

# SUSTAINABILITY REPORTING AND STRATEGIC LEGITIMACY: THE INFLUENCE OF OPERATING IN EMERGING ECONOMIES ON THE LEVEL OF GRI REPORTING IN CANADA'S LARGEST COMPANIES

Philip R. Walsh<sup>\*</sup>, Ranjita Singh<sup>\*\*</sup>, Matthew Malinsky<sup>\*\*\*</sup>

<sup>\*</sup> Corresponding author, Ted Rogers School of Management, Ryerson University, Toronto, Canada  
Contact details: Ted Rogers School of Management, Ryerson University, 350 Victoria Street, Toronto, ON M5B 2K3, Canada

<sup>\*\*</sup> Ted Rogers School of Management, Ryerson University, Toronto, Canada

<sup>\*\*\*</sup> Yeates School of Graduate Studies, Ryerson University, Toronto, Canada



## Abstract

**How to cite this paper:** Walsh, P. R., Singh, R., & Malinsky, M. (2021). Sustainability reporting and strategic legitimacy: The influence of operating in emerging economies on the level of GRI reporting in Canada's largest companies. *Corporate Governance and Sustainability Review*, 5(1), 39-53. <https://doi.org/10.22495/cgsrv5i1p5>

Copyright © 2021 The Authors

This work is licensed under a Creative Commons Attribution 4.0 International License (CC BY 4.0). <https://creativecommons.org/licenses/by/4.0/>

**ISSN Online:** 2519-898X

**ISSN Print:** 2519-8971

**Received:** 09.12.2020

**Accepted:** 05.02.2021

**JEL Classification:** C1, F6, K2, L1, L2

**DOI:** 10.22495/cgsrv5i1p5

Corporate sustainability reporting is a contributor to strategic legitimacy (Chelli, Durocher, & Fortin, 2018) and certain traditional corporate characteristics (size, industry vulnerability) can influence the level of sustainability reporting (Drempetic, Klein, & Zwergel, 2020). However, limited literature exists in regards to sustainability reporting by Canadian companies operating in emerging countries. Content analysis of sustainability reports examined the current use of the Global Reporting Initiative (GRI) framework. Principal component analysis (PCA) provided a sustainability reporting index (SRI) measure for each firm using factor scores. Correlations and independent-samples t-testing tested the association of the level of reporting to a firm's size, industry, level of internationalization, and level of activity in emerging economies. A review of 234 large Canadian-based, publicly-traded companies found a total of 86 companies employed the GRI framework, and data from these companies was used in this study. Asset size and vulnerable industries had no significant association with the level of sustainability reporting contrary to prior studies. Operating in emerging economies resulted in greater levels of sustainability reporting when compared to firms that do not. This finding is consistent with the external legitimacy strategy and contributes to the limited literature in this area.

**Keywords:** Sustainability Reporting, GRI, Strategic Legitimacy, Emerging Economies, Canada, ESG

**Authors' individual contribution:** Conceptualization - P.R.W. and R.S.; Methodology - P.R.W.; Investigation - M.M.; Resources - R.S.; Writing - Original Draft - P.R.W. and R.S.; Writing - Review & Editing - P.R.W. and R.S.; Supervision - P.R.W.

**Declaration of conflicting interests:** The Authors declare that there is no conflict of interest.

**Acknowledgements:** We wish to acknowledge the contributions of Ola Ajibade, Ryerson University, for assisting with the original data acquisition as part of an internal funding grant from the Ted Rogers School of Management, Ryerson University.

## 1. INTRODUCTION

An increasing number of companies around the world seek to pursue their economic goals while engaging in actions that protect the environment, ensure social justice and pursue good governance practices. These economic, social and governance (ESG) measures jointly determine the extent to which a firm engages in sustainability initiatives. While research spanning from the 1990s (Kolk, 1999; 2003; Galani, Gravas, & Stavropoulos, 2012) has examined the factors that should be specifically evaluated to gauge the extent of companies' compliance with sustainability routines, it is not clear which companies are more or less likely to pursue these programs. While most companies would like to be known as "good citizens", there are some that face greater pressure to attain legitimacy either because of the scrutiny they face, as is the case with extractive sector firms, or their desire for greater legitimacy as a way to gain a competitive advantage over their rivals (Miotto, Del-Castillo-Feito, & Blanco-González, 2019; Walsh, 2014). The larger the size of a firm, the more likely they are to face increased attention. Multinational firms encounter many stakeholders in the different countries in which they are present and often deal with varying regulations and government guidelines. Furthermore, requirements in emerging economies are quite often very different from those in more mature economies and stakeholder concern for activities in developing countries can be heightened as a result.

There have been growing pressures on Canadian companies to be more accountable about their actions and behaviour in light of recent corporate scandals (cf. SNC Lavalin, Bombardier Inc., etc.) and the calls for transparency on social justice and human rights issues (such as outlined by the Truth and Reconciliation Commission). It stands to reason, then, that companies would like to present their case on sustainability by engaging in sustainability reporting norms using the guidelines generally accepted across the world. The Global Reporting Initiative (GRI) framework, which has been at the forefront of sustainability reporting since 1997, offers sustainability reporting measures widely accepted in most countries. We, therefore, focus on the GRI sustainability reporting of the 234 companies in the S&P/TSX Composite Index. We examine previously established corporate characteristics such as size and industry membership but we also extend the empirical literature by testing for the influence of internationalization and operations in emerging economies on the sustainability reporting of large Canadian-based publicly-traded corporations. Our research contributes not only to the existing knowledge on the relationship of certain corporate characteristics to the level of sustainability reporting but also exposes a lack of reporting generally among these corporations, even though reporting can contribute to strategic legitimacy. We further identify the influence of operating in emerging economies on their level of reporting. The implications of these results are then discussed further.

This paper is structured as follows. Section 2 presents an examination of the literature related to legitimacy theory and the strategic use of GRI

reporting as a measure of sustainability performance, followed by a discussion on Canadian corporate reporting and requirements related to sustainability disclosure. Section 3 addresses the empirically-supported identification of specific corporate characteristics that may be associated with the level of sustainability reporting, and the development of related hypotheses to be tested. Section 4, a methodology section, supports the statistical approach taken and then in Section 5 we discuss the results of our analyses and conclude with a summary of the findings and the limitations of our study in Section 6.

## 2. LITERATURE REVIEW

### 2.1. Strategic use of GRI reporting

The GRI framework is increasingly being used as a device to inform companies of their performance on a number of dimensions related to their ESG practices (Chen, Tang, & Feldmann, 2015) and past research has found that the GRI has become an influential institution in terms of its acceptance as a global sustainability reporting organization (Brown, de Jong, & Lessidrenska, 2009; Milne & Gray, 2013; Seck, 2011; Chelli, Durocher, & Richard, 2014). The guidelines and related measures were, and continue to be, derived using input from a multitude of experts within the business, academia, and non-governmental organizations and are considered to be the best developed for the purpose of reporting the sustainable actions of the firm (Chelli et al., 2014). While the adoption of these guidelines by corporations remains purely voluntary, many government agencies and regulatory authorities promote their use as part of the company's annual standard reporting requirements (Camilleri, 2015). There have been certain criticisms about the voluntary nature of the application of the framework and whether that hinders the credibility of the firm's reporting efforts (Mori Jr. & Best, 2017) but the GRI framework has become increasingly more acceptable on a global scale (Klettner, Clarke, & Boersma, 2014; Landrum & Ohsowski, 2018; Nielsen & Thomsen, 2007), suggesting its applicability for firms operating in multiple jurisdictions, each having their own political systems. For example, García-Sánchez, Rodríguez-Ariza, Aibar-Guzmán, and Aibar-Guzmán (2020) identified GRI reporting by firms in 53 countries while other research has addressed the use of the GRI framework by companies headquartered in diverse political settings, ranging from government-controlled economies (China) to monarchies (Saudi Arabia) to dictatorships (Venezuela) (Gallén & Peraita, 2018; Mahjoub, 2019; Weber, 2014). The trend of integration of sustainability into the core business strategy of the firm (Rezaee, 2016) supports the need for the integration of sustainable activities into corporate reporting as a whole, and the use of the GRI framework can contribute "to more consistent and compatible disclosures" (Klettner et al., 2014, p. 162). Furthermore, the use of these guidelines has become an instrumental part of the strategic intent of companies to maintain their legitimacy with key stakeholders so that they can attain their strategic

goals (Momin & Parker, 2013).

