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COVID-19 and sustainability reporting: What are the roles of reporting frameworks in a crisis?

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Abstract

Purpose: This article commentates on the roles of sustainability reporting during the COVID-19 pandemic. It evaluates the Global Reporting Initiative's (GRI) framework, designed as a guide for best-practice in sustainability reporting, for its applicability to cover COVID-19 issues and, more generally, issues arising in crisis conditions.

Design/methodology/approach: The GRI's COVID-19 communications and the GRI framework are reviewed using three common theories of reporting: institutional, stakeholder, and legitimacy theory. For each theory, the authors contrast expectations under business-as-usual conditions against crisis conditions to identify gaps and avenues to guide COVID-19 responses.

Findings: This commentary opines the GRI framework risks perpetuating incremental change towards the 'new normal', rather than motivating the urgent responses needed in a crisis. The GRI can play a significant normative role to guide immediate and short-term best practice in COVID-19 reporting. Findings motivate the need to report for vulnerable rather than powerful stakeholders and to recognise and celebrate proactive change.

Originality: This article commentates on the suitability of a major sustainability reporting framework and its role in improving responses to the current COVID-19 crisis. Findings propose challenges to the GRI and GRI framework to motivate urgent responses and communication for the pandemic.

Keywords: *Sustainability reporting, COVID-19, Global Reporting Initiative (GRI), Institutional theory, Stakeholder theory, Legitimacy theory*

1. Introduction

COVID-19 is predicted to cause the deepest global recession in decades, with diverse impacts for investment, human capital, global trade, and supply linkages (The World Bank, 2020). The pandemic has drawn global attention to how firms respond to economic, environmental, and social issues, raising questions about their actions and responsibilities towards stakeholders (Alpaslan et al., 2009). Firms therefore need to assure stakeholders they are doing their best to respond to the crisis, ensure business survival, and thus enhance their reputation. Sustainability reporting plays a natural role in crisis response, providing the holistic communication needed to manage stakeholder perception and legitimise the firm's reputation (Herzig et al., 2012). An issue arising from the pandemic is the role of sustainability reporting to address the challenges of COVID-19.

The Global Reporting Initiative (GRI) is an organisation who seeks to improve the quality and relevance of sustainability reporting. They have developed the GRI framework as a benchmark for sustainability reporting, outlining areas that define best-practice in comprehensive reporting. Firms are invited to report on areas that are material to their stakeholders. Research supports the significance of the GRI framework in terms of adoption rate, comprehensiveness, and visibility (Watts, 2015). Given the potential role of sustainability reporting in COVID-19 response, the GRI and GRI framework can offer critical leadership and expertise to guide urgent action by firms during a time of chaos.

This article is a reflection on the responses of the GRI to the pandemic and applicability of the GRI framework to COVID-19 and, more generally, crisis situations. Three commonly used theories of sustainability reporting are used for this purpose: institutional, stakeholder, and legitimacy theory. These theories explain external influences on sustainability reporting. For each theory, the GRI and GRI framework are assessed from a business-as-usual perspective and a crisis perspective. This multi-theoretical approach facilitates a holistic assessment of challenges arising from COVID-19 for sustainability reporting in order to identify avenues to strengthen the role of the GRI and GRI framework to respond to the pandemic.

This commentary contributes to understanding the role of sustainability reporting frameworks in response to the pandemic. From an institutional perspective, the GRI is positioned to offer high-impact normative guidance in a time lacking established industry best-practice or coercive regulatory requirements. However, their emerging responses target long-term, 'new normal' reporting, and short-term guidance is gated by unedited webinars with no directed takeaways. Stakeholder and legitimacy theory offer suggestions for how sustainability reporting as an ongoing practice can adapt to specific needs of COVID-19 and crises in general. The stakeholder perspective identifies a shift away from reporting to appease powerful stakeholders towards addressing the needs of the vulnerable. Under legitimacy theory, the article reflects on the ability for sustainabiloffeity reports to respond to multiple concurrent crises and the risk of perpetuating business-as-usual reporting. The authors propose that researchers develop perspectives to recognise and celebrate firm actions, rather than adopting the prevailing approach in legitimacy theory to regard reports with suspicion.

This article is structured as follows. Section 2 provides background on sustainability reporting for crisis management and communication. Section 3 reviews the GRI framework using institutional, stakeholder, and legitimacy to commentate on the role of GRI and GRI framework for COVID-19. Section 4 concludes.

