



# Social Diversity on Corporate Boards in a Country Torn by Civil War

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## Abstract

We examine how social diversity and inclusiveness on corporate boards affect corporate performance and monitoring in Sri Lanka, a country subject to decades of polarization, civil war, and even genocide. Barely more than a decade after the civil war, we find that board social diversity on the basis of ethnicity, religion, language, gender, and nationality of the board members is positively related to corporate performance, both in terms of stock market performance and accounting returns, and to corporate financial stability. The main positive effects of social diversity derive from ethno-linguistic inclusiveness. The results are confirmed by an instrumental variable approach that addresses endogeneity issues. We find no evidence that inter-personal and moral conflicts or communication problems among board members negatively affect firm performance.

**Keywords** Socio-cultural diversity · Inclusiveness · Inclusion · Ethnic diversity · Gender bias · Corporate performance · CEO turnover · Corporate governance · Board of directors

**JEL Classification** G33 · G34

## Introduction

Over the past two decades, corporate social responsibility, which emphasizes a corporation's role in enhancing environmental, social, and governance (ESG) performance, has gained importance. Its G-factor<sup>1</sup> refers to inclusion and diversity at all levels within the corporation (Adams & Ferreira, 2009; Bernile et al., 2018; Campbell & Mínguez-Vera, 2008; Carter et al., 2003; Frijns et al., 2016; Westphal & Milton, 2000). A diversified board reflects the multicultural, gender-sensitive, and varying personal backgrounds of its members (van der Walt & Ingley, 2003). Diversity at the board level is not merely a matter of equitability, but has also cognitive and communication-oriented consequences

(Milliken & Martins, 1996) because board diversity, defined by not only skills based on education, occupation, functional background, and industry experience but also by ethnicity, nationality, or gender, induces a different ability to process information, interpret results, and make decisions.<sup>2</sup> Cox (1991) enumerates effective decision making, enhanced creativity, and augmented innovativeness, as the benefits derived from diversified groups. Diverse boards may also be more independent, considering heterogeneity of viewpoints,

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<sup>1</sup> In the environmental, social, and governance (ESG) investment terminology, the E-factor stands for corporations' impact on the physical environment (e.g. carbon emissions and waste management); the S-factor refers to corporations' impact on a variety of stakeholders (e.g. employees, customers relations, communities); and the G-factor refers to a variety of ethically responsible policies and good governance practices (i.e. transparency, CEO compensation, diversity, and inclusion).

<sup>2</sup> This paper focusses on social diversity at the board, and this concept to some degree overlaps with socio-cultural diversity. The latter usually refers to the variety and differences that exist in a society concerning cultural backgrounds, beliefs, customs, traditions, languages, and values. Social diversity, on the other hand, focusses on the array of differences based on various social characteristics, such as age, gender, race, ethnicity, socioeconomic status, sexual orientation, and disability. So, this paper deals with the aspects of both social and socio-cultural diversity, when we use the former term in this paper, we also implicitly refer to socio-cultural diversity.

which may in turn reduce a firm's agency costs. However, board heterogeneity could also induce problems as disagreements between directors could escalate to conflicts (Adams & Ferreira, 2009) and could constrain fast and efficient decision making (Goodstein et al., 1994).

In this paper, we focus on the effects of board social diversity on corporate performance in a country with significant linguistic, religious, and ethnic heterogeneity: Sri Lanka. The Sri Lankan case constitutes an interesting laboratory to such social diversity because the boards of Sri Lankan firms show variation across different diversity measures and because cooperative behaviour by different ethnic groups within a company may not be obvious given that the country was torn by civil war for more than a quarter of a century (1983–2009). In this period, more than 70,000 people were killed, and more than 100,000 displaced. The wounds of this civil war, which even led to genocide, only had a little more than a decade to heal. Voors et al. (2012) document that civil wars and massacres permanently affect people's behaviour towards others. Those who are greatly exposed to violence are more risk-seeking and use discount rates above the endowed level for discounting future payoffs of investments, but are also more altruistic. Accordingly, we would expect that the long-lasting violent ethnic conflict between Tamil and Sinhalese in Sri Lanka as well as other cultural idiosyncrasies impact corporate outcomes—for the better or the worse. Social and moral conflicts in the boardroom can affect managers' cognition and decision-making process. In this paper, we examine to which degree multi-layer social diversity influences firms' financial performance (Tobin's Q, ROA), financial stability (interest coverage ratio, distance to default), and board of directors' functioning (CEO turnover, board attendance).

Ethical views may differ across communities, which could entail that the responsibilities and moral values of managers and directors in the boardroom may conflict (Jones et al., 2005). If managers uphold different priori ethical rules and judgements, moral conflicts could emerge in the context of various business issues. This does not necessarily imply that disagreements at the board level would harm decision making, as instead, disagreements could lead to better, value-enhancing resolutions (Preuss, 1999). Perhaps board members with different views may rationalize a new corporate culture and ethical discourse with deliberate communication (Habermas, 1990) in which they prioritize shareholders' and stakeholders' benefits over their personal interests, and responsibilities towards their close communities and social networks.

While the majority of board diversity studies have concentrated on gender, only a few studies focus on ethno(-linguistic) diversity (Buse et al., 2016; Carter et al., 2003; Erhardt et al., 2003). We consider four aspects of diversity at the board level: *ethnicity and religion, language, gender,*

*and nationality.* Social groups in Sri Lanka have clearly demarcated boundaries based on the country's complicated ethno-linguistic and religious fractionalization, although the population is similar in skin colour and physical appearance. In Sri Lanka, ethno-linguistic and religious fractionalization has evolved historically. The *Sinhalese* are the natives in Sri Lanka belonging to an *Indo-Aryan* ethnic group. The majority of Sinhalese live in southern, central, and west parts of the country, representing 74.9% of the population (Fig. 1). The native *Tamils'* ancestry originated from the Tamil Nadu state in India and the Tamils account for 11.1% of the population of whom the majority lives in the Northern and Eastern provinces. The Indian Tamils in Sri Lanka (4.1%) are the descendants of people who migrated more recently, namely in the 1800s, as plantation workers. The Moors make up 9.3% of the population, and their ancestry are Arab traders who settled in Sri Lanka in the ninth century. The Sinhalese speak Sinhala and adhere predominantly to Buddhism (which is followed by 70.1% of the population) or Christianity (7.6%). Both the Sri Lankan (native) and Indian Tamils speak Tamil and are Hindus (12.6% of the population) (Fig. 1). The Moors also speak Tamil affected by a mix of Sinhala and Arabic dialects and they are predominantly Muslim.

Over the centuries, the ethnicities engaged in specific economic activities, such that companies in some industries are still dominated by specific ethnic groups. For instance, while the Sinhalese are often active in farming, animal husbandry, lathe work, clay work, metalwork, and handicrafts, the Muslim Moors and Sri Lankan Tamils concentrated on trading activities. In 1861, the British Colonial authority introduced the Joint Stock Companies Ordinance to legalize business entities of Sri Lanka, and in 1938, the Companies Ordinance No 51 allotted stockholders' rights to local investors. As a consequence, individuals and families of specific ethno-linguistic backgrounds became the main shareholders. From the independence in 1948, labour laws also ensured equal employment opportunities for every ethnic group and the educational reforms gave everyone the right to free and indiscriminate education. Following the opening of the economy to foreign investors in 1977, foreign direct investments started to flow to the country. In 1995, the *Takeovers and Mergers Code* regulated the market for corporate control. The *Companies Act* of 1982 (updated in 2007) strengthened the board of directors' authority to design the financial and operating corporate policies.

Sri Lanka and India have some similarities derived from common ancestral history and geographical proximity. Dating back to the arrival of the first Sinhalese king (Prince *Wijaya*) from India in 543 BCE, the Sri Lanka's culture and governance traditions have always been under the influence of its large sister country India, of which the demography is also ethnologically sophisticated. In the

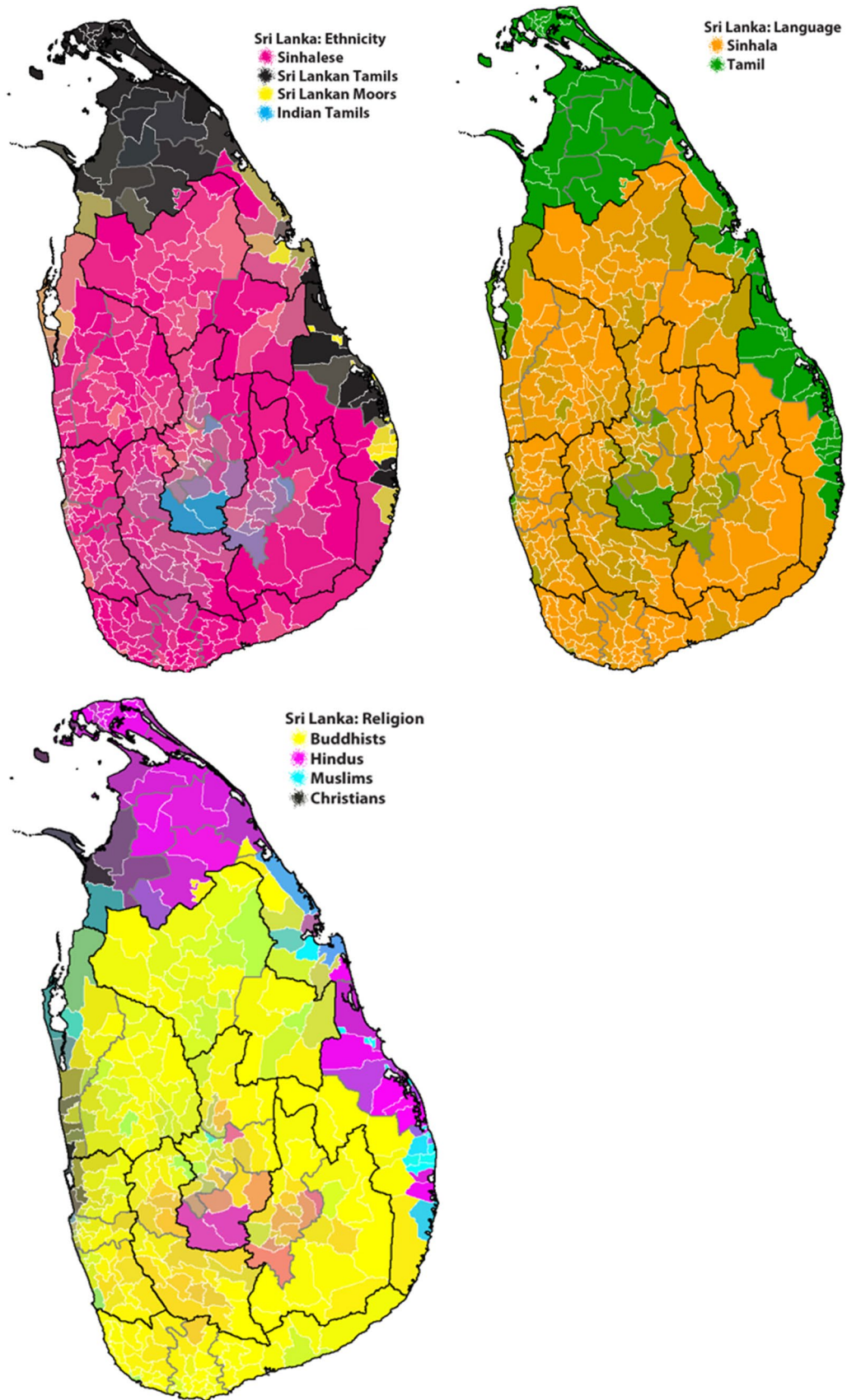


Fig. 1 Ethno-linguistic and religious diversity in Sri Lanka (Source South Asia Blog)

Indian occupation-specific caste system, family surnames and occupations give reliable information about which castes they likely belong to (*Brahmin* are priests and teachers, *Kshatriya* are warriors and royalty, *Vaishya* are traders, merchants, and moneylenders, and *Shudra* do menial jobs (Ajit et al., 2012)). Social stratification based on the caste system also still prevails in Sri Lanka. Accordingly, each ethnic group has its own caste hierarchy in which people's social roles and occupations are determined (Riswan, 2014; Silva et al., 2009). For instance, the Sinhalese-Buddhists who supposedly originated from the King's ancestry belong to the highest cast within the Sinhalese community. Besides, Sri Lankan Tamils are ranked in a higher position in the cast pyramid than the Indian Tamils. Dayanandan et al. (2019) argue that corporate boards in India are typically dominated by a single caste. In our study, we focus on directors' ethno-linguistic qualities which play a more important role in explaining social conflicts for Sri Lanka's firms.<sup>3</sup>

In family firms, external directors with the same ethnicity as the leading family are usually appointed. For instance, *Lake House Printers and Publishers* and *East West Properties* belong to the Sinhalese-Buddhist families (with ownership stakes of more than 75% and 65%, respectively) whose boards consist of only Sinhalese-Buddhist directors. There is a visible variation with respect to board composition across the industries: e.g. Tamils and Moors dominate trading industry and therefore hold many board seats. Especially in older firms, the ethnically dominant owners are Tamils or Moors because these people originally constituted the business-oriented class. For instance, *Ceylon Foreign Trades*, a family business of Moors, is engaging in importing and exporting of goods, and the board consists of only Moor and Tamil directors. Similarly, *Cargills (Ceylon)* is the largest retailer owned by a Tamils family, whose chairman and CEO are family members, and most directors are from ethnic minorities.

