 [0.011]	0.007 [0.011]	0.008 [0.011]	0.008 [0.011]	0.007 [0.011]	0.007 [0.011]	0.008 [0.011]	0.008 [0.011]
CSR expenditure	0.043 [0.027]	0.044 [0.027]	0.048* [0.027]	0.048* [0.027]	0.043 [0.027]	0.043 [0.027]	0.048* [0.027]	0.048 [0.027]
CSR disclosure	-0.537*** [0.192]	-0.531*** [0.192]	-0.584*** [0.192]	-0.570** [0.192]	-0.532** [0.191]	-0.531*** [0.191]	-0.584*** [0.191]	-0.570** [0.190]
Mandatory reporting	0.245*** [0.073]	0.244*** [0.073]	0.244*** [0.073]	0.239*** [0.073]	0.245*** [0.073]	0.244*** [0.073]	0.244*** [0.072]	0.239*** [0.072]
Lag of Disability employment	0.795*** [0.018]	0.796*** [0.018]	0.790*** [0.018]	0.786*** [0.018]	0.795*** [0.018]	0.795*** [0.018]	0.790*** [0.018]	0.786*** [0.018]
<i>Independent variables</i>								
CEO age	0.001 [0.004]	0.001 [0.004]	-0.004 [0.005]	-0.003 [0.005]	0.001 [0.004]	0.001 [0.004]	-0.004 [0.005]	-0.003 [0.005]
CEO tenure			0.010** [0.004]	0.010** [0.004]			0.010** [0.004]	0.010** [0.004]
CEO gender				-0.298** [0.142]				-0.298** [0.142]
Adjusted R ²	0.7975	0.797	0.799	0.802				
F test/Chi-square	394.37***	350.12***	317.78***	290.52***	3190.84***	3190.98**	3222.11***	3244.33***
Observation	800	800	800	800	800	800	800	800

OLS is an ordinary least square with robust standard errors. FGLS is a feasible generalized least square. *, ** and *** represents 10%, 5% and 1% level of significance. Note. Table 3 reports the results of testing Hypotheses 1 to 3. Robust standard errors are in parenthesis.

construction industry (Motilal, 2017). We also observe that our results under ordinary least squares (OLS) are consistent with FGLS results, and therefore FGLS is used to analyse the data from the study.

H1 states that firms with ageing CEOs are likely to exhibit a lower level of disability employment. Previous studies also showed a correlation between CEO age and CEO tenure (Gupta et al., 2018). Based on those mentioned earlier, we build up the study by adding CEO age to CEO tenure. Therefore, Model 6 from Table 3 shows that ageing CEOs have an insignificant association with disability employment in the Indian context [$\beta = 0.001$ $SE = 0.004$]. *H1* is not supported. We expected firms with ageing CEOs to likely exhibit a lower level of disability employment due to fear of failure as they exit from the firm. Our results are inconsistent with previous studies that argued that CEO age negatively correlates with corporate decisions in India (Gupta et al., 2018) and the positive association between CEO age and earnings and related information to stock market analysts (Haider et al., 2019). But consistent with a Chinese study that claimed no significant association between CEO age and firm performance (Liu & Jiang, 2020). Nonetheless, other studies argued that employment with a disability leads to a low retention rate (Araten-Bergman, 2016; Motilal, 2017) and financial benefits in tax credits (Zivolich & Weiner-Zivolich, 1997). This study suggests that ageing CEOs are insignificant and see disability employment as a welfare cost or employment that cannot lead to other benefits. Stewardship theory is not upheld in an Indian context as the results of this study confirm ageing CEOs do not employ people with disabilities. Thus, the benefits emanating from disability employment which is consistent with a stewardship theory (Donaldson & Davis, 1991; Zandi et al., 2021), are not utilized by ageing CEOs in the Indian context. We see the study's outcome is insignificant to agree with *H1*, which states that firms with ageing CEOs are likely to exhibit a lower level of disability employment.

