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COMMENTARY

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Governance mechanisms, accounting regulation, and corporate disclosure in the aftermath of Covid-19: Novel research questions and methodological opportunities

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Abstract

Research Issue: In this commentary, we sought to highlight research opportunities in terms of how governance mechanisms, accounting regulation, and corporate disclosure were affected by Covid-19 (C19) and shaped the economic landscape in the post-C19 period.

Research Insights: The outbreak of the C19 triggered significant researchers' interests in the fields of business and economics for two main reasons: first, to the economic and social consequences of the crisis, and the impact of various policy interventions enacted by governments and supra-national institutions worldwide and, second, the availability of microdata on the spread of the pandemic and vaccines, complemented economic and financial data to assess the effects of policy interventions in curtailing the crisis.

Theoretical/Academic Implications: We envision two potential avenues for further study: first, research on the impact of C19 and policy interventions in areas of interest, and, second, using the C19 disruption as a "laboratory" to unravel research questions on how various characteristics of firms, governments, and regulatory bodies affect the response to systemic crises, assuming that pre-existing characteristics are not related to the crisis event.

Policy Implications: Relevant and rigorous research on the effects of C19 and the policy interventions is likely to be informative to governments, financial regulators, and supra-national institutions facing future instances of systemic crisis.

KEYWORDS

corporate governance, corporate governance theories, external CG: laws and regulations, financial auditing issues, financial disclosure

The views expressed in this article are the author's own and do not necessarily represent the views of the Financial Accounting Standards Board (FASB). The views of the FASB are reached only after extensive due process and deliberations.

1 | INTRODUCTION

The outbreak of the Covid-19 (hereafter, C19) pandemic attracted significant research attention in the fields of business and economics for two main reasons: first, the need to assess the economic and social consequences of the crisis, as well as the benefits and costs of policy interventions to protect workers, companies, and households, and, second, the availability of microdata on the spread of the pandemic and the rollout of vaccines supplemented traditional economic and financial data on the size and type of policy interventions implemented to curtail the crisis.

The C19 crisis was a unique economic shock. In its outbreak, it created a major disruption with immediate, deep, and wide-ranging economic effects on firms and workers. These effects were asymmetric across industries and geographies, and most importantly, the increase in uncertainty stemmed primarily from noneconomic factors, such as the evolution of the pandemic and the release of vaccines. The crisis and policy interventions generated shifts in demand, production, and supply of products and labor across businesses and industries (Barrero et al., 2021). Therefore, scholars must carefully consider this reallocation shock when assessing the economic effects of C19.

The literature on and around C19 is growing rapidly. A cursory analysis of articles containing the word "Covid" in the title or abstract reveals that between 2020 and 2023, about 306 articles were published (or are forthcoming) in journals in the *Financial Times* list (FT50) and an additional 48 articles were published in 10 journals considered highly reputable in the fields of accounting or finance. Of these 354 articles, 45 directly address topics related to governance mechanisms, accounting regulation, and corporate disclosure. Most deal with the consequences of C19 on workers, their performance and well-being, team dynamics, business models, consumer behavior, supply chains, and firm digitalization.

Two thematic special issues on C19 have been published. In 2021, the *Journal of Financial and Quantitative Analysis* featured a special issue focused on the impact of the crisis on the financial sector, corporate finance, capital allocation, and venture capital. Also in 2021, the special issue of the *Journal of Management Studies* published short essays on the effects of C19 on different subfields of management.

This commentary complements the literature on this topic and issues a call for additional research on how governance mechanisms, accounting regulation, and corporate disclosure: (1) were affected by C19 and (2) have helped shape the economic landscape in the post-C19 period. The focus on these areas comes from the direct impact that the global pandemic had on each. For example, it is worth exploring how corporations adapted their decision making, the remuneration of key executives, and their external monitoring (i.e., governance) during a period of turmoil. Furthermore, firms were exposed to unexpected temporary changes in accounting regulation and policies (e.g., in relation to loan loss provisions or the granting of extra time to file their financial statements) (deHaan et al., 2023). Consequently, firms changed their accounting behavior with respect to items reported in financial statements (such as bad debt provisions), in earnings announcements (Brennan et al., 2021), and in disclosures of key risks.