Inviting directors from another ethnicity than that of the main ethnicity of the board could lead to decision making that is more considerate of the sensitivities of customers or, more generally, stakeholders from other ethnicities. Foreign firms usually appoint foreign directors and may need to appoint a good mix of local directors with the aim of addressing the various regional domestic markets. Also, the boards are more heterogeneous in the livestock industry,

perhaps as a response to people's economic activities that are regulated by customs and religions.<sup>4</sup> Hiring ethnically diverse directors may be necessary for firms which produce food and beverages as ethnicity can influence people's eating and drinking habits. For instance, firms in food, beverage, and tobacco industry frequently invite other ethnicities on their board; 41% of the board members in this industry do not belong to the dominating ethnic group. Firms that focus on foreign markets may appoint directors with international social networks. As such, the consumer services industry (which includes hotels, restaurants, and leisure) has a relatively large representation of catholic directors (23%), as this may be considered as important to enhance the confidence of the western tourist industry.

In addition to the above ethno-religious diversity, linguistic heterogeneity on the board can bring benefits when business deals are made with customers or firms from regions where other languages are dominant. For instance, language diversity of directors in the industry of telecommunication services amounts to 55%. Besides, as the target market of many businesses is the Sinhalese population, it is important to appoint Sinhala-speaking directors in Tamil or Moor controlled firms as they can oversee e.g. the development of marketing strategies in the country's dominant language. We do indeed observe that at least one Sinhala-speaking director is frequently appointed in Tamil- or Moor-owned/oriented firms.

Despite the high degree of emancipation in Sri Lanka, female representation in the corporate sector is still modest, with exception of family businesses that often appoint female family members as chairpersons or CEOs or directors or corporate managers. Similar to the neighbouring country India, where gender discrimination is also an important social issue (Cooke & Saini, 2010), occupational gender segregation abounds in Sri Lanka's firms. Ample research shows that gender diversity in boards positively impacts corporate performance (Campbell & Mínguez-Vera, 2008; Carter et al., 2003; Erhardt et al., 2003; Fidanoski et al., 2014; Green & Homroy, 2018; Mahadeo et al., 2012; Sabatier, 2015).

In addition to differences based on ethnicity, language, and gender, we also examine board diversity based on nationality as foreign individuals are sometimes appointed to the Sri Lankan boards to foster foreign business affiliations. Most foreign directors are from India, China, Japan, and Malaysia. The finance literature also provides evidence

<sup>3</sup> As to the corporate landscape, most businesses are ethnically determined: they are Sinhalese, Tamil, and Moor-oriented. Overall, the board characteristics of family and non-family firms are not substantially different, nor is the social diversity, but family firms have somewhat less linguistic and ethnic diversity. The representation of minority languages, ethnic minorities, Tamil and Moor minorities and female directors do not differ between family and non-family firms. Family firms appoint fewer foreign directors. The CEO of a family firm has a longer tenure and its board has more frequent board meetings (on average 0.5 meetings more per year).

<sup>4</sup> Sinhalese-Buddhist directors may avoid taking part in firms in livestock industry since eating meat is forbidden in Buddhism. Besides, Muslims require that meat processing takes place according to Islamic traditions (*halal* standards). For instance, Sinhalese-Buddhist directors are absent on the board of *Bairaha Farms*, a leading player in the livestock industry. The chairman, managing director, board members, and large shareholders are all Moors.

on the impact of the presence of foreign board members on firm output and profitability. Masulis et al. (2012) find that US firms with foreign independent directors benefit from cross-border acquisitions and other foreign operations in the home countries of these foreign directors. Estélyi and Nisar (2016) point out that UK firms with foreign directors become more successful in foreign market operations and perform overall better.

We gather data on the social diversity of boards, and other corporate governance and firm-specific factors for a panel of 205 firms listed on the Colombo Stock Exchange over the period April 2011 to March 2018, resulting in 1436 firm-year observations. It should be noted that when we use the term directors, we refer to executive and non-executive directors (serving on one-tier boards). We use a Herfindahl index to capture board social diversity combining linguistic, ethnic, and gender diversity, as well as diversity based on the nationality of directors. This index is a common measure to capture (ethno-linguistic) fractionalization of societies (Anderson & Paskeviciute, 2006; Alesina & La Ferrara, 2005; Liu & Pizzi, 2018), boards' cultural diversity (Frijns et al., 2016), social diversity (Upadhyay & Zeng, 2014), and occupational and social diversity (Anderson et al., 2011). We also follow the diversity literature (e.g. Bear et al., 2010; Fidanoski et al., 2014; Roberson and Park, 2007) that uses a Blau index to capture the heterogeneity of a group of people based on demographic criteria, and adopt Blau indices for language diversity, ethnic diversity, and gender diversity on the board. We perform panel analyses controlling for industry and year fixed effects and many firm-specific variables. We follow an instrumental variable approach by means of two-staged least squared regressions (IV-2SLS) to address concerns about endogeneity.

We find that firms with greater board social diversity generate a stronger financial performance and maintain financial stability. Even if some firms may suffer from some communication problems and inter-personal conflicts within the boardroom, the overall potential benefits of social diversity outweigh its possible costs. Similar to Roberson and Park (2007) who report a curvilinear U-shaped relationship between leader racial diversity and corporate performance in the US, we demonstrate that board social diversity enhances financial performance, and that this relation does not disappear for the "overly diversified" firms. Also, we show evidence that financially distressed firms are characterized by poor social diversity on the board. Firms that are well socially diversified typically exhibit healthy balance sheets and have a lower probability of default. In addition to testing the impact of social diversity aspects on financial performance, we also test its influence on the functioning of the board, proxied by CEO turnover and directors' board attendance. While we do not find a relation with CEO turnover, we observe a negative relation between social diversity and

board attendance. It can also be noticed that social diversity is lower in firms owned by large companies (members of the S&P SL20, the stock index of the most liquid and largest 20 companies) and firms with strong institutional ownership stakes. We also document that in firms with diversified boards, the tasks of the CEO and chairman are often combined by one person, and that this person belongs more frequently to an ethnic minority.

The above results, which consider the various diversity aspects (such as ethnicity and religion, language, gender, nationality) jointly, are upheld when we test the impact of these diversity-related measures separately by means of Blau indices. Accordingly, the presence of directors speaking a minority language, of those belonging to an ethnic minority (particularly, Tamils and Moors), and of those with a different country of origin helps to achieve financial success. In contrast, the presence of female directors does not enhance corporate performance. We also performed a matched-company analysis to further investigate the cost of ignoring the social heterogeneity on Sri Lankan corporate boards. We find that for firms with diversified boards financial distress is less likely to occur. Overall, our robustness tests confirm that socially inclusive boards perform better than socially exclusive ones.

The benefits from ethno-linguistic board diversity go hand-in-hand with the government's ethnic harmony policy that requires that every state employee is required to speak a second Sri Lankan language competently. Consequently, both communication barriers and marginalization of linguistic groups are reduced. The government has also taken important steps over the past decade to improve corporate governance standards as well as diversity and inclusion. In spite of the country's stability over slightly more than a decade, the country remains vulnerable to erupting conflicts such as the Moor (Muslim) extremist attack in 2019, which tarnished ethnic harmony. Such terrorist actions could also adversely affect the functioning of diversified boards and hence affect corporate performance.

## Literature on Board Social Diversity

In this section, we focus on theories of business ethics that offer valuable insights into managerial behaviour within the unique context of Sri Lanka, and other theories that contribute to our understanding of board social diversity in order to help the formulation of our hypotheses.

### A Concise Literature Overview on Board Social Diversity

With exception of the focus on gender, the corporate finance literature has said little about the consequences of cultural

diversity on corporate boards. In this section, we summarize some of those studies that examine ethnic and linguistic diversity and its impact on firm financial output measures. Ethnic diversity and inclusion are not only important from the perspective of corporate social responsibility but also for corporate performance. Evidence on the relation between firm performance and ethnic diversity is, however, mixed. Carter et al. (2003) investigate the relation between board diversity (measured by the presence of women, African-Americans, Asians, and Hispanics) and firm value for a sample of Fortune 1000 firms. They document that although boards are on average composed of eleven directors, no ethnic minority directors are present in nearly half of the firms.<sup>5</sup> This may surprise given that they document that the presence of ethnic minorities establishes a significant and positive relationship with firm value. Erhardt et al. (2003) confirm that in large US firms the presence of female directors and of directors from ethnic minorities leads to higher corporate performance. Borghesi et al. (2016) demonstrate that board diversity (ethnic minorities, females, disabled members) significantly enhances firm value, whereas Guest (2019) fails to confirm this relation.

Some researchers document a non-linear relation between board diversity and performance. For instance, Roberson and Park (2007) observe U-shaped relation between racial diversity of the top management and the performance of large firms. This implies that firms can be sub-optimally diversified. Frijns et al. (2016) focus on the national cultural diversity of board members (measured by Hofstede's (2001) country-culture framework) and find that corporate performance negatively responds to board cultural diversity. Even so, they also show that this negative impact is minimized in a context of high business complexity and of foreign operations. For Canadian firms, Ben-Amar et al. (2013) show a concave relation between board demographic diversity (based on culture, nationality, gender, and experience of the directors) and M&A performance. In contrast, Kagzi and Guha (2018) find a positive linear relation between demographic board diversity and corporate performance in India. Compared to the developed world, corporate boards of Indian firms provide a unique setting as board members' castes matter as well as their ethnicity. Ajit et al. (2012) show that Indian boards are typically dominated by one caste group (the forward caste) that occupies 93% of directorships. Empirical support for the benefits are cast diversity is not found at Indian boards. Forward caste members seem to have few interactions with other castes. Dayanandan et al. (2019)

show that more than one-third of Indian boards have interlocking directors but they the same caste and that the vast majority of CEOs come from the dominating caste.

Multi-linguistic corporate boards can bring benefits to a firm but also impose costs. Henderson (2005) analyses language diversity of international management teams in multinational corporations. The demand for language diversity largely depends on the need to align with the dynamics of international business group collaborations. Lazear (1999) treats a global firm as a multicultural team and points out that a gathering of workers from different cultures, legal systems, and languages induces costs and rigidities in collaboration. Tenzer et al. (2014) also claim that cognitive and emotional reactions of multinational team members to language barriers can affect team members' trust in one another. Brannen et al. (2014) point out that when board members express their views in one language but think in another, this contributes to a less one-sided framing of problems and better subsequent decision making. Conversely, Piekkari et al. (2015) discuss the 'silencing effect' of board language diversity. Referring to Nordic countries, they observe impoverished and silenced discussions in board meetings of firms that are unprepared to adopt a new working language (in this case, English). Consequently, time-consuming conflicts and transaction costs induced by the use of non-native languages on boards can arise (Makkonen et al. 2018).

In terms of diversity, the corporate finance literature has focussed mostly on gender and extensively documented that board gender diversity affects a firm's output. Following Daily et al. (1999), the majority of the subsequent literature agrees (while addressing the obvious endogeneity problems) that women in top management or board positions enhance corporate performance (Campbell & Mínguez-Vera, 2008; Carter et al., 2003; Erhardt et al., 2003; Fidanoski et al., 2014; Green & Homroy, 2018; Mahadeo et al., 2012; Sabatier, 2015). Moreover, Campbell and Mínguez-Vera (2008) argue that gender-diverse boards are better prepared to penetrate new markets, increase a firm's creativity and potential to innovate, and solve problems. In the context of critical mass theory, Torchia et al. (2011) demonstrate that boards with a strong presence of (at least three) female directors are more innovation-oriented. Furthermore, board gender diversity minimizes stock return volatility (Jizi & Nehme, 2017), and is correlated with more equity-based compensation for directors (Adams & Ferreira, 2009). Several studies examine the impact of mandatory minimum gender representation on the board—the first country with gender quota was Norway (with 40%) (see e.g. Ahern & Dittmar, 2012).

A board's cultural diversity could also affect board monitoring effectiveness (proxied by e.g. CEO turnover)

<sup>5</sup> Likewise, Stewart (2016) claims that in the UK, women and black and ethnic minorities are significantly underrepresented in senior management and on the board. Bravo et al. (2018) report that on the boards of S&P 500 firms, ethnic diversity is largely absent.

and the commitment to board decision making (proxied by e.g. director's attendance of board meetings). When a board counts foreign independent directors, Masulis et al. (2012) and Daniel et al. (2013) observe a lower sensitivity of CEO turnover to corporate performance. In contrast, this sensitivity is greater in firms with outsider-dominated boards (Weisbach, 1988). In the presence of external board members, Norwegian and Swedish firms experience more sensitivity of CEO turnover to performance (Oxelheim & Randøy, 2003). Adams and Ferreira (2009) discuss the responsiveness of CEO turnover to return performance in relation to board gender diversity, and find a greater sensitivity in firms with gender-diverse boards. Guest (2019), however, reports that CEO turnover is insensitive to corporate performance when boards are ethnically well-diversified. In relation to board attendance, Adams and Ferreira (2009) observe a more frequent board attendance by female directors compared to their male counterparts and Ferreira (2010) adds that male directors encounter fewer attendance problems in gender-diverse boards. Masulis et al. (2012) report that foreign independent directors in the US have a rather poor attendance record of board meetings.