H2 states that firms with long-tenured CEOs are likely to exhibit a lower level of disability employment. Model 7 from Table 3 shows that long-tenured CEOs have a positive and statistically significant association with disability employment of listed firms in India [$\beta = 0.010^{**}$ $SE = 0.004$]. Thus, CEO tenure under FGLS has a 5% significance level with the disability employment of listed firms in India. *H2* is supported. Our study is consistent with previous studies that argued that long-tenure CEOs in India reflect strong networks with important stakeholders, especially when deciding on debt acquisition (Kaur & Singh, 2021). It is also argued that CEO with longer tenure is associated with safety agendas (Naseem et al., 2020), and the employment of people with disabilities has its uncertainties. The uncertainties can contribute to the fear of failing to achieve high firm performance from disability employment. However, the results of this study are consistent with the assumption that CEOs have a sense of responsibility to achieve what is right for the firm, which seeks to protect the firm's assets (Donaldson & Davis, 1991; Zandi et al., 2021) and also build effective networks (Kaur & Singh, 2021). Thus, long-tenured CEOs' positive traits may account for the employment of people with disabilities in an Indian context. Therefore, *H2* is accepted, even though the hypothesis states that firms with long-tenured CEOs are likely to exhibit a lower level of disability employment.

H3 states that firms with female CEOs will exhibit a higher level of disability employment than firms with male CEOs. Model 8 from Table 3 shows that male CEOs exhibit a lower level of disability employment of listed firms [$\beta = -0.298^{**}$ $SE = 0.142$]. Thus, male CEOs under FGLS have a 5% level of significance with disability employment of listed firms. Therefore, *H3* is supported. The study uses a binary measure of male CEO for one and female CEO for 0. The results of the study can be interpreted in another way. Thus, female CEOs exhibit higher levels of disability employment in India. Our study is inconsistent with previous studies that argued for a negative association between the female gender and corporate decisions (Putri & Rusmanto, 2019) but consistent with studies that showed a positive association (Furst & Reeves, 2008; Papangkorn et al., 2021). We perceive the positive results because female directors or CEOs are better coordinators because of multiple tasking attitudes associated with the female gender. The stewardship theory ensures

better coordination from a central point with fewer ulterior motives (Ahmadi et al., 2018; Donaldson & Davis, 1991). Female CEOs and their decision-making can be associated with the theory, resulting in increased disability employment. We perceive female CEOs to excel in difficult situations, including the employment of people with disabilities sometimes associated with uncertainty in contributing to profitability. It can also be inferred further that female CEOs who are perceived as high achievers are motivated to excel in an environment of fear of failure (Hunter et al., 2021) when firms are confronted with difficult challenges. The study's outcome agrees with H3, which states that female CEOs exhibit higher levels of disability employment in India.

5. Conclusion

The paper deepens the scholarly debate using fear of failure and stewardship theory to explain the association between listed firms' CEO characteristics and disability employment. We applied descriptive statistics and feasible generalised least square (FGLS) assumption for data (800 firm-year observations) interpretation for the 2010 to 2019 study period. We used the Indian stock market as a testing ground. The descriptive statistics show that the average age of CEOs in the study is 54.4 years, and the average CEO tenure is 8.4 years. It is suggested that Indian CEO tenure is higher than the average CEO tenure globally (i.e. from 7.5 years in 2013 to 7.2 years in 2017), as Marcec (2018) researched. The first findings show that ageing CEOs are insignificant to exhibit any levels of disability employment in India. This study suggests that ageing CEOs do not respond to disability employment (i.e. as a welfare cost or jobs that can lead to a consequential profit). The second findings show that firms with long-tenured CEOs exhibit a higher level of disability employment. The results of this study do not conflict with the assumption that CEOs have a sense of responsibility to achieve what is right and seek to protect the firm's assets. The possible reason for the positive association may include the positive traits of embracing a newer perspective that highlights societal values. Lastly, the study shows that female CEOs exhibit higher levels of disability employment in India. In other words, male CEOs exhibit lower levels of disability employment in India. It is suggested that female CEOs excel under challenging situations and may employ people with disabilities because female directors tend to manage uncertainty to increase firm performance.

We find that firm size and mandatory reporting positively affect disability employment. However, CSR disclosure to stakeholders and financial leverage on a firm's disability employment is negative. The type of industry is also insignificant in influencing disability employment in India.

6. The implication of the study

6.1. Theoretical contribution

Previous studies have identified factors responsible for influencing the employment of disabled persons, which include logistical challenges, poor awareness and high cost of accommodation (Kaye, Jans and Jones, 2011; Gold et al., 2012; Gröschl, 2013). Also, the employment of people with disabilities can lead to profitability (Siperstein et al., 2006; Zivolich & Weiner-Zivolich, 1997) and a low retention ratio of labour employment (Araten-Bergman, 2016; Motilal, 2017). Examining CEO characteristics (CEO age, CEO tenure and CEO gender) on disability employment deepens disability studies in emerging markets. The second contribution of the study adds new knowledge to the application of stewardship theory and the theory of fear of failure. Previous studies using the two theories examined CEO characteristics and firm performance (Li et al., 2021; Waheed & Malik, 2019; Zandi et al., 2021). However, there are no studies as we know that used stewardship theory and theory of fear of failure to interpret the relationship between CEO characteristics and disability employment.