There is an abundance of research on the extensive attribution of legitimacy theory to the motivation to disclose a firm's sustainable actions (Adams, Hill, & Roberts, 1998; Mobus, 2005; Rayman-Bacchus, 2006; Archel, Husillos, Larrinaga, & Spence, 2009; Momin & Parker, 2013; Ali, Frynas, & Mahmood, 2017). Legitimacy theory is an extension of the neo-institutional theory which suggests that a firm's survival is dependent upon society's willingness to accept its legitimacy, in light of that firm's ability to conform to that society's past, present, and future expectations of it. Research over the years has supported the overlap of the neo-institutional and legitimacy theories in explaining why firms invest in ESG activities in order to obtain legitimacy (Baldini, Dal Maso, Liberatore, Mazzi, & Terzani, 2016; Schaltegger & Hörisch, 2017; Drempeic et al., 2019). Literature pertaining to reporting practices and the use of legitimacy theory has highlighted the importance of disclosure and its role as a critical resource (Chelli, Durocher, & Richard, 2018; Chen & Roberts, 2010). Suchman (1995) described this as strategic legitimation that "is purposive, calculated, and frequently oppositional" and is often influenced by the competitive nature of the business environment (p. 576). Accordingly, management is seen to play a significant part in securing strategic legitimacy at the risk of manipulating their goals in order to appear to be onside with prevailing norms and societal values (Long & Driscoll, 2008). This risk arises because strategic legitimacy does not have to reflect the organization's actual behaviour, just as long as society perceives the firm's behaviour to be legitimate to meeting those societal norms and values (Deegan, 2014). To this extent, society perceptions are significantly influenced by corporate communications and the use of public disclosure as a means to seeking societal support (Aerts & Cormier, 2009; Chelli et al., 2018). This is particularly true for firms operating in sectors that are vulnerable to sustainability issues such as oil and gas, mining, and garment apparel, where the provision of information pertaining to their ESG activities are generally more pronounced.

## 2.2. The Canadian context

Regulation of publicly-traded companies is not undertaken at a federal level but is the responsibility of the 10 provinces and 3 territories through their own legislated securities regulator. Each regulator has established reporting requirements that include disclosing the company's environmental impact as part of the firm's general Continuous Disclosure Obligations, known as National Instrument (NI) 51-102. This general reporting obligation was created by the Canadian Securities Administrators (CSA), an organization comprised of members from all of the provincial and territorial securities regulators, to provide consistent rules and policies related to the disclosure of financial statements, management discussion, and analysis (MD&A), annual information forms (AIF) and other forms of information relevant to the public (CSA, 2020). Subsequent to the publication of NI 51-102, further

standards were created by the CSA in the form of Staff Notice NR 51-133 Environmental Reporting Guidance that provided more clarity in terms of the environmental information that was required to be disclosed. This included the determination by the firm of the materiality of the environmental information to the business of the firm, and the level of risk, uncertainty, liability, obligation, and financial and operational effects associated with the firm's impact on the natural environment. Furthermore, the notice required the company to disclose how it manages the oversight of those risks as well as any relevant forward-looking information (CSA, 2010). Although the notice did not specifically address the reporting responsibilities associated with the impact of the firm related to social sustainability, it can be interpreted to also require social information that is material to the company (CPA & TMX, 2014). Accordingly, under Canadian securities rules, all publicly-traded Canadian companies must disclose all material information about their environmental and social issues as well as obligating the company's board of directors to undertake governance responsibility. This includes annual oversight of a firm's strategic planning process, the identification of related environmental and social risks pertaining to activities related to the strategic plan, and the implementation of appropriate measures to mitigate those risks. Should a company be in non-compliance with these rules the penalty may lead to a cease trading order although that would be rare given the opportunities provided by the regulators to allow firms to address their reporting deficiencies (Chelli et al., 2018).

When it comes to empirical research into GRI reporting and Canadian companies listed on the Toronto Stock Exchange (TSX), a review of the literature identifies only a few studies, each with different approaches to the role of the GRI framework. Most addressed the use of GRI and its effect on the value of the firm. Berthelot, Coulmont, and Serret (2012) investigated the signaling effect of the disclosure of a firm's sustainable activities on the market value of the company. They reviewed the sustainability reports of 28 publicly-traded companies on the Toronto Stock Exchange's S&P/TSX Composite Index and found that investors attach a positive market value to these reports. Furthermore, they confirmed that initiatives such as the GRI are relevant as recognized sustainability reporting guidelines. In 2014, another study examined 192 companies from the S&P/TSX Composite Index using, in part, elements of the GRI to identify a positive association of corporate governance and CSR disclosure with the ability to forecast earnings (Cormier & Magnan, 2014). The GRI was again used in part by Cormier, Gordon, and Magnan (2016) in their analysis of the negative impact of ethical lapses on the firm's legitimacy and standing in financial markets. Of their sample of 589 North American firms, approximately a third was selected from the S&P/TSX Composite Index. A sector-specific paper by Chowdhury, Choi, Ennis, and Chung (2019), measured the respective levels of social, environmental, and economically sustainable activities of TSX-listed oil and gas companies using select aspects of the GRI and then comparing

the relative contribution to the value of the firm. The results supported a positive impact on a firm's market value from their socially sustainable activities only.

In the other studies, more specific topics were dealt with including the use of the work environment indicators contained within the GRI and the comparison of companies who were corporate social responsibility leaders with those who were not (Searcy, Dixon, & Neumann, 2016). This study involved a total of 100 TSX-listed companies and found a need for enhanced standardization of workplace reporting. Lamb, Jannings, and Calain (2017) focused on 27 mining companies listed on the TSX to examine their contribution to the sustainable development of the health sector of low-income countries in which they operate. As part of their study, they used certain GRI indicators to complement their total measure of healthcare impact and found little evidence to support any substantial contribution. Of the few studies identified, one did specifically deal with corporate levels of reporting using the GRI guidelines and that involved a comparison of 20 Canadian TSX-listed companies with 20 French companies where it was found that the use of GRI indicators increased the normativity of sustainability reporting (Chelli et al., 2018). However, of all the literature reviewed, none addressed the level of sustainability reporting of multi-sector, TSX-listed firms and their company characteristics, i.e., size, industry vulnerability, internationalization, or activities in emerging economies. Accordingly, the contribution of this research includes the assessment of the S&P/TSX Composite Index of companies across multiple sectors and the determination of whether they seek strategic legitimacy through the existence and use of corporate sustainability reporting. We explore the extent to which they employ the GRI framework and use that framework to analyze the influence of certain company characteristics on the level of reporting.

### 3. CONCEPTUAL FRAMEWORK AND HYPOTHESES DEVELOPMENT

#### *Size*

In both developed and developing countries, the literature identified a significant positive relationship between corporate size and the level of sustainability disclosure (Ali et al., 2017; Branco & Rodrigues, 2008; Chiu & Wang, 2015; Dremptic et al., 2019; Joubert, 2019; Kansal, Joshi, & Batra, 2014; Tagesson, Blank, Broberg, & Collin, 2009). Early researchers in this area such as Hutton Goodman, Alexander, and Genest (2001) and Graafland, van de Ven, and Stoffele (2003) postulated that it was the added costs of sustainability reporting that limited the level of reporting to larger firms who had the resources to undertake the analysis and reporting of their sustainable activities. More recent research has pointed to the growth in sustainability reporting (Pérez, 2015) with studies suggesting that the only consistent factor for positively influencing sustainability reporting is the firm size (Chauhan & Amit, 2014; Hahn & Kühnen, 2013). The level of

reporting can also be attributed to the likelihood of larger firms having more knowledge about sustainability and the use of sustainability management tools (Gallo & Christensen, 2011; Hörisch, Johnson, & Schaltegger, 2015; Lisi, 2018).

*H1: The level of sustainability reporting among Canada's top publicly-traded companies is significantly and positively associated with the size of the firm.*

#### *Industry vulnerability*

Generally, prior research has supported the association of the level of sustainability reporting with a firm's industry sector (Ates, 2020; Dremptic et al., 2019; de Souza Gonçalves, de Medeiros, Jreige Weffort, & Niyama, 2014; Huang & Kung, 2010; Kansal et al., 2014). It was found to be an important variable for consideration with respect to reporting on the sustainable activities of the firm because the degree of stakeholder pressure on a firm can vary depending on the industry sector they operate in (Adams et al., 1998). For example, the empirical literature has shown that certain industries, e.g., mining, oil and gas, forestry are more vulnerable to stakeholder concern regarding the firm's operating activities (Hussain, Rigoni, & Orij, 2018) and accordingly these firms typically rely on their sustainability reporting for the purpose of strategic legitimacy (Chelli et al., 2018).

*H2: The level of sustainability reporting among Canada's top publicly-traded companies is significantly and positively associated with the vulnerability of their industry to stakeholder concerns.*

#### *Emerging economies*

The literature contains numerous studies related to sustainability reporting and disclosure among firms based in emerging economies (Ching & Gerab, 2017; Elg, Ghauri, Child, & Collinson, 2017; Faisal, Tower, & Rusmin, 2012; Momin & Parker, 2013; Wanderley, Lucian, Farache, & de Sousa Filho, 2008) but there is very little examination of large publicly-traded, multi-national Canadian companies active in emerging economies and their level of sustainability reporting. Some research outside of Canada has been done regarding the influence of the country of origin on sustainability disclosure. Wanderley et al. (2008) chose 127 companies from Africa (South Africa), Asia (China, India, Indonesia, Thailand), and Latin America (Brazil, Chile, Mexico) in order to search their corporate websites for information related to sustainable activities of the firm. Their results indicated that the country of origin had a significant influence on the level of disclosure. Elg et al. (2017) addressed the activities of 3 Swedish firms in Brazil, Russia, India, and China (BRIC economies) and the importance of developing legitimacy with stakeholders. This legitimacy can be attained by multi-national corporations (MNCs) through sustainable actions in emerging economies (Elg et al., 2017; Kolk & van Tulder, 2010; Reimann, Ehr Gott, Kaufmann, & Carter, 2012; Walsh, 2012) and sustainability reporting has become an important contributor to establishing that legitimacy (Momin & Parker, 2013). Therefore, the need to address the influence that operating in emerging economies

has on the level of sustainability reporting is an important topic for examination.

