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## RESEARCH ARTICLE



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# Corporate ESG reporting quantity, quality and performance: Where to now for environmental policy and practice?

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## Abstract

Environmental, social and governance (ESG) issues are driving corporate strategy and performance. However, does this mean more ESG reporting is being done? If so, is the quality of ESG reports improving? And what about ESG performance? In this paper, we examine these three trends in ESG reporting—quantity, quality and corporate ESG performance. With a Swedish multinational corporate focus, we analyse data from Sustainalytics, corporateregister.com and the Alliance for Corporate Transparency to answer our research questions. Our analysis shows that, while the quality of ESG information in Sweden has steadily improved, performance plateaued around 2015. Mitigating problems such as the impacts of climate change and COVID-19 call for improved ESG *performance*, not improved ESG reporting quantity or quality. Thus, rather than focusing on improving ESG reporting regulations, we need to redirect our focus towards creating better ESG outcomes. Therefore, we argue that companies must be asked to provide data that are more timely, relevant, credible and comparable and that demonstrate improved ESG performance. With this information, financial analysts and investors can redirect and accelerate capital flows towards corporate investments that help tackle important problems related to climate crises and the reaching of a sustainable development. Our analysis reveals that we need more research focusing on consumers, investors and policymakers. Future scholars could explore how changing consumer preferences are driving improvements in ESG performance and how changing capital market allocations affect ESG performance.

## KEYWORDS

climate change, ESG information quality, ESG performance, ESG reporting quality, EU Green Deal, financial market, reporting regulation

## 1 | INTRODUCTION

Every non-executive director would also attest, as would every CEO who goes out and engages with

shareholders, that the change in the tone in the marketplace around ESG has been remarkable. Go back 15 years ago, I'm not even sure we would have known what the ESG acronym meant. Well today the ESG individual specialists within our big shareholders is driving the [annual general] meeting (...).

**Abbreviation:** ESG, environmental social governance.

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(Ken MacKenzie, Chairman of BHP, The Australian Financial Review Business Summit, 10 March 2020)

MacKenzie's quote reveals how important environmental, social and governance (ESG) issues have become in driving corporate reporting and performance (Adams, 2017). This shift is vital, given that more than half the people in a recent international survey agreed that 'capitalism, as it exists today, does more harm than good in the world' (Edelman, 2020, p. 12). At the heart of that harm are ESG issues like climate change and poverty, issues that the United Nations, through its Sustainable Development Goals, encourages everyone to act on—including companies (United Nations Development Programme [UNDP], 2015). Such issues have only been magnified by the impacts of the COVID-19 crisis (Wood, 2020). In short, the world has changed dramatically, and companies must both plan for potential ESG-related issues and meet the demand for comprehensive corporate ESG performance information (Barker & Eccles, 2019).

Ironically, as MacKenzie outlines, it is investors, by which he means shareholders, who drive the demand for further ESG performance information to understand how companies are becoming part of sustainable development—being 'development that meets the needs of the present without compromising the ability of future generations to meet their own needs' (Brundtland, 1987, p. 41). For example, the world's biggest investment fund BlackRock is shifting its investment strategy to focus on sustainable development because investors now recognise 'that climate risk is investment risk' (Edelman, 2020; Fink, 2020). That risk translates into stranded assets and resources, as a low-carbon economy makes certain assets worthless, or even turns them into liabilities (Bos & Gupta, 2019). Because investors now need to better understand the link between climate change and investment risk, demand for investment-grade climate change and other ESG performance information is exponentially increasing.

In response, new regulations for corporate reporting have mushroomed. In Europe, the focus of this paper, the European Union (EU) Directive (2014/95/EU) on non-financial and diversity reporting (EU Directive) (EU, 2014) has required large European entities to issue non-financial reports since 2017. Additionally, the Directive is currently under review (the Corporate Sustainability Directive [CSRD]) to ensure it aligns with the European Green Deal and the Platform for Sustainable Finance, which seeks to make Europe a carbon-neutral economy by 2050 through transition finance (European Commission, 2019). However, even before the EU Directive and the Green Deal, there was considerable pressure in specific EU member states to increase both the quantity and quality of ESG information in the hopes of improving corporate ESG performance.

Empirical research examining ESG quantity, ESG quality and ESG performance is minimal and conflicting in its focus, methodologies and results (Aureli et al., 2020; Leong & Hazelton, 2019; Xie et al., 2019). It is to this strand of literature we direct our contribution. In this study, we focus on Sweden, which has always been a leader in developing sustainability reporting. We asked the questions 'Is ESG reporting increasing?' and 'If so, has this resulted in improved report

quality and/or ESG performance?' and found the answers by analysing and comparing data sourced from Sustainalytics, [corporateregister.com](http://corporateregister.com) and the Alliance for Corporate Transparency. We find that ESG reporting quality and quantity have increased, but corporate ESG performance has plateaued since 2015. We also show that Swedish companies are on par with the rest of Europe concerning ESG reporting.

Our findings imply that Sweden is hamstrung by the requirement to keep their policies in line with the EU Directive. Future Swedish policy on ESG reporting will therefore depend on how the EU Directive is revised into the upcoming Corporate Sustainability Reporting Directive (CSRD). Unless the ongoing revisions promote better ESG performance as opposed to better *information quality*, corporate ESG performance is unlikely to improve much in Sweden nor in any European country—it will be business as usual.

As we write the conclusion to this paper, the world is locked in the grip of the COVID-19 pandemic, which has forever changed the way businesses communicate with their stakeholders, including investors. Simply insisting on better ESG reporting will not cut the mustard. To meet challenges like COVID-19 and the climate crisis, we need to focus on implementing true ESG-friendly policies, such as developing clean energy infrastructure, building efficiency retrofits, educating and training workers, investing in natural capital and promoting clean R&D (Hepburn et al., 2020). The EU must also implement policies that develop value-relevant, credible and comparable measures of corporate ESG performance (Arvidsson, 2019a). We must engender the philosophy that, in a corporate report, actions speak louder than words. That way, financial analysts and investors can direct their money towards companies that are actually helping to mitigate the climate crisis all in line with the transition-finance approach adopted in the European Green Deal. Furthermore, companies need to go beyond reporting and develop timely accountability. Thus, we need companies to open up about their actual corporate ESG performance and become accountable to investors and stakeholders now, rather than waiting for the next reporting cycle (Biondi et al., 2020; La Torre et al., 2020).

Section 2 of our paper presents a literature review of corporate ESG reporting and disclosure, providing context for our research question. In Section 3, we identify the Swedish context and outline why it is a suitable context for our research, and in Section 4, we outline our research methodology and methods. The results and discussion follow in Section 5 before concluding, in Section 6, with some implications for ESG reporting in Sweden and internationally.

## 2 | LITERATURE REVIEW

Corporate ESG information has, for decades, been the object of scepticism and criticism by investors and financial analysts. They claim it lacks qualitative aspects such as value relevance, comparability and credibility and that nothing about it helps them make a financial decision (Abhayawansa et al., 2019; Arvidsson, 2014; Cho, Michelon, et al., 2015). As Fink (2020) argues, companies who do not openly

disclose information 'and do not respond to stakeholders and address sustainability risks will encounter growing scepticism from the markets, and in turn, a higher cost of capital'. At best, these companies will slowly adapt to a lower carbon economy. At worst, they may not survive. Therefore, one way accounting academics can contribute to helping companies survive in a dynamic climate change impacted world is through research on the impacts of corporate reporting and disclosures (Bebbington & Unerman, 2018).

That sustainability accounting and reporting add legitimacy (Suchman, 1995) to a business has been borne out in both research and practice (Mori Junior et al., 2014). Yet there is debate in the field about the importance of corporate sustainability. For example, Gray (2010) claims that there is little hope that corporate sustainability accounting will ever be of much use, while Cho, Laine, et al. (2015) argue that corporate sustainability disclosure is nothing but a facade. Critical theorists like Searcy and Buslovich (2014) highlight that, although sustainability information may be useful, it is also often ambiguous and not comparable—issues that are only exacerbated by the smorgasbord of voluntary reporting frameworks and guidelines that continue to splinter practice (Bartels et al., 2016). Hence, current ESG reporting and disclosure practices have many problems that can work to decrease, rather than enhance, legitimacy (Dumay et al., 2019).

Beyond legitimacy is the need to understand if ESG reporting is related to corporate performance. Many companies believe that their ESG reporting strategy is an indicator for actual corporate ESG performance (Rajesh & Rajendran, 2020). However, perceived performance often does not meet actual performance because, as Leong and Hazelton (2019) find, mandatory ESG reporting only under certain conditions is likely to improve performance. Thus, even if company intends to improve performance, it may not get the results it wants or perceives because of environmental constraints.

Currently, in Europe, the EU Directive is driving companies to provide more ESG information with the intention of increasing ESG performance of European companies (undertakings) (EU, 2014). Yet the few studies about the effects of the EU Directive provide mixed results. For example, Cordazzo et al. (2020) show that corporate ESG information continues to lack value relevance after implementing the EU Directive. Oppositely, based on a case study, Aureli et al. (2020) show that producing a mandatory report to comply with the EU Directive can have positive influence on sustainability-related practices in a company.