6.2. Managerial implications

The study results, which indicate female CEOs are better than male CEOs in managing disability employment, call for listed firms and shareholders to cause an increase in female CEOs in India

above the single-digit employment of female CEOs. Against our expectations, long-tenured CEOs support the employment of people with disabilities. There is a need for executive training for the top management of firms in India to increase knowledge on the importance of disability employment to ensure long-term sustainability. Also, the results from the study through female CEOs and long-tenured CEOs gives firms in India the opportunity to leverage the associated benefits of employing people with disability which can include a forbearance from the regulatory agencies when the firm is caught in legal issues with the state and low retention ratio in the firms with a consequent increase in profitability.

6.3. Policy implications

In policymaking, we find that CEO age is unimportant for India's management of a listed company towards disability employment. However, the current state of the Indian stock market with an average CEO tenure above the global average can contribute to the employment of people with disability. Therefore, long-tenured and female CEOs must pay more attention to disability employment to embrace a newer perspective that highlights societal value contributing to the Sustainable Development Goal (SDG) 2030 agenda.

7. Limitations and future research direction

The study is subject to some limitations. The study is limited to large firms with data on people with disabilities, and using the Indian stock market as the only study source may affect the study's generalisation. Also, some firms that employ disabled persons in various industries, including hospitality and tourism, have no listing on the stock market and are excluded from the study, potentially undermining the study's scope. Also, due to the unavailability of data, other CEO characteristics, such as CEOs' education, career path, and marital status, were not examined. Future research can look at the other CEO characteristics, such as CEO education and its effect on disability employment in different countries. We argue the need to examine CEO education because previous studies have argued its relevance in corporate decisions in emerging markets like India.

Funding

The authors received no direct funding for this research.

Author details

Kofi Mintah Oware¹

E-mail: owaremintah@hotmail.com

ORCID ID: <http://orcid.org/0000-0003-1136-2894>

Gilbert K. Amoako²

¹ Department of Banking Technology and Finance, Kumasi Technical University, Ghana, Kumasi.

² Department of Accountancy and Accounting Information Systems, Kumasi Technical University, Ghana, Kumasi.

Disclosure statement

No potential conflict of interest was reported by the author(s).

Citation information

Cite this article as: CEO characteristics and disability employment of listed firms. Evidence from India, Kofi Mintah Oware & Gilbert K. Amoako, *Cogent Business & Management* (2022), 9: 2119826.

References

- Ahamed, N. (2015). How long a tenure is long enough: CEOs tenure and its impact on firm's performance. *Corporate Board: Role, Duties and Composition*, 11(2), 50–64. <https://doi.org/10.22495/cbv11i2art4>
- Ahmadi, A., Nakaa, N., & Bouri, A. (2018). Chief executive officer attributes, board structures, gender diversity and firm performance among French CAC 40 listed firms. *Research in International Business and Finance*, 44(July 2017), 218–226. <https://doi.org/10.1016/j.ribaf.2017.07.083>
- Ahmad, G. N., Prasetyo, M. R. P., Buchdadi, A. D., Suherman, W. U., & Kurniawati, H. (2022). The effect of CEO characteristics on firm performance of food and beverage companies in Indonesia, Malaysia and Singapore. *Quality - Access to Success*, 23(186), 111–122. <https://doi.org/10.47750/QAS/23.186.15>
- Alqatamin, R., Aribi, Z. A., & Arun, T. (2017). The effect of CEOs' characteristics on forward-looking information. *Journal of Applied Accounting Research*, 18(4), 402–424. <https://doi.org/10.1108/JAAR-03-2016-0027>
- Altarawneh, M., Shafie, R., Ishak, R., Ghaleb, B. A. A., & McMillan, D. (2022). Chief executive officer characteristics and discretionary accruals in an emerging economy. *Cogent Business and Management*, 9(1), 1–20. <https://doi.org/10.1080/23311975.2021.2024117>
- American Psychological Association. (2007). APA dictionary of psychology. *Choice Reviews Online*, 44(6). <https://doi.org/10.5860/choice.44-3029>
- Araten-Bergman, T. (2016). Managers' hiring intentions and the actual hiring of qualified workers with disabilities. *International Journal of Human Resource Management*, 27(14), 1510–1530. <https://doi.org/10.1080/09585192.2015.1128466>
- Baltagi, B. H. (2005). *Econometric analysis of panel data*. John Wiley and Sons Ltd. England. Third Edit.
- Barba Navaretti, G., Castellani, D., & Pieri, F. (2022). CEO age, shareholder monitoring, and the organic growth of European firms. *Small Business Economics*, 59 (1), 361–382. <https://doi.org/10.1007/s11187-021-00521-5>