We identified relevant research questions and ideas that may further advance the field. We envision two potential avenues for further study. The first is research on the impact of C19 and policy interventions in areas of interest, specifically exploring whether and how governance mechanisms, accounting regulation, and corporate disclosure were affected by the pandemic, for example, by asking whether changes to governance mechanisms (e.g., virtual shareholder meetings or reduced monitoring), accounting regulation (e.g., longer filing period of financial statements or adoption of new standards), and corporate disclosure (e.g., disclosure of risk) modified the incentives and behaviors of firms and other stakeholders. The second is using the C19 disruption as a "laboratory" to unravel research questions on how various characteristics of firms, governments, and regulatory bodies affect the response to systemic crises, assuming that pre-existing characteristics are not related to the crisis event. Although the scope is broad to cover the research interests of the readership of CGIR, it is also specific enough to differentiate from the articles in other domains (e.g., HR and supply chain) that boomed after C19.

The remainder of this article is structured as follows. First, we outline the main opportunities and challenges in conducting empirical research in terms of data, methods, and research design. We view this section as an overarching one, because it has broad applicability for empirical work related to the main substantive areas of interest. Next, we discuss the implications of C19 for research on corporate governance mechanisms (Section 3), accounting regulation (Section 4), and corporate disclosure (Section 5).

2 | REFLECTIONS ON METHODOLOGICAL AND RESEARCH DESIGN CHOICES

Addressing relevant research questions related to C19 requires careful consideration of potential limitations and methodological choices with respect to data, measurement, and research design. The availability of a large amount of (real-time) data, the exogenous nature of the shock, the sequence, and the heterogeneity in policy responses in terms of time, jurisdiction, and magnitude offer significant opportunities for empirical researchers. At the same time, they raise important methodological challenges.

A conundrum for any empirical study is a full appreciation of the nature and timing of all economically relevant events that unfold after March 2020. The post-C19 period has characteristics that directly impact the methods, empirical analyses, and implications that can be drawn. Following the declaration by the World Health Organization (WHO) of a worldwide pandemic in March 2020, governments and policy makers announced and launched a wide range of relief mechanisms to support employees, companies, and households. These events occurred soon after the WHO declaration within a short time frame, from March to May 2020 (Hong & Lucas, 2023).

The crisis spurred by C19 is exogenous to the economy (Barrero et al., 2021). In contrast to other recent crises, it originated as a health and epidemiological crisis, unrelated to financial regulation or economic turmoil (Philippon, 2021). However, policy interventions and relief mechanisms should not be considered completely exogenous, since they necessarily reflect the state of the economy, the institutional and regulatory environment, and the perceived severity of the crisis in different jurisdictions. Therefore, endogeneity exists to some extent.

Recognizing the (quasi) simultaneity of the crisis and the ensuing policy intervention matters for empirical strategies, especially given the short time between the recognition of the pandemic and the introduction of relief mechanisms. Some of the early researchers recognized that the "crisis-only" period was relatively short and opted for event studies taking advantage of the narrow window, free of policy interventions, to ascertain the effects of the crisis on firms. For example, Ding et al. (2021) studied how investors' reaction to the crisis changed depending on (preexisting) governance attributes of firms. Alongside this approach, alternative designs may be better suited to explore the longer term effects of policy changes on firms across industries, as well as to assess the costs—direct and indirect—and effectiveness of various relief mechanisms. Disentangling these confounding issues is key to attributing the economic consequences of C19 to the crisis itself or to a specific policy intervention.

Following the C19 outbreak, one of the main opportunities provided to researchers is the availability of free microdata tracking the health effects of the pandemic over time and jurisdiction (Beck & Keil, 2022). Data on virus spread, number of deaths, beginning and end periods of restrictions, and vaccine rollout are available from the Johns Hopkins University resource center (https://coronavirus.jhu.edu/data).