Despite the problems with voluntary and regulated ESG reporting, investors and financial analysts are demanding more ESG information to assess corporate ESG performance (Barker & Eccles, 2019). For example, Krasodomska and Cho (2017) find that financial analysts want to use more sustainability information in their valuation process. Investors are also increasingly seeking to include ESG performance information in their investment decision processes (Barker & Eccles, 2019; Eurosif & ACCA, 2013). For example, for the third year in a row, environmental and societal risks have dominated the global risk agenda outlined at the World Economic Forum (2020), making ESG issues critical factors in decision-making and strategic

planning. Thus, there is increasing pressure from investors for organisations to report more information, so analysts can better assess ESG performance.

Reflecting investor interest in ESG performance, Hinze and Sump (2019) identify an increase in analysts' coverage of companies with a clear sustainability profile. Many companies are changing their ESG disclosure and reporting in response to new regulations and frameworks, such as the EU Directive (EU, 2014), the Task Force on Climate-Related Financial Disclosures (TCFD, 2016) and EU (2019b) regulation for the improvement of sustainability disclosure benchmarks.

Considering the critical role corporate ESG information will play in assessing a company's long-term performance, companies must ensure that not only they provide more information but also that the information is relevant and of high quality (Barker & Eccles, 2019). The research on ESG quantity and ESG quality rests on the assumption that the quantity of disclosure also captures the quality or transparency of disclosure (see, e.g., Helfaya & Whittington, 2019). However, as Helfaya et al. (2019, p. 163) find in their analysis of users and preparers of environmental reporting, 'quantity was not perceived as the most significant element in determining quality'. They identify 'information types, measures used, themes disclosed, adopting reporting guidelines, [the] inclusion of [an] assurance statement and the use of visual tools as significant dimensions/features of reporting quality'. However, Crifo et al. (2016) find that sustainability assurance is positively associated with ESG reporting quantity and quality. Additionally, in accounting, the reporting quality and quantity of forward-looking information is not positively related despite it being 'generally assumed that the quantity of information has an implication in determining its quality, [thus] quantity measures are often used as proxy for disclosure quality' (Beretta & Bozzolan, 2008, p. 333).

Similar normative arguments are made by ESG reporting proponents. For example, the International Integrated Reporting Council (IIRC, 2021, p. 2) advocates that companies undertake integrated reporting because improving 'the quality of information available to providers of financial capital ... enable[s] a more efficient and productive allocation of capital'. Similarly, the Sustainability Accounting Standards Board (SASB, 2021) provides reporting standards for investors who 'want to evaluate how companies are managing the environmental, social, and governance (ESG) factors that also impact financial performance'. Another example is the Global Reporting Initiative (GRI) standards that are intended 'to enhance the global comparability and quality of information' relating to 'the economic, environmental, and social impacts of organizations'. Thus, the IIRC, SASB and the GRI advocate increasing reporting quantity and quality by using their reporting frameworks. Furthermore, this highlights the need to better understand exactly what good reporting quality is so that preparers can meet user expectations (see also de Villiers & van Staden, 2006).

Hence, our research questions are as follows: 'Is ESG reporting increasing?' and 'If so, has this resulted in improved report quality or ESG performance?'.

### 3 | THE SWEDISH CONTEXT

Sweden is an excellent lens through which to examine corporate ESG disclosure quality and performance. Arguably, Swedish companies are among the best when it comes to providing their stakeholders with ESG information (see Cahan et al., 2016; KPMG, 2015, 2019). Some contend that national cultures and differences in social and political context might not be as influential over ESG disclosure nowadays due to the birth of stateless firms (Chen & Bouvain, 2009; Levi-Faur, 2005; Whittington & Mayer, 2002), whereas others argue that even multinational enterprises experience a sense of 'home embeddedness' and are uniquely shaped by their home country (Hall & Soskice, 2001; Whitley, 1999).

Why have Swedish companies excelled at ESG reporting? To begin with, Sweden has long been a hotbed for developing and testing different innovative reporting practices. The country was a leader in human resource costing and accounting (Gröjer & Johanson, 1998), intellectual capital reporting (Mouritsen et al., 2001) and integrated reporting (Eccles & Serafeim, 2011). As a result, the Swedish setting often attracts research attention when a new facet of corporate reporting and disclosure is early in its development (Chen et al., 2015; Rimmel & Jonäll, 2013).

Besides being enthusiastic adopters of new reporting practices, Swedish companies tend to be active in social, political and business contexts where ESG issues have been a top priority for decades. As a result, several ESG regulative reporting instruments have been issued and implemented in Sweden, with several currently in force (Table 1). According to Eccles and Serafeim (2011), a decade ago, Swedish companies were ranked fourth in the world when it came to integrating ESG information into corporate reporting. Clearly, the regulatory climate has led significant numbers of Swedish companies to increase their ESG reporting voluntarily.

However, although voluntary reporting has been a key part of ESG reporting in Sweden, the EU Directive (2014/94/EU) on non-financial reporting effective as of 2017 now requires all Swedish companies of a certain size to do so. Thus, the past few years have witnessed a number of first-time reporters. The Directive has also pushed far more corporate focus onto ESG issues (EU, 2014; La Torre et al., 2018). Notably, the EU Directive has strong ties to the European Green Deal, a European Commission (2019) policy that:

aims to transform the EU into a fair and prosperous society, with a modern, resource-efficient and competitive economy where there are no net emissions of greenhouse gases in 2050 and where economic growth is decoupled from resource use.

Tanguy van de Werve, Director General of the European Fund and Asset Management Association (EFAMA), supports the Commission's new policy and emphasises that, to achieve these ambitious environmental goals, investors need access to 'robust, comparable, reliable and publicly available ESG data on investee companies' (Rust, 2020, p. 15). As a result, the current EU Directive is under

review, with the revised version, that is, CSRD expected to increase the availability of ESG data (Rust, 2020).

The EU Directive has been enshrined in Sweden's corporate reporting legislation since the end of the 2017 financial year. Swedish companies with more than 250 employees, a net turnover of SEK 350 million or more or a balance sheet total of over SEK 175 million are required to issue an EU Directive compliant report annually (see Table 1). That report must address environmental, social and employee-related, human rights and anti-corruption and bribery matters (CSR Europe & GRI, 2017).

Matching the increased ESG reporting regulation in Sweden, investor interest in ESG reporting looks to be growing. A decade ago, Arvidsson (2010) found that financial analysts assigned an increased risk premium to Swedish companies that frequently reported on ESG issues. Eccles and Serafeim (2011) also found that, at the time, Swedish investors were uninterested in ESG information. So, a decade ago, Swedish companies were not particularly driven to report on ESG issues by their investors. Yet, today, sustainability dominates investor concerns. As the CEO of Swedish pension fund AP2, Eva Halvarsson, explains, 'We used to have to put a lot of effort into explaining to our colleagues in the broad investment community why ESG is important. [But] now the focus is on how we can most effectively capture value from ESG integration.' (Eccles & Klimenko, 2019, p. 111). Thus, both today's regulatory climate and increased ESG interest among Swedish investors have affected Swedish ESG reporting.

While Sweden has a long history of and reputation for being at the forefront of ESG reporting, the country is not without its corporate scandals (Rimmel & Jonäll, 2011). These include fraud and bonuses scandals (e.g., ABB and Skandia: Foley, 2002; Sachs et al., 2009; The New York Times, 2005), violation of labour rights (e.g., H&M: Adamsson, 2020; Butler, 2016) and corruption (e.g., Telia Company: Dye, 2017; Pollack & Allern, 2018). Such scandals have also accelerated a focus on ESG in corporate reporting, particularly as scandals may reduce public trust in Swedish companies. Rebuilding trust in companies was one of the reasons the EU introduced the Directive (EU, 2014). However, Ries et al. (2018, p. 43) report that the Swedish people have a general mistrust of Swedish companies, which has barely shifted over the last decade. Thus, despite the increased pressure on Swedish companies to become more accountable, disclosures by those companies about their performance—financial and otherwise—have not shifted the needle on public trust.