- BRR and Sustainability Report Tracker for Listed Companies. (2019, October 10). *Sustainability Outlook*. <http://www.sustainabilityoutlook.in/data-feeds%0D%0A%0D%0A>
- Bui, H. T. M., Nguyen, H. T. M., & Chau, V. S. (2020). Strategic agility orientation? The impact of CEO duality on corporate entrepreneurship in privatized Vietnamese firms. *Journal of General Management*, 45(2), 1005–1027. <https://doi.org/10.1177/0306307019886170>
- Cai, D., Luo, J., & Wan, D. (2012). Family CEOs: Do they benefit firm performance in China? *Asia Pac J Management*, 29(4), 923–947. <https://doi.org/10.1007/s10490-012-9318-4>
- Chen, R., Tong, J. Y., Zhang, F. F., & Zhou, G. S. (2021). Do female directors enhance R&D performance? *International Review of Economics and Finance*, 74, 253–275. <https://doi.org/10.1016/j.iref.2021.03.003>
- Cherneski, J. (2020). Evidence-loving rock star chief medical officers: Female leadership amidst COVID-19 in Canada. *Gender, Work, and Organization*, 27(5), 900–913. <https://doi.org/10.1111/gwao.12494>
- Choi, J. H., Kim, S., & Lee, A. (2020). CEO tenure, corporate social performance, and corporate governance: A Korean study. *Sustainability (Switzerland)*, 12(1), 1–17. <http://doi.org/10.3390/su1201009>
- Clarkson, P. M., Li, Y., Richardson, G. D., & Vasvari, F. P. (2008). Revisiting the relation between environmental performance and environmental disclosure: An empirical analysis. *Accounting, Organizations and Society*, 33(4–5), 303–327. <https://doi.org/10.1016/j.aos.2007.05.003>
- Cline, B. N., & Yore, A. S. (2016). Silverback CEOs: Age, experience, and firm value. *Journal of Empirical Finance*, 35, 169–188. <https://doi.org/10.1017/CBO9781107415324.004>
- Cormier, D., Ledoux, M. J., & Magnan, M. (2011). The informational contribution of social and environmental disclosures for investors. *Management Decisions*, 49(8), 1276–1303. <https://doi.org/10.1108/00251741111163124>
- Dang, M., Henry, D., & Hoang, V. A. D. (2017). Target CEO age, ownership decisions, and takeover outcomes. *Research in International Business and Finance*, 42, 769–783. <https://doi.org/10.1017/CBO9781107415324.004>
- Darmadi, S. (2013). Do women in top management affect firm performance? *Corporate Governance*, 13(3), 288–304. <https://doi.org/10.1108/CG-12-2010-0096>
- De Silva, L. G. R. V., & Banda, Y. K. W. (2022). Impact of CEO characteristics on capital structure: evidence from a frontier market. *Asian Journal of Business and Accounting*, 15(1), 71–101. <https://doi.org/10.22452/ajba.vol15no1.3>
- Dezan Shira & Associates. (2017). *The disabilities act in India: What employers need to know*. India Briefing. <https://www.india-briefing.com/news/the-disabilities-act-india-what-employers-need-to-know-15755.html/>
- Domzal, C., Houtenville, A., & Sharma, R. (2008). *Survey of employer perspectives on the employment of people with disabilities: Technical Report*. CESSI. <https://icdr.acl.gov/resources/reports/survey-employer-perspectives-employment-people-disabilities-technical-report>
- Donaldson, L., & Davis, J. H. (1991). Stewardship theory or agency theory. *Australian Journal of Management*, 16 (June 1991), 49–66.
- Eduardo, M., & Poole, B. (2016). CEO age and gender: Subsequent market performance. *Cogent Business & Management*, 94(1), 1–8. <https://doi.org/10.1080/23311975.2016.1146389>
- Firdiansjahc, A., Apriyanto, G., & Widyaratna, L. (2020). Analysis of CEO duality influence and corporate social responsibility (CSR) toward financial performance through earning management on food & beverage company listed in Indonesian stock exchange period 2013 – 2017. *International Journal of Scientific and Technology Research*, 9(1), 1206–1216.
- Francoeur, C., Li, Y., Singer, Z., & Zhang, J. (2022). Earnings forecasts of female CEOs: Quality and consequences. *Review of Accounting Studies*, Article-in. <https://doi.org/10.1007/s11142-021-09669-7>
- Furst, S. A., & Reeves, M. (2008). Queens of the hill: Creative destruction and the emergence of women's executive leadership. *Leadership Quarterly*, 19(3), 372–384. <https://doi.org/10.1016/j.leaqua.2008.03.001>
- 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>
- Geetika, & Shukla, A. (2017). The relationship between corporate social responsibility and financial performance of Indian banks. *IUP Journal of Corporate Governance*, 16 (2), 39–53. <http://ezproxy.auckland.ac.nz/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=buh&AN=125155991&site=ehost-live&scope=site>
- Gibbons, R., & Murphy, K. J. (1992). Does executive compensation affect investment? *Journal of Applied Corporate Finance*, 5(2), 99–109. <https://doi.org/10.1111/j.1745-6622.1992.tb00493.x>
- Goergen, M., Limbach, P., & Scholz, M. (2015). Mind the gap: The age dissimilarity between the chair and the CEO. *Journal of Corporate Finance*, 35, 136–158. <https://doi.org/10.1017/CBO9781107415324.004>
- Gold, P. B., Oire, S. N., Fabian, E. S., & Wewiorski, N. J. (2012). Negotiating Reasonable workplace accommodation: Perspectives of employers, employees with disabilities and rehabilitations service providers. *Journal of Vocational Rehabilitation*, 37(1), 25–37. <https://doi.org/10.3233/JVR-2012-0597>
- Gómez-López, M., Courel-Ibáñez, J., & Granero-Gallegos, A. (2021). Profiles of motivation, fear of failure and anxiety in young handball players: A cross-sectional study. *International Journal of Sports Science & Coaching*, 16(3), 658–669. <https://doi.org/10.1177/1747954120975107>
- Green Clean Guide. (2011). *GRI-based sustainability reporting in India*. Retrieved October 10, 2017, from <http://greencleanguide.com/gri-based-sustainability-reporting-in-india>
- Groschi, S. (2013). Presumed and Incapable: Exploring the Validity of Negative Judgements about Persons with Disabilities and their employability in Hotel Operations. *Cornell Hospitality Quarterly*, 54(2), 114–123. <https://doi.org/10.1177/1938965512453082>
- Gupta, G. (2022). CEO's age and investment-cash flow sensitivity. *Managerial and Decision Economics*, 43(6), 2214–2224. <https://doi.org/10.1002/mde.3519>
- Gupta, N., & Mahakud, J. (2020). CEO characteristics and bank performance: Evidence from India. *Managerial Auditing Journal*, 35(8), 1057–1093. <https://doi.org/10.1108/MAJ-03-2019-2224>
- Gupta, G., Mahakud, J., & Debata, B. (2018). Impact of CEO's characteristics on investment decisions of Indian listed firms: Does crisis make any difference?