These data can be used to proxy for the severity of the crisis and lockdowns, in terms of disruption of the supply chain, changes in customer preferences and spending habits, or changes in banks' ability (firms) to grant (access) funding. In addition, differences within the same jurisdiction allow exploiting quasi-exogenous variation to establish a causal relationship between key events (e.g., policy interventions) and their effects; for example, within the United States, some states opted for lockdowns or restrictions, whereas others did not, thus generating differences across firms across states in terms of their ability to continue their operations. However, the researcher should bear in mind that the quality of the data itself may not be independent of jurisdictional characteristics. For example, some jurisdictions might have had incentives to manage data on virus spread and number of fatalities to justify decisions regarding the beginning and ending of restrictions.

Another overarching theme from a methodological point of view is related to policy interventions and relief mechanisms launched by governments, regulatory and supervisory entities, and other bodies. These interventions differed in their objectives and scope (i.e., fiscal, monetary, or prudential) and the institution backing them. Many governments sought to ensure business continuity and avoid waves of corporate defaults via direct intervention, such as tax deferrals, allowances to support liquidity, and credit easing via direct or state-guaranteed loans or grants. In contrast, central banks and other supervisory bodies were concerned with ensuring financial system stability and continued lending. In fact, both the European Central Bank (ECB) and the Federal Reserve (FED) endorsed large asset purchase programs and continued low-interest rate policies. Furthermore, banking regulators restricted dividend distributions and share buybacks by financial institutions to increase their capital buffer (Demirgüç-Kunt et al., 2021). Other entities also intervened. For example, accounting standard setters (e.g., International Accounting Standards Board [IASB] and the Financial Accounting Standards Board [FASB]) postponed the adoption of certain new accounting standards, and financial regulators (e.g., the Securities and Exchange Commission [SEC]) required corporations to provide additional disclosure on risks (see Section 4).

Although all the above qualify as policy interventions, they differ in terms of their impact on incentives and behavior of firms, investors, and managers. To help researchers unravel the myriads of interventions, systematic information is available from many sources. For example, the International Monetary Fund (IMF) and the University of Oxford offer detailed information on government responses, while the Bank for International Settlements the World Bank and the Yale School of Management track the government responses to attenuate the ensuing financial crisis.[1]

In the remainder of this section, we present some of the methodological opportunities and challenges for exploiting various settings and data, as well as reflecting on key issues to consider when defining the empirical strategy. In the following three sections, we discuss these design issues in relation to the substantive research questions in various areas of interest.

First, we encourage researchers to establish a tight connection between the empirical design and the questions addressed. Some of the early studies related to C19 employ an "event study" methodology to explore the effects of the crisis and/or various policy interventions on investor reactions. These studies utilize short windows and, provided they convincingly isolate the event of interest, document the differential effects of pandemic restrictions or policy interventions on firms whose securities are traded. Possible extensions of these studies involve exploiting cross-sectional variation in terms of firm attributes (e.g., ownership, board composition, analyst follow-up, and prominence of stakeholders, to name just a few) or institutional characteristics to assess differential market reactions based on characteristics that predated the crisis. These studies could be useful to policy makers interested in understanding the effects of the crisis and designing appropriate interventions.

However, we caution that the findings of the event studies are "local" and limited to the short term, in the sense that investors' reactions can be reversed with the release of relief mechanisms. Additionally, the stakeholder expectations of future policy interventions are also affected by both the crisis and any resulting interventions. Therefore, an area that deserves further investigation and different research designs is related to the effects of crisis and policy interventions on long-term firm survival, investment, and financing decisions.

Second, while identifying the costs and benefits of crisis or policy interventions is crucial, exploring the mechanisms and channels through which policy changes affect firm-level outcomes is equally important. For example, Granja et al. (2022) assess the effects of the US Paycheck Protection Program (PPP) on small businesses and highlight that the success of the program depended largely on the role of regional banks in ensuring the flow of funds in initially disadvantaged areas. In a different setting, Buchetti et al. (2023) tentatively show that granting private firms an extension to file their 2019 financial statements triggered late filing firms to access disproportionately higher amounts of state-guaranteed loans (compared to previous years), thus highlighting some firms' incentives to alter the transparency of their reporting to pursue self-serving behaviors and access multiple relief mechanisms.

