A Perspective on the Influence of National Corporate Governance Institutions and Government’s Political Ideology on the Speed to Lockdown as a Means of Protection Against Covid-19

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Received: 21 November 2020 / Accepted: 14 July 2022 / Published online: 3 August 2022
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Abstract
This first wave study of the Covid-19 pandemic investigates why the governments of different countries proceeded to lockdown at different speeds. We draw upon the literature on Corporate Governance Institutions (CGIs) to theorize that governments’ decision-making is undertaken in the light of prevailing beliefs, norms, and rules of the collectivity, as portrayed by the focal country’s CGIs, in their effort to maintain legitimacy. In addition, drawing on motivated cognition we posit that the government’s political ideology moderates this relationship because decision-makers are biased when assessing the impact of lockdown on commerce. Running negative binomial regressions on a sample of 125 countries, we find that the more shareholder-oriented the CGIs, the slower the governmental response in shutting down the economy to protect from the pandemic. Moreover, the main relationship is stronger the more right-leaning the government’s ideology. Our study contributes to the research on corporate governance institutions and political ideology and illustrates how societal and ideological biases affect government decision-making, especially when important decisions about public welfare are taken with little information on hand.

Keywords COVID-19 · Pandemic response · National CGIs

Introduction
Lockdown, defined as any form of government-enforced mandatory containment or closure policy for limiting the spread of Covid-19 (Graham-Harrison, 2020; Tham, 2020), is an approach that has been much observed and debated upon. For example, for the US, until well into March 2020 the government refused to grasp the gravity of the threat because they did not want to contemplate the draconian response of immediate shutdowns (Luce, 2020, p. 48). Conversely, in the initial phase of the pandemic, Germany was lauded by most for a ‘swifter reaction’ in implementing lockdowns (Ellyatt, 2020). These diverse lockdown responses occurred although the WHO recognized the need for governments to impose these effective but socioeconomically costly interventions (Karatayev et al., 2020; WHO, 2020) since Covid-19 was (and is) remarkably virulent and quick to spread (Cookson et al., 2020; Li et al., 2021).

Given that at the early stage of the pandemic we had little information about the virus and most importantly few means to fight it (e.g., the absence of vaccines), lockdown seemed an imperative response to mitigate the risk of death. For example, infectious disease experts noted that implementing such measures, although seemingly more draconian than those seen during the plague in the Middle Ages, would have worked to prevent the shocking numbers of fatalities witnessed in certain countries especially in the initial period (Booth et al., 2020). Therefore, it is puzzling to note that...
not all countries moved swiftly to lockdown. Media reporters tried to explain the varying speed of lockdown among the different countries, suggesting that a key determinant was decision-makers’ explicit concerns regarding the effects of sudden, drastic action on businesses’ survival and the economy at large (Dutt, 2020; Watts, 2020; Young, 2020). In addition, many scholars have noted the effectiveness of reacting quickly and coming down “hard” (Karatayev et al., 2020; Rachel, 2020; Sergent & Stajkovic, 2020) on the pandemic spread. Despite that, studies of lockdown as a protection against the Covid-19 pandemic have not explicitly examined this tradeoff. Most papers focus instead on factors that influence the progression, and outcomes, of the pandemic. For example, Sergent and Stajkovic (2020) concentrate on how female leadership during the pandemic led to fewer deaths in the United States. Separately, Dheer et al. (2021) find cultural explanations for lower pandemic growth in some nations as compared to others. While these have made important contribution, to the best of our knowledge, no papers have considered how, from a corporate governance perspective, cross-national Covid-19 lockdown measures are affected by tradeoff considerations between the cost to business and the pandemic’s toll on public health. In light of this, in this paper we investigate the following question, “for governments of different countries around the world, to what extent does the orientation towards the interests of shareholders influence the speed to lockdown as a means of protection against Covid-19?” The answer to our research question should help us understand how governments make decisions about businesses’ interests when the broader societal good is at stake.

The departure point of this study, as compared to others, is the fact that governments had to outweigh the benefits of lockdown with the cost of this protective action on commerce. Therefore, to understand this tradeoff we draw upon the literature on Corporate Governance Institutions (CGIs) that explains variations in corporate governance among the different countries (La Porta et al., 1999; Aguilera & Jackson, 2003; Schneper & Guillén, 2004; Capron & Guillén, 2009) to posit that a country’s societal norms on community welfare versus business welfare as portrayed by CGIs factored into the speed of governmental response to the threat. Governments need to establish legitimacy amongst the voting public and key social stakeholders by adhering to the underlying ethos of national corporate governance institutions (Wallner, 2008). Since CGIs emphasize either the protection of shareholders or the protection of stakeholders in the organization, they signal a country’s deeply rooted social priorities (Capron & Guillen, 2007). For example, the more shareholder-oriented the corporate governance institutions within the country, the more that country’s emphasis on capitalism above social welfare. Therefore, we theorize that, where it concerns policy choice in response to the Covid-19 threat (and possibly other critical decisions of this latitude), governments’ decision-making is undertaken in the light of prevailing beliefs, norms, and rules of the collectivity (March & Olsen, 2005), as portrayed by CGIs, in their effort to maintain legitimacy. Moreover, we recognize that government decision-makers are also influenced by their own biases about shareholder versus stakeholder priorities, and therefore we examine a boundary condition that relates to the political ideology of the government. Specifically, we draw on motivated cognition to suggest that the main relationship is moderated by the political orientation of the government since political ideology should affect how government officials perceive and analyze information that relates to societal expectations about protecting shareholder interests (Gupta et al., 2018).

We tested our hypotheses by running negative binomial regressions on a sample of 125 countries. Findings support our hypotheses. Moreover, additional analysis shows that the main relationship is stronger the shorter the time to the next general election, which provides additional support for the proposed mechanism—that government’s legitimacy concerns drive the time to lockdown. In addition, robustness tests for (i) the influence of omitted variables, and (ii) alternative modeling through Cox proportional hazard analysis support our findings.

This research is a first wave study where data were collected on different countries’ time to lockdown, and is the first to provide large-scale empirical support for the suggestion that national CGIs, as well as governmental political ideological leaning, can led to material repercussions, for example, in terms of lives lost to the pandemic, and that these two factors are not actually value-neutral in terms of policy prescriptions, as some have argued (Converse, 2000; Knight, 2006). Specifically, the study draws on the literatures on CGIs and political ideology which acknowledge the shareholder versus stakeholder orientation at different levels, namely, at the societal and governmental levels, to provide a nuanced perspective on lockdown decisions, and more generally, on decisions that consider the tradeoff between safeguarding societal good versus protecting commercial interests. As such, the study contributes to the literature on CGIs since we theorize that the orientation of CGIs towards shareholders, versus stakeholders, influenced the lockdown decisions of governments. To-date, the literature on CGIs has mostly focused on how CGIs influence company strategies to enhance legitimacy, for example, that CGIs influence listings (Chenmanur & Fulghieri, 2006; Vaaler & Schrage, 2006), or corporate reputation (Coffee, 2002), but there exists a lacuna concerning how national CGIs influence governmental policy response to pandemics.

In addition, this study contributes to the literature on political ideology. Building on research which theorizes that a government’s political ideological inclination signals
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its social welfare protection versus capital protection priorities (Thorisdottir et al., 2007; Antonio & Brulle, 2011; Tellis et al., 2020), we provide evidence that governmental ideological leaning was not value-neutral in terms of policy prescriptions where it concerned the pandemic. Overall, the findings of this study may have implications for governmental decision-making since they indicate that societal and ideological biases should be put aside, and expert advice sought out to deal with emerging phenomena which are less understood.

Theoretical Background and Hypotheses

Research has shown that lockdown was effective at curbing the Covid-19 spread (Koh et al., 2020). This is because lockdown measures require some measure of social distancing, i.e., for citizens to stay at home and refrain from, or limit, social and economic activities outside the home (Prati & Mancini, 2021, p. 201), which would have lowered the effective reproduction rate of the virus (Haider et al., 2020). For example, some models estimated that, had some form of lockdown measures been introduced one week, two weeks, or even three weeks earlier in China, the number of COVID-19 cases could have been reduced by 66%, 86%, and 95%, respectively (Lai et al., 2020). Additionally, a report from the US suggested that 90% of the cumulative deaths could have been avoided had some form of lockdown measures been implemented two weeks earlier than they actually were (Jewell & Jewell, 2020; Koh et al., 2020).

Moreover, some other studies have focused on the general economy-wide costs of lockdowns and the impact on supply chains. For example, a study on Wuhan, China, modeled and estimated the direct and indirect economic losses on industries using the Input–Output model, focusing on meso-economic losses (You et al., 2020). Yet another study hypothesized and estimated that, should Tokyo be locked down for a month, the indirect effect on other regions through supply chain disruptions and demand shortages would be twice as large as the direct effect on Tokyo, leading to a loss of 5.2% of the country’s annual GDP (Inoue & Todo, 2020). This research on lockdowns indicates that there is a need to provide more nuanced perspective on lockdown decisions. Specifically, there is a need for studies to directly take into account considerations that factor into the decision-making tradeoff between safeguarding societal good versus protecting commercial interests.