*H3: The level of sustainability reporting among Canada's top publicly-traded companies is significantly and positively associated with their level of activity in emerging economies.*

#### *Internationalization*

A firm that, in addition to its domestic business, conducts operations in foreign jurisdictions is involved in a certain level of internationalization. For some companies, the number of foreign markets can be numerous and for others, it can be a matter of 3 or 4 countries. The influence of internationalization on sustainability reporting has been studied with various findings as to the extent of that influence and the reasons for it. A broader global presence means exposure to a greater number of stakeholders and the global visibility of the firm (Kang, 2013), thus, increasing the pressure to increase the level of sustainable practices and reporting in order to maintain their reputation and legitimacy (Attig, Boubakri, El Ghouli, & Guedhami, 2016). Furthermore, exposure to various international contexts such as country cultures, supply chain activities, and innovation systems can enhance the ability to behave more sustainably (Ayuso, Roca, Arevalo, & Aravind, 2016; Chen, Ong, & Hsu, 2016; Chiarvesio, De Marchi, & Di Maria, 2015). In addition, the costs that go into establishing sustainable practices and reporting can be amortized across the entire global operation (Aguilera-Caracuel, Guerrero-Villegas, Vidal-Salazar, & Delgado-Márquez, 2015), thus, encouraging greater levels of reporting.

*H4: The level of sustainability reporting among Canada's top publicly-traded companies is significantly and positively associated with their level of internationalization.*

#### **4. RESEARCH METHODOLOGY**

The sample used for this study was the S&P/TSX Composite Index which as of December 2019 comprised 234 companies. The choice for using this benchmark index was driven by the likelihood that a significant sample of companies who report on their sustainable activities and use the GRI framework could be found. This choice is also

consistent with some of the other research cited earlier (Berthelot et al., 2012; Cormier & Magnon, 2014). Canada's largest companies are included in the index representing approximately 70% of the total market capitalization of the TSX. Content analysis of these companies' investor relations disclosures was undertaken to determine if they had either produced an annual GRI report specifically or had used elements of the GRI in an annual report or sustainability report. Of the total sample of companies, 42 firms made no mention of sustainability at all, 39 companies provided some reference to sustainability in their annual reports, 66 firms had published a separate sustainability report or sustainability section within their annual reports but did not specifically use the indicators contained within the GRI framework, and 87 companies employed the GRI framework in their annual reports or annual sustainability reports for the 2018-2019 period. Two related companies re-organized into a single entity at the end of 2019, thus reducing to 86 the number of sample companies that reported their sustainable activities using GRI indicators (Table 1).

For the purpose of this study, vulnerable companies are those firms who are active in industries known to be subject to heightened shareholder sensitivity to environmental and social sustainability risks as supported by the literature review above and these companies and their respective industries are highlighted in Table 1. Classifying emerging economies as those that do not belong to the OECD was based on observations from the literature that have commonly distinguished emerging economies as being distinct from OECD member economies (Antal & van den Bergh, 2014; Aizenman & Binici, 2016; Chen, Li, & Shapiro, 2011; Wang & Wei, 2020). Determining whether a firm was operating internationally also involved a review of their corporate disclosures as to the number of countries they operate in. Companies that reported being active in greater than two countries were deemed to be international. Setting the limit at two countries was based on our findings that when a firm's operation was limited to just two countries, they were generally operating in Canada and the United States. Given the integrated nature and similarities of these two economies, we chose to expand the definition of internationalization to be operating in three or more countries.

Table 1. S&amp;P/TSX Composite Index company sample (n = 86)

<i>Company</i>	<i>Industry</i>	<i>Company</i>	<i>Industry</i>	<i>Company</i>	<i>Industry</i>
CAE Inc.	Aerospace & defense	<b>Barrick Gold Corporation</b>	<b>Mining</b>	<b>Parex Resources Inc.</b>	<b>Oil &amp; Gas</b>
Nutrien Ltd.	Agriculture	<b>Cameco Corporation</b>	<b>Mining</b>	<b>Pembina Pipeline Corporation</b>	<b>Oil &amp; Gas</b>
Shopify Inc.	Application software	<b>Centerra Gold Inc.</b>	<b>Mining</b>	<b>PrairieSky Royalty Ltd.</b>	<b>Oil &amp; Gas</b>
BRP Inc.	Automotive	<b>Eldorado Gold Corporation</b>	<b>Mining</b>	<b>Suncor Energy Inc.</b>	<b>Oil &amp; Gas</b>
Celestica Inc.	Computer hardware	<b>Endeavour Mining Corporation</b>	<b>Mining</b>	<b>Tourmaline Oil Corp.</b>	<b>Oil &amp; Gas</b>
SNC-Lavalin Group Inc.	Construction	<b>Ero Copper Corp.</b>	<b>Mining</b>	<b>Vermillion Energy Inc.</b>	<b>Oil &amp; Gas</b>
Gildan Activewear Inc.	Consumer apparel	<b>First Quantum Minerals Ltd.</b>	<b>Mining</b>	<b>Whitecap Resources Inc.</b>	<b>Oil &amp; Gas</b>
Alimentation Couche-Tard Inc.	Consumer goods	<b>Hudbay Minerals Inc.</b>	<b>Mining</b>	First Capital REIT	Real Estate
Cott Corporation	Consumer goods	<b>IAMGOLD Corporation</b>	<b>Mining</b>	Killam Apartment REIT	Real Estate
Maple Leaf Foods Inc.	Consumer protein	<b>Ivanhoe Mines Ltd.</b>	<b>Mining</b>	RioCan REIT	Real Estate
<b>AltaGas Ltd.</b>	<b>Energy</b>	<b>Kinross Gold Corporation</b>	<b>Mining</b>	Restaurant Brands International Inc.	Restaurants
<b>Enbridge Inc.</b>	<b>Energy</b>	<b>Lundin Mining Corporation</b>	<b>Mining</b>	Stantec Inc.	Services
<b>TC Energy Corporation</b>	<b>Energy</b>	<b>OceanaGold Corporation</b>	<b>Mining</b>	WSP Global Inc.	Services
Bank of Montreal	Financial	<b>Pan American Silver Corp.</b>	<b>Mining</b>	<b>Labrador Iron Ore Royalty Corp.</b>	<b>Mining</b>
Bank of Nova Scotia (The)	Financial	<b>Pretium Resources Inc.</b>	<b>Mining</b>	BCE Inc.	Telecom
Canadian Imperial Bank Of Commerce	Financial	<b>SSR Mining Inc.</b>	<b>Mining</b>	Cogeco Communications Inc.	Telecom
IGM Financial Inc.	Financial	<b>Teck Resources Limited</b>	<b>Mining</b>	Rogers Communications Inc.	Telecom
Sun Life Financial Inc.	Financial	<b>Yamana Gold Inc.</b>	<b>Mining</b>	Shaw Communications Inc.	Telecom
TD Bank	Financial	<b>ARC Resources Ltd.</b>	<b>Oil &amp; Gas</b>	TELUS Corporation	Telecom
<b>Canfor Corporation</b>	<b>Forest Products</b>	<b>Baytex Energy Corp.</b>	<b>Oil &amp; Gas</b>	Air Canada	Transport
<b>West Fraser Timber Co. Ltd.</b>	<b>Forest Products</b>	<b>Canadian Natural Resources Limited</b>	<b>Oil &amp; Gas</b>	Canadian National Railway Company	Transport
Finning International Inc.	Industrial distribution	<b>Cenovus Energy Inc.</b>	<b>Oil &amp; Gas</b>	Canadian Pacific Railway Limited	Transport
Great-West Lifeco Inc.	Insurance	<b>Crescent Point Energy Corp.</b>	<b>Oil &amp; Gas</b>	<b>Algonquin Power &amp; Utilities Corp.</b>	<b>Utilities</b>
Manulife Financial Corporation	Insurance	<b>Enerplus Corporation</b>	<b>Oil &amp; Gas</b>	<b>Canadian Utilities Limited</b>	<b>Utilities</b>
Power Corporation of Canada	Insurance	<b>Freehold Royalties Ltd.</b>	<b>Oil &amp; Gas</b>	<b>Capital Power Corporation</b>	<b>Utilities</b>
<b>Agnico Eagle Mines Limited</b>	<b>Mining</b>	<b>Frontera Energy Corporation</b>	<b>Oil &amp; Gas</b>	<b>Emera Incorporated</b>	<b>Utilities</b>
<b>Alacer Gold Corp.</b>	<b>Mining</b>	<b>Gibson Energy Inc.</b>	<b>Oil &amp; Gas</b>	<b>Fortis Inc.</b>	<b>Utilities</b>
<b>Alamos Gold Inc.</b>	<b>Mining</b>	<b>Inter Pipeline Ltd.</b>	<b>Oil &amp; Gas</b>	<b>Northland Power Inc.</b>	<b>Utilities</b>
<b>B2Gold Corp.</b>	<b>Mining</b>	<b>MEG Energy Corp.</b>	<b>Oil &amp; Gas</b>		

Note: Vulnerable industries are in bold.