- Cogent Economics and Finance*, 6(1), Art. 1439258. <https://doi.org/10.1080/23322039.2018.1439258>
- Haider, I., Sultana, N., Singh, H., & Tham, Y. H. (2019). CEO age and analysts forecast properties. *Asian Review of Accounting*, 18 (1), 51. Purpose <https://doi.org/10.1108/ARA-02-2019-0054>
- Heath, D., & Babu, R. (2017). Theorizing managerial perceptions, enabling IT, and the social inclusion of workers with disabilities. *Information and Organization*, 27(4), 211–225. <https://doi.org/10.1016/j.infoandorg.2017.09.001>
- Hunter, E., Jenkins, A., & Mark-Herbert, C. (2021). Fear of failure leads to intentions to act entrepreneurially: Insights from threat appraisals and coping efficacy. *International Small Business Journal: Researching Entrepreneurship*, 39(5), 407–423.
- Incentives to private sector for employing persons with disability. (2014). Enabled. In. <https://enabled.in/wp/incentives-private-sector-employing-persons-disability/>
- Jackson, G., & Apostolou, A. (2010). Corporate social responsibility in Western Europe: An institutional mirror or substitute? *Journal of Business Ethics*, 94(3), 371–394. <https://doi.org/10.1007/s10551-009-0269-8>
- Jadiyappa, N., Iyer, S. R., & Jyothi, P. (2021). Does social responsibility improve firm value? Evidence from mandatory corporate social responsibility regulations in India. *International Review of Finance Early, (Early View)*, 21(2), 653–660.
- Kamel, H., & Shahwan, T. (2014). The association between disclosure level and cost of capital in an emerging market: Evidence from Egypt. *Afro-Asian Journal of Finance and Accounting*, 4(3), 203–225. <https://doi.org/10.1504/AAJFA.2014.064173>
- Kaur, R., & Singh, B. (2019). Do CEO characteristics explain firm performance in India? *Journal of Strategy and Management*, 12(3), 409–426. <https://doi.org/10.1108/JSMA-02-2019-0027>
- Kaur, R., & Singh, B. (2021). The impact of CEOs' characteristics on corporate leverage: Indian scenario. *Vision*, 25(4), 428–438. <https://doi.org/10.1177/0972262920954596>
- Kaye, H. S., Ans, L. H., & Jones, E. C. (2011). Why don't employers hire and retain workers with disability?. *Journal of Occupational Rehabilitation*, 21(4), 526–536. <https://doi.org/10.1007/s10926-011-9302-8>
- Khidmat, W. B., Habib, M. D., Awan, S., & Raza, K. (2022). Female directors on corporate boards and their impact on corporate social responsibility (CSR): Evidence from China. *Management Research Review*, 45(4), 563–595. <https://doi.org/10.1108/MRR-09-2020-0560>
- Kramarić, T. P., & Miletić, M. (2022). The influence of demographic, cultural, and educational background in the boardroom on firm performance. *Zbornik Radova Ekonomskog Fakulteta u Rijeci*, 40(1), 79–95. <https://doi.org/10.18045/zbefri.2022.1.79>
- Li, S., Huang, R., Huo, W., & Li, Q. (2021). Does the leadership of the board of directors affect corporate performance? Based on the empirical research of China's SMEs. *Emerging Markets Finance and Trade*, 1–18. <https://doi.org/10.1080/1540496X.2021.1891881>
- Liu, C., & Jiang, H. (2020). Impact of CEO characteristics on firm performance: Evidence from China listed firms. *Applied Economics Letters*, 27(14), 1–5. <https://doi.org/10.1080/13504851.2019.1607965>
- Malik, F., Wang, F., Naseem, M. A., Ikram, A., & Ali, S. (2020). Determinants of corporate social responsibility related to CEO attributes: An empirical study. *SAGE Open*, 10(1), 215824401989909. <https://doi.org/10.1177/2158244019899093>