### Moral Conflicts in the Boardroom

Sri Lanka's ethno-linguistic diversity is associated with ethical pluralism. Across its communities, there are conflicting *rights* and *wrongs*, which may be context-dependent. These ethical norms, the outcomes of long historical processes, are typically the normative doctrines of religions, which dictate how people should behave in society and regulate their business activities. The dominant business ethical values are influenced by the religions in Sri Lanka: Buddhism, Islam, Hinduism, and Catholicism.<sup>6</sup> Buddhism, the dominant religion of the Sinhalese population, values interconnectedness, nurturing social networks, and "personal growth and fulfilment" (Gould, 2015). Hinduism (of the Tamils) embraces pluralism and social inclusion more (Pani, 2009). For the (Moor) Muslims, there is a clear division between acceptable (*halal*) and forbidden practices (*haram*), which regulate not only day-to-day relations but also many business conventions. For instance, trading fixed income securities or relations with banks could be a delicate topic for Muslim businesspeople since charging interest is considered usury and hence forbidden under Islamic traditions (Ahmad, 2009). It should be noted that, although Muslims and Catholics constitute a smaller fraction of the population, they play an

influential role in business due to their historical engagement in international trade and business.

The moral judgements of a Sri Lankan manager may deviate from western business ethical norms and values; Sri Lankan people may prioritize their in-group responsibilities and relations when making business decisions. A manager, as a member of one of these ethnic communities, may well be bound to implicit social contracts within his web of relationships. One should behave according to the expectations of one's community and close social networks as this possibly generates societal penalties and rewards. Consequently, an implicit trade-off can arise between being a good manager for the shareholders and being a good citizen for the community that he belongs to and feels responsible for. Relying on *the ethics of care*, Held (2006) extensively elaborates on the importance of social networks, personal bonds, and social context in making moral judgements. People are relational; therefore, they are not immune to the well-being of their close network such as family, friends, and kin groups.

In relation to the intersectionality of ethical values in the boardroom, gender (macho culture vs feminist ethics) may also play an important role next to ethnicity and religion. Some research suggests that female managers behave more ethically in business decisions and are relationally smarter than male managers (Craft, 2013; Grosser et al., 2017; Held, 2006).

Perhaps the most prominent ethical dilemma for a Sri Lankan manager is how to deal with corruption. For some Sri Lankan managers, engaging in controversial governance practices may be a matter of taking responsibility towards one's own ethnic community. For instance, for the sake of pleasing certain social groups or supporting political ideology, a manager may engage in nepotistic appointments, serving the benefits of the elites, favouritism in procurements, divesting public funds, etc. He may also be involved in improper relations with the government officials and could eventually become the facilitator of corruption (Boateng et al., 2021; Wu, 2005). Sri Lanka is one of the most corrupt countries in the world according to the corruption perception index (CPI) from Transparency International which captures the perception of experts and businesspeople. Social diversity on the board may reduce an inclination to favour specific ethnicities.

The board of directors is a place where deliberate communication and socialization is unavoidable. Inspired by Jurgen Habermas's (1990) *discourse ethics*, we argue that managers can generate new norms and values via extensive argumentation and "communicative action" (see Crane et al. (2019) for a review of discourse ethics). As a consequence of shareholder pressure, directors may feel compelled to synthesize certain ethical values for the benefit of corporation even if those values conflict with their personal ones.

<sup>6</sup> The relation between religion and business ethics is a well-established field in sociology; e.g. see Weber and Kalberg (2013) on protestant ethic studies.

The extent to which corporations agree to new ethical values has been investigated before. For instance, Preuss (1999) discusses how German corporations frame business ethics that diverge from Anglo-American traditions and emphasizes the importance of corporate dialogue and rational argumentation for building value-enhancing corporate culture. Building upon Habermas' ethical and political theories, Scherer and Palazzo (2007) discuss the changing role of corporations during globalization. Accordingly, firms are then new actors in the political arena alongside formal institutions; they engender a new moral language and understanding on corporate social responsibility through "deliberate democracy".

## Hypotheses

Corporate executives in Sri Lanka are obviously affected by the political and social environment. As such, board members may be (of have been) strongly influenced by the long-lasting violent ethnic conflict between mainly the Tamils and Sinhalese and by other country-specific cultural factors. Voors et al. (2012) state that people's behaviour changes persistently after experiencing severe violent conflicts. After civil wars and atrocities, people are more altruistic but are also more risk-loving. The effects of the social conflicts and fragmentation in Sri Lanka may have long-lasting effects, which, in turn, can shape group behaviour within corporations.

In the final phase of and since the civil war, visible improvements in board social diversity started to occur. In 1997, Sri Lanka first adopted corporate governance standards that allowed regulators to monitor the board composition. As a result of these regulations and voluntary corporate governance practices, corporate boards gradually became more socially inclusive. For example, Wellalage et al. (2012) reported that minority representation on Sri Lankan boards took place in more than 42% of the boards by 2010. This positive evolution continued with ethnic diversity being present in 48.5% of the boards during the period 2012–2018. The end of the civil war and the subsequent government policy of reconciliation has contributed to this evolution towards a more cooperative business community. While segregation based on racism has declined at the board level, inviting Tamils and Moors as directors to Sinhalese firms has also yielded an immediate benefit in terms of an increase in available expertise in how to do business and in terms of the value of trading networks.

How do such social differences of board members influence corporate outcomes? Our theoretical arguments explaining such intricate mechanisms are based on the theories of boards' social behaviour and business ethics, which we discussed in the previous sections.

Managers' cognition is not only affected by past (and ongoing) social tensions, there is another persistent factor which keeps playing an important role in Sri Lanka: *ethical pluralism*. We argue that people's ethical values are predominantly associated with people's ethnicity as well as religion. Conflicting ethical norms and values may not be always harmful to corporations, provided that conflicts end with constructive resolutions after a process of deliberation and argumentation. Relying on Habermas's (1990) *discourse ethics*, we foresee that directors, despite possible social and ethical conflicts, have the potential of generating new norms and values via extensive interactions. Even though an emerging corporate culture and discourse may not be in line with board members' personal moral values, they may still agree on value-enhancing principles and financially viable moral judgements (Preuss, 1999; Scherer & Palazzo, 2007). Combining these social and moral forces affecting intra-group dynamics and group decision processes, we argue that the net effect of board ethnic diversity could be positive for Sri Lanka's firms. We therefore hypothesize: *Ethnic diversity on corporate boards positively affects corporate performance (H1)*.

The ethno-linguistic landscape of Sri Lanka is highly complex. Communities belonging to different ethnic backgrounds may speak the same language, while communities speaking different languages can still belong to the same ethnicity. In particular, there are four major ethnic communities (Sinhalese-Buddhists, Sinhalese-Catholics, Tamils, and Moors) and two major languages (Sinhala and Tamil) in Sri Lanka. Religion is also related to ethnicity as there are Buddhist and Christian Sinhalese, Hindu Tamils, and Muslim Moors. This culturally rich atmosphere provides us a perfect social laboratory to investigate people's interactions within the society as well as within the organizations. We argue that directors speaking different languages engage in more successful business dealings with various types of stakeholders as they can address them directly in their own language. This is pivotal in relation to Tamils and Moors, who constitute, by origin, the merchant class. Traditionally, Tamil is the business language spoken by both Tamils and Moors (as Moors gradually and ultimately adopted this language as their mother tongue, at the expense of Arabic). This an example of language disenfranchisement (Ginsburgh et al., 2005), the incapacity of accepting a language among the official ones or the fading of languages. Prior to 1987, this language disenfranchisement also extended to the Tamil language, which is the native tongue of Tamils but was discriminated against (and one of the reasons for the civil war). Consequently, an important part of the population was not able to get full access to official documents and institutional processes when using their native tongue. In



many public and private Sri Lankan organizations, the working languages were (and still are) Sinhala and English (as a remnant of the British colonial period), but in order to reach out to the ethnic minority areas (e.g. north and east) where Tamil is the main language, at least part of the board members should be able to speak the minority language to facilitate connecting with minorities and local politicians as this could have a direct effect on business. We therefore propose: *Linguistic diversity on corporate boards positively impacts corporate performance (H2)*.

In Sri Lanka, board participation by women is low, currently around 8%, which is lower than the (mandatory) ratio in developed economies. In family firms, female family members are often invited to their boards. In spite of all efforts to emancipate women, the decision-making power is still centralized to the male upper echelons in the corporate sector. However, the trend towards more women in business is gradually gaining strength. For instance, some leading businesses are headed by woman entrepreneurs (e.g. Abans, Janet, 4ever, House of Fashion, Spring and Summer, Lyceum group of schools, etc.), and nearly 7% of CEOs of listed firms are female. With equal opportunities created by education and civil liberties' movements, women should reach a critical mass to play an important role on firms' destiny (see Konrad et al., 2008; Liu et al., 2014; Torchia et al., 2011); they gradually move into top leadership positions and raising their voices more audibly in the board room. Gender-diverse boards are shown to increase investments in innovations (Campbell & Mínguez-Vera, 2008), to generate competitive advantages through enhancing a firm's reputation as an inclusive employer (Miller & Triana, 2009), value-enhancing CSR spending (Bear et al., 2010), to make more successful acquisition decisions (Levi et al., 2014), to enhance problem-solving capacities (Campbell & Mínguez-Vera, 2008), and ultimately, corporate performance (Campbell & Mínguez-Vera, 2008; Carter et al., 2003; Erhardt et al., 2003; Fidanoski et al., 2014; Green and Homroy, 2018; Mahadeo et al., 2012; Sabatier, 2015). We therefore hypothesize: *Gender diversity on corporate boards positively influences corporate performance (H3)*.

Sri Lankan CEOs are typically powerful and politically oriented: often they have held or are holding positions in government-affiliated institutions. Furthermore, the average CEO holds more than four seats on different boards and has a tenure of more than seven years. As both long tenure and prestige derived from a set of non-executive positions may make a CEO powerful, this raises the question as to whether corporate boards are able to monitor CEOs effectively and discipline them in case of underperformance. In the context of this paper, we wonder whether socially diversified boards are more effective to deal with such CEO entrenchment than

homogeneous boards. The literature argues that well-diversified boards can monitor and discipline CEOs better, and can take actions against them in case of poor corporate performance (Adams & Ferreira, 2009; Ferreira, 2010). Masulis et al. (2012) (as well as Oxelheim & Randøy, 2003; Weisbach, 1988) show that non-voluntary CEO turnover usually follows poor corporate performance when boards are highly diversified. As such, board social diversity (ethno-linguistic, gender, and nationality-based diversity) could lead to better monitoring which then leads to more frequent CEO departures. We therefore hypothesize: *Social diversity in boards increases the likelihood of CEO turnover (H4)*.

Our final question deals with as to how (diversified) boards operate: Does board attendance increase with board diversity? It is known that gender-diverse boards are more active because of higher overall attendance of directors (Ferreira, 2010). The exception is family-affiliated female directors; their attendance record is poor (Bianco et al., 2015). Board diversity based on foreign directorships creates fewer attendance problems (in the UK) (Estélyi & Nisar, 2016). However, Miletkov et al. (2014) claim that language and cultural barriers induced by foreign directors as well as their poor board meeting attendance record may hinder their contribution to effective board decision making. Although directors voluntarily accept to serve on a board, directors with different backgrounds do not necessarily get along well; and this could very well be the case in Sri Lanka, considering the three-decade-long ethnic civil war and various subsequent incidents such as the 2019 jihadist terrorist attacks. Taking decisions and even meeting regularly with the full board could be difficult in case of inter-ethnic discords. Pompper (2014) states that if directors do not deem the behaviour and habits of other ethnicities acceptable, they may feel isolated on the board which may lead to a lower attendance of meetings. We therefore hypothesize: *Social diversity in boards decreases the overall board meeting attendance of directors (H5)*.

## Data and Methodology

Sri Lankan firms constitute a social laboratory for examining a spectrum of forms of diversity. We construct several indices to capture the various aspects of social diversity: (i) a Herfindahl index to measure the general level social diversity, (ii) Blau indices to measure specific types of diversity (based on ethnic, linguistic, gender, and nationality-based diversity) separately. These indices are independent variables in our panel data analysis, which tests their relationship with firm performance, financial distress, board attendance, and CEO turnover.