Most companies were found to have used the latest GRI G4 reporting guidelines but where the older G3 guidelines were used, the data was adjusted by mapping to the appropriate G4 disclosure and related GRI standard number. A total of 33 GRI indicators (Table 2) measuring aspects

related to the economic, environmental and social sustainability activities of each company made up the total. Consistent with the approach of Galani et al. (2012), dichotomous values were assigned (0 - no; 1 - yes) if a company disclosed a measure for each indicator. A total of 2,838 measures were recorded.

**Table 2.** GRI indicator measures

<i>Economic aspects</i>	<i>Social aspects - Human rights</i>
Economic performance GRI201	Diversity and equal opportunity GRI405
Market presence GRI202	Non-discrimination GRI406
Indirect economic impacts GRI203	Freedom of association and collective bargaining GRI407
Procurement practices GRI204	Child labour GRI408
Anti-corruption GRI205	Forced or compulsory labour GRI409
Anti-competitive behaviour GRI206	Security practices GRI410
<i>Environmental aspects</i>	<i>Social aspects - Society</i>
Materials GRI301	Indigenous rights GRI411
Energy GRI302	Assessment GRI412
Water GRI303	Local communities GRI413
Biodiversity GRI304	Public policy GRI415
Emissions GRI305	Compliance GRI419
Effluents and waste GRI306	Supplier social assessment GRI414
Compliance GRI308	<i>Social aspects - Product responsibility</i>
Supplier environmental assessment GRI308	Customer health and safety GRI416
<i>Social aspects - Labour practices</i>	Product and service labelling GRI417
Employment GRI401	Customer privacy GRI418
Labour/Management relations GRI402	
Occupational health and safety GRI403	
Training and education GRI404	

Principal component analysis (PCA) with varimax rotation was applied to reduce the indicators in each of the economic, environmental and social aspects of the GRI measures to a smaller number of latent factors or variables without limiting the explanation of variance. The Kaiser-criterion (eigenvalues > 1) was used to identify factors, and factor loadings < .5 were suppressed. The three product responsibility indicators were isolated as one social factor and the remaining 30 indicators were reduced to two economic factors, three environmental factors, and three additional social factors. The weighted scores of all indicators in each factor were summed to provide a factor score. A total sustainability reporting index (SRI) measure for each firm giving equal weight to economic, environmental and social dimensions (Hussain et al., 2018) was calculated using the factor

scores and then expressed as a percentage (Galani et al., 2012). The SRI represents the dependent variable for the purpose of further analysis. The independent variables are described in Table 3 and are proposed to test the hypotheses developed in the previous section of the paper. The data required to measure the independent variables were gathered from each company's financial statements and annual information form (AIF) filed with SEDAR, Canada's official electronic filing system for public companies and investment funds. All publicly-traded companies are required by regulation to file their documents electronically using this system. AIFs must be filed annually as per the NI 51-102 - Continuous Disclosure Obligations standard referred to earlier and the information contained within the AIF submission must conform to the requirements of the standard.

**Table 3.** Independent variables

<i>Variable</i>	<i>Description</i>	<i>Hypothesis</i>	<i>Expected sign</i>
Size	Corporate size measured by the logAssets1	H1	+
Industry vulnerability	Dummy variable that takes the value 1 if the company is in an industry vulnerable to stakeholder sensitivity to sustainable activities and 0 otherwise.	H2	+
Operations in emerging economies	Dummy variable that takes the value 1 if the company has operations in non-OECD countries and 0 otherwise.	H3	+
Internationalization	Dummy variable that takes the value 1 if the company has operations in more than 2 countries and 0 otherwise.	H4	+

Note: 1 - for financial institutions, the value of total equity was used instead of total assets.

To test H1, Pearson correlation was employed to determine if there was any statistically significant association between the independent continuous variable of asset size and the dependent continuous variable of the level of GRI reporting. H2 through 4 were tested using independent-samples t-testing that compare the means between firms that operate in sustainably-vulnerable industries or not; firms that have operations in emerging economies or not; firms that are international or not; and the continuous, dependent variable of the level of GRI

reporting. An alternative approach would have been to treat each GRI indicator as a measured variable and to create an SRI score from the total of those measures that could be correlated with the independent variables. However, this would imply equal weighting of the variables in developing the SRI score whereas the application of the PCA extracts the maximum common variance from all variables and creates an index of those variables that will generate a more appropriate score for future analysis.

## 5. RESULTS AND DISCUSSION

The PCA reduced the total number of measured GRI indicators to a number of factors for economic, environmental and social sustainability measurement. For each result the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was reasonable ( $> .6$ ) and the determinant values of the related correlation matrices were greater than 0 (.001 to .308). Cronbach's alpha was determined for each factor and scale reliability ranged from acceptable to good ( $> 0.5$  to  $0.9$ ) (Taber, 2018). Each factor was provided with a new label and factor sums were calculated from the respective GRI indicators as shown in Tables 4a, 4b and 4c. The distribution of factor sums and their relative weighted contribution to the SRI (dependent variable) are illustrated in Figure 1. Environmental reporting was the largest contributor followed by economic and social reporting. Within the environmental reporting sub-index, energy use and emissions were the prevailing focus for reporting firms and suggest the influence of stakeholder concerns about climate change. Reporting related to the environmental elements of the firm's supply chain however was well behind. This raises a concern that large TSX companies are not reporting on the more indirect impacts that their organizations may be having on the environment, instead stating the obvious in terms of their direct impacts. Economic reporting was next in terms of contribution to the index reflecting the size and scope of major Canadian companies and their operations in terms of their economic impact on society, as would be expected. A noticeable distinction exists between the level of reporting of activities that are related to the firm's behaviour in the market, e.g., anti-corruptive behaviour, and their level of reporting related to their local wage structures and proportion of spending on local suppliers. This suggests the reluctance of the companies to report on competitive operating measures and the willingness to report on activities that they are legally, and publicly, required to monitor.

Finally, social reporting is the smallest contributor to the sustainability reporting measure. Activities related to educational training and local communities were the most reported, reflecting the desire of firms to showcase employee professional development internally and contributions to education and the local community externally. Reporting on occupational health and safety, and employment practices were also factors that were commonly reported. This would be expected as many of these indicators are legislated obligations for Canadian companies and would be monitored as a result. However, the relatively low level of reporting (37 of 86 firms) by Canadian companies as it pertains to indigenous rights is troubling, given the importance in Canadian society of ensuring the protection of First Nations treaties and rights. While it is recognized that some companies would have a greater impact than others on the indigenous communities in this country and elsewhere, certainly all Canadian companies with activities in Canada would have some impact that could be reported, even if it is to simply confirm that their product or service has not violated the rights of indigenous peoples. Product responsibility was the least reported and, perhaps given the large percentage of companies in the primary extractive sector, this is to be anticipated, but a significant number of companies (40 of 86 or 47%) provide products or services to a variety of consumer groups and it would be expected that the reporting percentages would at a minimum mirror that ratio. A similar dissonance exists with the human relations factor which given the significant number of companies operating in emerging economies (43 of 86 or 50%) one would expect more reporting related to this factor. On average, the companies sampled score only 50% on their overall sustainability reporting suggesting either an inability to report on many indicators or an unwillingness to do so given the voluntary nature of the GRI reporting process.

**Table 4a.** PCA rotated component matrix<sup>a</sup>

<i>GRI economic aspect indicators</i>	<i>Component</i>	
	<i>Factor EC1 Market presence</i>	<i>Factor EC2 Industry behaviour and performance</i>
Economic performance		0.53
Market presence	0.855	
Indirect economic impacts	0.503	0.448
Procurement practices	0.875	
Anti-corruption		0.648
Anti-competitive behaviour		0.854
Eigenvalue	2.398	1.143
% of variance	40.0	19.1
Cronbach's $\alpha$	0.698	0.581
<i>Extraction method: PCA.</i>		
<i>Rotation method: Varimax with Kaiser normalization.<sup>a</sup></i>		
<sup>a</sup> Rotation converged in 3 iterations.		



Table 4b. PCA rotated component matrix<sup>a</sup>

GRI environmental aspect indicators	Component		
	Factor EN1 Supply chain	Factor EN2 Land and water	Factor EN3 Energy and emissions
Materials		0.838	
Energy			0.879
Water	0.700		
Biodiversity	0.675		
Emissions			0.852
Effluents and waste	0.792		
Compliance		0.458	
Supplier environmental assessment		0.804	
Eigenvalue	2.553	1.434	1.253
% of variance	31.9	17.9	15.7
Cronbach's $\alpha$	0.608	0.584	0.750
Extraction method: PCA.			
Rotation method: Varimax with Kaiser normalization. <sup>a</sup>			
<sup>a</sup> Rotation converged in 5 iterations.			