- Marcec, D. (2018). *Harvard law school forum on corporate governance CEO tenure rates*. Equilar Incorporation, pp. 1–5. <https://corp.gov.law.harvard.edu/2018/02/12/ceo-tenure-rates/>
- Minh Ha, N., Ha, T. T. M., Vuong, P. M., & McMillan, D. (2021). The effect of CEO characteristics on financial leverage: Findings from listed companies in Vietnam. *Cogent Business and Management*, 8(1), 1–12. <https://doi.org/10.1080/23311975.2021.2002129>
- Ministry of Corporate Affairs. (2009). *Corporate social responsibility voluntary guidelines in 2009*. Retrieved January 20, 2018, from www.icsi.edu/media/website/CorporateSocialResponsibility.pdf
- Ministry of Corporate Affairs. (2013). *Companies act, 2013, ministry of corporate affairs, government of India, New Delhi*. Retrieved November 22, 2017, from <http://www.mca.gov.in/Ministry/pdf/CompaniesAct2013.pdf>
- Ministry of Law. (2014). The rights of persons with disabilities act, 2016. 1. <http://www.disabilityaffairs.gov.in/upload/uploadfiles/files/RPWD ACT 2016.pdf>
- Minniti, M., & Nardone, C. (2007). Being in someone else's shoes: The role of gender in Entrepreneurship. *Small Business Economics*, 28(2–3), 223–238. <https://doi.org/10.1007/s11187-006-9017-y>
- Mishra, S., & Suar, D. (2010). Does corporate social responsibility influence firm performance of Indian companies? *Source Journal of Business Ethics Journal of Business Ethics*, 95(95), 571–601. <https://doi.org/10.1007/s10551-010-0441-1>
- Motilal, S. (2017, November 12). *Why companies are hiring people with disabilities?* The Economic Times. <https://economictimes.indiatimes.com/jobs/why-companies-are-hiring-people-with-disabilities/articleshow/61609438.cms?from=mdr>
- Nakamura, E. (2015). The bidirectional CSR investment – Economic performance relationship. *Journal of Global Responsibility*, 6(1), 128–144. <https://doi.org/10.1108/JGR-05-2014-0021>
- Naseem, M. A., Lin, J., Rehman, R., Ahmad, M. I., & Ali, R. (2020). Does capital structure mediate the link between CEO characteristics and firm performance? *Management Decision*, 58(1), 164–181. <https://doi.org/10.1108/MD-05-2018-0594>
- National Sample Survey Office. (2016). *Disabled persons in India: A statistical profile*. http://mospi.nic.in/sites/default/files/publication_reports/Disabled_persons_in_India_2016.pdf
- Ng, E. S., & Sears, G. J. (2012). CEO leadership styles and the implementation of organizational diversity practices: Moderating effects of social values and age. *Journal of Business Ethics*, 105 (1), 41–52. <https://www.jstor.org/stable/41413207>
- Papangkorn, S., Chatjuthamard, P., Jiraporn, P., & Chueykamhang, S. (2021). Female directors and firm performance: Evidence from the great recession. *International Review of Finance*, 21(2), 598–610. <https://doi.org/10.1111/irfi.12275>
- Putri, E. A., & Rasmanto, T. (2019). The impact of CEO characteristics on earnings per share and earnings management. *International Journal of Scientific and Technology Research*, 8(10), 925–929.
- Schröder, L. M., Bobek, V., & Horvat, T. (2021). Determinants of success of businesses of female entrepreneurs in Taiwan. *Sustainability (Switzerland)*, 13(9), 1–23. <https://doi.org/10.3390/su13094842>
- Serfling, M. A. (2014). CEO age and the riskiness of corporate policies. *Journal of Corporate Finance*, 25, 251–273. <https://doi.org/10.1017/CBO9781107415324.004>
- Setiawan, R., & Gestanti, L. (2022). CEO CHARACTERISTICS, FIRM POLICY, AND FIRM