The framework shown in Fig. 1 illustrates the theoretical argument supporting the research question, and the testable proposition, which have both been discussed in the introduction. In addition, this framework presents the main relationships that will be tested. Subsequently, in this section, we discuss the literature on CGIs and political ideology, and finally, we develop the arguments supporting our hypotheses 1 and 2, respectively.

CGIs, and Shareholder Vs. Stakeholder Societal Norms

In line with Aguilera and Jackson’s (2003) sociological approach that describes and explains variations in corporate governance among the different countries, we focus on national CGIs, which determine the social relations and institutional arrangements that shape who controls corporations within countries (p. 447). Our institutional approach explains firm level corporate governance practices

Fig. 1 Theoretical framework
in terms of institutional factors that shape how the different stakeholder group interests are defined (i.e., “socially constructed”) and represented across countries (Aguilera & Jackson, 2003). In other words, this theoretical model emphasizes how national models embody an institutional logic that drives the relationships between institutions and firm level actors, for example, how cross-national differences in CGIs can lead to national differences in property rights protection, workers' rights, and professional management. Therefore, by capturing cross-national diversity in CGIs in our model, we seek to provide a configurual framework on how the three key stakeholder groups, namely, capital, labor, and management, are regulated. By contrast, other approaches such as that offered by (Roe, 2008) offer a more agency-centered approach to actor relationships within the firm itself, and provide a useful view of how firms self-regulate.

The sociological view of institutions notes that society’s norms and expectations are reflected through its institutions, and national corporate governance institutions are no exception. National CGIs embody that country’s underlying norms and expectations as to how the corporation should be governed, i.e., as an economic entity whose purpose is to maximize shareholder value, or as a social institution whose purpose is to further the interests of the corporation itself by considering the interests of multiple stakeholders, including that of employees and the community (Capron & Guillén, 2009, p. 805). Such country mindsets set priorities between community welfare and business welfare, and scholars note that such priorities differ from one place to another (Witt, 2008). For example, social obligations are more important in countries such as Germany and Japan, whereas the interests of shareholders are rated more highly in the US and UK (Dore, 2000; Yoshikawa & Rasheed, 2009).

At the same time, differences in corporate governance institutions are persistent and enduring (Capron & Guillen, 2007). They are determined by a complex combination of that country’s history, power struggles, compromises, and happenstance (La Porta et al., 1999; Aguilera & Jackson, 2003; Schneper & Guillén, 2004; Capron & Guillén, 2009). For example, the USA’s national history of revolution against hierarchical, statist structures tends to discourage workers’ organizations and overly restrictive employment legislation (Garlington, 2014), and Americans may sometimes view such organizations as compromising the individual’s right to self-determination (Forbath, 1991; Lipset, 1996). In other words, in countries that advocate the shareholder-centered model, management’s ultimate contractual responsibility is the maximization of shareholder value or wealth (Schneper & Guillén, 2004). As Seely (1991) puts it, for such countries, “companies are not in the business to reward creditors, inspire devotion of their employees, win the favor of the communities in which they operate, or have the best products. These are all means to an end—making shareholders richer” (Seely, 1991, pp. 35–36). Thus, shareholder-oriented institutions facilitate the development of equity markets and the wide participation of individual shareholders, which in turn, increases political support for shareholder protection (La Porta et al., 2000). Conversely, in the stakeholder-centered model that some other countries follow, corporations are expected to avoid overt profit-maximizing risks, and to use up capital rather than to rely on destabilizing measures to society at large such as downsizing when their capabilities become misaligned with markets (Schneper & Guillén, 2004). In other words, in such countries the objective of the business organization is to broadly incorporate the concerns of other constituents, including that of employees, creditors, and the community at large (Seely, 1991; Dore, 2000).

Theories in the literature tend to emphasize that organizational survival and success depend upon the legitimacy judgements of evaluators (Johnson et al., 2006; Meyer & Rowan 1977), where legitimacy, broadly defined, is the “generalized perception or assumption that the actions of an entity are desirable, proper, or appropriate within some socially constructed system of norms, values, beliefs, and definitions.” (Suchman, 1995, p. 574). Lipset (1959) also notes that, the extent to which contemporary political systems, and entities, are deemed legitimate, depends in large measure upon the ways in which the key issues which have historically divided the society have been resolved satisfactorily. For example, some key issues that have confronted Western states over their course of development include the right of workers to bargain collectively in the economic sphere, as well as their continual struggles over the distribution of the national income (Lipset, 1959). Certainly, governments must also heed the societal norms and expectations underpinning their country’s corporate governance institutions, since they, like other social actors, are not exempt from legitimacy reassessments if they disregard these (La Porte & Metlay, 1996; Dahl, 1998; Wallner, 2008). As an example of how stakeholders will consider governments as legitimate or illegitimate depending on value-fit, the Weimar Republic is a good illustration of a failed government that was rejected by important constituents such as the army, civil service, and aristocratic classes, not simply because it was ineffective, but because its symbolism and basic values negated their own (Lipset, 1959).

Political Ideology and Decision-Making

An individual’s political ideology is defined as that individual’s implicit as well as explicit preferences for values that relate to tradition, conformity, order, stability, and hierarchy (Jost, 2006; Jost et al., 2008, 2009). For example, in the United States where the dominant way of classifying
ideologies is in terms of two opposing modes of value systems, either conservatism or liberalism, conservatives have a higher need for closure, are more accepting of inequality, and are more disciplinary towards norm violators as compared to liberals (Jost, 2006; Jost et al., 2009). Most social scientists regard these opposing value systems as a left–right distinction, and note that this is the most powerful and parsimonious way of classifying political attitudes (e.g., Jost, 2006; Thorisdóttir et al., 2007). Other research has also established that this general left–right dimension exists across different cross-national contexts, and in many cases, that it represents a continuum of value systems in terms of ideology (Durriz et al., 2005; Malka et al., 2014). Finally, individuals also identify with particular parties along this continuum (partisanship). This is because group affiliation is essential to human beings’ sense of self, and since individuals instinctively think of themselves as representing broad ideological categories, political parties will also form along these lines (Lipset & Rokkan, 1967; Iyengar et al., 2019). Certainly, the median citizen may sit close to the middle, rather than on the ends of this continuum on most issues (Fiorina et al., 2008), and we do not dispute that political ideological orientation for many countries is represented by different political parties with varying manifestos (e.g., socialist, centrist, etc.). Nevertheless, political parties tend to range themselves along a left–right continuum; they represent broad ideological categories and they package diverse issue positions into ideological bundles in order to attract supporters (Malka et al., 2019; Herrmann & Döring, 2021a). Therefore, political party ideology is viewed as a set of social values that align with the ideology of a group of individuals.

Additionally, research within political psychology has also demonstrated the universality of key psychological sources of ideological constraint on the left–right dimension, noting that cultural and economic conservatism tend to have similar origins in a set of related psychological attributes (Jost et al., 2003; Malka et al., 2019). In other words, cultural and economic forms of conservatism are similarly rooted in personal underlying needs to reduce uncertainty and manage threat, and therefore, cultural and economic conservatism tend to go hand-in-hand for most people most of the time, because the needs for security and certainty attract individuals to a worldview (and corresponding political party) that best maintains traditional modes of conduct (cultural conservatism) and resists destabilization of the prevailing economic hierarchy (economic conservatism) (Jost, 2006; Malka et al., 2019). Therefore, research finds that the expression of political conservatism tends to be associated with perpetuating the status quo and preserving inequality (Jost et al., 2003). Not surprisingly, one common value in political party manifestos, which derive from individual values, is the party’s attitude towards capitalism. In fact, in the US, the conservative party is ideologically committed to capitalism and private initiative as opposed to state intervention, as well as unrestricted competition among individuals and corporations (Van Hiel & Mervielde, 2004; Thorisdóttir et al., 2007). Moreover, conservatives tend to view the corporation as an economic entity whose purpose is to serve shareholder interests. By contrast, democrats, more than conservatives, tend to concern themselves about the welfare and rights of employees and the community because they view the corporation as a social institution whose purpose is to serve broader stakeholder interests. Therefore, unsurprisingly, research in different countries has shown a direct relationship between a political party’s positioning on the left–right continuum and their shareholder versus stakeholder orientation, in that, the more right-leaning the party, the more the party’s shareholder orientation (Van Hiel & Mervielde, 2004; Thorisdóttir & Jost, 2011; Boffo et al., 2018).

Finally, the literature also shows that political ideology affects decision-making. Since ideology and partisanship are aligned (Iyengar et al., 2019), sorted partisans will display particular value preferences and dispositional tendencies that underlie their ideological convictions (Jost et al., 2008). In fact, researchers tend to envision political ideology as that which shapes decisions to adopt (or resist) particular practices or policies (Jost et al., 2003; Gupta et al., 2017). Thus, if we view political ideology as a form of motivated social cognition, and that it serves as a guide for action (Jost et al., 2003; Gupta et al., 2017), it can help to explain why people do what they do. Overall, researchers have acknowledged that political ideology causes behavior channeling, as people explicitly favor choices that align with their values (England, 1967), and in fact that they are engaging in perceptual filtering when they interpret stimuli in ways that suit these values, perceiving instrumental merits in choices which are congruent with their belief systems (England, 1967; Kunda, 1990; Gupta et al., 2017, 2018).