### 4 | METHODOLOGY AND RESEARCH DESIGN

Our investigations began by exploring whether there has been an increase in ESG reporting in Sweden. Next, we analysed the reports to determine whether quality has generally improved over time. Finally, we examined whether ESG performance has improved. Throughout our case study, we drew on multiple data sources, which helped us to develop a robust chain of evidence. It also meant we could triangulate the data to bolster the validity of our findings

**TABLE 1** Current ESG reporting instruments in Sweden

Regulative reporting instrument	Objective	ESG coverage	Companies covered	Mandatory or voluntary	Issuer	Year
ESG Reporting Guide: A Support Program for Nasdaq Issuers Nordic and Baltic Markets	Seeks to impart the long-term value of measuring, managing and reporting environmental, social and corporate governance data and be used as a tool for such	E—all S—employment conditions, policies and practices, human rights G—all	Large private and listed companies	Voluntary	NASDAQ Stockholm	2017
National Action Plan on Business and Human Rights	Seeks to place more responsibility on multinational enterprises	E—none S—human rights G—ethics and integrity, accountability, anti-corruption and anti-competitive behaviour	All companies	Mandatory	Ministry of Foreign Affairs and International Development	2017
Transposition of EU NFR Directive: Corporate sustainability reporting and diversity policy	For businesses to divulge information on sustainability such as social and environmental factors, to identify sustainability risks and increase investor and consumer trust	E—all S—human rights, employment conditions, policies and practice, social impacts and value creation G—accountability, anti-corruption and anti-competitive behaviour	Large private and listed companies	Mandatory	Ministry of Justice	2016
Sustainable Business Guide—The Government's policy for sustainable business	Practical advice and tools for companies seeking to develop their sustainable business efforts	E—all S—all G—all	All companies	Voluntary	Ministry of Enterprise and Innovation	2016
The Swedish Corporate Governance Code	Outlines a structure for good corporate governance	E—none S—employment conditions, policies and practices G—all	Large private and listed companies	Voluntary	Swedish Corporate Governance Board	2015
The Swedish National CSR Policy	Seeks a more ambitious policy for sustainable entrepreneurship and encourages all public companies to issue sustainability reports	E—all S—human rights, employment conditions, policies and practices G—accountability, anti-corruption and anti-competitive behaviour	All companies	Voluntary	Ministry of Industries and Innovation	2015
Corporate reporting on sustainability and diversity policy	Guidance for companies that will have to report on sustainability and diversity, scoping out the legal landscape in Sweden up until 2014 and providing an overview of the measures and instruments available for compliance with the EU directive on disclosing non-financial and diversity information	E—all S—human rights, employment conditions, policies and practices G—accountability, anti-corruption and anti-competitive behaviour	Large private and listed companies	Mandatory	Ministry of Justice	2014

(Continues)



TABLE 1 (Continued)

Regulative reporting instrument	Objective	ESG coverage	Companies covered	Mandatory or voluntary	Issuer	Year
Guidelines for external reporting by state-owned companies, 2007	States that the companies shall present a sustainability report using GRI G3 Guidelines	E—all S—social impacts and value creation, human rights, employment conditions, policies and practices G—none	State-owned companies	Mandatory	Ministry of Enterprise, Energy and Communications	2007
Transposition of EU NFR Directive: Act No. 3/2006 Amendments of Annual Accounts Act of 1995	An obligation to include a brief disclosure of environmental and social information in the Board of Directors' Report section of the annual report	E—all S—employment conditions, policies and practices, social impacts and value creation, human rights G—accountability, anti-corruption and anti-competitive behaviour	Large private and listed companies	Mandatory	Ministry of Industries and Innovation	2006

Abbreviations: E, environment; S, social; G, governance.

Source: carrotandsticks.net, accessed 22 July 2020.

(Yin, 2017). A summary of the data sources and how we used them to answer our research questions follows.

#### 4.1 | An analysis of Swedish sustainability reports

Our corpus comprised ESG information provided in the sustainability reports of the 30 most-traded Swedish companies as listed on the NasdaqOMXS30 index of the Stockholm Stock Exchange during the period 2008 to 2018. After adjusting for companies outside Sweden or more than one share type in the index, 27 companies from eight different GICS industries remained (see Table 2). These enterprises represent approximately 55% of Sweden's total share market capitalisation. Naturally, these companies are essential to investors and society because their actions and performance will affect stakeholders the most.

Reports from the 2018 financial year were the most recent available when we began our research. 2008 was the year when sustainability reporting began to increase significantly (corporateregister.com; see Figure 1). We selected 2013 as our second 'anchor point'—the year the increase in sustainability reporting began to plateau. Our third anchor point, 2015, marks the year companies began adjusting to the new EU Directive (2014/95/EU), signed in 2014. Overall, our selection of sustainability reports from these four years (2008, 2013, 2015 and 2018) provides a comprehensive dataset for our analysis of the longitudinal trends in ESG information quantity, quality and effect on corporate performance among Swedish companies.

##### 4.1.1 | An Analytical ESG Information Quality Framework

To examine whether providing more ESG information is related to improved ESG quality and performance, we constructed a framework

we call the Analytical ESG Information Quality Framework. This is a novel approach designed to be useful when examining ESG quantity, ESG quality and ESG performance.

The EU's (2017, p. 4) guidelines on non-financial reporting (2017/C 215/01; section 2 purpose) explicitly emphasise the ESG structure: '... non-financial (environmental, social and governance-related) information'. This tripartite structure is now widely adopted by investors and financial analysts when they assess a company's sustainability performance (Dumay & Hossain, 2019). Today, most of the leading rating agencies, such as Morgan Stanley Capital International (MSCI), Sustainalytics and Fitch Ratings, provide corporate ESG performance scores. In our framework (see more in Section 4.1.2), the environmental dimension (E) focuses on a company's environmental initiatives: how it approaches issues such as resource efficiency and climate protection. The social dimension (S) focuses on how a company interacts with society and engages with its stakeholders. The governance dimension (G) captures how a company uses guidelines, policies, standards and frameworks to guide, structure and govern its operations.

A vital consideration when constructing our framework was how to develop a structure useful for determining quality in longitudinal ESG information. We build on a tripartite conceptual framework adopted not only in a corporate setting but also at policy and financial market level. We wanted the structure to reinforce the materiality of the disclosed ESG information, that is, how important the information is to understanding a company's *position*, *development* and *performance*—three critical concepts commonly used by preparers, auditors and users of sustainability information (EU, 2017, section 3.1). We integrated these criteria into our structure and examined whether each company reports on its *position* (describing today's status), *development* (showing progress over time) and *performance* (highlighting outcome) related to each of the three ESG dimensions (see Table 3).

Our complete framework can therefore be used to examine longitudinal patterns in how companies communicate ESG information.

**TABLE 2** Companies and industries

Company	GICS industry	Percentage (industry)
Boliden AB	Basic materials	
Lundin Petroleum AB	Basic materials	
SSAB AB	Basic materials	11%
Electrolux AB	Consumer goods	
SCA AB	Consumer goods	
Swedish Match AB	Consumer goods	11%
H&M AB	Consumer services	
MTG AB	Consumer services	7%
Investor AB	Financials	
Nordea AB	Financials	
SEB AB	Financials	
Svenska Handelsbanken AB	Financials	19%
Swedbank AB	Financials	
Getinge AB	Health care	4%
ABB AB	Industrials	
Alfa Laval AB	Industrials	
Assa Abloy AB	Industrials	
Atlas Copco AB	Industrials	
Sandvik AB	Industrials	
Scania AB	Industrials	
Securitas AB	Industrials	
Skanska AB	Industrials	
SKF AB	Industrials	37%
Volvo AB	Industrials	
Ericsson AB	Technology	4%
Tele2 AB	Telecommunications	
Telia Company AB	Telecommunications	7%
Total	27	100%

Table 4 provides a summary of our focus points in the coding procedure.

#### 4.1.2 | Coding procedure

To capture quality developments across the ESG dimensions, we focused on coding how the sample companies reported on their position, development and performance related to ESG initiatives. The coding procedure is explained below with examples.

##### *The environmental dimension (E)—Position, development and performance*

Our environmental analysis focused on how our sample companies reported on their environmental initiatives. Within the *environmental position* section of our framework, we examined how many environmental initiatives each company highlights in its report and how many

of these it describes in detail. Examples of environmental initiatives undertaken by our sample companies include reducing CO<sub>2</sub> and other emissions, recycling and disposing of other waste sustainably, minimising the consumption of water, energy and other resources, using renewable energy, fostering biodiversity and implementing ISO14001. For example, one industry company reported:

[The company] works continuously to reduce energy consumption by optimizing operations and investing in energy-efficient technologies [...] One-quarter of [the company's] energy consumption consists of energy converted internally. See the chart showing the break-down of our energy converted internally during 2018. Renewable energy includes biogas and renewable energy converted, which includes energy from photo-voltaic systems. All other energy sources are fossil-based (non-renewable).

Once we determined how many environmental initiatives were detailed in each report, we calculated a ratio: the number of environmental initiatives described in detail divided by the total number of initiatives mentioned. For example, if four out of five mentioned initiatives are coded as 'described in detail', the company would receive a score of 0.8. A ratio of 1 (0) should be interpreted as the company describing all (none) of its environmental initiatives in detail.