Third, we emphasize that a detailed understanding of the institutional setting is crucial to successfully identify the source of variation, counterfactuals, and mechanisms to support the analyses of interest. For example, despite similarities in governments' choice of relief mechanisms to support corporations (e.g., tax deferrals or access to loans), there are important differences in terms of the measures launched surrounding the pandemic period. For example, ready access to loans for small and medium-sized entities (SMEs) is a commonly used measure in steady-state environments in many countries. Thus, relief mechanisms that might appear similar might be executed differently, such as a change in the eligibility criteria for access to relief (e.g., by increasing the size thresholds for eligible firms) or changes in the amount, restriction to access, or use of the allowances. Institutional knowledge matters insofar as it allows the researcher to exploit discontinuities around thresholds or detect ex ante incentives to change behaviors across groups of firms seeking to access the relief mechanisms.

Finally, we caution about two key methodological challenges and their implications for interpreting empirical results. Most policy interventions were bundled and launched at the same time, at least within a given jurisdiction. Disentangling potential confounding effects requires either employing a cross-country or within country cross-region design, in which the chosen jurisdictions are substantially similar, yet different in the timing of adoption of a particular policy. This is challenging to achieve, given that the governments' responses occurred roughly at the same time. Similarly, while the researcher's objective can be to assess the effectiveness of a certain policy, the "perfect" counterfactual—a state in which no such policy was endorsed—is unobservable. Furthermore, it is not possible to draw conclusions about the general social welfare implications of the responses of governments.

3 | CORPORATE GOVERNANCE MECHANISMS, RELATIONSHIPS, AND STRUCTURES FOLLOWING THE C19 PANDEMIC

The crisis spurred by the C19 pandemic offers opportunities for corporate governance researchers to advance the field. We identify potential research questions (RQs) in the domain of corporate governance and cluster them into two broad categories depending on the nature of the RQs and the chosen research design. We distinguish studies exploiting the exogeneity of C19 as a "shock" to existing governance mechanisms (C19 shock), from studies exploring temporary or long-lasting changes in governance due to the crisis (C19 changes). Within these two categories, we highlight RQs that have already been (partly) addressed, while focusing more on the opportunities yet to be exploited.

The first group of research questions exploits the exogeneity of the C19 shock as a "stress test" for various governance attributes and mechanisms in place before March 2020. Interestingly, in the last 3 years, some studies empirically investigated the effects of existing governance structures (the main predictor) on a wide range of firm-level outcomes. These studies share common characteristics: (a) exploit cross-sectional variation in governance characteristics at the beginning of the crisis, allegedly uncorrelated with the crisis itself, to test its impact on a series of outcomes such as investor reactions, corporate performance, and survival; (b) focus on a short timeframe, most likely employing outcome variables such as stock returns around the weeks immediately after the lockdowns and spread of the pandemic, or next-quarter performance; and (c) rely almost exclusively on publicly listed firms. Collectively, these studies show that family ownership attenuated the negative effect of the crisis on stock price and operating performance (Amore et al., 2022), especially in the presence of nonfamily managers, while increased ownership by hedge funds and asset management companies led to underperforming stocks (Ding et al., 2021). Interestingly, there is virtually no research exploring whether differences in board composition, committee structures, or the background of directors in place before C19 affected stock returns, corporate performance, or responses to the C19 crisis. An exception is the work of Kara et al. (2022), which shows that banks whose boards featured a higher proportion of female directors were more apt to provide financial support to customers and nearby communities.

Another stream of research is related to the effects of a broad array of individual-level attributes of board members and top management teams (over and above ownership and other governance mechanisms) in shaping corporate performance or survival. This area has received very limited attention. However, there are three examples. Bizjak et al. (2022) employ a micro perspective and show the impact of the CEO's political ideology on the choice to continue (discontinue) business activities and the negative (positive) effects on stock returns. Anwar et al. (2023) focus on the effects of individual-level resilience on organizational resilience and organizational performance. Finally, Ding et al. (2021) document positive (negative) stock market responses with small (large) amounts of managerial ownership.