In addition, the literature has established that political ideology affects governmental decision-making behavior. For example, consistent with the hypothesis that persons on the socio-political right are more prone to rely on simple evaluative rules in interpreting policy issues, Tetlock (1983) found that conservative senators tended to present policy issues in less integratively complex ways as opposed to their liberal or moderate colleagues, and that this also affected their voting patterns. For political elites such as government officials and the judiciary, scholars have also demonstrated how political ideology substantively affects their cognitive patterns and behavior (Tetlock, 1983; Tetlock et al., 1985). For example, in their study of the slavery debate in Antebellum America, Tetlock et al. (1994) found that political ideological leaning affected how the different politicians approached the debate in terms of cognitive style, as well
as how this affected their policy preferences. Additionally, other research has shown that U.K. company law was shaped at decisive points in history by the ideological perspectives of the Labour Party (Clift et al., 2000; Aguilera & Jackson, 2010), and in China, that governmental political orientation influenced the field of corporate environmental reporting (Situ et al., 2021). As such, there is significant evidence to show that political ideology does affect the decision-making, and the behaviors, of politicians (Tetlock, 1983; Tetlock et al., 1985, 1994), and thus it is likely that they would act on the basis of their filtered impressions woven by their respective political ideological cognitive bases (Jost et al., 2003).

**Government Legitimacy Concerns and Lockdown Response**

The main hypothesis suggests that the more shareholder-oriented the corporate governance institutions in a country, the longer it took to lockdown in response to the threat of Covid-19. This hypothesis is supported by the arguments below.

Due to the urgent situation created by Covid-19, governments around the globe had to act with little information because Covid-19 was a new disease and there were uncertainties about its nature. Literature on bounded rationality (Cyert & March, 1963) posits that when there is uncertainty, environmental factors influence which aspects of the situation that decision-makers attend to. Given their constraints of time and other limited resources, decision-makers will direct their attention to environmental stimuli associated with highly valued issues which serve to enhance their interests and identities (Fiske & Taylor, 1991; Ocasio, 1997). For example, when there are significant events that affect the public, government decision-makers often respond to societal concerns (Hoffman & Ocasio, 2001). This is because government decisions should align with the beliefs of affected dominant stakeholders and the public—failure to receive acceptance from these actors will compromise the goals and the interests of the government by eroding society’s trust in it (Wallner, 2008).

Legitimacy involves confidence among the public that government’s decisions are desirable, proper, and appropriate (Dahl, 1998). When authority rests upon legitimacy, citizens tend not to question government decisions. Also, decisions that receive public approval are more likely to produce results because the public would commit to implementation (Tost, 2011). By contrast, decisions deemed illegitimate can damage the party in power during implementation and erode its status before other social actors (Wallner, 2008). The literature on the process of legitimizing an entity supports that at times individuals re-assess the legitimacy of entities in the light of new information (Tost, 2011). Institutional theorists argue that major events can act as jolts to the institutional system (Greenwood et al., 2002). Violations of social expectations as a result of a major event will alert individuals that their judgements about an entity are no longer reliable, which, in turn, will affect their subsequent behavior towards it (Tost, 2011). Violations may trigger mistrust and a reassessment of the legitimacy of the government; as a consequence, individuals are likely to protest and punish the government with their vote in the next election. Consequently, it is possible that government actions to deal with the Covid-19 threat, and which happen to be at odds with societal norms and expectations would trigger a reassessment of the legitimacy of government. For example, anecdotal evidence from news reports suggest that the government in the UK avoided a fast response because this was deemed to entail risks to their reputation (Stephens, 2020). Therefore, to prevent legitimacy reassessments of their position of authority, governments will be motivated to act in accordance with societal norms and expectations, as approximated by national CGIs’ shareholder or stakeholder orientation.

It is natural to expect that in most countries the public and other stakeholder representatives will be concerned about the loss of life, however, we argue that in a country with greater pro-social norms that support the promotion of general welfare in society, the public, on average, may have higher expectations on the government to take action to reduce the impact of Covid-19 on public health, and be less concerned about the impact of the virus on business interests as compared to countries with shareholder-oriented norms. Therefore, a decision to delay lockdown might not receive support from such a public and stakeholder representatives supporting the interests of the society, but rather be more supported by a shareholder-oriented public and stakeholder representatives that support business interests. As we have discussed, within-country norms signaling social priorities on community welfare versus business tend to be captured in national corporate governance institutions. For more stakeholder-oriented countries, these corporate governance institutions would tend to support the development of entities with strong community-based orientations such as labor unions (Esping-Andersen, 1990), and in the event of policy measures that seem to promote capital interests, public suspicion might arise (La Porte & Metlay, 1996). By contrast, in more shareholder-oriented countries, CGIs support stakeholders that represent capital interests, such as business associations, among others. Also, as we have noted, shareholder-oriented institutions facilitate the development of equity markets and the wide participation of small shareholders, which would increase political support for shareholder protection (La Porta et al., 2000). For example, La Porta et al. (1998) have shown that countries with strong pro-shareholder corporate governance institutions tend to have a greater preponderance of private individuals owning shares and other financial instruments linked to companies.
which we argue, would make them more supportive towards shareholder rights (La Porta et al., 1998). Therefore, in such countries, a decision for closure may elicit a more negative response.

Consequently, we expect that in countries with more shareholder-oriented CGIs, decision-makers will take more time to understand how lockdown will affect the economy. By contrast, in countries with more stakeholder-oriented CGIs, decision-makers will act faster to lockdown as their priority may be to take actions that are in line with country expectations on social solidarity. Therefore, we expect that,

Hypothesis 1: The more shareholder-oriented the corporate governance institutions in a country, the longer the time to lockdown in response to the threat of Covid-19.

The Influence of Political Ideology on the Government’s Decision to Lockdown

The second hypothesis argues for a contingent relationship, where the more right-leaning the ideology of the government, the stronger the relationship between shareholder-oriented CGIs and the time to lockdown in response to Covid-19. Below, we present the supporting arguments.

When societal norms as indicated by national CGIs are more in line with the capital-orientation of a government with a more right-leaning ideology, the government may perceive that they have more discretion in responding to the Covid-19 threat because they may conclude that the shareholder-oriented public and strong stakeholder representatives are more concerned about the adverse economic impact of such response especially given their vested interests in the markets (La Porta et al., 2000). Through perceptual filtering, decision-makers’ values can operate explicitly by attending to supportive information, thus perceiving and justifying their actions to suit their values under the illusion of objectivity (England, 1967; Gupta et al., 2018). Such assessment may lead decision-makers to take more time to better evaluate the economic costs of lockdown and give businesses breathing space.

By contrast, when the public and the strong stakeholder representatives are more pro-social a more left-leaning government may react more swiftly to the Covid-19 threat since they will quickly discount the need to protect businesses in light of the threat to life. In general, their perception that economic costs are less important as compared to loss of life may be influenced by their ideology, because their risk assessment of the situation may discount the importance of capital (Jost et al., 2003; Van Hiel & Mervielde, 2004; Thorisdottir et al., 2007), and therefore, the costs associated with early lockdown. In addition, when the stakeholder-oriented public and strong stakeholder representatives are suspicious of governmental actions that seem to place the interests of capitalism above life, a more right-leaning government may be more constrained where it concerns delaying closure, since delay may trigger reassessment of the government’s legitimacy if delay is deemed to be at odds with societal norms (Tost, 2011).

The above discussion suggests that the more right-leaning the government, the effect of shareholder-oriented corporate governance institutions on the speed of lockdown response to the Covid-19 threat will be strengthened. Therefore, we expect that,

Hypothesis 2: The more right-leaning the ideology of the government, the stronger the relationship between shareholder-oriented CGIs and the time to lockdown in response to Covid-19.

Methods

Sample

To construct the sample for testing our hypotheses, we used data from the Oxford COVID-19 Government Response Tracker (OxCGRT) (Hale et al., 2020) to identify all the countries where the government had reported at least one verified case of Covid-19, and had enforced at least one containment (i.e., closure) policy. In addition, we gathered (i) information on the country’s quality of corporate governance from the Global Competitiveness Report, published by the World Economic Forum; (ii) information on governments’ political ideology from the Database of Political Institutions and the Herrmann and Döring Dataset (Herrmann & Döring, 2021b); (iii) demographic and macroeconomic country data from the World Bank Database; (iv) information on emerging markets from the following: the International Monetary Fund (IMF), the FTSE International Limited, MSCI, the S&P Global Ratings, the S&P Dow Jones and Russell Investments; and (v) information on authoritarian regimes from The Economist Intelligence Unit. We excluded China from our sample because being the first country to experience Covid-19, the Chinese government had to act on different information from the rest of the world. The final sample consisted of 125 countries: 38 European, 35 African, 28 Asian, 12 North American, 10 South American, and 2 Oceanian countries.

Dependent Variable

Days to Lockdown

We initially identified the date of the first verified case of Covid-19 in the country. Then, we defined the date of lockdown as the first date of imposition of a government-enforced mandatory containment or closure policy for limiting the spread of Covid-19 that would have a direct impact
on the country’s economy. Such policies were either (i) closure of workplaces; (ii) public transport; (iii) schools and universities; or (iv) enforcement of restrictions on movements. The days to lockdown variable was calculated as the difference between the date of lockdown and the date of the first verified case.