## Sample

Our sample comprises the firms listed on the Colombo Stock Exchange (CSE). We collect firm-specific data on financial and non-financial information as well as governance from the annual reports, which include the financial statements (of which the disclosure is compulsory according to the Companies Act No. 07 of 2007), the Corporate Governance Compliance Report (which is subject to mandatory disclosure according to the listing rules of the CSE), the List of Top-20 Shareholders, and the Report of the Directors (which also discloses directors' shareholdings). We gather information on 1435 firm-year observations related to 205 firms that are labelled as non-financial companies according to the Global Industry Classification Standard. We exclude banks, financial, and insurance firms because these institutions have different corporate reporting standards and practices. The financial year 2011–2012 necessarily marks the beginning of our sample window for two reasons: First, the CSE database publishes annual reports only from this year onwards. Second, a major reform of corporate governance codes occurred in 2011.<sup>7</sup>

We extract the social identity of the directors from the Profiles of Directors shown in annual reports, which show pictures of the directors, their status (executive or non-executive), and their surnames that enable us to identify the ethnic background of a director's family. Although skin colour and physical appearance are almost the same for every Sri Lankan, an individual's family name clearly indicates the ethnic background. Sinhalese-Buddhist names evolved from the era of the King e.g. Appuhamy, Bandaranaike, Dissanayake, Ekanayake, etc. The Sinhalese-Catholic names (e.g. Silva, Fernando, Perera, Almeida, etc.) originated from the Portuguese presence. Even though Tamils and Moors speak Tamil, their surnames are quite different: while surnames of Tamils stem from the Tamil language (e.g. Mahendran, Ponnambalam, Rajaratnam, Subramaniam, etc.), names of Moors are of Arabic origin (e.g. Cader, Muhammad, Hameed, Rahman, etc.). In particular, we identify four ethnic backgrounds (Sinhalese-Buddhists, Sinhalese-Catholics, Tamils, and Moors) and the foreign directors. How to define ethnicity has been a delicate subject among social scientists.

<sup>7</sup> The Institute of Chartered Accountants of Sri Lanka (ICASL) and the Securities and Exchange Commission (SEC) of Sri Lanka jointly published the Code of Best Practice on Corporate Governance in 2008. The CSE included the governance codes into their listing rules. The Corporate Governance Committee of the ICASL performed the third major reform of corporate governance codes in 2011. In line with benchmark governance codes of developed markets, they focussed on strengthening internal control and risk management, on responsibilities of the board, audit and remuneration committees and the company secretary, on communication with shareholders, on material transactions, and on sustainability reporting.

In this regard, we follow Fearon and Laitin's (2003) definition that is widely accepted in the extant literature and well-fit to the context of corporate governance. This definition considers several dimensions such as common ancestry, sense of community and self-consciousness, language, religion, customs, remembering the Homeland, and sharing common (his)stories.

## Measuring Social Diversity

We construct several indices to measure the variety of social diversity aspects. Following the general convention in social sciences, we capture group diversity by means of the Herfindahl index (1950)<sup>8</sup> and the Blau index (1977). Our Herfindahl index for social diversity (*Herf.Soc.Div.*) captures board social diversity that incorporates linguistic, ethnic, gender, and international diversity of corporate boards:  $Herf.Soc.Div = \frac{1}{s^2} [a^2 + b^2 + c^2 + d^2]$ , where  $a$  = number of non-Sinhalese language directors,  $b$  = ethnic minority directors (directors other than Sinhalese-Buddhists),  $c$  = foreign directors,  $d$  = female directors, and  $s$  = board size. The *Herf. Soc. Div.* values (theoretically) range from zero (0) to four (4) and a higher value indicates a greater social diversity of the board.<sup>9</sup>

The Blau index (1977) is commonly used in the diversity literature (Bear et al., 2010; Fidanoski et al., 2014; Richard, 2000; Roberson and Park, 2007) to measure the within-group variation for a specific demographic/ethnic/cultural criterion. When we measure the linguistic heterogeneity of a board, the Blau index (shown below) on linguistic diversity (*Blau Lang. Div.*) considers the relative proportions of members of each language category  $l$  (*Sinhala, Tamil, and Others*).<sup>10</sup> The Blau index, *Blau Ethnic Div.* represents ethnic heterogeneity of the directors and  $e$  is the number of directors from a specific ethnic background (*Sinhalese-Buddhists, Sinhalese-Catholics,*

<sup>8</sup> For example, Anderson and Paskeviciute (2006) and Alesina and La Ferrara (2005) apply a Herfindahl index as a fractionalization index to differentiate ethnic and linguistic heterogeneity across countries. Other corporate governance studies (Anderson et al., 2011; Frijns et al., 2016; Roberson & Park, 2007; Upadhyay & Zeng, 2014) also apply this index to measure some diversity aspects of board members and top management teams.

<sup>9</sup> Assume that 9 directors are present in a board out of which there are 2 Sinhalese-Buddhists, 1 Sinhalese-Catholic, 2 Tamils, 2 Moors, and 2 foreigners. Four of nine directors are women. Sinhalese-Buddhists and Sinhalese-Catholics speak Sinhala, Tamils and Moors speak Tamil, and foreigners may speak one or two non-Sri-Lankan languages. Accordingly,  $s = 9$ ,  $a = 6$ ,  $b = 7$ ,  $c = 2$ , and  $d = 4$  resulting in a Herfindahl index value of 1.30.

<sup>10</sup> Assume that a board comprises nine members who speak three different languages. If three directors belong to each language category, we achieve maximum linguistic diversity in the board. According to the Blau index, the maximum value in this case is 0.67.

*Tamils, Moors, and foreigners*). As Sinhalese can be Buddhists or Catholics, we consider them as two distinct groups. The index, *Blau Gend. Div.*, measures gender diversity, where  $g$  stands for directors from each gender category. The general Blau index is calculated as  $y = 1 - [\frac{1}{s^2} \sum_{i=1}^n x_i^2]$ , where  $y$  represents, respectively, *Blau Lang. Div.*, *Blau Ethnic Div.*, *Blau Gend. Div.*, and  $x$  stands for  $l$ ,  $e$  and  $g$  denote directors from each language category, ethnicity, and gender;  $s$  is the board's size. In robustness tests, we will test a set of alternative diversity variables.

## Measuring Firm Output

We intend to examine the impact of social diversity of boards on (a) corporate performance, (b) financial distress, (c) board monitoring (CEO turnover), and (d) board functioning (meeting attendance). We measure firm performance by means of a market-based measure, Tobin's Q (market capitalization of equity plus book value of liabilities, divided by book value of total assets), and an accounting-based measure, return on assets (ROA, earnings before interest and taxes, divided by total assets). Besides, we use three proxies for financial distress. First, a firm is financially distressed when its interest coverage ratio (earnings before interest and taxes divided by interest paid on debt) is less than two (then, *Low Int. Cov.* equals 1 and is zero otherwise). At this level of coverage, a firm typically loses investment-grade status (Renneboog et al., 2017).

The second indicator of distress is the distance to default from Merton's (1974) model, which estimates the default probability by means of a firm's capital structure and the distributions of stock returns and volatilities. Our bankruptcy measure is given by  $1-DD = 1 - n(dd)$ , where  $n$  is the standard normal cumulative distribution function, and  $dd$  is the distance to default. We compute the distance to default by means of the following equation (see Bharath & Shumway, 2008) in which  $l$  stands for the asset value,  $l$  for the liabilities (short term plus current portion of long-term liabilities),  $\mu_A$  is the asset drift from the CAPM,  $\sigma$  is the asset volatility, and  $t$  is the maturity period of liabilities:  $dd = \frac{[\ln(\frac{l}{l}) + (\mu_A - 0.5\sigma^2)t]}{\sigma\sqrt{t}}$ .

Third, a firm is considered as financially distressed when its return on equity (ROE, net income after tax divided by book value of equity) is negative (the indicator variable negative return on equity (*Neg. ROE*) then equals 1 and is zero otherwise).

To investigate whether socially diversified boards have disciplining and monitoring power, we regress our social diversity index on CEO turnover, an indicator variable

equal to one if the CEO leaves his position (corrected for retirement age > 65 years and illness/death). To examine the relation between board social diversity and directors' attendance to board meetings, we calculate the arithmetic average of each director's board meeting attendance. Our board attendance measure is  $bdatt = [\frac{1}{b} \sum_{i=1}^n a_i]/n$ , where  $a$ ,  $b$ , and  $n$  denote attendance, number of board meetings, and number of board members, respectively.

## Descriptive Statistics

The descriptive statistics of the corporate performance and distress measures, social diversity indices, and other firm-specific variables are presented in Table 1. Panel A shows that Tobin's Q averages 1.48 and ROA amounts to 7%. A large number of Sri Lankan firms suffer from financial distress (Panel B). For instance, 28% of the firms earn less than twice their interest payments; the average distance to default amounts to 0.13 and one-fifth of the firms incur earnings losses (negative ROE). Panel C exhibits that the CEO turnover (corrected for retirement and death/illness) amounts to around 8%; this number is four times higher for firms with high default risk. Board attendance shows large variations across the boards: an average director attends only half of the board meetings (the mean amounts to 53% with a standard deviation of 41%). Panel D of Table 1 shows the basic distributional properties of our main independent variables, the diversity indices. There is a remarkable variation in ethno-linguistic diversity across Sri Lankan corporate boards. The average score on social diversity (Herfindahl index) may seem low at 0.43 (with a standard deviation of 40), but this is caused by the fact that the index captures diversity based on several diversity aspects (ethnicity, language, gender, and nationality) among which gender diversity on the board is still lagging as is international board diversification. Linguistic and gender diversity indices (Blau indices) are, respectively, 32% and 12%, and the ethnic diversity index is the highest at approximately 50%. Panel E reports data distributions of alternative board inclusiveness variables, some of which were jointly considered in the above diversity indices. The board representation of minority languages on the board (which comprise non-Sinhalese languages) and of minorities (non-Sinhalese-Buddhist such as Sinhalese-Catholics, Tamils, Moors, or other) amounts to 24% and 42%, respectively.

Minority representation on corporate boards shows variation across industries. The Food and Staples Retailing industry reports the highest ethnic minority board representation. Directors who do not belong to the dominant family's ethnic background account for 36% of the directorships. The Telecommunication Services industry is the most inclusive one. For instance, in *Sri Lanka Telecom*, the largest (privatized) telecommunication provider with the government

**Table 1** Descriptive statistics

Variable	Observations	Mean	S.D.	Q25	Median	Q75
<b>Panel A: Corporate performance measures</b>						
Tobins' Q	1435	1.48	0.97	0.83	1.15	1.75
Return on assets (%)	1435	7.00	16.0	2.00	6.00	12.0
<b>Panel B: Financial distress measures</b>						
Low interest coverage ratio (dummy variable)	1435	0.28	0.45	0.00	0.00	1.00
Distance to default (1-DD)	1435	0.13	0.31	0.00	0.00	0.01
Negative return on equity (dummy variable)	1435	0.20	0.40	0.00	0.00	0.00
<b>Panel C: Other output measures</b>						
CEO turnover	1435	0.08	0.27	0.00	0.00	0.00
Board attendance (%)	1435	53.0	41.0	0.00	75.0	89.0
<b>Panel D: Social diversity indices</b>						
Herfindahl Index for Social Diversity	1435	0.43	0.40	0.13	0.30	0.61
Blau Index for Linguistic Diversity	1435	0.32	0.21	0.18	0.38	0.49
Blau Index for Ethnic Diversity	1435	0.49	0.18	0.41	0.50	0.61
Blau Index for Gender Diversity	1435	0.12	0.15	0.00	0.00	0.24
<b>Panel E: Alternative board inclusiveness variables</b>						
Minority language representation (%)	1435	24.0	25.0	0.00	17.0	40.0
Ethnic minority representation (%)	1435	42.0	27.0	22.0	40.0	63.0
Within-board ethnic minority (%)	1435	36.0	17.0	25.0	38.0	50.0
Tamil and Moor minority representation (%)	1435	22.0	25.0	0.00	14.0	38.0
Ethnic board dominance (dummy variable)	1435	0.48	0.50	0.00	0.00	1.00
Foreign board (%)	1435	11.0	18.0	0.00	0.00	14.0
Female board (%)	1435	08.0	11.0	0.00	0.00	14.0
<b>Panel F: Ownership measures (%)</b>						
Corporate and institutional ownership	1435	76.0	24.0	71.0	85.0	93.0
Large company ownership	1435	6.00	19.0	0.00	0.00	0.00
Pension fund ownership	1435	02.0	4.00	0.00	0.00	1.00
Families and individuals' ownership	1435	13.0	21.0	0.00	0.00	14.0
Executive directors' ownership	1435	6.00	15.0	0.00	0.00	1.00
Non-executive directors' ownership	1435	2.00	6.00	0.00	0.00	1.00
CEO ownership	1435	3.00	11.0	0.00	0.00	0.00
<b>Panel G: CEO and board characteristics</b>						
CEO duality (dummy variable)	1435	0.27	0.45	0.00	0.00	1.00
CEO cross-directorships (number)	1435	4.23	5.94	1.00	3.00	6.00
CEO tenure (years)	1435	7.03	6.53	3.00	5.00	8.00
Ethnic minority CEO (dummy variable)	1435	0.52	0.50	0.00	1.00	1.00
Board size (number)	1435	7.77	2.09	6.00	8.00	9.00
Board meetings (number)	1435	4.56	3.41	3.00	4.00	6.00
Board independence (ratio)	1435	0.39	0.13	0.30	0.38	0.45
<b>Panel H: Firm-specific variables</b>						
Firm size (ln total assets)	1435	21.7	1.49	20.9	21.8	22.6

This table presents descriptive statistics for firm outcome measures, social diversity indices, and other firm characteristics. The data window comprises 1435 firm-year observations from 205 firms for the period April 2011–March 2018. Online Appendix 1 provides definitions and acronyms of the variables.

holding majority control, Sinhalese-Buddhist is the dominating ethnicity of its board but other ethnicities Tamils and Sinhalese-Catholics (and foreigners) occupy 42% of directorships. Tamil and Moor minorities hold 22% of the directorships on the average board. In approximately 50% of the

boards, one ethnicity dominates (with two-third of the board members). The other diversity indicators, the percentage of foreign directorships (11%) and of female directorship (8%), are lower. Women, however, hold board seats at 13% in the

retailing industry in which families and individuals hold a higher stake ownership (20% on average).