Within the *environmental development* section of our framework (i.e., progress over time), we examined whether the company described any progress related to the environmental initiatives highlighted in the report. For example:

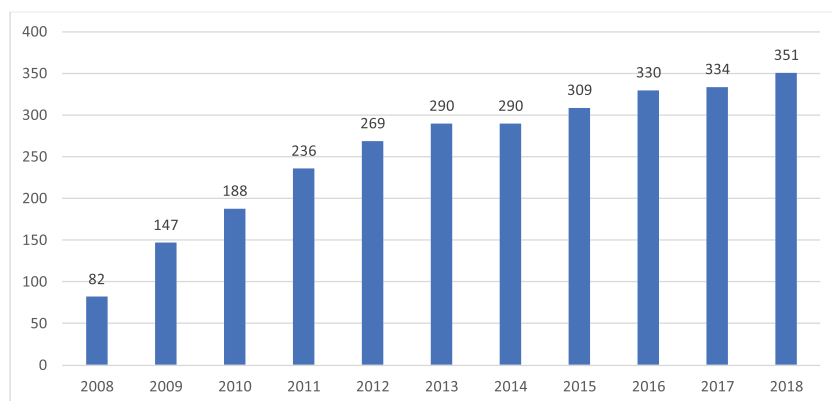
Other activities are ongoing at [the company] with the aim of reducing (...) energy consumption. These activities include using energy as a key performance indicator in all manufacturing sites, which is monitored monthly, and a newly established cross-company energy group that focuses on sharing best practice.

Development needs to be shown to have taken place over the last 3 years (in charts, graphs or verbally), and an in-text explanation is also required:

Energy consumption increased by 8.6% compared to 2015. The increase is mainly attributable to production.

We then calculated another ratio: the number of environmental initiatives that feature some description of development divided by the total number of environmental initiatives discussed in the report (e.g., if three of five mentioned initiatives had descriptions of development, the company would receive a score of 0.6). A ratio of 1 (0) should be interpreted as the company describing the development of all (none) its environmental initiatives discussed in the report.





**FIGURE 1** Sustainability reporting in Sweden 2008–2018. Source: corporateregister.com as of 13 May 2020 [Colour figure can be viewed at [wileyonlinelibrary.com](https://onlinelibrary.wiley.com)]

**TABLE 3** ESG dimensions structured according to position, development and performance

Environmental (E)	Social (S)	Governance (G)
Position: describes the present status of the initiative(s)		
Development: shows progress related to the initiative(s)		
Performance: highlights target(s) related to the initiative(s)		

Finally, within the *environmental performance* section of our framework (i.e., target-setting), we examined the following: whether the company highlighted any qualitative or quantitative target(s) related to its environmental initiatives; whether there were time frames attached to achieving those target(s); and whether any outcome(s) were detailed. For instance,

Target: Reduce energy consumption by 10% between 2015 and 2020. [Note: This information is presented along with a table illustrating the outcome for energy consumption over the period 2015–2011].

We then calculated a final ratio: the number of initiatives where a target, target time frame and outcome are given divided by the total number of environmental initiatives discussed in the report (e.g., if two of eight mentioned initiatives had included target, time frame and outcome, the company would receive a score of 0.25). A ratio of 1 (0) should be interpreted as the company including targets, target time frames and outcomes to all (none) of its environmental initiatives discussed in the report.

#### *The social dimension (S)—Position, development and performance*

Our social analysis focused on how our sample companies reported on their stakeholders and stakeholder-related activities. Within the *social position* (today's status) section of the framework, we examined how each company's stakeholder focus (how many stakeholders its report highlights and how many stakeholder relationships it describes in detail) and its stakeholder identification analysis (whether the company describes how it identifies relevant stakeholders). The following quote is an example of a company describing its relationship with a specific stakeholder in detail:

We must have an in-depth understanding of our clients' needs and industry-specific requirements, both to provide optimal and cost-effective security solutions and to meet their requirements on us as a supplier regarding sustainability [...] [The company's] employees at different levels frequently meet with clients and continuously engage in dialog with them. Client satisfaction surveys and evaluation reports are important tools.

To calculate a ratio for a company's *social position*, as for its *environmental position*, we first divided the number of stakeholder relationships described in detail divided by the number of total stakeholders mentioned to come up with a figure for stakeholder focus. To code the second element of *social position*—companies' stakeholder identification analysis—we assigned companies either 1 (those that described how they identified relevant stakeholders) or 0 (those that did not). Notably, no reports before 2013 included information on how companies identified relevant stakeholders. Below are quotes from two company reports which achieved a rare score of 1 for reporting on how they identified their relevant stakeholders:

[The company's] main stakeholder groups have been identified as those who have a material impact on [the company's] operations or are materially affected by the operations.

Our main stakeholders are identified based on the impact they might have on our business, as well as on their interests and potential influence on [the company].

Within the *social development* (progress over time) section of our framework, we tried to capture each company's progress on social initiatives by examining how much detail it described its stakeholder engagements in. We assigned companies scores of either 1 (those who described the overall objective and design of their stakeholder engagements and how they engage with different stakeholders) or 0 (those who do only one or the other, or none). A score of 1 (0) should

**TABLE 4** Analytical ESG Information Quality Framework

	Environmental (E)	Social (S)	Governance (G)
Position: describes the current status of the initiative(s)	Whether a company highlights any environmental initiatives and how many of these are described in detail	Whether a company highlights its stakeholders and how many of these stakeholder relationships are described in detail <i>and</i> whether the company identifies its most relevant stakeholders	Whether a company highlights its governance system and describes the present status of its governance system
Development: shows progress related to the initiative(s)	Whether a company describes progress related to its environmental initiative(s) in its report	Whether a company describes both the overall objective and design of its stakeholder engagements <i>and</i> how it engages with its different stakeholders	Whether a company is a member of UNGC and at least describes what UNGC is <i>and</i> whether the company applies GRI and at least describes what GRI is
Performance: highlights target(s) related to the initiative(s)	Whether a company highlights target(s), states a time frame for achieving target(s) and describes outcome(s) related to the environmental initiatives that it highlights in its report	Whether a company conducts a materiality analysis and how much detail it provides and whether it describes the process and outcome of this materiality analysis	Whether a company includes a GRI index with indicators in its report

be interpreted as the company being detailed (not detailed) as to its progress on social initiatives, that is, social development. The following quotes come from a finance company with a score of 1. The company provided a detailed description of the overall objective and design of its stakeholder engagements:

Ongoing dialogue with our stakeholders. Through active dialogue, [the company] can better understand the expectations, opinions and demands that stakeholders have on us and on the way, we conduct our operations. This helps us make well-founded decisions and better prioritise our sustainability efforts in the markets where we operate.

It also detailed how it engages with various stakeholders, as exemplified in this discussion of engaging with customers:

The most important dialogue occurs in the meetings that take place every day at our almost 800 local branches around the world. These meetings arise from our desire to grow long-term relationships with our customers. They can be face-to-face, held over the phone, at digital meeting places or on social media. By maintaining close, long-term relationships with our customers, the [company] gains a better understanding of our customers' expectations on our sustainability work.

Finally, we assigned companies *social performance* scores according to whether they conducted detailed materiality analyses in their reports, describing the process and outcome of this analysis (1 if yes; otherwise 0). We chose this method because a materiality analysis entails information related to the company and stakeholders (Dumay et al., 2015), so it is a useful barometer for a company's actual performance. A score of 1 (0) should be interpreted as the company

being detailed (not detailed) as to the process and outcome of its materiality analyses.

For reference, the quotes below are from an industrial company assigned a 1 for *social performance* and demonstrate a detailed materiality analysis:

During 2018, a renewed materiality analysis was undertaken involving internal and external stakeholders through surveys and interviews. A survey asking stakeholders to prioritize a set of predefined issues was posted on the intranet and spread externally in order to capture a broad array of stakeholder views. In-depth interviews with representative stakeholder groups such as customers, employees, investors, NGOs, peers and board members complemented the survey. The result was discussed in internal workshops with for example the specialist safety, health, environment and quality functions and reviewed by Group Management.

[The company] uses this stakeholder input together with the UN Global Compact ten principles, mapping of the business' impact on the UN Sustainable Development Goals, and risk and opportunity assessments based on the business strategy to define the Group's significant environmental, economic and social impact. The result of the materiality process was used in the review of the Group's focus areas for sustainable, profitable growth. The analysis also served as input to the formulation of new KPIs and goals, as presented on page 5, that will measure [the company's] progress from 2019. This annual report for 2018 reports and discusses progress in relation to the KPIs and goals for 2016–2018.

Based on the materiality analyses in 2015 and 2018, [the company] has identified material topics according to the GRI Standards framework. No significant changes to the material topics have been made in 2018 following the analysis. [The company's] work with the material topics impacts the different parts of the value chain as described in the table below.

#### *The governance dimension (G)—Position, development and performance*

Our governance analysis focused on our sample companies' governance initiatives. To assess *governance position*, we gave companies a score of 1 if they discussed their governance system and described its present status and 0 if they did not. Below is an example of a company receiving the score 1 for discussing its governance system and its present status:

Our Business Code of Practice, including training and a Compliance Statement that all employees need to sign, is our most important tool to make sure that we always act with the highest ethical standards and integrity. Laws, environmental standards and social conditions vary from country to country. We insist on upholding our high standards also in challenging environments where national legislation is weaker. Our business partners are expected to do the same. To make this happen and to safeguard our reputation, we rely on solid governance and our leaders' ability to defend our values, including of course internal as well as external audits.