**Independent Variables**

**Corporate Governance Institution (CGI) Index**

To construct the CGI index, we drew on Aguilera and Jackson’s (2003) corporate governance framework to identify three dimensions of corporate governance: management, capital, and labor, which together specify the institutional mechanisms shaping cross-national variations in corporate governance. To measure these dimensions, we identified five indicators from the 2019 Global Competitiveness Report, published by the World Economic Forum. Specifically, we used the indicator, reliance on professional management, to capture the management dimension; the indicators of (i) shareholder-oriented governance and (ii) property rights protection, to capture the capital dimension; and the indicators of (i) flexibility of wage determination, and (ii) workers’ rights, to capture the labor dimension. The first, third, and fourth indicators (i.e., reliance on professional management, property rights protection, and flexibility of wage determination) are responses to survey questions taking values from 1 to 7, the second indicator (i.e., shareholder-oriented governance) is a score on the extent that governance supports shareholders, and ranges from 0 to 10. For all of those indicators high values indicate more shareholder-oriented corporate governance institutions. The last indicator (workers’ rights) is a score on the level of protection in comparison with internationally recognized core labor standards, and ranges from 0 to 100, with 100 representing high protection. Thus, high values indicate less shareholder-oriented corporate governance institutions. Consequently, to use this indicator we reversed the score. We then standardized (z-scored) all the indicators, and the average of the five standardized values was our CGI index. Factor analysis of these five indicators resulted in one factor, which indicates that these indicators capture related concepts.

**Moderator Variable**

**Government’s Political Ideology**

The government’s political ideology was defined as the ideology of the main governing political party. We first identified the main political party in the government in March 2020 for each country from the Database of Political Institutions. We then coded the government’s political ideology as an ordinal variable that takes five values: left, center-left, center, center-right, and right using information provided by the Herrmann and Döring Dataset (Herrmann & Döring, 2021b). Researchers have demonstrated that ideological terms such as ‘center,’ ‘left,’ and ‘right’ have consistent meaning across different countries and can be positioned on a continuum (Di Tella & MacCulloch, 2005).

**Control Variables**

We included controls for an array of factors that could directly or indirectly influence the government decision to enforce lockdown. To control for demographic factors which relate to the impact of Covid-19 on human life, we used population density. Population density is defined as the population divided by land area in terms of square kilometers of a country. More dense countries would face a faster spread of the virus, and as a result, governments may have had to respond faster. Furthermore, to control for economic factors which relate to the difficulty of the government being able to enforce such policies, we used GDP growth (i.e., the annual percentage growth rate of GDP). Countries with low economic growth rates might have to delay their response to Covid-19 to avoid further worsening of the economy. Moreover, to control for factors associated with connectivity to other countries, we use volume of air travelers passing through the country’s airports. Higher numbers of air travelers might indicate greater difficulty to lockdown due to the country’s higher dependency on international activity. The air travelers’ variable is defined as the ratio of the number of air passengers, both domestic and international, to the country’s population. All information was gathered from the World Bank Database. In addition, the emerging market variable captures the economic dependence of the country on developed markets. Due to such dependence, emerging market countries could suffer higher costs in case of lockdowns. The emerging market variable is an indicator variable that takes the value of one if the country is an emerging market, and zero otherwise. We classified a country as an emerging market if it has been classified as one by all of the following: the International Monetary Fund (IMF), the FTSE International Limited, MSCI, S&P Global Ratings, S&P Dow Jones, and Russell Investments. Additionally, to control for the political discretion of the government to impose such lockdown policies, we used an indicator variable (Authoritarianism) that takes the value of 1 if a country is governed by an authoritarian regime based on the classification by the Economist Intelligence Unit’s 2019 Democracy Index. Finally, to control for the availability of information on Covid-19, we used an indicator variable (Lockdown before pandemic declaration) that takes the value of 1 if the date of the lockdown (as defined above) was before the World Health Organization (WHO) had declared
the Covid-19 outbreak a global pandemic (11/03/2020), and zero otherwise.

**Analysis**

The dependent variable in this study counts days, and therefore, we employed negative binomial regression with robust standard errors (Cameron & Trivedi, 2013). Negative binomial regression was preferred over the Poisson regression, another regression technique commonly used to analyze count data, because it does not assume equality of conditional mean and variance, which our data does not support (mean = 10.96 and s.d = 15.290). The drawback of this method is that it does not allow for negative values (i.e., if the lockdown was enforced before the first verified case of Covid-19 in the country). To deal with this issue, we set these values to 1. Note that the results are robust when linear (OLS) regression was employed, which allows for negative values, however, this method does not control for the discreteness of the dependent variable (Cameron & Trivedi, 2013).

**Results**

Table 1 displays the descriptive statistics and pairwise correlations of our variables. Most variables correlate with the days to lockdown and exhibit the expected sign. To test the impact of multicollinearity on the estimation process, we calculated the variance inflation factors (VIFs) values and the condition indices (Hair, 2009). None of these measures supported the existence of multicollinearity among the independent variables. Specifically, the highest VIF was 1.84, which is well below 10 (Menard, 2008). In addition, the highest value of the condition index was 4.31, which is well below 30.

Table 2 shows the results of the negative binomial regression analysis. To simplify interpretation of the coefficient estimates of the negative binomial regression, we standardized all continuous variables. In Model 1, all the control variables are included to create the baseline model. In Model 2, the CGI Index is added, and in Model 3, the interaction term of CGI Index with the government’s political ideology is added to create the full model. As expected, in Model 1, most controls are significant and in the expected direction. Hypothesis 1 predicts that days to lockdown increase when CGIs are more shareholder-oriented. As shown in Model 2, the coefficient associated with CGI Index is positive (0.25) and significant ($p = 0.007$), which provides support for the hypothesis.

Hypothesis 2 predicts that the positive relationship between a more shareholder-oriented CGI Index and the time to lockdown will be strengthened the more right-leaning the government. The results in Model 3 show that the interaction term is positively related to time to lockdown (0.14) and significant ($p = 0.034$). Therefore, Hypothesis 2 is supported. Because we employed a nonlinear method to analyze the data, the coefficients of interaction term may not always represent the true interactions (Wiersema & Bowen, 2009). Thus, we analyzed the sign and statistical significance of the values of the moderator variable’s marginal effect on the relationships between the CGI Index and the time to lockdown over all the sample values of the model variable. The marginal effect of the CGI Index on the number of days to lockdown was positive (2.48) and significant ($p < 0.001$) when the ideology was more right (one standard deviation above the mean), whereas it was positive (0.64) but statistically insignificant ($p = 0.38$) when the ideology was more left (one standard deviation below the mean). Further, Fig. 2 displays the change in the time to lockdown as a function of the CGI Index at different levels of the government’s political ideology. When the ideology is more right, it intensifies the positive relationship between the CGI Index and the time to lockdown. The slope of the line when ideology is more left is positive but not significant. These findings provide additional support for hypothesis 2.

**Table 1** Correlations and descriptive statistics

|   | Mean    | S.D     | 1 | 2          | 3          | 4          | 5          | 6          | 7          | 8          |
|---|---------|---------|---|------------|------------|------------|------------|------------|------------|------------|
| 1 | Days to lockdown | 10.960  | 15.290 | 1          |            |            |            |            |            |            |
| 2 | CGI Index      | 0.008   | 0.550   | 0.393***   | 1          |            |            |            |            |            |
| 3 | Government’s Political Ideology | 2.976   | 1.066   | 0.418***   | 0.341***   | 1          |            |            |            |            |
| 4 | Population density | 206.586 | 658.693 | −0.054     | 0.334***   | 0.004      | 1          |            |            |            |
| 5 | GDP growth     | 3.442   | 1.979   | −0.181**   | −0.115     | −0.027     | 0.033      | 1          |            |            |
| 6 | Air travelers  | 0.997   | 1.397   | 0.266***   | 0.483***   | 0.091      | 0.358***   | −0.229**   | 1          |            |
| 7 | Emerging Market | 0.056   | 0.231   | 0.247***   | 0.034      | 0.169*     | −0.032     | 0.019      | −0.065     | 1          |
| 8 | Authoritarianism | 0.032   | 0.177   | −0.116     | 0.212**    | −0.082     | −0.031     | −0.190**   | 0.044      | −0.044     | 1          |
| 9 | Lockdown before pandemic declaration | 0.680   | 0.468   | 0.526***   | 0.428***   | 0.453***   | 0.085      | −0.127     | 0.172*     | 0.092      | 0.027     |

The number of observations is 125. * *, **, and *** represent significance at the 10%, 5%, and 1% levels, respectively (two-tailed tests)
Robustness Checks

While we have controlled for variables that may influence the governments’ decision to enforce the lockdown, given the wide range of such factors it is possible that we may have an omitted variable problem. In order to address this concern, we employed the coefficient stability approach of Oster (2019) to evaluate the robustness of our main results to omitted variables bias. However, this method has not yet been adapted for the negative binomial regression model, thus we employed Oster’s (2019) method in Model 3 of Table 2 but using OLS regression. Table 3 reports the results. The first column of Table 3 reports the OLS regression results, which are qualitatively the same as the results reported on Model 3 of Table 2. The second column presents the estimated coefficients of the variables in the hypothetical case that (i) the controlled variables and the omitted ones have the same effect on the coefficient of the variable in question (i.e., \( \delta = 1 \)); and (ii) the maximum \( R^2 \) that the inclusion of the omitted variable result is 1.3 times the \( R^2 \) of the estimated models, as per Oster’s (2019) recommendation. All the estimated coefficients are in the same directions as the ones reported in first column, therefore the OLS coefficients are stable. Finally, the third column reports the values of \( \delta \), i.e., how large would have to be the effect of the omitted variables in comparison to the observable variables in order to nullify the effect of the estimated variable (i.e., \( \beta = 0 \)). For instance, the effect of the omitted variables would need to have over 4.25 times the effect of the observable variables on the coefficient of the interaction term in order to bias the main results. Note that \( \delta \) values for all variables have absolute values greater that one, thus our estimates can be considered robust (Oster, 2019). In conclusion, assuming similar effects on the negative binomial analysis, the problem of omitted variables is unlikely to affect the results of this study.