Another potentially fruitful area of investigation within this first group is related to the effects of stakeholder management and corporate social responsibility (CSR) orientation on organizational performance after C19. This debate is timely from both a theoretical (Broccardo et al., 2022) and empirical perspective. Increasingly, investors are incorporating non-financial metrics and performance in investment and voting decisions. The C19 pandemic allows assessing whether firms differing in their stakeholder orientation and socially responsible practices (e.g., CSR) were differentially affected by the crisis and how investors responded. Several studies offer opposing points of view. Bae et al. (2021) find no evidence that CSR affected stock returns during the C19 period, while Garel and Petit-Romec (2021) and Albuquerque et al. (2020) show that firms placing more emphasis on environmental issues experienced superior stock returns. This lack of consensus could be driven by inconsistent measurements and proxies used to classify firms along the CSR dimension or different time frames. Related to this, a nascent strand of literature investigates the role of corporate culture on outcomes such as performance, resilience, and the ability to connect with key stakeholders (Li et al., 2021); however, the underlying mechanisms and channels through which culture affects corporate outcomes during a crisis are unclear.

A second group of potential RQs relates to how institutions, investors, companies, and various actors respond to the crisis in terms of changes in governance mechanisms and arrangements. It is important to recognize that the C19 crisis not only stressed the governance arrangements in place but also triggered changes to corporate governance, financing, and ownership structures (Pagano & Zechner, 2022). Few studies have investigated this aspect, and significant opportunities lie ahead.

However, a note of caution is warranted. While describing the changes that occur in the post-C19 period is meritorious, determining whether governance changes are idiosyncratic is challenging. Such changes might not be totally exogenous either in terms of type or effect. However, it helps that there is significant heterogeneity across countries in terms of government interventions modifying corporate governance arrangements. Notable examples include the lifting of directors' duties and legal responsibilities to avoid court congestion and allowing virtual shareholder meetings (deHaan et al., 2023).

We emphasize four potential areas of interest and distinguish them according to their unit of analysis. First, the crisis spurred an increase in financial leverage due to debt moratoria or eased access to credit (Fahlenbrach et al., 2020) with a marked shift in the relationships between shareholders, debtholders, and managers. This raises important questions related to the financing decisions made by corporations. To what extent do managers reduce dividends? What drives the decision of firms to cut dividends in years affected and unaffected (e.g., 2019) by the crisis? In some countries, the introduction of public relief mechanisms related to equity support or convertible bonds might have reshuffled the role of minorities or changed power relationships and dynamics between debtholders and shareholders or among existing owners. Interestingly, because the shock favored some industries and penalized others, the ultimate majority owner could change. Accordingly, C19 might represent, to some extent, an unexpected shock to the ownership structure, whose consequences are worth considering.

Second, the pandemic and the resulting restrictions on mobility made it difficult for corporations to meet legal and regulatory requirements with respect to shareholder meetings and public dissemination of financial information. Governments temporally relaxed certain requirements and offered alternative means to comply. In fact, the pandemic and the resulting restrictions on mobility precipitated a significant review of the operations and inner dynamics of the board of directors, committees, executives, and even shareholders. The switch to remote participation and a fully virtual working environment may have altered the interaction patterns among participants, affecting monitoring activities, voicing dissent, and the ability to actively contribute to decision-making processes. This is an obvious area for empirical investigation with potentially relevant policy implications.

Interestingly, deHaan et al. (2023) show that for large US firms, the pandemic did not exert a significant effect in terms of the timeliness and quality of financial information that boards, auditors, and shareholders were able to ensure integrity to the financial reporting process. The availability of outcomes from meetings held for a short time frame in an online-only environment, as well as the outcomes of discussions on key governance aspects (e.g., compensation, acquisition, and financial reporting), may prove a useful way forward.

Third, it is worth exploring the roles, behaviors, and responses of executives to the crisis. Did they pursue value-maximizing choices for the firm? Did they act to protect themselves? Eldar and Wittry (2020) show an increase in the adoption of poison pills to allow managers to protect themselves from low market valuations and takeover threats. Similarly, executive compensation deserves significant attention. How did managers, shareholders, and stakeholders address the declining profitability and depletion of equity that were likely extraneous to managerial decisions? Such research would feed into the debate as to whether CEOs are rewarded for luck (Bertrand & Mullainathan, 2001). Moreover, it could potentially offer a view to whether CEOs are protected from bad luck by examining whether executives are penalized for bad luck when negative performance is allegedly unrelated to their ability and effort. The study by Alves et al. (2021) shows that voluntary CEO pay cuts predict shareholders' willingness to accept dividend cuts in fiscal year 2019 (a year not affected by C19).