2. Sustainability reporting and crisis management

Crisis management research defines a crisis as "an unpredictable event that threatens important expectancies of stakeholders and can seriously impact an organisation's performance and generate negative outcomes" (Coombs, 2007, p. 2). Crisis communication theory (Coombs, 2004, 2007) further defines crises by their type and reputational threat. COVID-19 is a victim cluster-type crisis where firms have weak responsibility for causing the crisis and so face mild reputational threats. Ki (2014) analyse crisis communication strategies and find a positive association between the use of strategic and timely communication and favourable audience reactions. Crisis management thus relies on both actions to remedy the crisis and communications to manage reputation (Christensen et al., 2016). Communication strategies include acceptance of responsibility, apologia to defend the firm's moral integrity, and account-giving to restore reputation. Sustainability reporting can play a key part in crisis communication by acknowledging responsibility and explaining the remedies taken to address economic, environmental, and social issues.

Research has investigated the impact of the 2008 Global Financial Crisis (GFC) on sustainability reporting, reporting mixed results in the level and quality of reports. The GFC saw plummeting stock indices, collapse of financial institutes, unemployment and poverty, and the need for government rescue packages (Dias et al., 2016). Some studies reported an increase in sustainability reporting during the GFC (e.g. Miras Rodríguez et al., 2014), argued to improve their market position and differentiate from competitors to gain stakeholder trust. Others reported a decrease in reporting and lack of engagement (e.g. Rodolfo, 2012), attributed to the additional financial burden of reporting. Since the GFC, sustainability reporting has grown in volume and importance (KPMG, 2017), suggesting stakeholders may place stronger expectations on sustainability reporting for both business-as-usual and crisis settings.

By way of comparison, climate change is an existing crisis concurrent with COVID-19. In 2020, the World Economic Forum ranked climate change as the biggest risk to the economy and society (Deutsche Welle, 2020). Climate change is projected to affect the growth rate of the global economy as well as increase poverty and these impacts are not reversible (Tol, 2018). In the context of climate change, a stream of critical research calls for greater urgency and proactivity in change, criticising existing reporting frameworks and researchers for failing to address issues needed to enact the changes needed to address the climate crisis (Dias et al., 2016). Reviewing the narratives found in sustainability reports, Milne et al. (2006) denounce the commonly used ‘progress’ and ‘journey’ narratives as they reinforce business-as-usual approaches. Such narratives deplete the urgency of the situation and thus motivation for managers to restructure their thinking. The question is to the appropriate level of urgency in sustainability reporting to address crisis, whether it be COVID-19, the GFC, or climate change.

The goal of the GRI is to guide best practice in sustainability reporting for emerging challenges as they relate to the firm’s economic, environmental, and social setting. The concept of best practice often arises from efforts to develop professional practice to provide practical recommendations which could apply to business-as-usual and crisis settings (Seeger, 2006). Hence, the GRI and GRI framework can play a key role in guiding crisis communication related to COVID-19. This would involve coverage of impacted areas and reporting to match the materiality of the issues. An effective response to COVID-19, and indeed other crises, requires urgency in actions – what could be termed a crisis-perspective. However, the GRI framework has been developed in the context of a relatively stable economic setting, characterised by low urgency and incremental change to business-as-usual. The higher visibility and abruptness of COVID-19 offers a counterpoint to this. Comparing the two crises, COVID-19 is seen as a global emergency requiring an urgent response, while climate change risks being characterised as a long-term problem that only warrants steady, incremental progress. Assessing the GRI framework from a COVID-19 perspective would thus provide an assessment of the information content related to the current pandemic, but also the framework's fitness-of-purpose in driving urgency needed to respond to crises more generally.

3. Assessing GRI and theories of reporting in terms of COVID-19

This study assesses the role of the GRI and GRI framework for COVID-19 and crises more generally. This assessment uses three commonly used theories of reporting: institutional, stakeholder, and legitimacy theory. The crisis communication literature has used these theories to assist firms in crafting their crisis communications. Christensen et al. (2016) outline that it is not enough that firms have the capacity to address a crisis, but they need to maintain legitimacy over their decisions. This legitimacy can be achieved through communications to improve public perceptions and trust in the organisation. An effective response, Alpaslan et al. (2006) argue, requires knowledge about stakeholder behaviour and needs. To achieve legitimacy and understand stakeholder needs, firms in crisis management search for norms from their institutional environment to inform their actions (Eriksson, 2012). These theories are used in this study to hypothesise the factors influencing sustainability reporting, such as the external forces that affect firm reporting (institutional forces), information that would be relevant to the pandemic (stakeholder groups), and strategies that characterise effective crisis communication (legitimacy theory). For each theory, a definition is provided that describes expectations under business-as-usual reporting. This is contrasted with influences in a crisis context to evaluate the role of the GRI in reporting for COVID-19 and other crises.