Corporate and institutional shareholders own on average 76% of the equity from which the largest listed companies (S&P SL20 firms), and other listed and private firms account for 6% and 65%, respectively. Only 4% of the listed firms are owned by pension funds (2%), insurance funds (1%), and mutual funds (1%). The government's corporate involvement in terms of holding equity stakes is limited; it holds on average (across all listed firms) only 1%. The reason is that, since the beginning of 1980s, the state's assets, especially those in telecommunication, airlines, plantation, transportation, and energy industries, were largely privatized and are considered to be largely unsuccessful (Salih, 2000). At present, the government treasury holds a controlling equity stake in telecommunications and stakes in some plantation firms (to safeguard the rights of estate employees). The rest of the equity stakes belong to families and individuals (13% on average), and executive and non-executive directors (8%) (Panel F). In firms in which a family owns at least a blocking minority (of 25%) through family executives, family non-executive directors, and other family members, the CEO (and his family) owns 16% and the directors (including their family's share stakes) own 38%.

Panel G of Table 1 presents the CEO traits and board characteristics. Almost half of the CEOs are from an ethnic minority (52% are not Sinhalese-Buddhists). The concentration of the tasks of chairman and CEO in the hands of a single person only occurs in 27% of the boards. CEOs usually serve on four boards of other firms as non-executive directors and have an average tenure of 7 years. While board size ranges from 2 to 14 directors, the median board comprises 8 directors or which 40% are independent non-executive directors. Four board meetings are held during a year by the median board. Nine firms were financially distressed for four consecutive years and did not hold a single board meeting over this period.

Table 2 presents the correlation matrix for the social diversity indices and the firms' output measures (Panel A), for corporate performance and firm characteristics (including ownership, CEO, and board characteristics) (Panel B), and for CEO, firm and board characteristics (Panel C). The table illustrates that board social diversity, linguistic diversity, and ethnic diversity display a significant positive correlation with Tobin's Q and ROA, but both performance measures are inversely related to gender diversity. Social diversity indices, particularly those on linguistic and ethnic diversity, correlate negatively with the financial distress measures. In Panel B, we note that large corporate ownership is positively correlated with firm performance (Tobin's Q and ROA), and both large company ownership and pension fund ownership are negatively and significantly related to financial distress.

Board size, board independence, and firm size are also negatively correlated with all three distress criteria. In Panel C, CEO turnover is inversely related to CEO ownership, duality, cross-directorships, and CEO tenure. Board size and independence have a positive relationship with CEO turnover and with directors' board meeting attendance.

Table 3 shows how firm performance and CEO/board characteristics differ between firms with high and low social diversity levels (firms belonging to quartiles 1 and 4 of the Herfindahl social diversity index). Corporate performance (both Tobin's Q and ROA) is significantly higher in firms with socially well-diversified boards. Similarly, the cost of financial distress is lower for firms with socially diverse boards. This univariate analysis indicates that well-diversified boards have on average a 7% lower probability of default (proxied by Merton's distance to default) compared to boards lacking such social diversity. Moreover, it is striking that directors' attendance of board meetings and the number of board meetings are both smaller in firms with socially well-diversified boards (respectively, by 8% and by 2 meetings). Furthermore, in firms with higher board social diversity, ownership held by large companies and pension funds is lower as is the board's independence. CEOs hold more non-executive directorships and have longer tenure in firms with low board social diversity and belong less often to an ethnic minority. Larger firms (measured by total assets) are characterized by lower social diversity.

## Multivariate Analyses

We regress corporate performance (*Corp. Perf.*) on the various lagged social diversity indices (*Soc. Div. Ind.*), while controlling for CEO traits, firm ownership, other board and firm characteristics, and time and industry fixed effects. The main regression model of the paper is the following:

$$\begin{aligned} Corp.Perf_{-it} = & \beta_0 + \beta_1 Soc.Div.Ind_{-it-1} + \beta_2 Corp.Own_{-it-1} + \beta_3 Pension Own_{-it-1} \\ & + \beta_4 Fam.Ind.Own_{-it-1} + \beta_5 Exec.Own_{-it-1} + \beta_6 Nonex.Own_{-it-1} \\ & + \beta_7 CEO Duality_{it-1} + \beta_8 \ln(Board Size)_{it-1} + \beta_9 Board Indep_{-it-1} \\ & + \beta_{10} \ln(Total Assets)_{it-1} + year\ fixed\ effects + industry\ fixed\ effects + \epsilon_{it} \end{aligned}$$

The monitoring role of large shareholders is expected to mitigate expropriation of shareholder rights by management. In particular, we expect stricter monitoring by large corporate owners. Pension funds are mostly employee pension schemes managed by the Central Bank; they are the largest public funds in Sri Lanka and the fact that Central Bank can use their voting rights may add to the impact. We control for executive and non-executive director ownership as this may reduce agency costs, and account for internal governance-related controls (CEO duality, board size, and

**Table 2** Correlation matrix

Panel A: Social diversity indices and output measures									
	Q	ROA	Low Int. Cov.	1-DD	Neg. ROE	CEO turn.	Board attend.		
Q	1								
ROA	0.359***	1							
Low Int. Cov.	-0.150***	-0.814***	1						
1-DD	-0.148***	-0.121***	0.424***	1					
Neg. ROE	-0.148***	-0.801***	0.971***	0.334***	1				
CEO Turn.	0.014	-0.042	0.128**	-0.025	0.159**	1			
Board Attend.	-0.008	0.119***	-0.199***	-0.049*	-0.177***	-0.049	1		
Herf. Soc. Div.	0.254***	0.049*	-0.023	-0.068**	0.013	-0.006	-0.157***		
Blau Lang. Div.	0.119***	0.048*	-0.122***	-0.112***	-0.107***	0.001	0.091***		
Blau Ethnic Div.	0.133***	0.101***	-0.142***	-0.095***	-0.124***	0.062	0.122***		
Blau Gend. Div.	-0.026	-0.014	-0.039	-0.002	-0.059	0.020	-0.058**		
Panel B: Ownership, CEO and board characteristics, and corporate performance									
	Corp. own.	Pension own.	Fam. ind. own.	Exec. own.	Nonex. own.	CEO duality	Board size	Board Indep.	Firm size
Q	0.074***	-0.023	-0.008	-0.047*	-0.016	0.009	-0.055**	-0.055**	0.006
ROA	0.048*	0.014	-0.012	-0.017	0.012	-0.180***	0.012	0.025	0.066**
Low Int. Cov.	-0.211***	-0.085**	0.026	0.014	0.009	0.252***	-0.112***	-0.039	-0.279***
1-DD	-0.068***	-0.022	-0.050*	-0.014	-0.076***	0.117	-0.026	-0.085***	-0.028
Neg. ROE	-0.162***	-0.097**	-0.025	-0.040	-0.080*	0.178***	-0.155***	-0.014	-0.428***
Panel C: CEO, firm, and board characteristics									
	CEO own.	CEO duality	CEO cross.	CEO tenure	Board size	Board indep.	Firm size	Q	
CEO Turn.	-0.037	-0.031	-0.168***	-0.183***	0.019	0.061	-0.086	0.014	
	Board meet	CEO duality	CEO ethnic.	CEO tenure	Board size	Board Indep.	Firm size	Q	
Board Attend.	0.450***	-0.218***	-0.022	-0.032	0.097***	0.159***	0.209***	-0.008	

This table presents Pearson correlation coefficients between variables from Panel A–C. Panel A shows correlation coefficients between firm output measures and social diversity indices. Panel B correlates firm performance with other firm characteristics. Panel C shows the correlations for CEO turnover and board attendance with other firm characteristics. The output measures contain Tobin's Q (*Q*), return on assets (*ROA*), low interest coverage (*Low Int. Cov.*), distance to default (*1-DD*), negative return on equity (*Neg. ROE*), CEO turnover (*CEO Turn.*), and board attendance (*Board Attend.*). Board social diversity indices comprise Herfindahl index for social diversity (*Herf. Soc. Div.*), Blau index for language diversity (*Blau Lang. Div.*), Blau index for ethnic diversity (*Blau Ethnic. Div.*), Blau index for gender diversity (*Blau Gend. Div.*). Ownership measures compose of large company ownership (*Corp. Own.*), pension fund ownership (*Pension Own.*), families and individual's ownership (*Fam. Ind. Own.*), executive director ownership (*Exec. Own.*), non-executive director ownership (*Nonex. Own.*), and CEO ownership (*CEO Own.*). CEO and board characteristics include CEO duality dummy (*CEO Duality*), CEO cross-directorships (*CEO Cross.*), CEO tenure (*CEO Tenure*), CEO ethnicity (*CEO Ethnic.*), board size (*Board Size*), board meetings (*Board Meet.*), and board independence (*Board Indep.*). Other firm-related variables contain only firm size by total assets (*Firm Size*). Online Appendix 1 provides definitions and measurements for the variables. Correlations between scale and nominal variables are presented as polyserial correlation coefficients. Tetrachoric correlation coefficients determine the correlation among nominal variables

\*\*\*, \*\*, and \* Statistical significances based on a t-statistic at the 1%, 5%, and 10% levels, respectively

board independence) as well as firm-specific variables. As we will also examine the effect of board social diversity on CEO turnover, we add to the above model the following CEO-related factors: CEO ownership, CEO cross-directorships, and CEO tenure—each of which could proxy for CEO influence. In the models on board meeting attendance, we add to the above control variables: the number of board meetings and the ethnic status of the CEO.

Our results may be affected by endogeneity issues because decisions on board diversity could be taken simultaneously with those affecting corporate performance, CEO turnover, or board attendance. We therefore apply an instrumental variable two-stage least squares approach (IV-2SLS), which includes instrumental variables that are associated with board social diversity but not (or less so) with the firm's outcome measures.

**Table 3** High versus low diversity

Means comparison on Social Diversity Index-Quartiles			
Variable	Mean on Quartile 1 (Low diversity) ( <i>n</i> = 359)	Mean on Quar- tile 4 (High diver- sity) ( <i>n</i> = 352)	Difference
<b>Panel A: Corporate performance measures</b>			
Tobins' Q	1.278	2.201	0.923***
Return on assets	0.057	0.082	0.025*
<b>Panel B: Financial distress measures</b>			
Interest coverage ratio < 2 (dummy)	0.320	0.280	- 0.040
Distance to default	0.173	0.103	- 0.070***
Negative ROE (dummy)	0.220	0.200	- 0.020
<b>Panel C: Other output measures</b>			
CEO turnover	0.080	0.084	0.004
Board attendance	0.530	0.452	- 0.078**
<b>Panel D: Ownership measures</b>			
Large company ownership	0.074	0.037	- 0.037***
Pension fund ownership	0.021	0.010	- 0.011***
Families and individuals' owner- ship	0.104	0.129	0.025*
Executive director ownership	0.053	0.060	0.007
Non-executive director owner- ship	0.008	0.028	0.020***
CEO ownership	0.033	0.031	- 0.002
<b>Panel E: CEO and board characteristics</b>			
CEO duality	0.300	0.380	0.080**
CEO cross-directorships	4.680	3.230	- 1.450***
CEO tenure	7.170	6.630	- 0.545*
Ethnic minority CEO	0.140	0.950	0.818***
Board size	7.523	7.494	- 0.029
Board meetings	5.240	3.450	- 1.785***
Board independence	0.405	0.359	- 0.046***
<b>Panel F: Firm-specific variables</b>			
Firm size (ln total assets)	21.527	21.188	- 0.339***

This table compares mean values of performance measures and other firm characteristics for board with high versus low social diversity (quartile 1 versus quartile 4 of the Herfindahl index for social diversity). Online Appendix 1 provides definitions and acronyms for the variables

\*\*\*, \*\*, and \* Statistical significance statistics (*t*-test) at the 1%, 5%, and 10% levels, respectively

## Empirical Results and Discussion

### Corporate Performance and Board Social Diversity

Panel A of Table 4 shows that the board's social diversity (Herf. Soc. Div.) is positively and significantly related to

corporate performance. The base-case linear specifications explaining market-based and accounting performance (Tobin's *Q* and ROA) are columns (1) and (4) and are estimated by means of OLS with robust standard errors. In both specifications, corporate performance increases with the composite social diversity index. A one-standard deviation increase in overall social heterogeneity (40%) correlates with a substantial increase in Tobin's *Q* (by 0.42) (Column (1)) and with a 1.4% increase in ROA (Column (4)). This finding is consistent with our hypothesis that social diversity in boards positively relates to corporate performance (Borghesi et al., 2016; Carter et al., 2003; Erhardt et al., 2003). We reestimated the models by means of GLS with clustered standard errors at the firm and industry levels (columns (2) and (3), respectively; and columns (5) and (6), respectively). The results remain statistically significant under these alternative estimations.