Fourth, while the role of boards and governance during a crisis has received attention in the past (Daily & Dalton, 1994; Dalton et al., 1999), little is known in terms of how directors, executives, and shareholders behave and support recovery during a generalized unexpected crisis. We suggest that scholars investigate how board members perform their resource provision task. Duchin and Hackney (2021) show that board connections with local politicians help restore the financing channel and get more loans. An interesting opportunity—from a methodological standpoint—is offered by the variation across jurisdictions in terms of relaxation of the legal duties on board members that were somewhat relieved from a tight monitoring for a short period of time to emphasize the need to restore the business activity.

Most published studies rely on readily available and archival data, but some of the research questions highlighted above would benefit from first-hand data, such as qualitative data (interviews, surveys), to triangulate and validate hard data. An example is Gompers et al. (2021), who use questionnaire data to investigate how venture capitalists experience difficulties in assessing and evaluating entrepreneurial opportunities. Questionnaires offer an opportunity to bridge the gap with practice and access channels and mechanisms to assess how firms responded to the crisis in both the short and long run.

4 | ACCOUNTING REGULATION IN THE AFTERMATH OF C19

Next to the voluminous release of relief mechanisms offering financial support, governments, regulatory, and supervisory bodies relaxed financial regulatory requirements and accounting standards to mitigate the risk of widespread corporate defaults and provide managers with more time to focus on pressing business issues. A growing body of research assesses the effectiveness of direct policy interventions, estimates their welfare effects, and compares them with the costs incurred by taxpayers (Goldstein et al., 2021; Granja et al., 2022). We supplement this literature by identifying research opportunities related to changes in accounting regulation made in response to the C19 crisis.

Whether changes to accounting regulation during crises are desirable is questioned (Ball, 2008). For example, there is an ongoing debate about the role of fair value accounting in the global financial crisis (Leuz & Wysocki, 2016). The C19 crisis offers an opportunity to analyze whether the benefits of temporary relief afforded by changes to accounting regulation during the C19 crisis justified the costs for firms, investors, other users of financial information, and the state.

At the outset, we put forward the first-order question of whether those changes achieved their desired economic objectives and at what cost to corporate transparency. Changes in accounting regulation during C19 vary depending on who designed the "intervention" (i.e., regulatory and supervisory bodies or national governments) and their main objectives (i.e., financial stability, corporate survival, and competitiveness). The unexpected, staggered, and differentiated types of intervention, by country and industry, allow for the exploitation of complementary research settings to address issues of greater interest beyond the accounting domain.

Interestingly, in the middle of the C19 pandemic, policymakers aimed to neutralize the effects of the crisis and avoid corporate defaults and bankruptcies. Deterioration of asset quality was a key concern given the dire consequences for multiple actors. For example, many firms faced plummeting profitability, liquidity shortfalls, and equity depletion, despite their healthy status before C19. Similarly, financial institutions faced increasing amounts of potentially "troubled assets" on their balance sheet, which could undermine their stability and ability to continue lending.

To minimize the potential impact of these risks, governments and supranational institutions temporarily amended accounting standards in a variety of ways, often with the intent of shielding firms from the juridical and contractual implications of financial statements that would otherwise reflect the (hopefully temporary) financial turmoil and losses arising from C19. We highlight five broad categories of related research questions, depending on the nature of the policy intervention, the unit of analysis, and the intended outcome.

A first area of enquiry stems from the increased discretion that national governments allowed corporations to ensure a smoother financial reporting process. The C19 outbreak hit around the end of the 2019 fiscal year for most companies around the world. Because generalized lockdowns and restrictions on mobility hampered managers and auditors' ability to prepare, audit, and file financial statements in due course, firms were offered extended periods to file their financial statements (e.g., the SEC in the United States offered 45 additional days, while in Spain, the government extended the filing period by 60 days). This allowed managers to focus on disruption to their business rather than on other administrative duties (deHaan et al., 2023). Furthermore, in some countries, members of the board and other internal monitoring bodies experienced temporary relaxation of their duties and responsibilities (and penalties) in terms of vigilance in the integrity of the financial reporting process. Important questions arise in relation to the reduced timeliness of financial statements and the reduced monitoring in a period in which timely and high-quality information was needed. For example, how did the reduction in timeliness and changes in information quality impact users of accounting information (e.g., investors and creditors), firms' access to capital, or the cost of capital?