In addition, to check whether the results are robust to alternative analyses, we employed the Cox (1972) proportional hazard model with robust standard errors. This method is particularly suitable for modeling data with timing events.
and the estimations are reliable for small samples such as the one in this study (Andersen et al., 1996); nevertheless, the interpretation of results is less straightforward. This method models the hazard of lockdown, therefore a positive coefficient estimate suggests a positive marginal impact on the hazard, and, hence, a shorter time to lockdown is expected. Similarly, a negative coefficient suggests a longer expected time to lockdown. The results presented in Table 4 are qualitatively similar to the ones reported in Table 2.

**Additional Analyses**

Our basic theoretical premise is that the time taken to respond to Covid-19 was influenced by governments’ legitimacy concerns. We implicitly investigate this premise by running the same negative binomial regression model with years to the next general election as a moderator variable. This variable is defined as the number of years that elapse between 2020 and the year of the next general election in the country. Data on the date of the next general election in the country were manually collected from the Global Elections Calendar of the National Democratic Institute. If our premise is correct, we expect that, the more distant the next general election, the less concerned the government should be about legitimacy, and therefore, the moderator should have a negative effect on the main relationship. The results are shown in Table 5. In Model 1, the coefficient estimate of moderation variable is negative (−0.12) and significant ($p = 0.043$), which provides additional support that the mechanism driving the observed relationships is the government’s legitimacy concerns.

**Discussion and Conclusion**

This study seeks to answer the research question, “for governments of different countries around the world, to what extent does the orientation towards the interests of shareholders influence the speed to lockdown as a means of protection against Covid-19?”. The findings suggest that the more shareholder-oriented the corporate governance institutions in a country, the longer the time to lockdown in response to the threat of Covid-19. Additional analysis shows that the closer the next general election, the stronger the main relationship, which provides evidence for the mechanism driving this relationship—the motive of the government to protect its legitimacy. Moreover, findings show that the more right-leaning the ideology of the government, the stronger the main relationship, which may support the idea that political ideology influences decision-makers’ attention.
and interpretation of information for assessing the cost of this protective action on commerce. Overall, the study provides a first proof of principle that CGIs and governmental political ideology matter in terms of response to the Covid-19 threat. Other research has focused on attributing differences in pandemic responses to reasons of female leadership (Sergent & Stajkovic, 2020), or cultural differences (Dheer et al., 2021).

The study draws on the literature on CGIs and political ideology, focusing on the notion of shareholder versus stakeholder priorities, to develop theory that sheds light into governments’ decisions to proceed with lockdown. This research has contributed to the literature on CGIs and political ideology in the following ways. First, this study suggests an extended role and importance of CGIs since the findings show that CGIs influence government action where business interests are involved. Prior studies have focused on company legitimacy, and for this reason, regard CGIs as institutions that influence company listings (Chemmanur & Fulghieri, 2006; Vaaler & Schrage, 2006), and corporate reputation (Coffee, 2002). For example, Vaaler and Schrage (2006) found that foreign firms sometimes list in markets with higher disclosure standards so as to signal their reputation and adherence to higher standards than that imposed by their country of origin. By contrast, this study draws on the literature on institutions and national norms to relate CGIs to government action ensuing from stakeholder expectations. Therefore, the study posits that besides corporations, governments also attend to CGIs to gain or maintain their legitimacy with social actors.

In addition, our theorizing contributes to extant research documenting that the efficacy and universality of “good” governance prescriptions are, in fact, subject to contextual contingencies (Aguilera et al., 2008; van Essen et al., 2013). A great deal of the literature on corporate governance implicitly takes for granted the context of the shareholder-oriented model, and holds this up as a baseline for that which is “normatively superior” (Aguilera & Jackson, 2010, p. 490). However, as many critics have noted, in the face of an unprecedented pandemic such as Covid-19, relying on shareholder-oriented approaches governed by a maximum of “rational” efficiency may not have been the best approach (Aboelenien et al., 2020; Saad-Filho, 2020; Gelter & Puaschunder, 2022).

Second, this study makes contribution to the literature on political ideology. Given that different country governments responded so differently to the Covid-19 threat, the idea that personal preferences in the form of political ideological

| Table 3 Robustness check— omitted variable bias | OLS Coefficients | Bias-adjusted coefficient | Value of δ in order to nullify the coefficients |
|-----------------------------------------------|------------------|----------------------------|-----------------------------------------------|
| Population density                            | −3.223***        | −4.122                     | −3.595                                        |
| GDP growth                                     | −1.540**         | −1.084                     | 3.004                                         |
| Air travelers                                  | 2.652**          | 1.785                      | 2.166                                         |
| Emerging Market                                | 2.747*           | 2.376                      | 5.913                                         |
| Authoritarianism                               | −15.594***       | −17.621                    | −9.853                                        |
| Lockdown before pandemic declaration           | 11.163***        | 5.186                      | 1.464                                         |
| Government’s Political Ideology                | 2.276*           | 1.006                      | 1.356                                         |
| CGI Index                                      | 3.407***         | 1.150                      | 1.414                                         |
| CGI Index x Government’s Political Ideology    | 2.460**          | 3.880                      | −4.253                                        |

This table reports the results of the coefficient stability approach of Oster (2019) for evaluating the robustness to omitted variables bias. The first column reports the OLS regression results. The second column reports the estimated coefficients of the variables in the hypothetical case that: (i) the controlled variables and the omitted ones have the same effect on the coefficient of the variable in question (i.e., δ = 1); and (ii) the maximum R² that the inclusion of the omitted variable result is 1.3 times the R² of the estimated models (i.e., assumed maximum R² is 0.617, given that the R² of OLS model is 0.475). The third column reports the values of δ, i.e., how large would have to be the effect of the omitted variables in comparison to the observable variables in order to nullify the effect of the estimated variable (i.e., β = 0). The number of observations is 125. Robust standard errors are reported in parenthesis. *, **, and *** represent significance at the 10%, 5%, and 1% levels, respectively (two-tailed tests).
leaning might be a contingent factor influencing the decision-making choices of political elites (Conn et al., 2020; Watts, 2020) is an insight that merits attention, especially when decisions about broader societal good are undertaken. As we have discussed, the government’s political ideological inclination signals its social welfare protection versus capital protection priorities (Thorisdottir et al., 2007; Antonio & Brulle, 2011; Tellis et al., 2020), and as a result, ideological biases, through perceptual filtering, intervene in the decision-making process regarding lockdown. Therefore, theorizing how government ideological biases interact with societal shareholder/stakeholder priorities, provides the base to study decisions that weight public good versus costs to businesses. In addition, governmental decision-making with regard to pandemics, which have potential implications for business, have not yet been substantively examined within the boundaries of political ideology.

Finally, the study has implications for practice. The study shows that complying with the principles underlying shareholder-oriented CGIs when deciding about lockdown might have been a less appropriate choice (Adhanom, 2020; Saad-Filho, 2020; Gelter & Puaschunder, 2022). Moreover, such approach coupled with ideological biases in favor of shareholders could have had more devastating outcomes since they could further delay lockdown. This result may have implications for governmental decision-making since it suggests that legitimacy concerns and ideological biases should be put aside when dealing with not well understood, wide-reaching phenomena that need urgent measures, such as pandemics. Therefore, this study advocates that more nuanced strategy needs to be calibrated according to the context (Aguilera et al., 2008; Aguilera & Jackson, 2010), as well as the exigency that is being faced. Given that the literature acknowledges the propensity of governments to demonstrate legitimacy to serve their own interests, the scene surrounding the first phase of the pandemic indicates that governments may need to compensate for their self-serving biases by opening up to independent expert advice.