Institutional theory

Institutional theory argues a firm's reporting is shaped by its desire to fit its institutional environment, defined by external cultural norms (Dacin, 1997). External pressures cause particular practices to become institutionalised within the firm as standard practice. These pressures are predicted to make firms isomorphic, that is, adopting the same institutionalised practice. DiMaggio and Powell (1983) describe three isomorphic forces. Mimetic forces arise when firms emulate each other. Coercive forces arise from organisations with power that compel a firm to take action. Normative forces arise from professionalisation about what constitutes best practice.

Under business-as-usual, institutional theory predicts that as sustainability reporting matures firms from in the same setting will produce similar reports as preparers mimic each other's standard practices or respond to similar coercive factors (de Villiers and Alexander, 2014). In a crisis, institutional environments change and hence mature sustainability reporting practices may no longer be appropriate. For example, COVID-19 highlights business continuity and health of employees and customers as priority areas. Business continuity is an extreme scenario of risk management, and thus established reporting practices may not be suitable for a crisis. When focused internally, firms are unlikely to have found other firms to mimic (weak mimetic forces) and reporting regulation is undeveloped in the early-stages of COVID-19 (weak coercive forces). In contrast, the health of employees and customers are areas where there are strong mimetic forces (for example in New Zealand, social distancing, mask-wearing, and contact tracing) and coercive forces (the New Zealand government has prescribed actions to be taken during various stages of lockdown).

There is thus an asymmetric set of mimetic and coercive factors on sustainability reporting for the pandemic. This raises an opportunity for the GRI to guide reporting through normative forces, given the lack of mimetic and coercive forces on reporting. At the time of writing, the GRI has issued three news posts related to COVID-19. First, a letter explaining the precautions it is taking to protect its employees and partners, discussing remote work and travel restrictions. Second, praise for the European Union committing to the European Green Deal (a plan to achieve climate neutrality by 2050) as a framework to boost recovery after the pandemic. In this, they highlight the importance of sustainability reporting to disclose corporate impacts and encourage sustainable business practices. Third, webinars to discuss COVID-19 crisis issues to prepare for the 'new normal' for GRI reporting in a post-pandemic world. The webinars cover sustainability and transparency in designing the 'new normal'; risk management and business continuity; stakeholder engagement and materiality assessment; supply chain resilience; and sustainability topics that firms are looking to add or increase.

The set of web resources shows a progression from mimetic reporting (safe work practices) to identifying coercive forces (EU Green Deal legislation), and eventually normative guidance (innovations and adaptations to GRI framework under COVID-19). This pattern shows the GRI taking a proactive role. What is challenging though is the opaque nature of the webinars, where content is hidden behind unedited recordings without a clear set of takeaways. Challenging also is the long-term horizon of the discussion, which discusses long-term transitions. Short-term guidance would be a key next-step for reporting in a crisis. Adapting the GRI framework, whether by way of a crisis-focused report or adapting the general framework, could provide firms with a template to ensure adequate reporting, and assists stakeholders in assessing the firm's performance. This adapted framework would provide professionalised normative pressure to improve reporting in response to COVID-19.

Stakeholder theory

Stakeholder theory describes that firms operate in an open system, interacting with various groups in society that have different demands (Rodolfo, 2012). Firms need to understand stakeholder requirements and communicate to meet the expectations of different societal groups. Performance is expected to improve if firms maintain good relationships with key stakeholders (Buallay et al., 2020). The business-as-usual expectation is that reporting will target key stakeholders, such that "stakeholders with higher power, urgency and legitimacy will be more aware of sustainability initiatives than stakeholders with lower power, urgency and legitimacy" (Peloza and Papania, 2008, p.172).