Another area that may attract further empirical analysis relates to changes in accounting principles, which would be forbidden in a non-crisis period. In several countries, privately held and nonfinancial firms follow national GAAPs for the preparation of their financial statements. In some cases, governments amended local GAAPs to mitigate the risk of widespread corporate defaults and court congestion. For example, to alleviate losses and protect equity, some companies were allowed to revalue fixed assets or suspend impairment or amortization of depreciable assets. These measures, which deviated from typical financial reporting standards, allowed firms to achieve a preferred financial reporting result through accrual accounting and raises researchable questions about the quality and reliability of financial statements during a period in which investors sought more transparency to assess the risk and impact of C19 on the future cash flows of firms. At a more general level, research is needed to assess whether a worthwhile objective, such the avoidance of presumably short-term losses and depletion of equity during a period of global crisis, ultimately affects the quality of financial reporting long term.

A third area of research focusses on how firms' access to relief mechanisms could affect the information provided in their financial statements. Virtually all governments used financial statement information to assess a firm's eligibility to access grants and the amount of grants available. As a result, firms might alter their reporting choices to maximize the size of grants. The short- and long-term consequences of any resulting distortion in financial statements for equity and credit investors are far from clear.

The changes in accounting standards did stem not only from governmental policy making but also from accounting standard-setters' decisions to delay the adoption of certain new accounting standards. A notable example in the US setting is the FASB's decision to defer the effective date of certain impending standards. For example, on June 3, 2020, the FASB deferred by 1 year the effective dates of Topic 606, Revenue from Contracts with Customers, and Topic 842, Leases for private companies and certain non-profit entities. Furthermore, on November 5, 2020, the FASB deferred by 1 year the effective date of Accounting Standards Update No. 2018-12, Financial Services - Insurance (Topic 944): Targeted Improvements to Long-Duration Contract Accounting (LDTI). These actions were taken to allow businesses to focus their resources on addressing the business challenges resulting from the crisis. Whether the extended time to adopt new accounting standards defers or ultimately increases implementation costs is an open question.

A fifth area of investigation relates to loan-loss provisioning, especially in the banking industry. The speed of recognition of expected losses on outstanding loans has long attracted the interest of regulators and academics (Beatty & Liao, 2014). The two main accounting regimes (expected credit loss [ECL] model versus incurred credit loss [ICL] model) have been considered at the extremes along a continuum of conservative versus nonconservative accounting for loan losses. The sudden disruption caused by C19 offers opportunities to unravel whether ECL versus ICL is a more effective tool for risk management. In fact, at the beginning of the crisis, firms that apply IFRS standards already had transitioned to IFRS 9 (since 2018) and consequently were applying an ECL model. However, for US banks, 2020 marked the transition year to their version of the current expected credit loss (CECL) model. Still, in the United States, some banks opted to delay the adoption of CECL in response to a decision by the US Congress to allow firms to postpone the adoption of CECL.

We believe that these research questions are timely, relevant, and consistent with calls for additional research to determine the "real" effects of accounting standards (Leuz & Wysocki, 2016). Specifically, we propose investigating whether changes to accounting rules during the crisis traded off short-term objectives (e.g., safeguarding existing firms) with lower transparency for outside parties and whether longer term consequences exist.

5 | CORPORATE DISCLOSURE DURING TIMES OF HEIGHTENED UNCERTAINTY

The corporate information environment has been heavily affected by the C19 pandemic. Unsurprisingly, uncertainty and risk affecting firms' operating environment cascaded on the information disclosed to their investors, creditor, and other stakeholders. To understand the potential effect of C19 on firm disclosure policies, we identify potential avenues of research by looking at the changes in three main disclosure decisions (Beyer et al., 2010): (a) managers' voluntary disclosure decisions, (b) disclosures mandated by regulators, and (c) reporting decisions by analysts.