Table 4c. PCA rotated component matrix<sup>a</sup>

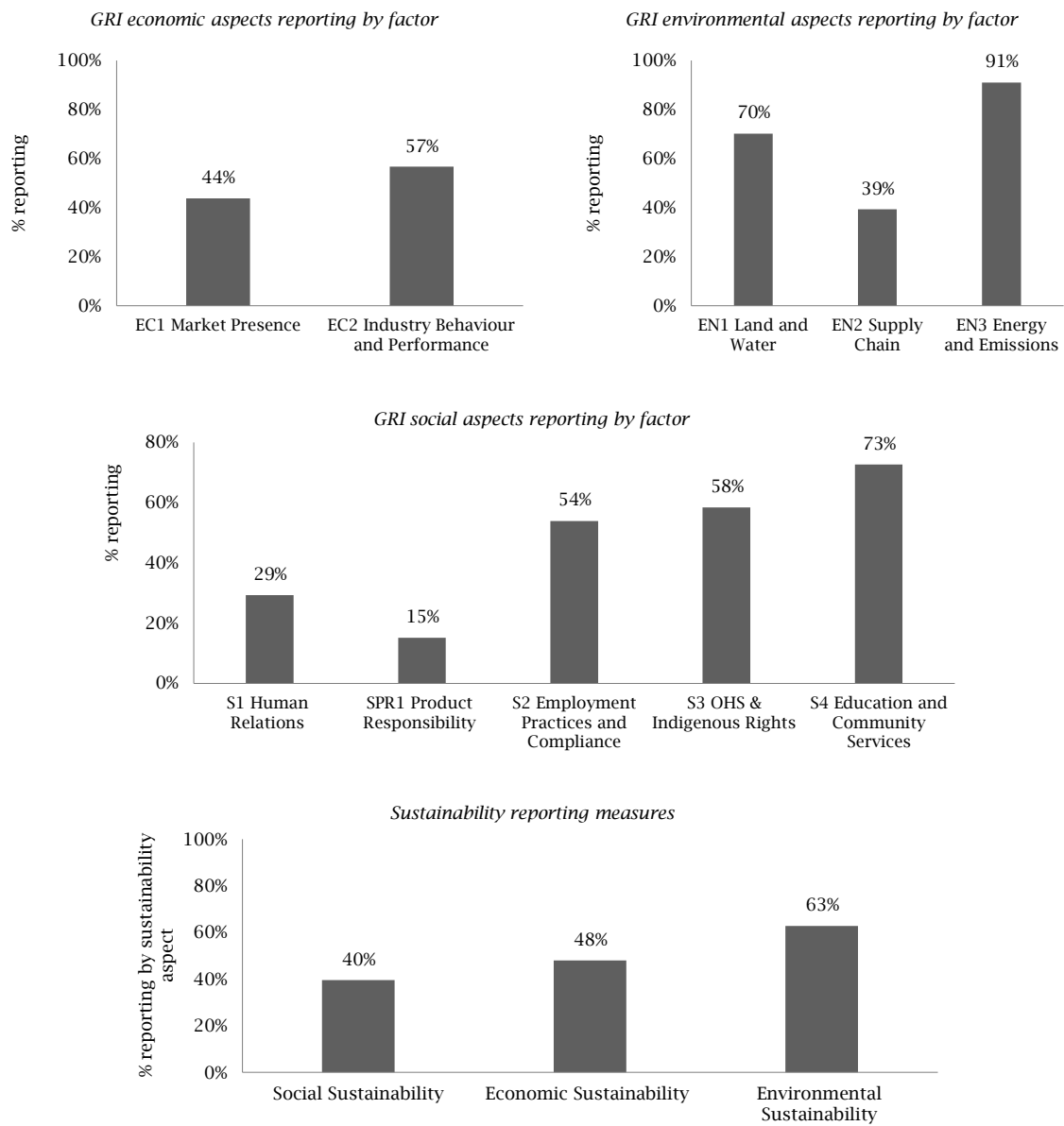
GRI social aspect indicators	Component			
	Factor S1 Human relations	Factor S2 Employment practices	Factor S3 OH&S and indigenous rights	Factor S4 Education and community services
Employment		0.560		
Labour/management relations	0.515			
Occupational health and safety			0.732	
Training and education				0.798
Diversity and equal opportunity		0.667		
Non-discrimination	0.632		0.416	
Freedom of association and collective bargaining	0.829			
Child labour	0.887			
Forced or compulsory labour	0.885			
Security practices	0.655			
Indigenous rights			0.612	
Assessment	0.581			
Local communities			0.480	0.634
Public policy		0.641		
Compliance		0.673		
Supplier assessment for impacts on society	0.443	0.500		
Eigenvalue	5.650	1.485	1.190	1.126
% of variance	35.3	9.3	7.4	7.0
Cronbach's $\alpha$	0.881	0.668	0.610	0.520
Extraction method: PCA.				
Rotation method: Varimax with Kaiser normalization. <sup>a</sup>				
<sup>a</sup> Rotation converged in 6 iterations.				

The descriptive statistics associated with the dependent and independent variables identified in this study are shown in Tables 5<sup>a</sup> and 5b. The S&P/TSX composite index companies that produce a GRI report are large, with assets on average exceeding \$20.9 billion. With a median value of \$8.7 billion for the sample, it is clear that a few very large companies and their asset values have impacted the mean. Furthermore, approximately two-thirds of the sample are companies who are global in their geographic scope with 74% operating in industries vulnerable to stakeholder concern regarding the sustainability of their operations. An analysis of the normality of the independent and dependent variables was undertaken using QQ plots (linear distribution) and the Kolmogorov-Smirnov test ( $p > .05$ ). A correlation matrix was constructed using both the Pearson's and Spearman's Rho techniques given the mix of parametric and non-parametric data (Table 6).

A strong and statistically significant association exists between operating in emerging

economies and internationalization ( $R = .713$ ) which would be expected given the greater number of countries a company operates in increases the likelihood of operating in an emerging economy. Another statistically significant, but much weaker, negative association exists between total assets and industry vulnerability indicating that within this sample the smaller companies are in the industries most vulnerable to stakeholder actions on sustainability issues. The lack of any statistically significant association between the asset size of the companies sampled and their respective level of sustainability reporting suggests that firm size does not have an effect on the level of sustainability reporting and thus provides no support for *H1*, contrary to the findings of the research cited earlier. A likely explanation is that the sampled companies have reached a certain threshold in size and in doing so have the necessary resources and experience required to undertake sustainability reporting (Lisi, 2018), therefore the level of reporting may no longer be significantly influenced by their size.

**Figure 1.** Distribution of GRI reporting percentages by factor and sustainability measures



**Table 5a.** Descriptive statistics for dependent variables

	<i>Total assets \$C MM</i>	<i>SRI</i>
N	86	86
Mean	20,953	0.50
Median	8,653	0.47
Std. deviation	27,569	0.22
Minimum	601	0.16
Maximum	163,269	0.96

**Table 5b.** Descriptive statistics for independent variables

	<i>Industry vulnerable to stakeholder sustainability activism</i>		<i>Operating in emerging economies</i>		<i>Internationalization</i>	
	Yes	No	Yes	No	Yes	No
Frequency	64	22	43	41	57	27
Valid percentage	74%	26%	50%	50%	66%	34%

Table 6. Correlation matrix

		Industry vulnerable to stakeholder sustainability activism	Operating in emerging economies	Internationalization	Total assets	SRI
Industry vulnerable to stakeholder sustainability activism	Spearman Rho correlation	1	-0.053	-0.024	-0.273*	0.063
	Sig. (2-tailed)		0.626	0.829	0.011	0.562
Operating in emerging economies	Spearman Rho correlation	-0.053	1	0.713**	0.015	0.219*
	Sig. (2-tailed)	0.626		0.000	0.891	0.043
Internationalization	Spearman Rho correlation	-0.024	0.713**	1	-0.056	0.084
	Sig. (2-tailed)	0.829	0.000		0.609	0.443
Total assets	Pearson correlation	-0.264*	0.02	-0.048	1	-0.047
	Sig. (2-tailed)	0.014	0.854	0.659		0.665
SRI	Pearson correlation	0.064	0.222*	0.074	-0.047	1
	Sig. (2-tailed)	0.556	0.04	0.498	0.665	
	N	86	86	86	86	86

Note: \* Correlation is significant at the 0.05 level (2-tailed). \*\* Correlation is significant at the 0.01 level (2-tailed).

The normality tests confirmed that the dependent variable (SRI) is approximately normally distributed across each group of the independent variables so independent t-tests were run between the SRI and the binary dummy variables (vulnerability, emerging economies, internationalization) in order to test the remaining hypotheses (Tables 7a and 7b). No statistically significant difference (t-test sig. > 0.05) in the level of sustainability reporting was found between companies that operate in vulnerable industries and

those who do not, therefore *H2* is not supported. This is a surprising result given it runs contrary to the strategic legitimacy theory, as mentioned previously in this paper (Chelli et al., 2018) and suggests that Canadian companies in industries vulnerable to stakeholder sustainability concerns may not find they need to report at a level any different than firms in other non-sensitive industries. This is troubling given the large percentage of the firms sampled who are operating in a vulnerable industry.