The Blau indices give more detailed information on the various types—linguistic, ethnic, and gender—of diversity (Panels B–D of Table 4). Both linguistic (Panel B) and ethnic diversity (Panel C) are positively and statistically significantly related to Tobin's *Q*. For Model (1), one-standard deviation increase in linguistic diversity and ethnic diversity indices are (*ceteris paribus*) related with respective increases of Tobin's *Q* by 0.295 and 0.313. Panel D exhibits a negative correlation between gender diversity and firm performance, which conflicts with the extant literature that highlights the benefits of appointing women to the board room (Campbell & Mínguez-Vera, 2008; Erhardt et al., 2003; Mahadeo et al., 2012; Sabatier, 2015), but the statistical significance disappears in Models (2) and (3) once we adjust for industry- and firm-level clustering of standard errors. We conclude that appointing directors from different ethnic and linguistic backgrounds on the board can affect performance, possibly through the value of business networks extending to minority communities, a higher sensitivity to cultural, religious, and linguistic differences in the Sri Lankan population, and more cooperative behaviour in board decisions. These results align with the social matching game model (Fearon & Laitin, 1996) which discusses the inter-ethnic groups' cooperation in communities and with Easterly and Levine (1997), Carter et al. (2003) on ethnic diversity enhancing economic performance.

### Financial Distress and Board Social Diversity

We turn to question whether firm's sensitivity to social diversity affects their financial health. In Table 5, we regress our social diversity indices on the three proxies of financial distress: (i) low interest coverage, (ii) (Merton's) distance to default, and (iii) earnings losses (negative ROE). In Panel A, we report statistically significant relations for the base linear models (1), (4), and (7) that point out that a highly socially

**Table 4** Board social diversity and corporate performance

	Dependent variable					
	Tobin's Q			ROA		
	(1)	(2)	(3)	(4)	(5)	(6)
<b>Panel A: Board social diversity and corporate performance</b>						
Herf. Soc. Div. <sub><i>t-1</i></sub>	1.042*** (0.174)	0.477** (0.233)	0.477** (0.213)	0.036*** (0.012)	0.032* (0.018)	0.032** (0.016)
Intercept	4.065***	8.011***	8.011***	-0.379***	-0.399**	-0.399***
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Industry fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Robust SE	Yes	No	No	Yes	No	No
Clustered-firm SE	No	Yes	No	No	Yes	No
Clustered-industry SE	No	No	Yes	No	No	Yes
R <sup>2</sup>	0.1860	0.1449	0.1449	0.1068	0.1001	0.1001
Prob > F	0.0000			0.0000		
Groups	205	205	205	205	205	205
Observations	1230	1230	1230	1230	1230	1230
<b>Panel B: Board linguistic diversity and corporate performance</b>						
Blau Ling. Div. <sub><i>t-1</i></sub>	1.405*** (0.219)	0.790** (0.384)	0.790* (0.420)	0.003 (0.026)	-0.004 (0.031)	-0.004 (0.034)
Intercept	5.761***	8.745***	8.745***	-0.343***	-0.372**	-0.372***
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Industry fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Robust SE	Yes	No	No	Yes	No	No
Clustered-firm SE	No	Yes	No	No	Yes	No
Clustered-industry SE	No	No	Yes	No	No	Yes
R <sup>2</sup>	0.1576	0.1271	0.1271	0.0998	0.0935	0.0935
Prob > F	0.0000			0.0000		
Groups	205	205	205	205	205	205
Observations	1230	1230	1230	1230	1230	1230
<b>Panel C: Board ethnic diversity and corporate performance</b>						
Blau Ethic. Div. <sub><i>t-1</i></sub>	1.738*** (0.273)	0.500** (0.237)	0.500* (0.275)	0.052 (0.034)	0.030 (0.038)	0.030 (0.038)
Intercept	5.168***	8.449***	8.449***	-0.342***	-0.369**	-0.369***
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Industry fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Robust SE	Yes	No	No	Yes	No	No
Clustered-firm SE	No	Yes	No	No	Yes	No
Clustered-industry SE	No	No	Yes	No	No	Yes
R <sup>2</sup>	0.1587	0.1174	0.1174	0.1026	0.0963	0.0963
Prob > F	0.0000			0.0000		
Groups	205	205	205	205	205	205
Observations	1230	1230	1230	1230	1230	1230
<b>Panel D: Board gender diversity and corporate performance</b>						
Blau Gen. Div. <sub><i>t-1</i></sub>	-0.775** (0.310)	-0.291 (0.257)	-0.291 (0.331)	-0.036 (0.034)	-0.025 (0.043)	-0.025 (0.032)
Intercept	5.341***	8.581***	8.581***	-0.332***	-0.363**	-0.363***
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes



**Table 4** (continued)

	Dependent variable					
	Tobin's Q			ROA		
	(1)	(2)	(3)	(4)	(5)	(6)
Industry fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Robust SE	Yes	No	No	Yes	No	No
Clustered-firm SE	No	Yes	No	No	Yes	No
Clustered-industry SE	No	No	Yes	No	No	Yes
$R^2$	0.1325	0.1073	0.1073	0.1008	0.0945	0.0945
Prob > $F$	0.0000			0.0000		
Groups	205	205	205	205	205	205
Observations	1230	1230	1230	1230	1230	1230

This table shows whether corporate performance (Tobin's Q and ROA) is affected by social diversity, linguistic diversity, ethnic diversity, and gender diversity of boards. The diversity measures are proxied by Herfindahl index for social diversity, and Blau indices for linguistic, ethnic, and gender diversity. The lagged control variables comprise large companies' ownership, pension fund ownership, families and individuals' ownership, executive director ownership, non-executive director ownership, CEO duality, log of board size, board independence, and log of total assets. Online Appendix 1 provides definitions and measurements for every variable. We also include year and industry fixed effects. Standard errors are given in parentheses. Models (1) and (4) are estimated via OLS; the other models by means of GLS with clustering of standard errors (at the industry level and the firm level)

\*\*\*, \*\*, and \* Statistical significances based on a t-statistic at the 1%, 5%, and 10% levels, respectively

diversified board is negatively related to all of the above measures of financial distress. For an average Sri Lankan firm, a one-standard deviation increase in social diversity is associated with 2.6% decrease in default likelihood (distance to default). We dissect the impact of social diversity in the subsequent panels. We turn to linguistic diversity in Panel B where models (1) and (4) indicate that linguistic diversity significantly reduces a firm's default probability (as measured by low interest coverage and distance to default). The magnitude and precision of our estimates show some variation when we estimate the parameters with the GLS estimator and correct the standard errors with firm and industry-clustering. We report these results in Model (2)–(3), (5)–(6), and (8)–(9) of Table 5. The relation between linguistic diversity and the distress measures largely disappears for these specifications. Model (3) of Panel C shows a significant relation between ethnic diversity and distance to default, but we do not find similar relations to firms with low interest coverage or negative returns. We also observe that female board presence relates to lower financial distress [low interest coverage and negative returns in models (1)–(3), and (7)–(9)].

### CEO Turnover and Board Meeting Attendance in Socially Diverse Boards

We document that board social diversity (in general and for the specific types of diversity) has no effect on CEO turnover for Sri Lankan public firms as shown by the logistic regressions of Table 6 [Models (1)–(3) of Panel A–D].<sup>11</sup> This implies that board social diversity does not lead to stricter monitoring and decision making on managerial departure issues. None of the included CEO traits (CEO shareholdings, CEO duality, CEO cross-directorships) affect turnover with the exception of CEO tenure, which reduces the probability of departure (not tabulated). Likewise, we do not find any impact on turnover of various board measures (size, board independence).

In Table 6, we further examine board attendance by directors and show that board social diversity seems to discourage attendance as Model (4) of Panel A points out that social diversity negatively correlates to presence at board meetings. The relation is upheld for the GLS models that adjust for firm- and industry-level clustering of standard errors in Models (5) and (6). When the positions of CEO and chairman are held by one person (CEO duality) which proxies for CEO power, the attendance records of directors are lower. Still, the presence of a CEO belonging to a minority, the frequency of board meetings, a high degree of board independence, higher corporate performance, and large firm size encourage regular meeting participation (not tabulated). An analysis capturing diversity by means of Blau indices shows that the gender diversity index is negatively and significantly

<sup>11</sup> We also examined the CEO turnover–performance sensitivity in a context of social diversity by including the interaction term performance\*social diversity, but the interaction is not statistically significant.

**Table 5** Board social diversity and financial distress

	Dependent variable								
	Interest coverage < 2 (dummy)			Distance to default			Negative ROE (dummy)		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
<b>Panel A: Board social diversity and financial distress</b>									
Herf. Soc. Div. <sub><i>t-1</i></sub>	-0.708*** (0.183)	-0.610 (0.395)	-0.610** (0.276)	-0.065*** (0.019)	-0.067** (0.032)	-0.067** (0.020)	-0.458** (0.196)	-0.336 (0.421)	-0.336 (0.334)
Intercept	7.281***	12.42***	12.42***	0.171	0.005	0.005	5.771***	9.189***	9.189***
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Robust SE	Yes	No	No	Yes	No	No	Yes	No	No
Clustered-firm SE	No	Yes	No	No	Yes	No	No	Yes	No
Clustered-industry SE	No	No	Yes	No	No	Yes	No	No	Yes
$R^2$				0.1465	0.1390	0.1390			
Pseudo $R^2$	0.1060		0.1155				0.1057		
Prob > $F$				0.0000					
Prob > $\chi^2$	0.0000	0.0000					0.0000		
Groups	197	197	197	205	205	205	198	198	198
Observations	1182	1182	1182	1230	1230	1230	1188	1188	1188
<b>Panel B: Board linguistic diversity and financial distress</b>									
Blau Ling. Div. <sub><i>t-1</i></sub>	-0.598* (0.351)	-0.291 (0.761)	-0.291 (0.754)	-0.142*** (0.044)	-0.117 (0.071)	-0.117* (0.070)	-0.357 (0.398)	0.314 (0.819)	0.314 (0.917)
Intercept	6.276***	11.89***	11.89***	0.038	-0.096	-0.096	5.143***	9.095***	9.095***
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Robust SE	Yes	No	No	Yes	No	No	Yes	No	No
Clustered-firm SE	No	Yes	No	No	Yes	No	No	Yes	No
Clustered-industry SE	No	No	Yes	No	No	Yes	No	No	Yes
$R^2$				0.1486	0.1415	0.1415			
Pseudo $R^2$	0.0979						0.1022		
Prob > $F$				0.0000					
Prob > $\chi^2$	0.0000	0.0000					0.0000		
Groups	197	197	197	205	205	205	198	198	198
Observations	1182	1182	1182	1230	1230	1230	1188	1188	1188
<b>Panel C: Board ethnic diversity and financial distress</b>									
Blau Ethic. Div. <sub><i>t-1</i></sub>	-0.352 (0.399)	-0.433 (0.878)	-0.433 (0.949)	-0.098* (0.051)	-0.140* (0.075)	-0.140 (0.089)	0.065 (0.440)	0.170 (1.024)	0.170 (1.092)
Intercept	6.485***	11.99***	11.99***	0.103	-0.059	-0.059	5.295***	8.940***	8.940***
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Robust SE	Yes	No	No	Yes	No	No	Yes	No	No
Clustered-firm SE	No	Yes	No	No	Yes	No	No	Yes	No
Clustered-industry SE	No	No	Yes	No	No	Yes	No	No	Yes
$R^2$				0.1429	0.1356	0.1356			
Pseudo $R^2$	0.0963						0.1015		
Prob > $F$				0.0000					
Prob > $\chi^2$	0.0000	0.0000					0.0000		
Groups	197	197	197	205	205	205	198	198	198

Table 5 (continued)

	Dependent variable								
	Interest coverage < 2 (dummy)			Distance to default			Negative ROE (dummy)		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Observations	1182	1182	1182	1230	1230	1230	1188	1188	1188
Panel D: Board gender diversity and financial distress									
Blau Gen. Div. <sub><i>t-1</i></sub>	-0.848*	-2.125*	-2.125**	0.046	0.004	0.004	-1.044**	-1.941*	-1.941**
	(0.473)	(1.162)	(1.059)	(0.064)	(0.072)	(0.069)	(0.510)	(1.090)	(0.988)
Intercept	6.917***	12.80***	12.80***	0.092	-0.052	-0.052	5.845***	9.759***	9.759***
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Robust SE	Yes	No	No	Yes	No	No	Yes	No	No
Clustered-firm SE	No	Yes	No	No	Yes	No	No	Yes	No
Clustered-industry SE	No	No	Yes	No	No	Yes	No	No	Yes
$R^2$				0.1407	0.1335	0.1335			
Pseudo $R^2$	0.0978						0.1044		
Prob > $F$				0.0000					
Prob > $\chi^2$	0.0000	0.0000					0.0000		
Groups	197	197	197	205	205	205	198	198	198
Observations	1182	1182	1182	1230	1230	1230	1188	1188	1188

This table shows whether financial distress measures are affected by social diversity, linguistic diversity, ethnic diversity, and gender diversity of boards. The diversity measures are proxied by a Herfindahl index, and Blau indices for linguistic, ethnic, and gender diversity. The lagged control variables are the same as in Table 4. Online Appendix 1 provides definitions and measurements for the variables. We also include year and industry fixed effects into the regressions. Standard errors are given in parentheses. Models (1) and (4) are estimated via OLS; the other models by means of GLS with clustering of standard errors (at the industry level and the firm level)

\*\*\*, \*\*, and \* Statistical significances based on a t-stat at the 1%, 5%, and 10% levels, respectively

correlated with director meeting attendance, which goes against the extant literature, but the relation is not robust when controlling for clustering of standard errors [Table 6, Panel D, Model (5)–(6)].