First, management forecasts and conference calls are allegedly among the main tools available to public firms as a source of voluntary disclosure. Hope et al. (2022) documented that firms with greater exposure to the pandemic and larger increases in economic uncertainty were more likely to withdraw their guidance. Wan and Tian (2022) using the Chinese setting confirm the Hope et al.'s results in China and in addition show that forecasts are less precise and timely during the pandemic period. Finally, Brennan et al. (2021) in the UK setting find poor-quality profit warnings, predominantly qualitative forecasts. While these findings are robust to settings made of listed companies, whereby other sources of information may substitute for firm-initiated disclosure, it is not so clear whether such behavior is plausible in other settings.

Mandatory disclosure has also been affected by the pandemic. Previous research examines both firms' financial statements and accompanying risk disclosures. They show that during Covid, financial statements are less extensive in content and less readable. Among the papers that examine risk disclosures, Loughran and McDonald (2023) concentrate on the US setting and look at the 10-K Item 1A. "Risk factors" and find a slight positive correlation between industry performance and the use of words related to the pandemic, as opposed to the expected negative correlation.

Finally, analyst reports are also influenced by and influence the corporate information environment. It is interesting to understand the effect of the C19 pandemic on analyst behavior and the quality of their forecasts. Zhang et al. (2022) find that the exposure of analysts to a C19 lockdown reduces the dispersion of their forecasts. Along with the forecast dispersion, the number of earnings forecasts issued by treated analysts decreases, supporting the attention distraction channel. Bilinski (2023) documents that, in response to the C19 pandemic, analysts increase their research activity and significantly revise their forecasts when compared to the pre-C19 period. Uncertainty-adjusted forecast errors are either comparable or smaller during the pandemic compared to the pre-C19 period. We have noted that most of the literature concentrates on the quality of the forecasts, but not on whether analyst change their behavior in terms, for example: whether to follow a firm (coverage); how many firms to follow; how much information to acquire/produce; whether and when to issue or revise a report.

In addition to these three themes, we emphasize that the greatest challenges and opportunities concern the antecedents and consequences of companies' different reactions to the pandemic. Looking at the determinants of disclosure, at the inception of the crisis, firms responded differently in terms of information production. It is not clear why, however. Relatedly, we identify three potential areas of inquiry. What drives differences in the reaction? For example, research might examine the differential reaction of private versus public firms to better understand the role of capital markets. Which ex ante factors (in the cross section) explain such behaviors? Finally, why did some firms resort to pre-announcements while others waited for the official release of annual/quarterly info?

Investigating the determinants of firm-level endogenous choices is of great interest given the ex ante uncertainty firms face in terms of forecasting. While companies with good records of disclosure in non-crisis periods would be expected to continue to do so especially during times of heightened uncertainty, they may also be reluctant to do so, given the difficulties in forecasting. Disentangling how firms behave matters to analysts and market participants.

Finally, the reaction of firm stakeholders to the change in the corporate information environment (consequences) also is of interest. How did providers of funds (banks, VC, equity-holders) react to the information provided during C19? How did firms and their auditors respond? Finally, how did information intermediaries, such as financial analysts, industry experts, and the financial press process and supplement disclosures during C19?

Interestingly during crisis periods, disclosure may be a relatively low cost yet extremely useful complement to "hard information." While changes to accounting policies and regulations may entail long term costs and benefits that are not clear ex ante, increasing disclosure requirements in specific areas may induce additional managerial discretion across industries and firms-type. Because of the richness in cross-sectional variation, we believe that examinations of the antecedents and determinants of changes in disclosure policies during C19 has the potential to contribute to the existing literature.

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CONFLICT OF INTEREST STATEMENT

The authors acknowledge no conflicts of interest.

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NOTE

[1] See links: for the IMF database (https://www.imf.org/en/Topics/imf-and-covid19/Fiscal-Policies-Database-in-Response-to-COVID-19); the University of Oxford (https://www.bsg.ox.ac.uk/research/covid-19-government-response-tracker); the BIS (https://www.bis.org/publ/work934.htm); the World Bank (https://openknowledge.worldbank.org/entities/publication/ddfcfbb0-2da2-5bbb-82b5-181fa4abf578); the Yale School of Management (https://som.yale.edu/centers/program-on-financial-stability/covid-19-crisis).

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