However, crises can change the importance of stakeholder groups, where some stakeholders may change from latent to definitive or vice versa (Dias et al., 2016). A preliminary list of key stakeholders and needs in the COVID-19 context could be:

- Employees: Attract and retain employees; Flexible work arrangements; Health and safety; Upskilling employees
- Customers: Attract and retain customers; Flexibility in service delivery
- Supply chain: Robustness of supply chain; Flexibility in supply chain
- Shareholders: Impact on financial stability; Innovation to manage crisis impacts

To assess the applicability of the GRI framework to the pandemic, this study searched for measures in the framework relating to these areas. Table I shows the stakeholder areas, COVID-19 issues, and relevant GRI measures.

--- Table I about here ---

For employees, the GRI primarily assumes steady employment and lacks measures of work flexibility and pandemic health and safety. Relevant crisis-reporting could include: initiatives to allow flexible work environments, the incidence of COVID-19, and impact on mental and physical health. For customers and supply-chain, the GRI includes measures of labour impacts in the supply-chain but lacks measures related to flexibility in services. Relevant measures could include flexibility (e.g. innovations in delivery methods) and disruptions (e.g. incidents in supply chain and/or customer service, issues arising from changes in customer or supplier financial circumstances). For shareholders, the GRI focuses on measures of government financial assistance, and impact on local communities. Relevant measures could extend existing GRI measures about the financial impacts of climate change to include other crises. These additional measures could take the form of a crisis-specific reporting framework or be embedded as standard into the core GRI framework to recognise the post-pandemic economy.

Legitimacy theory

Legitimacy theory argues that firms must be seen to have values aligning with society to successfully operate (Lindblom, 1994). Two common sustainability reporting strategies by firms to achieve legitimacy are greenwashing and representative reporting (van Staden and Hooks, 2007). Greenwashing refers to the use of symbolic reporting to manage stakeholder perceptions without underlying material change. Representative reporting begins with substantive material change in operations, with the role of sustainability reporting to inform stakeholders of the change. Legitimacy theory is related to stakeholder theory as firms seek legitimacy by preparing reports targeting concerns from relevant stakeholders (Deegan, 2019).

From a business-as-usual perspective, applying the GRI framework can add credence to a firm's sustainability report and identify key stakeholders and potential actions to strengthen legitimacy. The latest versions of the GRI framework highlight the importance of materiality assessments, where firms define immaterial issues that can be omitted from their reports to justify partial reporting. In a crisis, the set of material topics changes, resulting in different topics covered in sustainability reports and variation in the standards by which their performance assessed. A concern is that materiality assessments may allow excessive flexibility to define what is relevant, potentially trading off the needs of various stakeholders. Given the resources required to produce sustainability reports, a risk is that topics related to climate change may be set aside for imminent issues related to COVID-19. This highlights the challenge of materiality and flexibility in sustainability reporting: is a sustainability report simply not large enough to cover two simultaneous crises?

Having defined the material areas of reporting, the second area of legitimacy theory concerns the nature of measures reported, being proactive or passive. Proactivity considers initiatives and actions to improve performance. This is in contrast to passive reporting, being only reports on the organisation's current level of performance. Passive reporting only indirectly encourage the firm to take further action.

In business-as-usual research, a common focus is the firm's intentions when producing the report. A large stream of critical research views reports with suspicion, looking for signs of greenwashing. However, in the time of crisis, the authors propose that the focus ought to be on the *actions* taken for change, rather than the *intention* for changes. Firms demonstrate legitimacy by communicating their specific actions to respond to the crisis. Whether or not management 'cares' about employee wellbeing when arranging work-from-home facilities is not relevant to addressing the COVID-19 crisis. What matters are the actions taken and the results being delivered. A firm does not need to internalize COVID-19 in its cultural fabric to produce effective COVID-19 responses. More generally, the same argument could apply to climate change and management intention.

Hence, this study proposes a need for urgency and proactivity as a standalone theoretical perspective for sustainability reporting. However, frameworks that promote passive measures do not encourage urgency for change. The review of the current GRI framework shows that the measures are largely passive (refer to Table 1). For example, results of a survey measuring customer satisfaction (PR5) only evaluates business performance regarding their customers, whereas a more proactive response is to evaluate the firm's flexibility to respond to the needs of customers in the time of crisis. Indeed, the GRI's conversations about the 'new normal' and long-term horizons reduce momentum for change.

4. Conclusion

The COVID-19 pandemic has had extensive impacts on economic, social, and environmental business performance. The GRI framework, and sustainability reports in general, are ways to guide firm reporting in uncertain environments, signal ways for firms to address complex problems, and assure stakeholders that actions are taken to promote their interests. This study commentates on the role of the GRI framework in COVID-19 conditions using three common theoretical lenses of institutional, stakeholder, and legitimacy theory. For each lens, the business-as-usual perspective and how these perspectives alter under COVID-19 crisis conditions were described.