An extended implication of our study is that, the shareholder-oriented slant of CGIs could be better optimized. The shareholder-oriented view of corporate governance prescribes responsibility as not being focused on right or

| Table 4 Robustness check— Cox regression on the days to lockdown |
|-------------|-------------|-------------|
| Population density | 0.320*** | 0.349*** | 0.355*** |
| (0.068) | (0.063) | (0.065) |
| GDP growth | 0.058 | 0.073 | 0.062 |
| (0.068) | (0.071) | (0.070) |
| Air travelers | −0.342** | −0.233 | −0.256 |
| (0.169) | (0.169) | (0.178) |
| Emerging Market | −0.806** | −0.843*** | −0.846** |
| (0.352) | (0.389) | (0.403) |
| Authoritarianism | 0.867** | 1.152** | 1.109** |
| (0.399) | (0.468) | (0.467) |
| Lockdown before pandemic declaration | −1.698*** | −1.583*** | −1.581*** |
| (0.294) | (0.299) | (0.293) |
| Government’s Political Ideology | −0.221** | −0.166* | −0.194** |
| (0.087) | (0.087) | (0.085) |
| CGI Index | −0.228** | −0.233** | −0.164** |
| (0.104) | (0.101) | (0.071) |
| CGI Index x Government’s Political Ideology | 125 | 125 | 125 |
| Number of Observations | 0.076 | 0.079 | 0.081 |
| Pseudo $R^2$ | −453.014 | −451.626 | −450.657 |
| Log likelihood | 99.130*** | 108.680*** | 108.011*** |
| Chi-square value | 108.680*** | 108.011*** |

This table reports the coefficients estimated by Cox proportional hazard regression. The dependent variable is the Hazard ratio which indicates the odds of forcing a lockdown. CGI Index is the Corporate governance institution index which is calculated as the average of the following standardized five indicators: (i) reliance on professional management; (ii) shareholder-oriented governance; (iii) property rights protection; (iv) flexibility of wage determination; (v) (inverted) workers’ rights. High values of CGI Index correspond to more shareholder-oriented corporate governance institutions. Government’s Political Ideology is an ordinal variable that takes five values: left, center-left, center, center-right, and right. Robust standard errors are reported in parenthesis. ‘*’ , ‘**’, and ‘***’ represent significance at the 10%, 5%, and 1% levels, respectively (two-tailed tests)
The role for business responsibility is allocated in these systems of capitalism across the globe have prepared for, the fact that we need to explore more thoroughly how different them with more ‘humanistic’ narratives—emanating from inside out of firms, rather than outside in—that privilege and increases of benefits (Pirson, 2020). However, it may be that we need to make a conscious and high-level break with ‘economistic’ narratives emphasizing extreme forms of competition and profit maximization, replacing and transcending them with more ‘humanistic’ narratives—emanating from the inside out of firms, rather than outside in—that privilege wider social engagements with wellbeing (Crane & Calvard, 2020; Pirson, 2020). The findings of this study point to the fact that we need to explore more thoroughly how different systems of capitalism across the globe have prepared for, and dealt with, the challenges of the pandemic, and what role for business responsibility is allocated in these systems to address social demands and the needs of wider society (Crane & Matten, 2020, p. 4).

This study has some limitations which we discuss below. In this study, we do not directly measure elements of the decision-making process, such as the availability of information, and this may lead to potential erroneous conclusions. We note, however, that capturing decision-making processes at high levels of government is extremely difficult, since much of this information is classified. Nevertheless, our additional analyses on time to the next general election provide evidence of the mechanism driving the hypotheses, and may provide some assurance for our theory, that, through their policy choice on business shutdowns, governments seek to protect their legitimacy. We recommend that researchers employ interviews with government officials to supplement our key quantitative results. In addition, we recognize that we cannot explicitly control for all potential variables that could influence the time to lockdown, such as the lack of resources that relate to hospital beds or doctors, the wide dependence of the population on the informal economy, or cultural differences that could result in less infections, for example, for certain countries in Asia, cultural habits of putting on face masks in public places (Tellis et al., 2020). Nevertheless, the effects of our explanatory variable are robust to the inclusion of our control variables (see Table 2), and also, robustness analyses show that omitted variables do not have material influence on the findings, which lend support to our hypotheses. Finally, we recognize that in many countries political party manifestos are diverse, and therefore, positioning political parties on a left–right continuum may be a simplistic approach, despite the fact that studies have found this classification to be consistent over time (Herrmann & Döring, 2021a). As a result, exploring other political party classification frameworks in the context of Covid-19 lockdowns may reveal new insights about government decision-making.

The idea that decisions to combat the pandemic were influenced by government concerns about the effects of lockdown on firms, raises questions about the core purpose of the firm and its relation with society. Crane and Matten (2020) note that the pandemic could signal the end of instrumental perspectives on the firm, for example, that for firms “good ethics makes good economics” (Suddaby & Greenwood, 2005, p. 48). Therefore, a new social compact is needed to address the systemic problems that grand challenges, such as pandemics, pose. By extending this study to the organization level, a number of intriguing questions that could enlighten this debate could be investigated, such as, ‘what action have firms taken to protect their employees; to what extent have legitimacy concerns and political ideology affected these decisions; and how effective were these actions?’ Answers to these questions may provide insights on the way forward on how to develop systems that extend

### Table 5 Additional analysis—number of years to next elections

| Variable                                      | Model 1          |
|-----------------------------------------------|------------------|
| Constant                                      | 0.932***         |
| Population density                            | −0.337***        |
| GDP growth                                    | −0.107*          |
| Air travelers                                 | 0.108            |
| Emerging Market                               | 0.553**          |
| Authoritarianism                              | −1.551***        |
| Lockdown before pandemic declaration          | 1.602***         |
| Government’s Political Ideology               | 0.191***         |
| Years to next elections                       | 0.302***         |
| CGI Index                                     | 0.220*           |
| CGI Index x Years to next elections           | −0.121**         |
| Number of Observations                        | 125              |
| Pseudo $R^2$                                  | 0.145            |
| Log likelihood                                | −375.375         |
| Chi-square value                              | 299.559***       |

This table reports the coefficient estimated in Negative Binomial regression on the number of days between the date of the first verified Covid-19 case and the date of lockdown (dependent variable). CGI Index is the Corporate governance institution index which is calculated as the average of the following standardized five indicators: (i) reliance on professional management; (ii) shareholder-oriented governance; (iii) property rights protection; (iv) flexibility of wage determination; (v) (inverted) workers’ rights. High values of CGI Index correspond to more shareholder-oriented corporate governance institutions. Years to next elections is the number of years that elapse between 2020 and the year of the next general election in the country.
the responsibilization role (Shamir, 2008) of firms in society. For example, Herzog (2019) proposes ‘total integrated situations’ by aligning regulations, incentives, and responsibilities that extend beyond duties to customers to explicitly address the prevention of systemic societal harms (Chow & Calvard, 2020). A pluralistic approach that recognizes multiple pro-tanto moral obligations (Kahn, 2016), rather than a singular focus on profits and customer welfare, will certainly lead us to different conclusions on how different actors should be mobilized and responsibilized for mitigating unprecedented risk (Aboelenien et al., 2020).

## Declarations

### Conflict of Interest

No potential conflict of interests.

### Research Involving Human Participants and/or Animals

NA.

### Informed Consent

NA.

## References

Aboelenien, A., Arsel, Z., & Cho, C. (2020). Passing the buck vs sharing responsibility: The roles of government, firms and consumers in marketplace risks during COVID-19. *Journal of the Association for Consumer Research*. https://doi.org/10.1086/711733

Adhanom, T. (2020). WHO Director-General’s opening remarks at the media briefing on COVID-19—21 August 2020. *World Health Organization*. Retrieved from https://www.who.int/director-general/s-openings/who-director-general-s-opening-remarks-at-the-media-briefing-on-covid-19---21-august-2020

Aguilera, R. V., Filatotchev, I., Gospel, H., & Jackson, G. (2008). An organizational approach to comparative corporate governance: costs, contingencies, and complementarities. *Organization Science, 19*(3), 475–492. https://doi.org/10.1287/orsc.1070.0322

Aguilera, R. V., & Jackson, G. (2003). The cross-national diversity of corporate governance: Dimensions and determinants. *Academy of Management Review, 28*(3), 447–465. https://doi.org/10.5465/amr.2003.10196772

Aguilera, R. V., & Jackson, G. (2010). Comparative and international corporate governance. *Academy of Management Annals, 4*(1), 485–556. https://doi.org/10.5465/19416520.2010.495525

Andersen, P. K., Bentzon, M. W., & Klein, J. P. (1996). Estimating the multiple pro-tanto moral obligations (Kahn, 2016), rather than a singular focus on profits and customer welfare, will certainly lead us to different conclusions on how different actors should be mobilized and responsibilized for mitigating unprecedented risk (Aboelenien et al., 2020).

Capron, L., & Guillen, M. (2007). National governance systems, stakeholder power, and post-acquisition dynamics. *Academy of Management Proceedings, 2007*(1), 1–6. https://doi.org/10.5465/ambpp.2007.26523619

Capron, L., & Guillén, M. (2009). National corporate governance institutions and post-acquisition target reorganization. *Strategic Management Journal, 30*(8), 803–833. https://doi.org/10.1002/smj.768

Chennamuri, T. J., & Fulghieri, P. (2006). Competition and cooperation among exchanges: A theory of cross-listing and endogenous listing standards. *Journal of Financial Economics, 82*(2), 455–489. https://doi.org/10.1016/j.jfineco.2005.06.008

Chow, D. Y. L., & Calvard, T. (2020). Constrained morality in the professional work of corporate lawyers. *Journal of Business Ethics*. https://doi.org/10.1007/s10551-020-04634-x

Clift, B., Gamble, A., & Harris, M. (2000). The labour party and the company. In J. Parkinson, A. Gamble, & G. Kelly (Eds.), *The political economy of the company*. Oxford: Hart.