Table 7a. Group statistics

Group statistics		N	Mean	Std. deviation	Std. error mean
Industry vulnerability	0	22	0.477	0.217	0.046
	1	64	0.510	0.222	0.028
Operating in emerging economies	0	43	0.453	0.204	0.031
	1	43	0.550	0.226	0.035
Internationalization	0	29	0.479	0.220	0.041
	1	57	0.513	0.220	0.029

Table 7b. Independent samples test

Independent samples test	SRI	Levene's test for equality of variances		t-test for equality of means			Mean diff.	SE diff.	95% confidence interval of the difference	
		F	Sig.	t	df	Sig. (2-tailed)			Lower	Upper
Industry vulnerability	Equal variances assumed	0.200	0.656	-0.592	84.000	0.556	-0.032	0.055	-0.141	0.076
	Equal variances not assumed			-0.599	37.259	0.553	-0.032	0.054	-0.141	0.076
Operating in emerging economies	Equal variances assumed	0.961	0.330	-2.087	84.000	0.040	-0.097	0.046	-0.189	-0.005
	Equal variances not assumed			-2.087	83.126	0.040	-0.097	0.046	-0.189	-0.005
Internationalization	Equal variances assumed	0.090	0.765	-0.68	84.000	0.498	-0.034	0.050	-0.134	0.066
	Equal variances not assumed			-0.68	56.471	0.499	-0.034	0.050	-0.135	0.066

However, firms who have operations in emerging economies did have statistically significantly greater levels of sustainability reporting [ $t(84) = -2.087$ ,  $p = 0.04$ ] than those who do not and consequently provides support for *H3*. This finding is consistent with the limited literature in this area and provides evidence that multi-national companies

who operate in emerging economies may increase their level of sustainability reporting as an external legitimacy strategy (Momin & Parker, 2013). Certainly, the sample in this study was evenly split between companies that operate in emerging economies and those who do not, so this result is significant in its support of that observation. Finally,

there was no statistically significant difference in the level of sustainability reporting by those companies who were international in their geographic scope and those who were not and as a result, *H4* was unsupported. The literature support for enhancing sustainable reporting through internationalization focused on the influence of global supply chains and cost reduction of the reporting process. In this study, companies were less forthcoming when it came to reporting on the supply chain sustainability factor (39%) so non-support for positive supply chain influence on the level of sustainability reporting is also not surprising. Furthermore, the sampled firms are quite large and may not need to amortize their sustainability reporting costs across multiple operating regions. Regardless, what may be more concerning is the possibility that Canadian firms are simply not interested in the sustainability influences that come with global reach as suggested by the literature (Attig et al., 2016; Kang, 2013).

## 6. CONCLUSION

We examined the 234 companies that comprise the S&P/TSX composite index and found that while 65% (153 out of 234) of the companies engaged in some sustainability reporting only 86 of these companies used the GRI sustainability framework and these companies tended to engage in those sustainability measures that were mainly required by law or where they would be subject to the most scrutiny. Our findings are consistent with that of Searcy et al. (2016) and, for the investment community, should reinforce concern that the voluntary nature of sustainability reporting for publicly-traded companies continues to allow for opaque reporting of sustainability measures, and exposure of the firm to the risk of future lawsuits and business interruptions that could have a negative impact on shareholder value. This also has implications for Canadian regulatory policy on the disclosure of material social and environmental impacts in that our results suggest that the current voluntary policy may be inadequate and that non-voluntary sustainability reporting in a manner similar to existing European Union directives and guidelines (Manes-Rossi, Tiron-Tudor, Nicolò, & Zanellato, 2018) would be more effective in limiting stakeholder risks.

Among the 86 companies that employed the GRI framework, greater levels of sustainability reporting were found to exist among those that

operated in emerging markets suggesting that heightened sensitivity to sustainability issues in developing countries influences the external legitimacy strategy of firms headquartered in Canada. As the companies we considered are large and generally well known in Canada, they are accustomed to receiving attention. By complying with Canadian guidelines, which include corporate reporting related to sustainability, they are able to maintain their good citizenship status for now but the expectation of stakeholders in regards to the level of corporate reporting will continue to be one of greater disclosure regarding the sustainable nature, or lack thereof, of their operations. While these guidelines may not exist in developing countries, firms seeking greater legitimacy both at home and abroad (Han, Liu, Xia, & Gao, 2018; Hoskisson, Wright, Filatotchev, & Peng, 2013) will need to consider how to employ the GRI framework. To this extent, our findings have implications for its interpretation and use as a common reporting tool.

The study has limitations. Like many studies of this type, it is recognized that the GRI is voluntary and companies can be selective as to what they wish to report. However, given that companies have an incentive to report on good results, their lack of reporting can be construed as avoidance of exposing unsustainable activities. Certainly, if a company decides that a particular indicator is not relevant they can simply state that in their sustainability report. Furthermore, we focused on the most recent year of record (2018-2019) which allowed us to study which major Canadian companies used the GRI measures but did not examine whether there have been changes over time. Is the trend moving towards more or less companies engaging in sustainability reporting even if they do not use the GRI reporting? Future research could examine a company's perception of itself via its vision/mission statement and how that impacts whether or not it engages in sustainability reporting. We also did not examine how the actions of peers, whether in the same industry or due to the fact that they are members of the composite index, or the impact of a company's performance (good or bad), influences its decision to engage in sustainability reporting. Do companies view sustainability reporting as an unnecessary interference that challenges their authority or do they view it as a way to showcase their conduct? Further qualitative work in this area would offer insights into firm behaviour and the conditions under which they are likely to engage in sustainability reporting.

## REFERENCES

1. Adams, C. A., Hill, W.-Y., & Roberts, C. B. (1998). Corporate social reporting practices in western Europe: Legitimizing corporate behaviour? *The British Accounting Review*, 30(1), 1-21. <https://doi.org/10.1006/bare.1997.0060>
2. Aerts, W., & Cormier, D. (2009). Media legitimacy and corporate environmental communication. *Accounting, Organizations And Society*, 34(1), 1-27. <https://doi.org/10.1016/j.aos.2008.02.005>
3. Aguilera-Caracuel, J., Guerrero-Villegas, J., Vidal-Salazar, M. D., & Delgado-Márquez, B. L. (2015). International cultural diversification and corporate social performance in multinational enterprises: The role of slack financial resources. *Management International Review*, 55(3), 323-353. <https://doi.org/10.1007/s11575-014-0225-4>
4. Aizenman, J., & Binici, M. (2016). Exchange market pressure in OECD and emerging economies: Domestic vs. external factors and capital flows in the old and new normal. *Journal of International Money and Finance*, 66, 65-87. <https://doi.org/10.1016/j.jimonfin.2015.12.008>