It is highlighted that there are gaps in the sustainability reporting frameworks such as GRI to cope with reporting on crises and motivating urgency. The authors suggest that the crisis creates an opportunity for GRI to be a key normative force in guiding sustainability reporting. With a lack of mimetic sources and regulatory coercive forces for COVID-19 responses, the GRI could act swiftly to give normative guidance about crisis-reporting. In a crisis, this study proposes a shift in reporting emphasis from those with power to those who are most vulnerable. A review of the GRI framework against immediate and emerging stakeholder priorities finds that there are areas that GRI framework can improve to encourage more responsive reporting. At the moment, there are no or only limited measures of a firm's flexibility in terms of coping with uncertainties especially with regards to the suppliers, customers and employees. COVID-19 emphasises the need for action and urgency. The review of stakeholder theory finds that the coverage of these areas is primarily by way of passive reporting. Materiality and legitimacy theory also raise questions about bloat in the GRI framework in terms of its ability to inform two simultaneous crises (climate change and COVID-19), where the immediacy of COVID 19 may distract from the existing climate change crisis.

This commentary piece proposes potential avenues for future research in finding what would a crisis reporting framework look like. It proposes a need for a theoretical perspective on sustainability reporting that evaluates urgency and actions taken, irrespective of the intention behind the actions. Future research can investigate the effect of the 'new normal' perspective on dampening urgency and change. This commentary suggests that the GRI framework frames economic, environmental, and social issues as incremental problems rather than crises requiring urgent responses.

These lessons have the potential to inform more than just COVID-19 responses. Strengthening the normative force of organisations such as the GRI, adapting stakeholder reporting for the vulnerable, and motivating urgency and action rather than scepticism over management intention offers ways to empower sustainability reporting to guide rapid change to address economies, environments, and societies in crisis.

References

Alpaslan, C. M., Green, S. E., & Mitroff, I. I. (2009). Corporate Governance in the Context of Crises: towards a Stakeholder Theory of Crisis Management. *Journal of Contingencies and Crisis Management, 17*(1), pp.38-49. https://doi.org/10.1111/j.1468-5973.2009.00555.x

Buallay, A., Fadel Sayed, M., Alajmi, J. & Saudagaran, S. (2020). Sustainability reporting and bank performance after Financial crisis: evidence from developed and developing countries. *Competitiveness Review*. https://doi.org/10.1108/cr-04-2019-0040

Carroll, A. B. (1991). The pyramid of corporate social responsibility: toward the moral management of organizational stakeholders. *Business horizons,* 34**,** pp.39-48. https://doi.org/10.1016/0007-6813(91)90005-G

Christensen, T., Lægreid, P., & Rykkja, L. H. (2016). Organizing for Crisis Management: building Governance Capacity and Legitimacy. *Public Administration Review, 76*(6), pp.887-897. https://doi.org/10.1111/puar.12558

Christine M. Pearson and Ian I. Mitroff, (1993). From crisis-prone to crisis prepared: a framework for crisis management. *Academy of Management Perspectives,* 7(1), pp.48-59. https://doi.org/10.5465/ame.1993.9409142058

Coombs, W.T. (2007). Ongoing crisis communication: planning, managing and responding Sage, Thousand Oaks, CA

Coombs, W. T. (2004). Impact of Past Crises on Current Crisis Communication: insights From Situational Crisis Communication Theory. *The Journal of Business Communication (1973)*, *41*(3), pp.265–289. https://doi.org/10.1177/0021943604265607

Dacin, M. T. (1997). Isomorphism in context: the power and prescription of institutional norms. *Academy of management journal,* 40**,** pp.46-81. https://doi.org/10.5465/257020

De Villiers, C. & Alexander, D. (2014). The institutionalisation of corporate social responsibility reporting. *The British Accounting Review,* 46**,** pp.198-212. https://doi.org/10.1016/j.bar.2014.03.001

Deegan, C. (2019). Legitimacy theory: despite its enduring popularity and contribution, time is right for a necessary makeover. *Accounting, Auditing & Accountability Journal,* 32**,** pp.2307-2329. https://doi.org/10.1108/AAAJ-08-2018-3638