Coffee, J. C. (2002). Racing towards the Top? The impact of cross-listings and stock market competition on international corporate governance. *Columbia Law Review, 102*(7), 1757–1831. https://doi.org/10.2307/1123661

Conn, D., & Lewis, P. (2020, 12 April 2020). Documents contradict UK Government stance on Covid-19. Herd Immunity. *The Guardian*. Retrieved from https://www.theguardian.com/world/2020/apr/12/documents-contradict-uk-government-stance-on-covid-19-herd-immunity

Converse, P. E. (2000). Assessing the capacity of mass electorates. *Annual Review of Political Science, 3*(1), 331–353. https://doi.org/10.1146/annurev.polisci.3.1.331

Cookson, J. A., Engelberg, J. E., & Mullins, W. (2020). Does partisan shape investor beliefs? Evidence from the COVID-19 pandemic. *The Review of Asset Pricing Studies, 10*(4), 863–893. https://doi.org/10.1093/raps/raaa018

Cox, D. R. (1972). Regression models and life-tables. *Journal of the Royal Statistical Society, 34*(2), 187–220.

Crane, A., & Matten, D. (2020). COVID-19 and the future of CSR research. *Journal of Management Studies*. https://doi.org/10.1111/joms.12642

Cyr, R. M., & March, J. G. (1963). A behavioral theory of the firm. Prentice-Hall.

Dahl, R. A. (1998). *On democracy*. Yale University Press.

Dheer, R. J. S., Egri, C. P., & Treviño, L. J. (2021). A cross-cultural exploratory analysis of pandemic growth: The case of COVID-19. *International Business Studies, 52*(9), 1871–1892. https://doi.org/10.1057/s41267-021-00455-w

Di Tella, R., & MacCulloch, R. (2005). Partisan social happiness. *The Review of Economics and Statistics, 72*(2), 367–393. https://doi.org/10.1111/j.1467-93X7.2005.00336.x

Dore, R. (2000). *Stock market capitalism: welfare capitalism: Japan and Germany versus the Anglo-Saxons*. Oxford University Press.

Duriez, B., Van Hiel, A., & Kossowska, M. (2005). Authoritarianism and social dominance in Western and Eastern Europe: The importance of the sociopolitical context and of political interest and involvement. *Political Psychology, 26*(2), 299–320. https://doi.org/10.1111/j.1467-9221.2005.00419.x

Dutt, P. (2020). Economic effects of coronavirus lockdowns are staggering—but health recovery must be prioritised. *The Conversation*.

Ellyatt, H. (2020). Germany “is still at the beginning of the epidemic” despite low death rate, health body warns. *CNBC*. Retrieved from https://www.cnbc.com/2020/04/06/germany-is-still-at-the-beginning-of-the-epidemic-health-body.htm

England, G. W. (1967). Personal value systems of american managers. *Academy of Management Journal, 10*(1), 53–68. https://doi.org/10.5465/25524
Esping-Andersen, G. (1990). *The three worlds of welfare capitalism*. Wiley.

Fiorina, M. P., Abrams, S. A., & Pope, J. C. (2008). Polarization in the American Public: Misconceptions and misreadings. *The Journal of Politics*, 70(2), 556–560. https://doi.org/10.1017/s00223816080050x

Fiske, S. T., & Taylor, S. E. (1991). *Social cognition* (2nd ed.). McGraw-Hill.

Forbath, W. E. (1991). *Law and the shaping of the American labor movement*. Harvard University Press.

Garlington, S. B. (2014). Value orientations of social welfare policy structures. *International Journal of Social Welfare*, 23(3), 287–295. https://doi.org/10.1111/jsw.12056

Gelter, M., & Puaschunder, J. (2022). COVID-19 and Comparative Corporate Governance. *Journal of Corporate Law*.

Graham-Harrison, E. (2020, 18 Mar 2020). What coronavirus lockdowns have meant around the world. *The Guardian*. Retrieved from https://www.theguardian.com/world/2020/mar/18/what-a-coronavirus-lockdown-mean-might-for-london

Greenwood, R., Suddaby, R., & Hining, C. R. (2002). Theorizing change: The role of professional associations in the transformation of institutionalized fields. *Academy of Management Journal*, 45(1), 58–80. https://doi.org/10.5465/0006285

Gupta, A., Briscoe, F., & Hambrick, D. C. (2017). Red, blue, and purple firms: Organizational political ideology and corporate social responsibility. *Strategic Management Journal*, 38(5), 1018–1040. https://doi.org/10.1002/smj.2550

Gupta, A., Briscoe, F., & Hambrick, D. (2018). Evenhandedness in resource allocation: Its relationship with CEO ideology, organizational discretion, and firm performance. *Academy of Management Journal*, 61(5), 1848–1868. https://doi.org/10.5465/amj.2016.1155

Haider, N., Osman, A. Y., Gadzekpo, A., Akipede, G. O., Asogun, D., Ansumana, R., Lessells, R. J., Khan, P., Hamid, M. M. A., Yeooha-Manu, D., Mboera, L. S., Shayo, E. H., Mmbaga, B. T., Urassa, M., Musoke, D., Kapata, N., Ferrand, R. A., Kapata, P. C., Istigler, F., et al. (2020). Lockdown measures in nine sub-Saharan African countries. *BMJ Global Health*, 5(10), e003319. https://doi.org/10.1136/bmjgh-2020-003319

Hair, J. F. (2009). *Multivariate data analysis*. New Delhi: Pearson Education.

Hale, T., Webster, S., Petherick, A., Phillips, T., & Kira, B. (2020). *Oxford COVID-19 Government Response Tracker*. Blavatnik School of Government.

Herrmann, M., & Döring, H. (2021a). Party positions from Wikipedia classifications of party ideology. *Political Analysis*. https://doi.org/10.1017/pan.2021.28

Herrmann, M., & Döring, H. (2021b). Replication data for: Party Positions from Wikipedia classifications of party ideology. Retrieved from: https://doi.org/10.7910/DVN/1H7Z1U

Herzog, L. (2019). Professional ethics in banking and the logic of “Integrated Situations”: Aligning responsibilities, recognition, and incentives. *Journal of Business Ethics*, 156(2), 531–543. https://doi.org/10.1007/s10551-017-3562-y

Hoffman, A. J., & Ocasio, W. (2001). Not all events are attended equally: Toward a middle-range theory of industry attention to external events. *Organization Science*, 12(4), 414–434. https://doi.org/10.1287/orsc.12.4.414.10639

Inoue, H., & Todo, Y. (2020). The propagation of economic impacts through supply chains: The case of a mega-city lockdown to prevent the spread of COVID-19. *PLOS ONE*, 15(9), e0239251. https://doi.org/10.1371/journal.pone.0239251

Iyengar, S., Leukes, Y., Levendusky, M., Malhotra, N., & Westwood, S. J. (2019). The origins and consequences of affective polarization in the United States. *Annual Review of Political Science*, 22(1), 129–146. https://doi.org/10.1146/annurev-polisci-051117-073034

Jewell, B., & Jewell, N. (2020). The huge cost of waiting to contain the pandemic. *The New York Times*. Retrieved from https://www.nytimes.com/2020/04/14/opinion/covid-social-distancing.html

Jost, J. T. (2006). The end of the ideology. *American Psychologist*, 61(7), 651–670. https://doi.org/10.1037/0003-066x.61.7.651

Jost, J. T., Federico, C. M., & Napier, J. L. (2009). Political ideology: Its structure, functions, and elective affinities. *Annual Review of Psychology*, 60(1), 307–337. https://doi.org/10.1146/annurev. psych.60.110707.163600

Jost, J. T., Glaser, J., Kruglanski, A. W., & Sulloway, F. J. (2003). Political conservatism as motivated social cognition. *Psychological Bulletin*, 129(3), 339–375. https://doi.org/10.1037/0033-2909.129.3.339

Jost, J. T., Nosek, B. A., & Gosling, S. D. (2008). Ideology: Its resurgence in social, personality, and political psychology. *Perspectives on Psychological Science*, 3(2), 126–136. https://doi.org/10.1111/j.1745-6916.2008.00070.x

Kahn, E. (2016). Poverty, injustice and obligations to take political action. In H. P. Gaisbauer, G. Schweiger, & C. Sedmak (Eds.), *Ethical issues in poverty alleviation* (pp. 209–224). Springer International Publishing.