Concerning *governance development* (progress over time), we assessed companies' focus on the two most common governance reporting frameworks (Dumay et al., 2015): the United Nations Global Compact (UNGC) and the GRI. Companies' awareness of and adherence to these frameworks are a strong indication of their attention to governance over time. We assigned companies two scores based on whether they were members of the UNGC and at least described what the UNGC is (1 if so; 0 if not) and whether they applied GRI and at least described what it is (1 if so; 0 if not). The average of these two scores is the company's sub-score for *governance development*. Below is a quote from an industrial company that received a sub-score of 1:

[The company] is a signatory to the UN Global Compact since 2008, a strategic policy initiative for businesses that are committed to aligning their operations and strategies with ten universally accepted principles in the areas of human rights, labor, environment and anti-corruption.

Finally, to assess a company's *governance performance*, we examined whether it included a GRI index with indicators in its report (1 if yes; 0 if no), given that a GRI index with indicators provides information related to targets, period and outcome. Thus, a company including

a GRI index with indicators receives the score of 1, while a company not disclosing a GRI index with indicators receives the score of 0.

In short, our Analytical ESG Information Quality Framework provides a comprehensive way of examining longitudinal patterns related to how companies communicate ESG information. By focusing on the ESG *position, development and performance* of companies, this framework adds to our understanding of quality trends in single ESG dimensions.

#### 4.1.3 | Robustness of the coding

We took several steps to ensure that our coding process was sound. To begin with, we created a list of detection and classification rules to help us find relevant material in each of the reports. To help us write this list, we analysed eight randomly selected sustainability reports, two from each of the years of interest (2008, 2013, 2015 and 2018). We used manual keyword searches and qualitative analysis to find and examine relevant material in each report, and to minimise the risk of missing something, we performed each search twice. We also performed a preliminary coding test to stamp out any ambiguity in the coding procedure. During this test, we and two independent senior researchers in the field of sustainability accounting and reporting independently analysed two randomly selected reports. We then compared our analyses and made a few small adjustments to the coding process to improve the quality of the final analyses.

#### 4.2 | ESG Performance Framework from Sustainalytics

The market for ESG ratings has gradually increased over the last decades, with rating institutes such as Fitch Ratings,<sup>1</sup> Morgan Stanley Capital International<sup>2</sup> (MSCI) and Sustainalytics<sup>3</sup> now hugely popular. To increase the validity of our analysis, we triangulated them with trends identified in Sustainalytics's ESG Performance Framework data.<sup>4</sup> Sustainalytics's ESG Performance Framework is used by investors looking to make informed investment decisions. The framework covers a wide range of data points across several ESG themes and is used to assess a company's performance on a specific aspect of an ESG issue, using qualitative and/or quantitative information. For example, the framework is used to assess the quality of a company's environmental policy, a company's carbon intensity relative to its peers and the quality of a company's business ethics programme. We felt this framework was a robust and comprehensive complement to our findings.

#### 4.3 | corporateregister.com data

We also triangulated our findings with data from corporateregister.com, which is a global online directory of corporate responsibility reports that are continually updated by researchers. We chose to use

this resource because we hold a research membership with the site that allows us to search the reports database and access information about overall corporate responsibility reporting in Sweden. We also have access to PDFs of all the reports held by [corporateregister.com](http://corporateregister.com). The data used in this paper were retrieved on 14 May 2020.

#### 4.4 | The Alliance for Corporate Transparency

Finally, we triangulated our findings using data from the Alliance for Corporate Transparency project, a 3-year study (2017–2019) of more than 1000 companies that have issued reports following the EU Directive (EU, 2014). According to its website, the Alliance for Corporate Transparency (2020a) brings together:

leading civil society organisations and experts to carry out the largest study on corporate sustainability reporting to date. The objective of the project is to provide evidence-based recommendations to improve and develop the EU Non-Financial Reporting Directive.

The project results are freely available on their website.

## 5 | RESULTS AND DISCUSSION

Our research questions were as follows: ‘Is ESG reporting increasing?’ and ‘If so, has this resulted in improved report quality and/or ESG performance?’. Table 5 presents a summary of our findings.

#### 5.1 | Has there been an increase in ESG reporting in Sweden?

As mentioned, accounting legislation requires Swedish companies to produce an annual report, and since 2017, companies with more than 250 employees must also prepare a report in line with the EU Directive (CSR Europe & GRI, 2017). Our analysis shows that sustainability reporting in Sweden has increased more than fourfold, with 82 reports produced in 2008 versus 351 reports in 2018—the first year that companies had to comply with the mandatory reporting requirements (Figure 1). Thus, more Swedish companies are issuing sustainability reports, and the trend is still on the up.

Arguably, Figure 1 also shows that the EU Directive has not significantly increased sustainability reporting in Sweden. The increase from 2014 (290 reports), the year after the EU Directive (2014/95/

**TABLE 5** Summary of results

Section	Title	Focus	Data	Period	Source	Finding
Section 5.1	Has there been an increase in ESG reporting in Sweden?	ESG reporting quantity	Number of sustainability reports provided by Swedish companies	2008–2018	corporateregister.com	The number of sustainability reports has increased throughout the period. The increase slows at the end of the period
			Length of sustainability reports provided by sample companies	2008–2018	Own analysis	At the end of the period, there is a decreasing trend in the length of sustainability reports
Section 5.2	Has there been an improvement in ESG reporting quality in Sweden?	ESG reporting quality	The Analytical ESG Information Quality Framework	2008–2018	Own analysis	ESG reporting quality is improving in Sweden
Section 5.3	Is there an improvement in ESG reporting performance in Sweden?	ESG reporting performance	The ESG Performance Framework	2009 <sup>a</sup> –2018	Sustainalytics	ESG reporting performance is improving (all three sub-dimensions). Tendency towards a performance plateau from 2015
Section 5.4	Further evidence of Swedish companies' reporting quality	European and Swedish reporting quality within the European context	Alliance for Corporate Transparency	2020	Alliance for Corporate Transparency	Companies are mainly reporting policies, not outcomes

<sup>a</sup>2009 is the first year when the ESG Performance Framework from Sustainalytics includes data from Swedish companies.

EU) was first introduced, to 2018 (351 reports), the first full year that reporting was required (for the financial year 2017), is only 61 reports. However, the increase from 2008 (82 reports) to 2013 (290 reports) is 208, suggesting that an upward trend was already in progress before the EU Directive came into force.

Given that there are 864 listed companies in Sweden and an estimated 1500 independent Swedish companies are impacted by the EU Directive (Stavlöt, 2018), it seems there is still scope for significant growth. We found that every company in our sample issued a sustainability report, which suggests that either smaller companies are not complying or the corporateregister.com data are incomplete.

Another measure of decreasing or increasing reporting is the length of sustainability reports. We analysed the number of pages found in the reports of our sample companies (see Table 6). In line with the findings in both Roca and Searcy (2012, p. 107) and Davis and Searcy (2010), we found that the typical length of sustainability reports is between 40 and 45 pages. Our analysis shows that the number of pages peaked in 2013 and then declined to below 2008 levels in 2018. There now appears to be a decreasing trend in report length—which is significant, considering some researchers claim that overly long corporate reports impair readability (du Toit, 2017).

The average length of Swedish sustainability reports is shorter than the length found by Chauvey et al. (2015) in their French sample. Their results showed an increase between 2004 and 2010 from an average of 37.82 pages to 80.45 pages. However, that we note since 2001, French companies are required by law (Nouvelles Régulations Économiques #2001-420, NRE) to disclose sustainability in their financial reports. Although Chauvey et al. (2015) assert that compliance with the law is low, this might partly explain the differing report lengths between Sweden and France. From this analysis, we find that,

although there has been an overall increase in sustainability reporting across the period, activity has plateaued since 2015.

## 5.2 | Has there been an improvement in ESG reporting quality in Sweden?

Sweden's largest companies seem to have acknowledged the importance of providing high-quality ESG information. Our analysis shows that ESG reporting quality is improving—both in terms of total ESG information (our ESG Index) and each of the three elements (E, S and G; see Table 7). The average of our ESG Index and each of the three ESG sub-scores shows an increase. Notably, while the environmental dimension shows a stable increase from a relatively high-quality level it already held in 2008, the quality score of both the social and governance dimensions increased from more modest levels (Figure 2). This is perhaps because environmental aspects have long been the focus of public debate and thus have previously dominated the sustainability discourse in corporate reporting (see Tregidga et al., 2014).

When we review the *position, development and performance* of each of the three ESG sub-groups, our analysis also shows an improvement in quality. Overall, our analysis suggests that the largest Swedish companies are not only responding to the favourable reports given by analysts with increased coverage (Hinze & Sump, 2019; Krasodomska & Cho, 2017) and investors (see Eurosif & ACCA, 2013; World Economic Forum, 2020) but also to a more robust ESG regulatory environment to potentially accommodate investor and analyst demand for ESG information (Eccles & Klimenko, 2019, p. 111; Rust, 2020). Our ESG Index's upward trend indicates that Swedish companies have continually improved the quality of their ESG reporting.