- PERFORMANCE. *International Journal of Business and Society*, 23(1), 371–389. <https://doi.org/10.33736/ijbs.4620.2022>
- Shabana, K. M., Buchholtz, A. K., & Carroll, A. B. (2017). The institutionalization of corporate social responsibility reporting. *Business & Society*, 56(8), 1107–1135. <https://doi.org/10.1177/0007650316628177>
- Shahwan, T. M. (2015). The effects of corporate governance on financial performance and financial distress: Evidence from Egypt. *Corporate Governance*, 15 (5), 641–662. <https://doi.org/10.1108/CG-11-2014-0140>
- Shahwan, T. M., & Hassan, Y. (2013). Efficiency analysis of UAE banks using data envelopment analysis. *Journal of Economic and Administrative Sciences*, 29(1), 4–20. <https://doi.org/10.1108/10264111311319204>
- Siperstein, G. N., Romano, N., Mohler, A., & Parker, R. (2006). A national survey of consumer attitudes towards companies that hire people with disabilities. *Journal of Vocational Rehabilitation*, 24(1), 3–9.
- Waheed, A., & Malik, Q. A. (2019). Board characteristics, ownership concentration and firms' performance: A contingent theoretical based approach. *South Asian Journal of Business Studies*, 8(2), 146–165. <https://doi.org/10.1108/SAJBS-03-2018-0031>
- Warner, J. (2010). Fear of failure. *Economist*. <https://doi.org/10.4324/9781315170039-5>
- Withisuphakorn, P., & Jiraporn, P. (2017). CEO age and CEO gender: Are female CEOs older than their male counterparts? *Finance Research Letters*, 22, 129–135. <https://doi.org/10.1016/j.frl.2016.12.026>
- Yim, S. (2013). The acquisitiveness of youth: CEO age and acquisition behavior. *Journal of Financial Economics*, 108 (1), 250–273. <http://ir.obihiro.ac.jp/dspace/handle/10322/3933>
- Zahra, S. A. (2005). Entrepreneurial risk-taking in family firms. *Family Business Review*, 18(1), 23–40.
- Zandi, G., Singh, D., & Shahzad, I. A. (2021). Corporate governance impact on significant aspect of firms' performance: An evidence from top 100 global public companies. *Advances in Mathematics: Scientific Journal*, 10(3), 1749–1769. <https://doi.org/10.37418/amsj.10.3.55>
- Zhang, J., Han, J., & Yin, M. (2018). A female style in corporate social responsibility? Evidence from charitable donations. *International Journal of Disclosure and Governance*, 15(3), 185–196. <https://doi.org/10.1057/s41310-018-0046-y>
- Zhang, H. L., & Liu, M. J. (2020). Analysis of the influencing factors of female leadership style on enterprise development. 2020 *International Conference on Wireless Communications and Smart Grid*, 379–381. <https://doi.org/10.1109/ICWCSG50807.2020.00087>
- Zivolich, S., & Weiner-Zivolich, J. S. (1997). A national corporate employment initiative for persons with severe disabilities: A 10-year perspective. *Journal of Vocational Rehabilitation*, 8(1), 75–87. <https://doi.org/10.3233/jvr-1997-8109>