Karateayev, V. A., Anand, M., & Bauch, C. T. (2020). Local lockdowns outperform global lockdown on the far side of the COVID-19 epidemic curve. *Proceedings of the National Academy of Sciences*, 117(39), 24575–24580. https://doi.org/10.1073/pnas.2014385117

Knight, K. (2006). Transformations of the concept of ideology in the twentieth century. *American Political Science Review*, 100(4), 619–626. https://doi.org/10.1017/S0003055406062502

Koh, W. C., Alikhan, M. F., Koh, D., & Wong, J. (2020). Containing COVID-19: Implementation of early and moderately stringent social distancing measures can prevent the need for large-scale lockdowns. *Annals of Global Health*. https://doi.org/10.5334/ajo.2969

Kunda, Z. (1990). The case for motivated reasoning. *Psychological Bulletin*, 108(3), 480–498. https://doi.org/10.1037/0033-2909.108.3.480

La Porta, R., Lopez-De-Silanes, F., & Shleifer, A. (1999). Corporate ownership around the world. *The Journal of Finance*, 54(2), 471–517. https://doi.org/10.1111/0022-1082.00115

La Porta, R., Lopez-de-Silanes, F., Shleifer, A., & Vishny, R. W. (1998). Law and Finance. *Journal of Political Economy*, 106(6), 1113–1155. https://doi.org/10.1086/250042

La Porta, R., Lopez-de-Silanes, F., Shleifer, A., & Vishny, R. (2000). Investor protection and corporate governance. *Journal of Financial Economics*, 58(1), 3–27. https://doi.org/10.1016/S0304-405X(00)00065-9

La Porte, T. R., & Metlay, D. S. (1996). Hazards and institutional trustworthiness: Facing a deficit of trust. *Public Administration Review*, 56(4), 341–347. https://doi.org/10.2307/976375

Lai, S., Ruktanonchai, N. W., Zhou, L., Prosper, O., Luo, W., Floyd, J. R., Wesołowski, A., Santillana, M., Zhang, C., Du, X., Yu, H., & Tatem, A. J. (2020). Effect of non-pharmaceutical interventions for containing the COVID-19 outbreak in China. *medRxiv*. https://doi.org/10.1101/2020.03.03.20029843

Li, A., Chiu, S.-C., Kong, D. T., Cropanzano, R., & Ho, C.-W. (2021). How CEOs respond to mortality salience during the COVID-19 pandemic: Integrating terror management theory with regulatory focus theory. *Journal of Applied Psychology*, 106(8), 1188–1201. https://doi.org/10.1037/apl0000956

Lipset, S. (1996). American exceptionalism: A double-edged sword, 322.
Lipset, S. (1959). Some social requisites of democracy: economic development and political legitimacy. *American Political Science Review, 53*(1), 69–105. https://doi.org/10.2307/1951731

Lipset, S., & Rokkan, S. (1967). *Party systems and voter alignments: Cross-national perspectives*. Free Press.

Luce, E. (2020). Inside Trump’s coronavirus meltdown. *Financial Times*. Retrieved from https://www.ft.com/content/977dc7e6-940b-11ea-9c3d-37f1e28b67ed

Malka, A., Lelkes, Y., & Soto, C. J. (2019). Are cultural and economic conservatism positively correlated? A large-scale cross-national test. *British Journal of Political Science, 49*(3), 1045–1069. https://doi.org/10.1017/s0007123417000072

Malka, A., Soto, C. J., Inzlicht, M., & Lelkes, Y. (2014). Do needs for security and certainty predict cultural and economic conservatism? A cross-national analysis. *Journal of Personality and Social Psychology, 106*(6), 1031–1051. https://doi.org/10.1037/a0036170

March, J. G., & Olsen, J. P. (2005). *Elaborating the “new institutionalism”*. Oslo: ARENA.

Menard, S. (2008). *Applied logistic regression analysis*. Thousand Oaks, CA: Sage.

Ocasio, W. (1997). Towards an attention-based view of the firm. *Administrative Science Quarterly, 42*(1), 187–206. https://doi.org/10.1177/0001839297042001002

Oster, E. (2019). Unobservable selection and coefficient stability: Theoretical and empirical perspectives. *Journal of Business Ethics*, (5), 785–811. https://doi.org/10.1007/s10553-020-04426-3

Oster, E. (2019). Unobservable selection and coefficient stability: Theory and evidence. *Journal of Business & Economic Statistics, 37*(2), 187–204. https://doi.org/10.1080/07350015.2016.1227711

Oster, E. (2019). Unobservable selection and coefficient stability: Theoretical and empirical perspectives. *Journal of Business Ethics*, (5), 785–811. https://doi.org/10.1007/s10553-020-04426-3

Parson, M. (2020). A humanitarian narrative for responsible management learning: An ontological perspective: JBE. *Journal of Business Ethics, 162*(4), 775–793. https://doi.org/10.1007/s10551-020-04426-3

Prati, G., & Mancini, A. D. (2021). The psychological impact of COVID-19 pandemic lockdowns: A review and meta-analysis of longitudinal studies and natural experiments. *Psychological Medicine, 51*(2), 201–211. https://doi.org/10.1017/S003329172000015

Rachel, L. (2020). An analytical model of covid-19 lockdowns. *London School of Economics and Political Science*. Working Paper.

Roe, M. J. (2008). The institutions of corporate governance. In C. Ménard & M. M. Shirley (Eds.), *Handbook of new institutional economics* (pp. 371–399). Berlin, Heidelberg: Springer.

Saad-Filho, A. (2020). From COVID-19 to the end of neoliberalism. *Oxford University Press*. Working Paper.

Sergent, K., & Stajkovic, A. D. (2020). Women’s leadership is associated with fewer deaths during the COVID-19 crisis: Quantitative and qualitative analyses of United States governors. *Administrative Science Quarterly, 50*(1), 35–67. https://doi.org/10.1177/000183920550.1.135

Shamir, R. (2008). The age of responsibilization: On market-embedded morality. *Economy and Society, 37*(1), 1–19. https://doi.org/10.1080/03085140701760833

Situ, H., Tilt, C., & Seet, P.-S. (2021). The influence of the Chinese government’s political ideology in the field of corporate environmental reporting. *Accounting, Auditing & Accountability Journal, 34*(9), 1–28. https://doi.org/10.1108/AAAJ-09-2016-2697

Suchman, M. C. (1995). Managing legitimacy: Strategic and institutional approaches. *Academy of Management Review, 20*(3), 571–610. https://doi.org/10.5465/amr.1995.950880331

Suddaby, R., & Greenwood, R. (2005). Rhetorical strategies of legitimacy. *Administrative Science Quarterly, 50*(1), 35–67. https://doi.org/10.2189/asanu.2005.50.1.135

Tellis, G. J., Sood, A., & Sood, N. (2020). How long should social distancing last? Predicting time to moderation, control, and containment of COVID-19. *USC Marshall School of Business Research Paper*. Retrieved on https://ssrn.com/abstract=3562996

Tetlock, P. E. (1983). Cognitive style and political ideology. *Journal of Personality and Social Psychology, 45*(1), 118–126. https://doi.org/10.1037/0022-3514.45.1.118

Tetlock, P. E., Armor, D., & Peterson, R. S. (1994). The slavery debate mediates the effect of threat on political conservatism. *Political Psychology, 32*(5), 785–811. https://doi.org/10.1111/j.1467-9221.2011.00840.x

Thorisdóttir, H., & Jost, J. T. (2011). Motivated Closed-mindedness mediates the effect of threat on political conservatism. *Political Psychology, 32*(5), 785–811. https://doi.org/10.1111/j.1467-9221.2011.00840.x

Tost, L. P. (2011). An integrative model of legitimacy judgments. *Academy of Management Review, 36*(4), 686–710. https://doi.org/10.5465/amr.2010.0227

Vaaler, P. M., & Schragge, B. N. (2006). Home country governance quality and the ‘bonding hypothesis’: Evidence from industrialized, emerging-market and less-developed countries. In S. Vachani (Ed.), *Transformations in global governance: Implications for multinationals and other stakeholders* (pp. 264–297). Edward Elgar.

van Essen, M., Engelen, P.-J., & Carney, M. (2013). Does “Good” corporate governance help in a crisis? The impact of country- and firm-level governance mechanisms in the European financial Crisis. *Corporate Governance: An International Review, 21*(3), 201–224. https://doi.org/10.1111/corg.12010

Van Hiel, A., & Mervielde, I. (2004). Openness to experience and boundaries in the mind: Relationships with cultural and economic conservative beliefs. *Journal of Personality, 72*(4), 659–686. https://doi.org/10.1111/j.0022-3506.2004.00276.x

Wallner, J. (2008). Legitimacy and public policy: Seeing beyond effectiveness, efficiency, and performance. *Policy Studies Journal, 36*(3), 421–443. https://doi.org/10.1111/j.1541-0072.2008.00275.x

Watts, J. (2020). Delay is deadly: what Covid-19 tells us about tackling the climate crisis. *The Guardian.*

WHO. (2020, 15 July 2020). Press Release: New Zealand takes early and hard action to tackle COVID-19. Retrieved from https://www.who.int/westernpacific/news/feature-stories/detail/new-zealand-takes-early-and-hard-action-to-tackle-covid-19

Wiersema, M. F., & Bowen, H. P. (2009). The use of limited dependent variable techniques in strategy research: Issues and methods.
Witt, M. A. (2008). Crossvergence 10 years on: Impact and further potential. *Journal of International Business Studies, 39*(1), 47–52. https://doi.org/10.1057/palgrave.jibs.8400332

Yoshikawa, T., & Rasheed, A. A. (2009). Convergence of corporate governance: Critical review and future directions. *Corporate Governance: An International Review, 17*(3), 388–404. https://doi.org/10.1111/j.1467-8683.2009.00745.x

You, S., Wang, H., Zhang, M., Song, H., Xu, X., & Lai, Y. (2020). Assessment of monthly economic losses in Wuhan under the lockdown against COVID-19. *Humanities and Social Sciences Communications*. https://doi.org/10.1057/s41599-020-00545-4

Young, T. (2020). Has the government overreacted to the Coronavirus Crisis? *The Critic*. 

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