## Discussion

The cultural diversity literature on corporate boards, which typically relies on the US and UK data, has shown mixed results on the impact on corporate performance. Our results are at odds with the literature reporting negative effects of diversity on firm performance (Frijns et al., 2016; Guest, 2019), but consistent with other studies highlighting a positive impact (Borgesani et al., 2016; Carter et al., 2003; Erhardt et al., 2003; Hill et al., 2015). Our results are context-dependent as Sri Lanka showcases a bitter example of a developing country which suffers from severe issues of discrimination, corruption, nepotistic relations, and persistent political and economic upheaval.

Board diversity for Sri Lankan firms is relatively a new concept in comparison to firms in developed economies, which have been focussing on social diversity to satisfy ESG criteria. Still, firms without ethnic minority directors are

considerably rarer in Sri Lanka (about 10%) than Fortune 1000 firms (50%) (Carter et al., 2003) and S&P 500 firms (Bravo et al., 2018). In the UK, black and ethnic minorities are significantly underrepresented on boards (Stewart, 2016). In relation to ethnicity-based pay, the US literature reports no strong evidence on racial pay gap at the CEO level (Guo et al., 2021) and weak evidence at the managerial level (Altonji & Blank, 1999).

At the end of this results section, it is worth emphasizing that there is no simple/single model that can describe group behaviour of corporate board members, especially in a complex context such as that of Sri Lanka. While agency theory helps us to understand board-shareholder interactions, a host of theories from various social sciences together bolster the justification of our research question. Unfortunately, the necessary variables (e.g. board meetings' minutes, directors' resumes) needed to test these theories in detail are mostly lacking. Therefore, we concisely mention these theories to sketch a broader framework of our research. In terms of group behaviour, the social identity approach produces two interrelated theories: *self-categorization theory* and *social identity theory*. Tajfel and Turner (1979) treat social categorizations as cognitive tools that help individuals to determine

**Table 6** Board social diversity, CEO turnover and board attendance

	Dependent variable					
	CEO turnover			Board attendance		
	(1)	(2)	(3)	(4)	(5)	(6)
<b>Panel A: Board social diversity</b>						
Herf. Soc. Div.	-0.064 (0.262)	-0.064 (0.246)	-0.064 (0.199)	-0.124*** (0.028)	-0.111*** (0.038)	-0.111** (0.048)
Intercept	-3.024	-3.024	-3.024	-1.466***	-1.306***	-1.306***
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Industry fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Robust SE	Yes	No	No	Yes	No	No
Clustered-firm SE	No	Yes	No	No	Yes	No
Clustered-industry SE	No	No	Yes	No	No	Yes
$R^2$				0.3358	0.3271	0.3271
Pseudo $R^2$	0.0432					
Prob > $F$				0.0000		
Prob > $\chi^2$	0.3019	0.0001				
Groups	197	197	197	205	205	205
Observations	1379	1379	1379	1435	1435	1435
<b>Panel B: Board linguistic diversity</b>						
Blau Ling. Div.	0.210 (0.524)	0.210 (0.488)	0.210 (0.437)	0.057 (0.049)	-0.025 (0.085)	-0.025 (0.106)
Intercept	-2.975	-2.975	-2.975	-1.488***	-1.371***	-1.371***
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Industry fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Robust SE	Yes	No	No	Yes	No	No
Clustered-firm SE	No	Yes	No	No	Yes	No
Clustered-industry SE	No	No	Yes	No	No	Yes
$R^2$				0.3283	0.3175	0.3175
Pseudo $R^2$	0.0434					
Prob > $F$				0.0000		
Prob > $\chi^2$	0.3488	0.0001				
Groups	197	197	197	205	205	205
Observations	1379	1379	1379	1435	1435	1435
<b>Panel C: Board ethnic diversity</b>						
Blau Ethic. Div.	0.920 (0.731)	0.920 (0.611)	0.920* (0.516)	0.057 (0.059)	-0.094 (0.096)	-0.094 (0.112)
Intercept	-3.157	-3.157	-3.157	-1.514***	-1.370***	-1.370***
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Industry fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Robust SE	Yes	No	No	Yes	No	No
Clustered-firm SE	No	Yes	No	No	Yes	No
Clustered-industry SE	No	No	Yes	No	No	Yes
$R^2$				0.3281	0.3154	0.3154
Pseudo $R^2$	0.0456					
Prob > $F$				0.0000		
Prob > $\chi^2$	0.3077	0.0002				
Groups	197	197	197	205	205	205
Observations	1379	1379	1379	1435	1435	1435

Table 6 (continued)

	Dependent variable					
	CEO turnover			Board attendance		
	(1)	(2)	(3)	(4)	(5)	(6)
Panel D: Board gender diversity						
Blau Gend. Div.	0.462 (0.670)	0.462 (0.676)	0.462 (0.504)	-0.132** (0.062)	0.039 (0.131)	0.039 (0.125)
Intercept	-3.272	-3.272*	-3.272	-1.472***	-1.372***	-1.372***
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Industry fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Robust SE	Yes	No	No	Yes	No	No
Clustered-firm SE	No	Yes	No	No	Yes	No
Clustered-industry SE	No	No	Yes	No	No	Yes
$R^2$				0.3296	0.3167	0.3167
Pseudo $R^2$	0.0437					
Prob > $F$				0.0000		
Prob > $\chi^2$	0.2844	0.0001				
Groups	197	197	197	205	205	205
Observations	1379	1379	1379	1435	1435	1435

This table shows whether CEO turnover and board attendance are affected by board social diversity, linguistic diversity, ethnic diversity, and gender diversity of boards. The diversity measures are proxied by a Herfindahl index, and Blau indices for linguistic, ethnic, and gender diversity. The control variables of CEO turnover comprise CEO ownership, CEO duality, CEO cross-directorships, CEO tenure, log of board size, board independence, log of total assets, and Tobin's Q. Control variables of board attendance are CEO duality, CEO tenure, ethnic minority CEO, log of board size, board independence, board meeting, log of total assets, and Tobin's Q. Online Appendix 1 provides definitions and measurements for the variables. We also include year and industry fixed effects into the regressions. Standard errors are given in parentheses. Models (1) and (4) are estimated via OLS; the other models by means of GLS with clustering of standard errors (at the industry level and the firm level)

\*\*\*, \*\*, and \* Statistical significances based on a  $t$ -statistic at the 1%, 5%, and 10% levels, respectively

their place in society and trigger varying social interactions. Turner (1999) distinguishes an individual's social and personal identity whereby the latter is independent of group membership. Social identity theory argues that people attempt to assure a positive social identity, often based on in- and out-group comparisons (Tajfel, 1982). According to *social capital theory*, a person accumulates economic, cultural, and social capital (Häuberer, 2011). Social capital is defined by the attributes of a social organization that contains networks, norms, and social benefits (Putnam, 2000). If social capital is poor, public policies in racially fragmented societies are bound to be unsuccessful (Alesina & La Ferrara, 2005). Social networks create value, particularly for directors (van der Walt & Ingley, 2003), and social capital is advantageous for minority directors who can then exert larger influence on strategic decision making (Westphal & Milton, 2000). The *resource-based model* (Barney, 1991) also applies here because firms' cultural diversity is a knowledge-based resource capturing social and human capital (Richard 2000) and may yield a competitive advantage. If a country has racio-ethnic diversity, board's human

resource mix should reflect this. Relatedly, according to the *resource dependency model* (Pfeffer, 1972), the board is a mechanism capturing a firm's interdependence with its environment, which should be reflected in its composition: inclusion of diverse skills and backgrounds suitable to address firms' political, economic, or social challenges (Pfeffer & Salancik, 1978).

Hambrick and Mason's (1984) *upper echelons theory* states that managerial attributes, both psychological traits (cognitive bases, values) and observable characteristics (education, socioeconomic background), determine organizational outcomes. Carpenter et al. (2001) and Takacs et al. (2010) show the importance of resource and capability perspectives of upper echelons to better predict organizational outcomes. Granovetter (1978) discusses the 'threshold', an equilibrium point where the net benefits of social group interactions begin to exceed the net costs, to model group behaviour. According to Etzkowitz et al. (1994), *critical mass theory* requires a strong minority of at least 15% of the total membership. This theory is applied in the diversity literature (Konrad et al., 2008; Liu et al., 2014; Torchia

et al., 2011) to account for women directors' contributions to the board. Liu et al. (2014) and Kristie (2011) caution that “one is a token, two is a presence, and three is a voice”.

## Robustness Tests

In order to verify the robustness of our results, we implement an IV approach, retest the main hypotheses by means of other alternative board inclusiveness variables, and perform a matched-pair analysis on distressed and non-distressed firms. In this section, we will also show some further evidence that the benefits of socially diversified boards significantly outweigh the cost of social frictions among executives.

## Instrumental Variable Approach

To test the impact of board social diversity on firm outcomes, we perform a two-stage least squares with instrumental variables (IV-2SLS). We use the minority CEO (the CEO belongs to an ethnic minority) as our first instrument for board social diversity to test corporate performance and financial distress. The second instrument, minority chairmanship (the chairman belongs to an ethnic minority) is used for board social diversity to test the relation between CEO turnover and board attendance. The idea is that when the leadership, be it the chairman or the CEO, are from an ethnic minority, there will be a stronger inclination to increase the board's social diversity, which we argue above can affect corporate decision making and lead to different outputs (e.g. higher corporate performance).<sup>12</sup> A direct relation between a CEO belonging to an ethnic minority and corporate performance is not obvious as it is not clear that CEO who is from a specific ethnic minority, who speaks a non-dominant language, or is female would generally be able to consistently generate higher returns than a CEO without such traits. We thus *ex ante* assume (but will test below) that CEOs ethnicity or race have not much to do with their ability to run firms better. Tamil CEOs, for example, do not have distinct anthropological or social qualities that allow them to function better as leaders. Rather, we expect that

the correlation runs from a ‘minority CEO’ to board social diversity of which we then examine the ability to generate higher corporate returns. Admittedly, finding a good instrument for board social diversity is not straightforward, which is why our robustness tests will not only rely on these tests, but we will also perform a set of alternative tests in the subsequent subsections.

Our instruments are economically and statistically relevant. First, CEO ethnicity has strong and significantly positive correlation with board social diversity ( $\rho=0.7$ ), but only a weak and insignificant correlation with our dependent variables (Tobin's Q ( $\rho=0.2$ ), ROA ( $\rho=0.1$ ), low interest coverage ( $\rho=-0.1$ ), distance to default ( $\rho=-0.1$ ), and negative return on equity ( $\rho=-0.1$ ). Our second IV, namely minority chairmanship also correlates with social diversity ( $\rho=0.7$ ) but is virtually unrelated to CEO turnover ( $\rho=0.1$ ) and board attendance ( $\rho=-0.1$ ). In our analyses, we use the same lagged controls as in the models of Table 4.

Our IV results are consistent with our baseline specifications in the previous section. Table 7 shows that the (lagged) board social diversity significantly and positively impacts Tobin's Q [model (1)] and ROA [model (2)]. As before, firms with high board social diversity avoid financial distress [proxied by low interest coverage (model (3)), distance to default [model (4)], and negative returns [model (5)]. Model (6) depicts that board diversity increases CEO turnover, whereas in model (7) we confirm that social diversity is related to lower meeting attendance by directors. This IV approach suggests that ethno-linguistically diversified boards generate higher corporate performance and avoid financial distress. The choice of instrument passes the weak identification tests (Cragg–Donald Wald *F*-stat and the Stock–Yogo test) and the weak-instrument-robust inference tests (Anderson–Rubin and Stock–Wright tests).

## Alternative Board Diversity Variables

We retest our hypotheses by means of alternative diversity variables capturing the presence of the language of minorities, ethnic minority directorships, nationality of directors, female directors, and the board's ethnic dominance. Variable definitions are presented in Online Appendix 1. We include the same set of lagged controls as in Table 4, and present the results of these models in Online Appendices 2.1 (corporate performance) and 2.2 (financial distress). In line with our previous findings, we exhibit that linguistic diversity (minority language representation in model (1)) is positively correlated with Tobin's *Q* (Online Appendix 2.1). When directors speak a Sri Lankan minority language, the firm may communicate better with or at least be more sensitive to the need to address people in every region in Sri Lanka in their native tongue. In addition, such a board may be more sensitive towards the requirements by and

<sup>12</sup> The CEO (in models on corporate performance) and the chairman (in models on CEO turnover and board attendance) are part of the board and hence affect the measurement social diversity. However, the average board comprises 8 people such that the impact of one person on the whole board's social diversity is limited. Furthermore, the index combines diversity based on ethnicity, language, gender, and nationality, which diminishes the impact of one single person on the global diversity index. The reason why the CEO (chairman) belonging to an ethnic minority can be a good instrument is that a CEO (chairman) can shape the constitution of the board and affect the hiring of a more diverse board.