Appendix A: List of companies

id	Company name	id	Company name
1	Maruti Suzuki	42	Chambai Fertilizer
2	Ambuja Cement Ltd	43	Cipla Ltd
3	BPCL	44	Commins India
4	Dr Redd's Laboratories, India	45	Container Corporation
5	Grasim	46	Dabur India
6	HCC	47	Davis Laboratories
7	Indian Oil	48	DLF Ltd
8	Infosys Technologies, India	49	Eicher Motors
9	ITC	50	Essar Shipping Ltd
10	Jain Irrigation Systems	51	Gail India
11	JSW Steel	52	GlaxoSmithKline Consumer
12	Jubilant Life Sciences Ltd	53	GlaxoSmithKline Pharmaceuticals Ltd
13	UltraTech Cement	54	Godrej Consumer
14	KOEL	55	GVK Power
15	Larsen & Toubro	56	HCL Technologies
16	Mahindra	57	Hero Motorcorp
17	Wipro	58	Hindalco Ltd
18	Oil and Natural Gas Corporation	59	Hindustan Petroleum
19	Reliance Industries Limited	60	Hindustan Unilever
20	Tata Motors	61	Hindustan Xinc
21	Sesa Goa	62	IDEA Cellular
22	Shree Cement	63	Indian Hotels Company
23	Transport Company India-TCI	64	Jaiprakash Associates
24	SRF	65	Jindal Stainless
25	Tata Tea	66	Jindal Steel and Power
26	Tata Consultancy	67	Kansai Nerolac Paints
27	Tata Steel	68	Kirloskar Brothers
28	ABB Ltd	69	Lupin Ltd
29	ACC Ltd	70	Mahindra Lifespace Developers Ltd
30	ADANI enterprise	71	Marico Ltd
31	AEGIS Logistics	72	Motherson Sumi systems

(Continued)

(Continued)

id	Company name	id	Company name
32	Apollo Tyres	73	Multi Commodity Exchange of India Ltd
33	Apollos Hospitals	74	National Aluminium Company
34	Asian Paints	75	Nestle India
35	Bajaj Auto	76	NHPC Ltd
36	Bharat Heavy electrical ltd	77	Oil India Ltd
37	Bharti Airtel	78	Pidilite Industries
38	Bosch India	79	Polyplex Corporation
39	Adani Ports Ltd	80	Reliance Infrastructure
40	Cardilla Healthcare		
41	Castrol India		

Appendix B: Description of the sample of study on the Bombay Stock Exchange

	Large firms before the amended of Act 2013	Large firms after amended Act 2013	Large firms with a sustainability report
Population of study	100	500	131
Sample size between 2010–2019			103
Sample size after removing firms with missing data			80



© 2022 The Author(s). This open access article is distributed under a Creative Commons Attribution (CC-BY) 4.0 license.

You are free to:

Share — copy and redistribute the material in any medium or format.

Adapt — remix, transform, and build upon the material for any purpose, even commercially.

The licensor cannot revoke these freedoms as long as you follow the license terms.

Under the following terms:

Attribution — You must give appropriate credit, provide a link to the license, and indicate if changes were made.

You may do so in any reasonable manner, but not in any way that suggests the licensor endorses you or your use.

No additional restrictions

You may not apply legal terms or technological measures that legally restrict others from doing anything the license permits.



***Cogent Business & Management* (ISSN: 2331-1975) is published by Cogent OA, part of Taylor & Francis Group.**

Publishing with Cogent OA ensures:

- Immediate, universal access to your article on publication
- High visibility and discoverability via the Cogent OA website as well as Taylor & Francis Online
- Download and citation statistics for your article
- Rapid online publication
- Input from, and dialog with, expert editors and editorial boards
- Retention of full copyright of your article
- Guaranteed legacy preservation of your article
- Discounts and waivers for authors in developing regions

Submit your manuscript to a Cogent OA journal at www.CogentOA.com