Deutsche, W. (2020). Climate Change Named Biggest Global Threat in New WEF Risks Report. EcoWatch. https://www.ecowatch.com/climate-change-global-risk-wef-2644819254.html

Dias, A., Rodrigues Lúcia, L. & Craig, R. (2016). Global financial crisis and corporate social responsibility disclosure. *Social Responsibility Journal,* 12**,** pp.654-671. https://doi.org/10.1108/SRJ-01-2016-0004

Dimaggio, P. J. & Powell, W. W. (1983). The Iron Cage Revisited: institutional. *Economic Journal,* 65**,** pp.691-716. https://doi.org/10.1016/S0742-3322(00)17011-1

Eriksson, M. (2012). On-line Strategic Crisis Communication: in Search of a Descriptive Model Approach. *International Journal of Strategic Communication*, 6(4), pp.309-327. https://doi.org/10.1080/1553118X.2012.711403

Giannarakis, G. & Theotokas, I.(2011). The effect of financial crisis in corporate social responsibility performance. *International Journal of Marketing Studies,* 3**,** p.2

Herzig, C., Giese, N., Hetze, K. & Godemann, J. (2012). Sustainability reporting in the German banking sector during the financial crisis. *International journal of innovation and sustainable development,* 6**,** pp.184-218. https://doi.org/10.1504/IJISD.2012.046952

Herzig, C., Viere, T., Burritt, R. & Schaltegger, S. (2006). Understanding and supporting management decision-making. South-East Asian case studies on environmental management accounting. *Sustainability accounting and reporting.* pp.491-507 Springer, Dordrecht.

Ki, E.-J., & Nekmat, E. (2014). Situational crisis communication and interactivity: usage and effectiveness of Facebook for crisis management by Fortune 500 companies. *Computers in Human Behavior, 35*, pp.140-147. https://doi.org/10.1016/j.chb.2014.02.039

KPMG. (2017). *The road ahead- the KPMG Survey of Corporate Responsibility Reporting 2017* [Online]. Available: https://assets.kpmg/content/dam/kpmg/be/pdf/2017/kpmg-survey-of-corporate-responsibility-reporting-2017.pdf [Accessed 2018].

Lindblom, C. K. (1994). The implications of Organizational Legitimacy for Corporate Social Performance and Disclosure. *Critical Perspectives on Accounting Conference, New York.*

Milne, M. J., Kearins, K. & Walton, S. (2006). Creating Adventures in Wonderland: the Journey Metaphor and Environmental Sustainability. *Organization,* 13(6)**,** pp.801-839. https://doi.org/10.1177/1350508406068506

Miras Rodríguez, M. D. M., Escobar Pérez, B. & Carrasco Gallego, A. (2014). Are Spanish Listed Firms Betting on CSR during the Crisis? Evidence from the Agency Problem. *Business and Management Research, 3 (1),* pp.85-95. https://EconPapers.repec.org/RePEc:jfr:bmr111:v:3:y:2014:i:1:p:85-95

Peloza, J. & Papania, L. (2008). The Missing Link between Corporate Social Responsibility and Financial Performance: stakeholder Salience and Identification. *Corporate Reputation Review,* 11**,** pp.169-181. https://doi.org/10.1057/crr.2008.13

Rodolfo, C. H. M. (2012). Examining CSR reporting and economic crisis a study of GRI reporting companies. *Asian Economic and Financial Review,* 2(1)**,** pp.30-39.

Seeger, M.W. (2006). Best practices in crisis communication: an expert panel process. *Journal of Applied Communication Research*, 34 (3), pp.232-244. https://doi.org/10.1080/00909880600769944

The World Bank. (2020). *Pandemic, Recession: the Global Economy in Crisis* [Online]. Available: https://www.worldbank.org/en/publication/global-economic-prospects [Accessed August 2020].

Tol, R. S. J. (2018). The Economic Impacts of Climate Change. *Review of Environmental Economics and Policy,* 12**,** pp.4-25. https://doi.org/10.1093/reep/rex027

Van Staden, C. J. & Hooks, J. (2007). A comprehensive comparison of corporate environmental reporting and responsiveness. *The British accounting review,* 39**,** pp.197-210. https://doi.org/10.1016/j.bar.2007.05.004

Watts, S. (2015). Corporate social responsibility reporting platforms: enabling transparency for accountability. *Information Technology and Management,* 16**,** pp.19-35. https://doi.org/10.1007/s10799-014-0192-2