5. Ali, W., Frynas, J. G., & Mahmood, Z. (2017). Determinants of corporate social responsibility (CSR) disclosure in developed and developing countries: A literature review. *Corporate Social Responsibility and Environmental Management*, 24(4), 273-294. <https://doi.org/10.1002/csr.1410>
6. Antal, M., & van den Bergh, J. C. J. M. (2014). Re-spending rebound: A macro-level assessment for OECD countries and emerging economies. *Energy Policy*, 68, 585-590. <https://doi.org/10.1016/j.enpol.2013.11.016>
7. Archel, P., Husillos, J., Larrinaga, C., & Spence, C. (2009). Social disclosure, legitimacy theory and the role of the state. *Accounting, Auditing & Accountability Journal*, 22(8), 1284-1307. <https://doi.org/10.1108/09513570910999319>
8. Ates, S. (2020). Membership of sustainability index in an emerging market: Implications for sustainability. *Journal of Cleaner Production*, 250, 119465. <https://doi.org/10.1016/j.jclepro.2019.119465>
9. Attig, N., Boubakri, N., El Ghouli, S., & Guedhami, O. (2016). Firm internationalization and corporate social responsibility. *Journal of Business Ethics*, 134(2), 171-197. <https://doi.org/10.1007/s10551-014-2410-6>
10. Ayuso, S., Roca, M., Arevalo, J. A., & Aravind, D. (2016). What determines principle-based standards implementation? Reporting on global compact adoption in Spanish firms. *Journal of Business Ethics*, 133(3), 553-565. <https://doi.org/10.1007/s10551-014-2412-4>
11. Baldini, M., Dal Maso, L., Liberatore, G., Mazzi, F., & Terzani, S. (2018). Role of country- and firm-level determinants in environmental, social, and governance disclosure. *Journal of Business Ethics*, 150(1), 79-98. <https://doi.org/10.1007/s10551-016-3139-1>
12. Berthelot, S., Coulmont, M., & Serret, V. (2012). Do investors value sustainability reports? A Canadian study. *Corporate Social Responsibility and Environmental Management*, 19(6), 355-363. <https://doi.org/10.1002/csr.285>
13. Branco, M. C., & Rodrigues, L. L. (2008). Factors influencing social responsibility disclosure by Portuguese companies. *Journal of Business Ethics*, 83(4), 685-701. <https://doi.org/10.1007/s10551-007-9658-z>
14. Brown, H. S., de Jong, M., & Lessidrenska, T. (2009). The rise of the Global Reporting Initiative: A case of institutional entrepreneurship. *Environmental Politics*, 18(2), 182-200. <https://doi.org/10.1080/09644010802682551>
15. Camilleri, M. A. (2015). Environmental, social and governance disclosures in Europe. *Sustainability Accounting, Management and Policy Journal*, 6(2), 224-242. <https://doi.org/10.1108/SAMPJ-10-2014-0065>
16. Canadian Securities Administrators (CSA). (2010). *CSA Staff Notice 51-133: Environmental reporting guidance*. Retrieved from [https://www.osc.gov.on.ca/documents/en/Securities-Category5/csa\\_20101027\\_51-333\\_environmental-reporting.pdf](https://www.osc.gov.on.ca/documents/en/Securities-Category5/csa_20101027_51-333_environmental-reporting.pdf)
17. Canadian Securities Administrators (CSA). (2020). *Protecting investors: Maintaining confidence in Canada's markets*. Retrieved from <https://www.securities-administrators.ca/aboutcsa.aspx?id=77>
18. Chartered Professional Accountants (CPA), & Toronto Stock Exchange (TMX). (2014). *A primer for environmental & social disclosure*. Retrieved from <https://www.tsx.com/resource/en/73>
19. Chauhan, S., & Amit. (2014). A relational study of firm's characteristics and CSR expenditure. *Procedia Economics and Finance*, 11, 23-32. [https://doi.org/10.1016/S2212-5671\(14\)00172-5](https://doi.org/10.1016/S2212-5671(14)00172-5)
20. Chelli, M., Durocher, S., & Fortin, A. (2018). Normativity in environmental reporting: A comparison of three regimes. *Journal of Business Ethics*, 149(2), 285-311. <https://doi.org/10.1007/s10551-016-3128-4>
21. Chelli, M., Durocher, S., & Richard, J. (2014). France's new economic regulations: Insights from institutional legitimacy theory. *Accounting, Auditing & Accountability Journal*, 27(2), 283-316. <https://doi.org/10.1108/AAAJ-07-2013-1415>
22. Chen, J. C., & Roberts, R. W. (2010). Toward a more coherent understanding of the organization-society relationship: A theoretical consideration for social and environmental accounting research. *Journal of Business Ethics*, 97(4), 651-665. <https://doi.org/10.1007/s10551-010-0531-0>
23. Chen, L., Tang, O., & Feldmann, A. (2015). Applying GRI reports for the investigation of environmental management practices and company performance in Sweden, China and India. *Journal of Cleaner Production*, 98, 36-46. <https://doi.org/10.1016/j.jclepro.2014.02.001>
24. Chen, P.-H., Ong, C.-F., & Hsu, S.-C. (2016). The linkages between internationalization and environmental strategies of multinational construction firms. *Journal of Cleaner Production*, 116, 207-216. <https://doi.org/10.1016/j.jclepro.2015.12.105>
25. Chen, V. Z., Li, J., & Shapiro, D. M. (2011). Are OECD-prescribed "good corporate governance practices" really good in an emerging economy? *Asia Pacific Journal of Management*, 28(1), 115-138. <https://doi.org/10.1007/s10490-010-9206-8>
26. Chiarvesio, M., De Marchi, V., & Di Maria, E. (2015). Environmental innovations and internationalization: Theory and practices. *Business Strategy and the Environment*, 24(8), 790-801. <https://doi.org/10.1002/bse.1846>
27. Ching, H. Y., & Gerab, F. (2017). Sustainability reports in Brazil through the lens of signaling, legitimacy and stakeholder theories. *Social Responsibility Journal*, 13(1), 95-110. <https://doi.org/10.1108/SRJ-10-2015-0147>
28. Chiu, T.-K., & Wang, Y.-H. (2015). Determinants of social disclosure quality in Taiwan: An application of stakeholder theory. *Journal of Business Ethics*, 129(2), 379-398. <https://doi.org/10.1007/s10551-014-2160-5>
29. Chowdhury, R. H., Choi, S., Ennis, S., & Chung, D. (2019). Which dimension of corporate social responsibility is a value driver in the oil and gas industry? *Canadian Journal of Administrative Sciences/Revue Canadienne des Sciences de l'Administration*, 36(2), 260-272. <https://doi.org/10.1002/cjas.1492>
30. Cormier, D., & Magnan, M. (2014). The impact of social responsibility disclosure and governance on financial analysts' information environment. *Corporate Governance*, 14(4), 467-484. <https://doi.org/10.1108/CG-01-2013-0012>
31. Cormier, D., Gordon, I. M., & Magnan, M. (2016). Corporate ethical lapses: Do markets and stakeholders care? *Management Decision*, 54(10), 2485-2506. <https://doi.org/10.1108/MD-05-2016-0301>
32. de Souza Gonçalves, R., de Medeiros, O. R., Jreige Weffort, E. F., & Niyama, J. K. (2014). A social disclosure index for assessing social programs in Brazilian listed firms. In *Accounting in Latin America: Research in accounting in emerging economies* (Volume 14, pp. 75-103). <https://doi.org/10.1108/S1479-356320140000014002>
33. Deegan, C. (2014). An overview of legitimacy theory as applied within the social and environmental accounting literature. In J. Bebbington, J. Unerman, & B. O'Dwyer (Eds.), *Sustainability accounting and accountability*, (pp. 248-272). Retrieved from <https://cutt.ly/mki7mM9>
34. Drempetic, S., Klein, C., & Zwergel, B. (2020). The influence of firm size on the ESG score: Corporate sustainability ratings under review. *Journal of Business Ethics*, 167, 333-360. <https://doi.org/10.1007/s10551-019-04164-1>
35. Elg, U., Ghauri, P. N., Child, J., & Collinson, S. (2017). MNE microfoundations and routines for building a legitimate and sustainable position in emerging markets. *Journal of Organizational Behavior*, 38(9), 1320-1337. <https://doi.org/10.1002/job.2214>