**TABLE 6** Number of pages in selected sustainability reports of Swedish companies 2008–2018

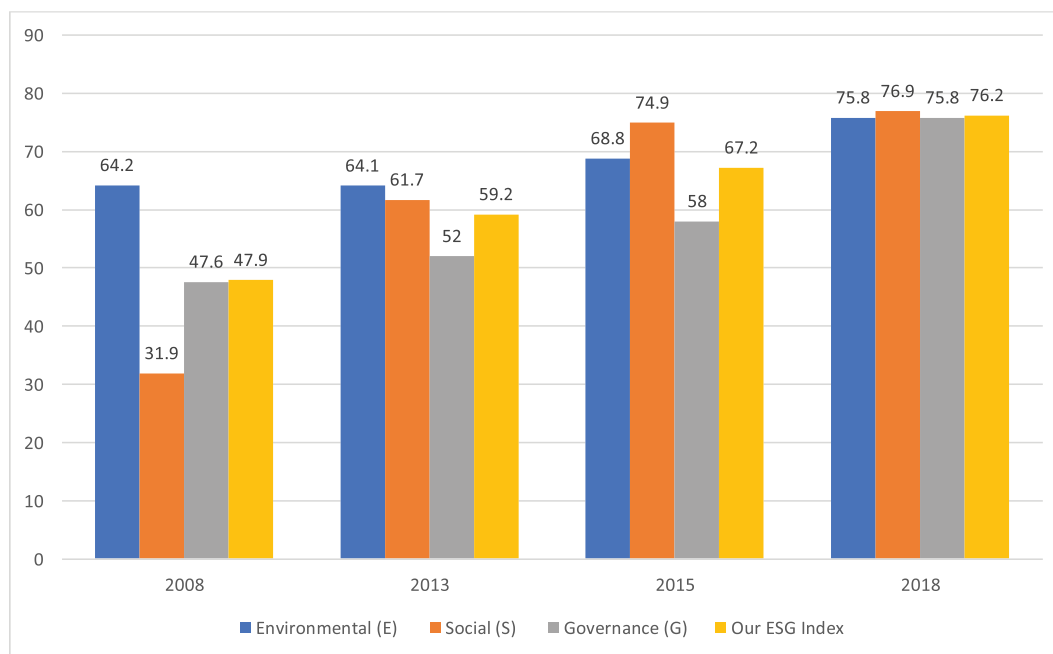
	2008	2013	2015	2018
Average number of pages	42	49	45	40
Median number of pages	33	45	37	33
Minimum number of pages	13	13	4	7
Maximum number of pages	127	92	130	111

## 5.3 | Is there an improvement in ESG reporting performance in Sweden?

To answer this question, we examined data from Sustainalytics between 2009<sup>5</sup> and 2018. Figure 3 shows that there has been a steady improvement in corporate ESG performance across all three dimensions of Sustainalytics' ESG Performance Framework. However, ESG performance seems to have plateaued from around 2015 as

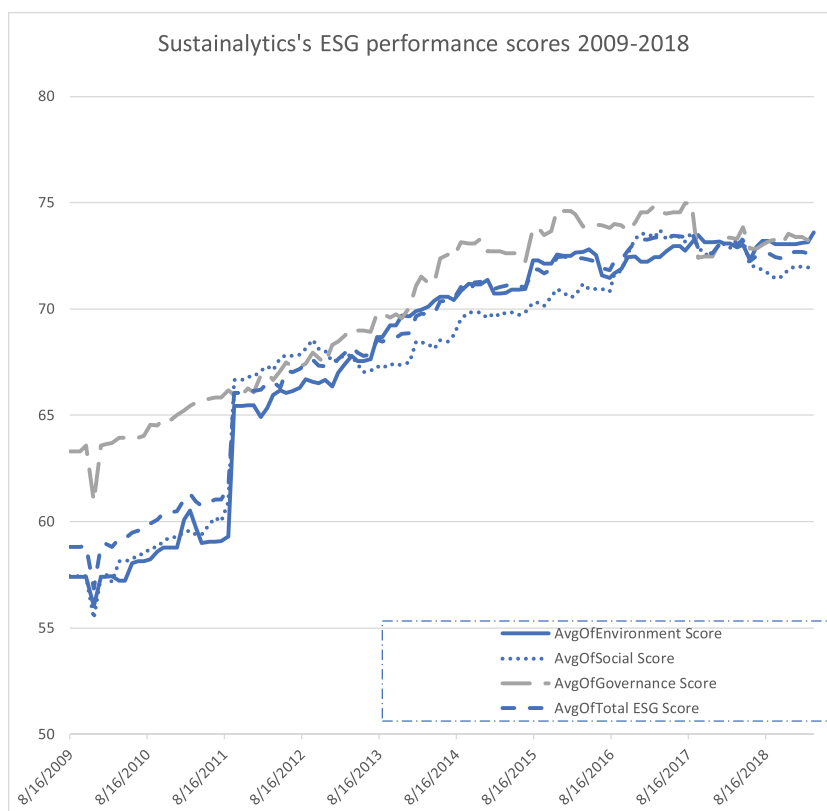
**TABLE 7** Results structured according to the three ESG dimensions and the sub-dimensions of position, development and performance

	Environmental (E)				Social (S)				Governance (G)			
	2008	2013	2015	2018	2008	2013	2015	2018	2008	2013	2015	2018
Position: describes the initiative(s)	0.890	0.861	0.908	0.957	0.385	0.412	0.496	0.602	0.178	0.206	0.375	0.625
Development: shows progress related to the initiative(s)	0.750	0.707	0.847	0.843	0.429	0.625	0.833	0.815	0.608	0.706	0.673	0.944
Performance: highlights target(s) related to the initiative(s)	0.287	0.355	0.310	0.475	0.143	0.813	0.917	0.889	0.643	0.647	0.692	0.704
Average	0.642	0.641	0.688	0.760	0.319	0.617	0.749	0.769	0.476	0.520	0.580	0.758



**FIGURE 2** Results structured according to the three ESG dimensions and our ESG Index [Colour figure can be viewed at [wileyonlinelibrary.com](http://wileyonlinelibrary.com)]

**FIGURE 3** Sustainalytics ESG performance scores for the Swedish sample 2009–2018 [Colour figure can be viewed at [wileyonlinelibrary.com](http://wileyonlinelibrary.com)]

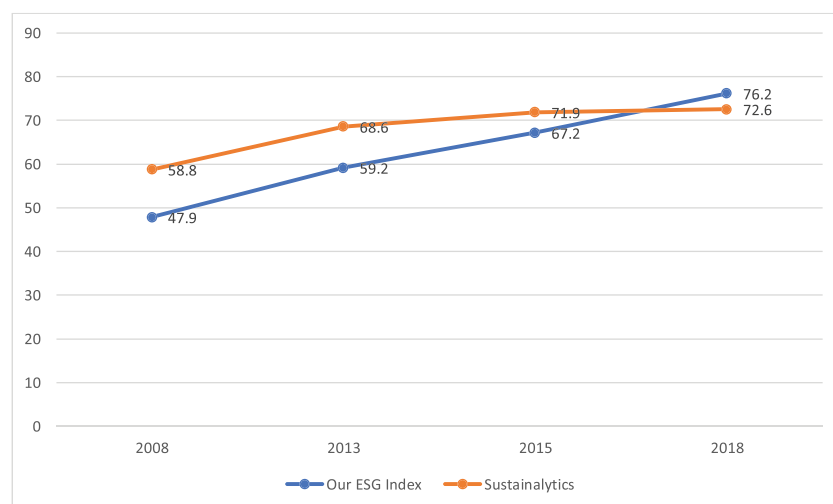


companies began to adjust to the new EU Directive, which parallels the plateau in reporting quantity around the same time.

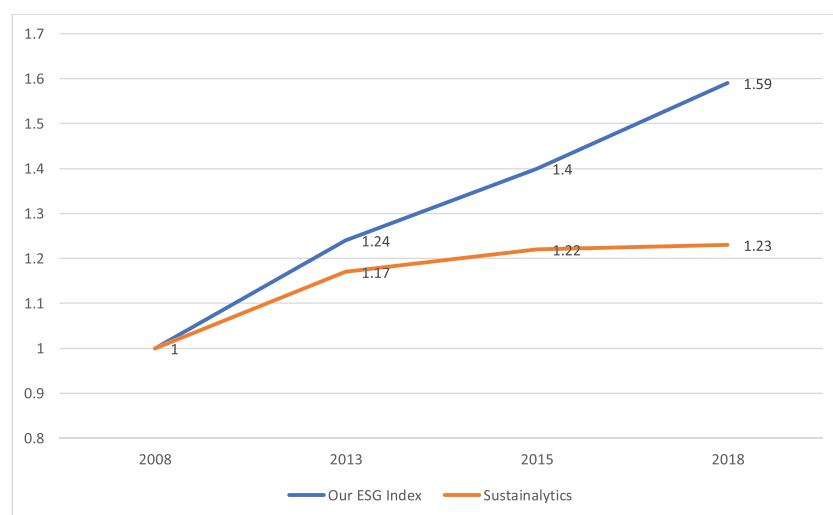
Figure 4 compares the Sustainalytics average ESG performance scores with the data points from our ESG Index, and Figure 5 provides an indexed analysis of the same data. Our comparison highlights the

trends across the two different datasets, with our index showing ESG reporting quality and Sustainalytics's showing ESG performance. While the Sustainalytics data do not measure reporting quality, its measures of ESG performance provide context for our findings, suggesting that the overall improvement in ESG reporting quality





**FIGURE 4** Our ESG Index versus the Sustainalytics ESG performance index [Colour figure can be viewed at [wileyonlinelibrary.com](http://wileyonlinelibrary.com)]



**FIGURE 5** An indexed analysis of our ESG Index versus the Sustainalytics ESG performance index [Colour figure can be viewed at [wileyonlinelibrary.com](http://wileyonlinelibrary.com)]

accompanies a marked improvement in ESG performance. Still, as Figure 5 shows, ESG reporting improved more than performance over the period.