**Table 7** Board social diversity, and corporate performance, and CEO turnover and board attendance (IV approach)

IV (2SLS) estim. (2nd stage)	Dependent variable						
	Q	ROA	Low Int. Cov.	1-DD	Neg. ROE	CEO Turn.	Board Attend.
	Instrument: CEO Ethnic.					Instrument: Min. Chair.	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Predicted Herf. Soc. Div. at $t - 1$	1.159*** (0.180)	0.042** (0.018)	-0.196*** (0.052)	-0.097*** (0.035)	-0.131*** (0.046)	0.064* (0.036)	-0.094* (0.049)
Intercept	4.179***	-0.374***	1.808***	0.194	1.393***	0.052	-1.304***
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Centred $R^2$	0.1805	0.1140	0.1369	0.1382	0.1176	0.0141	0.2372
Uncentered $R^2$	0.5930	0.2794	0.3817	0.2767	0.2934	0.0924	0.7084
Prob > $F$	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Groups	205	205	205	205	205	205	205
Observations	1435	1435	1435	1435	1435	1435	1435
Underidentification test							
Anderson canon. corr. LM stat.							
Chi-sq(1)	466.23					377.68	
$p$ -value	0.0000					0.0000	
Weak identification test							
Cragg–Donald Wald $F$ statistic	673.76					500.10	
Stock–Yogo weak ID test critical values							
10%	16.38					16.38	
15%	8.96					8.96	
20%	6.66					6.66	
25%	5.53					5.53	
Weak-instrument-robust inference							
Anderson–Rubin Wald $F$ -test	39.04	5.10	14.34	7.55	7.93	3.03	3.51
$p$ -value	0.0000	0.0240	0.0002	0.0061	0.0049	0.0819	0.0610
Anderson–Rubin Wald test Chi-sq(1)	40.02	5.23	14.70	7.74	8.13	3.11	3.60
$p$ -value	0.0000	0.0222	0.0001	0.0054	0.0043	0.0780	0.0577
Stock–Wright LM S statistic Chi-sq(1)	38.93	5.21	14.55	7.70	8.09	3.10	3.59
$p$ -value	0.0000	0.0224	0.0001	0.0055	0.0045	0.0783	0.0580

This table exhibits two-stage least square (2SLS) regressions for the Herfindahl social diversity index on Tobin's  $Q$  ( $Q$ ), return on assets ( $ROA$ ), low interest coverage ( $Low\ Int.\ Cov.$ ), distance to default ( $1-DD$ ), negative return on equity ( $Neg.\ ROE$ ), CEO turnover ( $CEO\ Turn.$ ), and board attendance ( $Board\ Attend.$ ). When we regress social diversity index on financial performance and distress measures (Models 1–5), we use *ethnic minority CEO* as the instrument which is whether the CEO belongs to an ethnic minority. In relation to CEO turnover and board attendance, the social diversity index is instrumented by *minority chairmanship*, namely whether the chairman belongs to an ethnic minority. We follow the same control variables and fixed effects used for respective analysis in Tables 4, 5, and 6. Online Appendix 1 provides definitions and measurements for the variables. Robust standard errors are given in parentheses

\*\*\*, \*\*, and \* Statistical significances based on a  $t$ -statistic at the 1%, 5%, and 10% levels, respectively

expectations of minorities, which translates in better corporate performance. Likewise, ethnic minority representation (the presence of ethnic minority directors) is correlated with Tobin's  $Q$  (model (2)). Our next definition of minority directors is somewhat different than in the base-case analysis (of Table 4), where we measured ethnic heterogeneity of boards through ethnic minorities (non-Sinhalese-Buddhists) representation on boards. Although Sinhalese-Buddhist directors

belong to the majority ethnicity in the country, this ethnicity may be a minority on the board. There are ethnicity-oriented (Sinhalese-Buddhist, Tamil, Moor firms, etc.) family firms or business groups of which the major shareholders and/or and the majority of directors belong to one ethnicity. We identify the cases where a firm's board has a majority of Tamils, Moors, or Sinhalese-Catholic directors and where Sinhalese-Buddhist directors are a minority. We therefore

define a variable Within-Board Ethnic Minority that captures the proportion of directors who do not belong to the dominant ethnic background of the firm and show a positive correlation with Tobin's  $Q$  (Model (3)). The presence of Tamil and Moor minorities (Model (4)) also correlates with market-based performance. Inversely, but in line with these results, we document that firm performance negatively relates to a lack of diversity, here captured by ethnic board dominance (which equals one if two-thirds of the board members belong to the same ethnic background) (Model (5)). All in all, all these models point out the importance of ethnically diverse boards. Board diversity in terms of the presence of foreign directors is also positively related to Tobin's  $Q$  (Model (6)). We documented earlier that there was no relation or a weak negative one between the presence of female directors and performance, which we confirm in Model (7). In Panel B of Online Appendix 2.1, we present similar regressions but now for accounting performance. We find no relation between board inclusiveness and accounting performance with exception of the variable presence of Ethnic Minority Representation, which positively correlates with ROA.

In Panels A to C of Online Appendix 2.2, we revisit the relation between financial distress and the alternative board inclusiveness variables. We consistently find that the presence of ethnic and linguistic minorities on the board as well as female directors are related to a lower probability of default and lower financial distress (measured by interest coverage and negative earnings). In keeping with these results, ethnic dominance, which indicates board homogeneity, is positively correlated with the financial distress/default measures (models (5) in Panel A–C).

The above analyses raise the question as to which diversity dimension matters most. Running a horse race for the diversity variables by including them in one model is not straightforward because some variables are correlated (e.g. ethnicity and language), but also because the importance of a diversity measure also depends on the output variable (performance, distress,...) under consideration.<sup>13</sup> We therefore analyse the economic significance of each variable in models including only one main diversity measure at the time. We find that ethno-linguistic diversity (ethnicity and language) has a more significant economic impact on firm performance (relative to gender and nationality). A one-standard deviation increase in minority language representation and ethnic minority representation augments Tobin's  $Q$ , respectively, by 0.39 and 0.32. A similar increase in within-board ethnic minority leads to a

higher  $Q$  by 0.34 variable (based on the parameter estimate of 2.045 in Online Appendix 2.1). An increase of foreign director presence (by one-standard deviation) increases  $Q$  by 0.18. Gender diversity does not seem to contribute to corporate value. Online Appendix 2.2 confirms that board representation of linguistic and ethnic minorities reduces financial distress (as measured by low interest coverage (Panel A), distance to default (Panel B), and negative earnings (Panel C)).

We also test for the interacting effects of a set of moderating governance variables such as corporate ownership, family ownership, and non-executive ownership, as well as the CEO duality, the number of cross-directorship, and CEO tenure. We find that social diversity in combination with strong ownership concentration held by corporations increases market-based financial performance (Tobin's  $Q$ ) but not accounting-based performance (Online Appendix 2.3). The interaction of strong ownership concentration held by families and social diversity reduces financial distress. Both non-executive ownership and social diversity positively impact market- and accounting-based performance, but the interaction of these terms slightly reduce these positive effects. The positive (negative) impact of social diversity on performance (financial distress) is lower when one person accumulates the power of the CEO and the supervisory power of the chairman (Online Appendix 2.4). The positive effect of social diversity on performance is slightly reduced when the CEO holds non-executive directorships (which may proxy for busyness).

### Financial Distress and Matched-Pair Analysis

We also discuss how social diversity explains financial distress in a matched-pair setting whereby we partition firms into financially distressed and non-distressed firms based on interest coverage (being below or above 2). We use firm size, industry, and the financial year as matching criteria, such that one-to-one matching generates 187 pairs of distressed and non-distressed firm-years. Our matching sample covers 72% of the listed firms on the Colombo stock exchange (the remainder cannot be matched).

First, we perform a mean comparison analysis to examine how board diversity measures, ownership, CEO traits, and board and firm characteristics compare for distressed and non-distressed firms. Our analysis, presented in Panel A of Online Appendix 3.1, demonstrates that board social diversity is larger in non-distressed firms. Moreover, the alternative diversity measures of Panel B also reflect a greater diversity in non-distressed firms. Accordingly, board ethnic dominance by a single ethnicity is significantly higher in financially distressed firms. Second, we perform a conditional logistic regression analysis in Online Appendix 3.2 to estimate to what extent the probability of financial distress is affected by social diversity (in our matched sample). After controlling for

<sup>13</sup> When we apply a principal component analysis, we find that the first principal component comprises belonging to an ethnic minority and speaking the non-dominant language (Tamil or Moorish Tamil), whereas the second principal component is based on gender and foreign nationality.



the usual set of control variables (as in Table 5), we conclude that the board social diversity index and the Blau linguistic, ethnic, and gender diversity indices negatively relate to default probability (Panel A of Online Appendix 3.2). Panel B shows the relations with the alternative board inclusiveness variables, which yield further confirming evidence that firms with socially exclusive boards suffer from higher default probabilities relative to firms with socially inclusive ones.

## Non-linear Specifications

In addition to our base model discussed in the previous section, we also consider possible non-linear relationships between corporate performance and social diversity. It may be that there is a limit to social diversity as over-diversification of boards could be costly. For instance, Cox et al. (1991) and Lazear (1999) highlight increased turnover, personal conflicts, and communication barriers as the possible costs of diversity. According to Makkonen et al. (2018), the use of non-native languages on board meetings may create time-consuming conflicts and transaction costs. Roberson and Park (2007) and Richard et al. (2004) observe a non-linear relationship between racial diversity of top managers and corporate performance. Therefore, we also include the quadratic forms of the social diversity indices into our model as follows:

$$\begin{aligned} \text{Corp.Perf.}_{it} = & \beta_0 + \beta_1 \text{Soc.Div.Ind.}_{it-1} + \beta_2 \text{Soc.Div.Ind.}_{it-1}^2 + \beta_3 \text{Corp.Own}_{it-1} \\ & + \beta_4 \text{Pension Own.}_{it-1} + \beta_5 \text{Fam.Ind.Own.}_{it-1} + \beta_6 \text{Exec.Own.}_{it-1} \\ & + \beta_7 \text{Nonex.Own.}_{it-1} + \beta_8 \text{CEO Duality}_{it-1} + \beta_9 \ln(\text{Board Size})_{it-1} \\ & + \beta_{10} \text{Board Indep.}_{it-1} + \beta_{11} \ln(\text{Total Assets})_{it-1} + \text{year fixed effects} \\ & + \text{industry fixed effects} + \epsilon_{it} \end{aligned}$$

The tables at Online Appendices 4.1 and 4.2 show non-linear relations whereby high linguistic and ethnic diversity on the board non-linearly augments corporate value. Therefore, our results indicate a potential non-linear relation between ethno-linguistic diversity of top managers and firm performance. While Roberson and Park (2007) find U-shaped relation (firm performance first decreases and then increases with diversity), our results show that firm performance does not worsen at any point with the presence of additional minority directors. This suggests that there is no over-diversification effect that could induce additional cost; instead, firms still benefit from increasing diversity.

## Conclusion

This study examines the social diversity of Sri Lankan corporate boards in terms of ethnicity (and religion) of the directors (Sinhalese-Buddhist, Sinhalese-Catholic, Tamils,

or Moor), the languages they speak, their gender and, in case of foreign directors, their nationality. Social diversity and inclusiveness on corporate boards are expected to improve decision making and hence affect corporate performance, monitoring of top management (e.g. CEO replacement), and how boards function (e.g. board meetings attendance). Diversity and inclusion are sensitive objectives in Sri Lanka firms, given the context of the extreme social frictions—the civil war, which extended over three decades and even led to genocide, terminated barely a decade ago—and regional segregation of peoples based on ethnicity, language, and religion. This study demonstrates that board social diversity is positively related to market-based performance and accounting returns, and negatively to financial distress and board attendance. Still, monitoring poor corporate performance by the board in socially diverse firms does not lead to increased CEO turnover.

The Sri Lankan example teaches us that firms with inclusive boards significantly outweigh firms with less socially diverse boards in terms of performance and financial stability despite communication challenges in the boardrooms that ethno-linguistic diversity could engender. Firms can create a socially diversified board by assigning board seats to individuals representing different ethnic, religious, and linguistic minorities, to women and to foreign nationals. Since a diversified board comprises people from different communities, their cultural heterogeneity is expected to lead to better, more balanced decision making. We show that directors' ethno-linguistic diversity can bring about more cooperative behaviour in board decisions, which translates into corporate success. When directors represent different cultural aspects of societies within a country, firms can gain a competitive edge following from directors' social connections and sensitivity to the expectations and requirements of minorities. Still, making directors from different ethnicities work together may still be challenging considering the recent wounds of the civil war and occasional resurfacing tensions. The evidence put forward in this paper confirms that governance reforms focussed on reconciliation and efforts to stimulating ethno-linguistic diversity have a conspicuous positive pay-off.

**Supplementary Information** The online version contains supplementary material available at <https://doi.org/10.1007/s10551-024-05624-z>. **Open Access** This article is licensed under a Creative Commons Attribution 4.0 International License, which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons licence, and indicate if changes were made. The images or other third party material in this article are included in the article's Creative Commons licence, unless indicated otherwise in a credit line to the material. If material is not included in the article's Creative Commons licence and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright

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