36. Faisal, F., Tower, G., & Rusmin, R. (2012). Legitimising corporate sustainability reporting throughout the world. *Australasian Accounting, Business and Finance Journal*, 6(2), 19-34. Retrieved from <https://ro.uow.edu.au/cgi/viewcontent.cgi?article=1335&context=aabfj>
37. Galani, D., Gravas, E., & Stavropoulos, A. (2012). Company characteristics and environmental policy. *Business Strategy and the Environment*, 21(4), 236-247. <https://doi.org/10.1002/bse.731>
38. Gallén, M. L., & Peraita, C. (2018). The effects of national culture on corporate social responsibility disclosure: A cross-country comparison. *Applied Economics*, 50(27), 2967-2979. <https://doi.org/10.1080/00036846.2017.1412082>
39. Gallo, P. J., & Christensen, L. J. (2011). Firm size matters: An empirical investigation of organizational size and ownership on sustainability-related behaviors. *Business & Society*, 50(2), 315-349. <https://doi.org/10.1177/0007650311398784>
40. García- Sánchez, I.-M., Rodríguez- Ariza, L., Aibar- Guzmán, B., & Aibar- Guzmán, C. (2020). Do institutional investors drive corporate transparency regarding business contribution to the sustainable development goals? *Business Strategy and the Environment*, 29(5), 2019-2036. <https://doi.org/10.1002/bse.2485DOI:10.1002/bse.2485>
41. Graafland, J., van de Ven, B., & Stoffele, N. (2003). Strategies and instruments for organising CSR by small and large businesses in the Netherlands. *Journal of Business Ethics*, 47(1), 45-60. <https://doi.org/10.1023/A:1026240912016>
42. Hahn, R., & Kühnen, M. (2013). Determinants of sustainability reporting: A review of results, trends, theory, and opportunities in an expanding field of research. *Journal of Cleaner Production*, 59, 5-21. <https://doi.org/10.1016/j.jclepro.2013.07.005>
43. Han, X., Liu, X., Xia, T., & Gao, L. (2018). Home-country government support, interstate relations and the subsidiary performance of emerging market multinational enterprises. *Journal of Business Research*, 93, 160-172. <https://doi.org/10.1016/j.jbusres.2018.04.021>
44. Hoskisson, R. E., Wright, M., Filatotchev, I., & Peng, M. W. (2013). Emerging multinationals from mid-range economies: The influence of institutions and factor markets. *Journal of Management Studies*, 50(7), 1295-1321. <https://doi.org/10.1111/j.1467-6486.2012.01085.x>
45. Hörisch, J., Johnson, M. P., & Schaltegger, S. (2015). Implementation of sustainability management and company size: A knowledge- based view. *Business Strategy and the Environment*, 24(8), 765-779. <https://doi.org/10.1002/bse.1844>
46. Huang, C.-L., & Kung, F.-H. (2010). Drivers of environmental disclosure and stakeholder expectation: Evidence from Taiwan. *Journal of Business Ethics*, 96(3), 435-451. <https://doi.org/10.1007/s10551-010-0476-3>
47. Hussain, N., Rigoni, U., & Orij, R. P. (2018). Corporate governance and sustainability performance: Analysis of triple bottom line performance. *Journal of Business Ethics*, 149(2), 411-432. <https://doi.org/10.1007/s10551-016-3099-5>
48. Hutton, J. G., Goodman, M. B., Alexander, J. B., & Genest, C. M. (2001). Reputation management: The new face of corporate public relations? *Public Relations Review*, 27(3), 247-261. [https://doi.org/10.1016/S0363-8111\(01\)00085-6](https://doi.org/10.1016/S0363-8111(01)00085-6)
49. Jouber, H. (2019). How does CEO pay slice influence corporate social responsibility? U.S.-Canadian versus Spanish-French listed firms. *Corporate Social Responsibility and Environmental Management*, 26(2), 502-517. <https://doi.org/10.1002/csr.1728>
50. Kang, J. (2013). The relationship between corporate diversification and corporate social performance. *Strategic Management Journal*, 34(1), 94-109. <https://doi.org/10.1002/smj.2005>
51. Kansal, M., Joshi, M., & Batra, G. S. (2014). Determinants of corporate social responsibility disclosures: Evidence from India. *Advances in Accounting*, 30(1), 217-229. <https://doi.org/10.1016/j.adiac.2014.03.009>
52. Klettner, A., Clarke, T., & Boersma, M. (2014). The governance of corporate sustainability: Empirical insights into the development, leadership and implementation of responsible business strategy. *Journal of Business Ethics*, 122(1), 145-165. <https://doi.org/10.1007/s10551-013-1750-y>
53. Kolk, A. (1999). Evaluating corporate environmental reporting. *Business Strategy and the Environment*, 8(4), 225-237. [https://doi.org/10.1002/\(SICI\)1099-0836\(199907/08\)8:4%3C225::AID-BSE206%3E3.0.CO;2-4](https://doi.org/10.1002/(SICI)1099-0836(199907/08)8:4%3C225::AID-BSE206%3E3.0.CO;2-4)
54. Kolk, A. (2003). Trends in sustainability reporting by the Fortune Global 250. *Business Strategy and the Environment*, 12(5), 279-291. <https://doi.org/10.1002/bse.370>
55. Kolk, A., & van Tulder, R. (2010). International business, corporate social responsibility and sustainable development. *International Business Review*, 19(2), 119-125. <https://doi.org/10.1016/j.ibusrev.2009.12.003>
56. Lamb, S., Jennings, J., & Calain, P. (2017). The evolving role of CSR in international development: Evidence from Canadian extractive companies' involvement in community health initiatives in low-income countries. *The Extractive Industries and Society*, 4(3), 614-621. <https://doi.org/10.1016/j.exis.2017.05.011>
57. Landrum, N. E., & Ohsowski, B. (2018). Identifying worldviews on corporate sustainability: A content analysis of corporate sustainability reports. *Business Strategy and the Environment*, 27(1), 128-151. <https://doi.org/10.1002/bse.1989>
58. Lisi, I. E. (2018). Determinants and performance effects of social performance measurement systems. *Journal of Business Ethics*, 152(1), 225-251. <https://doi.org/10.1007/s10551-016-3287-3>
59. Long, B. S., & Driscoll, C. (2008). Codes of ethics and the pursuit of organizational legitimacy: Theoretical and empirical contributions. *Journal of Business Ethics*, 77(2), 173-189. <https://doi.org/10.1007/s10551-006-9307-y>
60. Mahjoub, L. B. (2019). Disclosure about corporate social responsibility through ISO 26000 implementation made by Saudi listed companies. *Cogent Business & Management*, 6(1), 1-23. <https://doi.org/10.1080/23311975.2019.1609188>
61. Manes-Rossi, F., Tiron-Tudor, A., Nicolò, G., & Zanellato, G. (2018). Ensuring more sustainable reporting in Europe using non-financial disclosure - De facto and de jure evidence. *Sustainability*, 10(4), 1162. <https://doi.org/10.3390/su10041162>
62. Milne, M. J., & Gray, R. (2013). W(h)ither ecology? The triple bottom line, the Global Reporting Initiative, and corporate sustainability reporting. *Journal of Business Ethics*, 118(1), 13-29. <https://doi.org/10.1007/s10551-012-1543-8>
63. Miotto, G., Del-Castillo-Feito, C., & Blanco-González, A. (2019). Reputation and legitimacy: Key factors for higher education institutions' sustained competitive advantage. *Journal of Business Research*, 112, 342-353. <https://doi.org/10.1016/j.jbusres.2019.11.076>

64. Mobus, J. L. (2005). Mandatory environmental disclosures in a legitimacy theory context. *Accounting, Auditing & Accountability Journal*, 18(4), 492-517. <https://doi.org/10.1108/09513570510609333>.
65. Momin, M. A., & Parker, L. D. (2013). Motivations for corporate social responsibility reporting by MNC subsidiaries in an emerging country: The case of Bangladesh. *The British Accounting Review*, 45(3), 215-228. <https://doi.org/10.1108/09513570510609333>
66. Mori Jr., R., & Best, P. (2017). GRI G4 content index. *Sustainability Accounting, Management and Policy Journal*, 8(5), 571-594. <https://doi.org/10.1108/SAMPJ-12-2015-0115>
67. Nielsen, A. E., & Thomsen, C. (2007). Reporting CSR- what and how to say it? *Corporate Communications: An International Journal*, 12(1), 25-40. <https://doi.org/10.1108/13563280710723732>
68. Pérez, A. (2015). Corporate reputation and CSR reporting to stakeholders: Gaps in the literature and future lines of research. *Corporate Communications: An International Journal*, 20(1), 11-29. <https://doi.org/10.1108/CCIJ-01-2014-0003>
69. Rayman-Bacchus, L. (2006). Reflecting on corporate legitimacy. *Critical Perspectives on Accounting*, 17(2-3), 323-335. <https://doi.org/10.1016/j.cpa.2005.07.002>
70. Reimann, F., Ehr Gott, M., Kaufmann, L., & Carter, C. R. (2012). Local stakeholders and local legitimacy: MNEs' social strategies in emerging economies. *Journal of International Management*, 18(1), 1-17. <https://doi.org/10.1016/j.intman.2011.06.002>
71. Rezaee, Z. (2016). Business sustainability research: A theoretical and integrated perspective. *Journal of Accounting Literature*, 36, 48-64. <https://doi.org/10.1016/j.acclit.2016.05.003>
72. Schaltegger, S., & Hörisch, J. (2017). In search of the dominant rationale in sustainability management: Legitimacy- or profit-seeking? *Journal of Business Ethics*, 145(2), 259-276. <https://doi.org/10.1007/s10551-015-2854-3>
73. Searcy, C., Dixon, S. M., & Neumann, W. P. (2016). The use of work environment performance indicators in corporate social responsibility reporting. *Journal of Cleaner Production*, 112, 2907-2921. <https://doi.org/10.1016/j.jclepro.2015.10.081>
74. Seck, S. L. (2011). Canadian mining internationally and the UN guiding principles for business and human rights. In *Canadian yearbook of international law* (Volume 49, pp. 51-116). <https://doi.org/10.1017/S0069005800010328>
75. Suchman, M. C. (1995). Managing legitimacy: Strategic and institutional approaches. *The Academy of Management Review*, 20(3), 571-610. <https://doi.org/10.2307/258788>
76. Taber, K. S. (2018). The use of Cronbach's alpha when developing and reporting research instruments in science education. *Research in Science Education*, 48(6), 1273-1296. <https://doi.org/10.1007/s11165-016-9602-2>
77. Tagesson, T., Blank, V., Broberg, P., & Collin, S. O. (2009). What explains the extent and content of social and environmental disclosures on corporate websites: A study of social and environmental reporting in Swedish listed corporations. *Corporate Social Responsibility and Environmental Management*, 16(6), 352-364. <https://doi.org/10.1002/csr.194>
78. Walsh, P. R. (2012). Prioritizing sustainability strategies for global extractive sector firms. *Management of Environmental Quality*, 23(6), 615-629. <https://doi.org/10.1108/14777831211262909>
79. Walsh, P. R. (2014). A license to operate? An empirical examination of the influence of environmental and social performance on the financial performance of mining sector firms. *International Journal of Innovation and Sustainable Development*, 8(2), 190-206. <https://doi.org/10.1504/IJISD.2014.062851>
80. Wanderley, L. S. O., Lucian, R., Farache, F., & de Sousa Filho, J. M. (2008). CSR information disclosure on the web: A context-based approach analysing the influence of country of origin and industry sector. *Journal of Business Ethics*, 82(2), 369-378. <https://doi.org/10.1007/s10551-008-9892-z>
81. Wang, H., & Wei, W. (2020). Coordinating technological progress and environmental regulation in CO<sub>2</sub> mitigation: The optimal levels for OECD countries & emerging economies. *Energy Economics*, 87, 104510. <https://doi.org/10.1016/j.eneco.2019.104510>
82. Weber, O. (2014). Environmental, social and governance reporting in China. *Business Strategy and the Environment*, 23(5), 303-317. <https://doi.org/10.1002/bse.1785>