## 5.4 | Further evidence of reporting quality for Swedish companies

Our analysis indicates that ESG performance plateaued for Swedish companies after 2015. This plateau is not in line with the ambitious ESG goals outlined in the European Green Deal (European Commission, 2019), which calls for investors to accelerate and redirect financial flows towards ESG investing. For the European Commission to succeed in developing the resilient, sustainable finance landscape its Green Deal describes, investors argue that they need more relevant ESG data (see, e.g., Eccles & Klimenko, 2019, p. 111; Rust, 2020). Through our Analytic ESG Information Quality Framework, we find that ESG reporting quality is gradually improving among the largest Swedish companies. However, the forthcoming revision of the EU Directive is evidence that the average quality of corporate

ESG reporting today is insufficient (Alliance for Corporate Transparency, 2020a). According to Howitt, as cited in Alliance for Corporate Transparency (2020b, p. 4) when commenting on their analysis of 1000 sustainability reports produced under the Directive, the 'results show that the Directive's firm intent to link 'policies, risks and results' together in the reporting, is falling far short'.

We know that a decade ago, Swedish companies were ranked fourth in the world for integrating ESG information into corporate reports (Eccles & Serafeim, 2011). Despite improvements in quality, our analysis so far does not confirm whether Sweden is still among the best in the world for integrating ESG information into corporate reports. To answer this question, we reviewed the EU Directive reports made available by the Alliance for Corporate Transparency. These data suggest that Swedish companies are no longer in the lead (Table 8).

Table 8 compares the average scores of the top 61 Swedish companies against the average scores of the top 1000 European companies, where the scores are based on company disclosures of policies, risks and outcomes. As the summary figures at the bottom of the table show, Sweden's scores are not much higher than Europe's. Both tend to report equally on these matters—that is, what they should do, their

TABLE 8 A comparison of Swedish and European reports

Attributes																			
Policy		Risks										Outcomes							
Information																			
No information		Described or referenced		Key issues/ objectives specified		None identified		Vague identification		Specific descriptions		No description		Description provided		Outcomes reported against targets			
Swd	EU	Swd	EU	Swd	EU	Swd	EU	Swd	EU	Swd	EU	Swd	EU	Swd	EU	Swd	EU		
A. Environment																			
A.1. Climate change		3.3	17.8	45.9	47.7	33.0	34.5	26.2	42.6	30.4	31.1	23.4	14.8	29.0	49.2	43.3	36.1	27.7	
A.2. Use of natural resources		37.7	43.0	37.7	38.9	18.4	18.1	59.0	68.3	24.6	19.2	16.4	12.5	52.5	37.7	35.3	9.8	12.1	
A.3. Polluting discharges		45.9	47.6	32.8	31.9	8.2	7.8	54.1	59.5	31.1	18.2	1.6	9.6	62.3	55.9	19.7	26.2	4.9	5.2
A.4. Waste		9.8	18.5	50.8	49.5	26.2	19.3	54.1	61.6	24.6	19.1	8.2	6.6	23.0	30.0	44.3	42.8	19.7	14.5
A.5. Biodiversity and ecosystem conservation		80.3	64.2	11.5	21.8	3.3	6.4	88.5	74.4	3.3	10.9	3.3	7.2	82.0	75.2	13.1	14.3	0.0	3.0
B. Employee and social matters																			
B.1. Employee and workforce matters		0	4.5	55.7	52.4	39.8	43.1	21.3	28.4	44.3	32.9	34.4	38.7	16.4	23.8	54.1	50.5	29.5	25.7
C. Human rights																			
General human rights reporting criteria		8.2	17.8	62.3	60.3	29.5	21.9	24.6	43.4	39.3	31.1	36.1	25.5	44.3	60.9	49.2	32.9	6.6	6.2
C.1. Supply chain management		11.5	21.6	55.7	54.7	32.8	23.7	18.0	43.2	49.2	33.6	32.8	23.2	39.3	58.1	44.3	31.4	16.4	10.5
C.2. Impacts on indigenous and/or local communities' rights		57.4	52.0	8.2	13.3	1.6	2.6	62.3	58.3	3.3	6.3	1.6	3.3	57.4	58.4	9.8	8.3	0.0	1.2
C.3. High-risk areas for civil and political rights		90.2	94.4	8.2	4.3	1.6	1.3	91.8	94.6	1.6	2.3	6.6	3.1	95.1	97.5	4.9	2.3	0.0	0.2
C.4. Conflict resources (minerals, timber, etc.)		39.3	51.1	18.0	6.0	4.9	3.3							54.1	55.3	8.2	4.1	0.0	1.0
C.5. Data protection/ rights		4.9	5.3	11.5	12.9	1.6	2.0	4.9	7.9	8.2	7.4	4.9	4.9	11.5	12.6	4.9	6.7	1.6	0.9
D. Anti-corruption and whistleblowing																			
D.1. Anti-corruption		0	11.9	75.4	68.4	24.6	19.7	9.8	35.1	55.7	44.4	34.4	20.5	27.9	54	65.6	40.1	6.6	5.9
(Continues)																			

(Continues)

TABLE 8 (Continued)

Attributes																				
Policy				Risks								Outcomes								
Information																				
	No information	Swd	EU	Described or referenced	Key issues/ objectives specified				None identified		Vague identification		Specific descriptions		No description		Description provided		Outcomes reported against targets	
					Swd	EU	Swd	EU	Swd	EU	Swd	EU	Swd	EU	Swd	EU	Swd	EU	Swd	EU
D.2. Whistleblowing channels	11.5	22.8	80.3	67.4	8.2	9.8									50.8	66.2	44.3	30.3	4.9	3.5
Average	28.6%	33.8%	39.6%	37.8%	16.7%	15.3%	42.9%	51.4%	27.3%	21.3%	17.6%	14.9%	45.1%	52.1%	32.1%	26.3%	9.7%	8.4%		
Summary	Policy	Risks	Outcomes																	
Sweden	28.3%	29.3%	29.0%																	
Europe	28.9%	29.2%	28.9%																	

Source: Publicly available data adapted from Alliance for Corporate Transparency (2020a).

risks and what they have done. Arguably, the relatively low average percentages for outcomes suggest there must be little material performance to report on or a general lack of transparency.

## 6 | DISCUSSION AND CONCLUSIONS

Our study was guided by questions over whether investor and regulatory attention has influenced corporate ESG activity in recent years in terms of reporting quantity, reporting quality and actual performance. Our analysis shows an increase in the *quantity* of ESG reporting in Sweden from 2008 to 2014, where activity levelled out; an improvement in ESG performance, which also levelled out at around 2015; and a steady improvement in reporting *quality* that continues to this day.

Swedish companies have a long history of being viewed as leaders in ESG disclosure. However, data from the Alliance for Corporate Transparency suggest that leadership may have evaporated. Our findings indicate that Swedish companies need to improve their ESG performance, which may lead to slight increases in their reporting. Similarly, it seems the EU Directive, with its regulated disclosure requirements, has not, in the short term, improved performance. Instead, the more things have changed, including more regulation, the more they have stayed the same (Dumay & Hossain, 2019).

### 6.1 | Implications for ESG reporting policy in Sweden

As we have shown, a plethora of frameworks and policies have been introduced to increase corporate transparency and disclosure among European companies. But what has been the impact of these policies? We observe that while ESG reporting has increased, it has plateaued in recent years, and new corporate reporting laws mandating ESG disclosure have neither increased reporting quantity nor improved ESG performance. ESG information quality has improved, but, we find, not substantially. As such, voluntary and mandatory reporting frameworks appear to slightly improve ESG information quality but do little to improve corporate ESG performance. If reporting frameworks were the answer, then there would no longer be calls for new or revised frameworks to improve information for investors. The ESG information asymmetry problem between companies and investors would now not exist. Furthermore, the recently launched and upcoming disclosure initiatives, standards and regulations (e.g., the CSRD [i.e., former NFRD], TCFD, EU Taxonomy on Sustainable Activities, and IFRS's and SASB's sustainability standards) would not be deemed needed.

Perhaps we should ask what Swedish policymakers can do to improve corporate transparency and rebuild accountability, legitimacy and trust among investors and stakeholders. Both the EU Green Deal and financial market actors stress the need for enhanced ESG information quality when assessing corporate ESG performance and thus redirecting financial flows towards investments to mitigate the climate crises. However, because of their association with the EU, Swedish

polymakers must first implement any policy changes at the EU level before considering Swedish measures. If they continue to transpose the European reporting directives into law, they essentially tie Sweden's ESG reporting development to the wishes of the European Commission.

Nevertheless, being hamstrung to European regulation does not prevent Swedish policymakers from introducing proactive policies for improving ESG performance and especially policy and practices aimed at tackling climate change. Such policies are in place across Sweden's entire economy impacting all of society, not just companies. Sweden currently boasts that it is working towards a green economy by 2045, 5 years ahead of the EU's Green Deal goal. The country is implementing several environmental policies, such as expanding renewable energy resources, turning wood into textiles, promoting sustainable development, creating climate-smart cities and changing consumer behaviour to help build a circular economy (Swedish Institute, 2020). Sweden is now ranked fifth in the Yale University (2020) Environmental Performance Index—clear evidence that introducing local climate action policies and practices has a greater impact than regulating corporate reporting quantity and quality.

## 6.2 | Implications for European ESG reporting policy and practice

As discussed above, investors, financial analysts and other interested stakeholders are demanding more ESG information. Current reporting is not satisfying that demand, so the EU Directive, which regulates reporting, is being revised (the so-called CSRD). Additionally, we find that Swedish companies, specifically, are not meeting the demand for ESG information. Our analysis shows that Swedish reporting performance and quality is generally low, as is the case in the rest of Europe (Alliance for Corporate Transparency, 2020b). There is also little hope that changes in reporting will prompt significant changes to corporate behaviour, because corporate behaviour, including ESG performance, appears not to be driven by voluntary or mandatory reporting (Biondi et al., 2020; Cho, Laine, et al., 2015).

When we started writing this paper, we could not have anticipated the COVID-19 pandemic and the economic impacts it would have. However, the same cannot be said of climate change. We have long known that climate change poses significant risks to the economic future of Europe and the world (EU, 2019a; TCFD, 2016). As BHP Chairman Ken MacKenzie outlined earlier this year, corporate ESG performance is a top priority for shareholders and investors. The COVID-19 pandemic has brought the climate change agenda forward because we are now forced to wonder whether the impacts of climate change will be just as, if not more, devastating than those of the pandemic (Wood, 2020).

ESG reporting has been around for more than 50 years without greatly improving ESG performance. We argue that any future developments in ESG reporting will not greatly enhance ESG performance—and given that we are heading into the abyss of climate change, it is time to focus on performance, not reporting.

Our analysis shows that ESG information quality has steadily increased while ESG performance appears to have plateaued. But mitigating the climate crises does not call for slick prose that talks about targets; it calls for setting targets that make a difference and meeting them regardless of the framework or other communication channels companies use to report the results. Rather than focusing on improving ESG reporting regulations, we need to redirect our focus towards developing more timely, relevant, credible and comparable measures of corporate ESG performance (Arvidsson, 2019b). Financial analysts and investors need data demonstrating improved ESG performance to redirect money towards investments that adhere to the EU Green Deal and therefore might combat the climate crisis. We need firm policies and actions, communicated directly to investors and stakeholders. If we wait around for the next round of reports, it might just be too late to tackle climate change (Biondi et al., 2020; La Torre et al., 2020).

According to Hepburn et al. (2020), the five most crucial policies for tackling climate change are developing clean energy infrastructure, building efficiency retrofits, education and training for workers, natural capital investments and clean R&D. Corporate ESG reporting does not even get a mention. We argue that the EU needs to focus on implementing these policies rather than on improving corporate reporting policies that have no impact on improving corporate ESG performance and, worse yet, have no demonstrable impact on climate change or helping the economy recover from the pandemic. In parallel, companies must hold themselves accountable to society and the environment through their actions, not through empty words (Biondi et al., 2020; La Torre et al., 2020). Moreover, time is crucial: Climate science makes it clear that we cannot afford to wait to act.

## 6.3 | Implications for future research

Unfortunately, it seems that mandating companies to disclose more ESG information will not have a significant impact on changing corporate behaviour towards enhancing ESG performance. Thus, as accountants, we need to rethink how we can develop novel approaches to change corporate behaviour and improve ESG performance and how companies hereby can contribute to sustainable development and reducing the impacts of climate change (Mistry et al., 2014). We contend that we need research into how corporate ESG practices change to cope with the pressures from consumers, investors and policymakers.

### 6.3.1 | A focus on consumers

While we have not analysed the influence of consumers on corporate behaviour in this paper, we believe that one crucial aspect that remains relatively unexplored is how consumers drive changes in corporate ESG behaviour because it is a potentially novel solution to the failure of corporate reporting policy and practice. However, consumers are linked to ESG reporting because one explicitly stated goal

of the EU Directive is to rebuild 'consumer trust' (EU, 2014, p. 1). However, there is no existing accounting research exploring how changing consumer preferences are driving ESG outcomes for companies—for example, what impact does the drive towards a circular economy have on changing consumer preferences and, by extension, corporate behaviour (Swedish Institute, 2020)? Companies need to respond to changing consumer preferences to remain viable. For example, Volvo is now changing to become an all-electric vehicle manufacturer by 2030 'to capitalise on growing demand for electric cars', which is in response to government policies restricting the sale of new fossil fuel-powered vehicles (BBC News, 2021). Thus, research into how government policies are changing consumer preferences to drive increases in ESG performance is needed to understand how it shapes future climate change-related policies.

### 6.3.2 | A focus on investors

Future researchers could also fruitfully explore the power that investors have to change corporate behaviour. Investors are increasingly concerned about the risks of having stranded assets that are no longer productive (Bos & Gupta, 2019). As Larry Fink (2020) outlines in his letter to CEOs of the companies BlackRock invests in, capital market allocations will change more quickly than climate change. Companies responding to climate change and investment risk will need to follow the money rather than reporting regulations. Already, frameworks such as the TCFD (2016) are becoming essential elements of corporate disclosures so that investors are not left holding a bagful of stranded assets and resources. Thus, we need research to understand how the dynamics of the capital market and the influence of influential investors are affecting corporate ESG performance.

### 6.3.3 | A focus on policy

Finally, as accounting scholars, we need to consider alternative policy solutions beyond accounting and accounting regulations. As we have outlined, several policy mechanisms not related to corporate reporting will have a significant impact on climate change—and these are avenues for future research. For example, policies aimed at changing consumer behaviour are fundamental to the circular economy's success. Accounting scholars have a key role to play in understanding how to measure changes in consumer behaviour and relate these changes to corporate financial stability and sustainability.

## 6.4 | Limitations

Our study has limitations due to its design and use of different data sources to triangulate our findings and arguments to enhance the soundness of our findings. Arguably, the paper and its findings are subject to the academic and practical expertise of the authors. We are

academics with several decades of experience who mainly undertake qualitative research projects. Thus, other academics working in tandem, like we have done, might not draw the same implications and conclusions from our data. However, we believe that this limitation is also the greatest strength of the paper as it adds novel insights into the future implications for research, practice and policy.

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## ENDNOTES

- <sup>1</sup> <https://www.fitchratings.com/>.
- <sup>2</sup> <https://www.msci.com/>.
- <sup>3</sup> <https://www.sustainalytics.com/>.
- <sup>4</sup> Data from Sustainalytics Legacy ESG Rating.
- <sup>5</sup> 2009 is the first year that the ESG Performance Framework from Sustainalytics included data from Swedish companies.

## REFERENCES

- Abhayawansa, S., Eljido-Ten, E., & Dumay, J. (2019). A practice theoretical analysis of the irrelevance of integrated reporting to mainstream sell-side analysts. *Accounting and Finance*, 59(3), 1615–1647. <https://doi.org/10.1111/acfi.12367>
- Adams, C. A. (2017). Conceptualising the contemporary corporate value creation process. *Accounting, Auditing & Accountability Journal*, 30(4), 906–931. <https://doi.org/10.1108/AAAJ-04-2016-2529>
- Adamsson, E. (2020). *The construction of corporate irresponsibility: A constitutive perspective on communication in media narratives*. Stockholm Business School, Stockholm University.
- Alliance for Corporate Transparency. (2020a). <https://www.allianceforcorporatetransparency.org/pages/about.html>
- Alliance for Corporate Transparency. (2020b). 2019 research report: An analysis of the sustainability reports of 1000 companies pursuant to the EU Non-Financial Reporting Directive.
- Arvidsson, S. (2010). Communication of corporate social responsibility: A study of the views of management teams in large companies. *Journal of Business Ethics*, 96(3), 339–354. <https://doi.org/10.1007/s10551-010-0469-2>
- Arvidsson, S. (2014). Corporate social responsibility and stock market actors: A comprehensive study. *Social Responsibility Journal*, 10(2), 210–225. <https://doi.org/10.1108/SRJ-08-2012-0099>
- Arvidsson, S. (2019a). *Challenges with managing sustainable business: Reporting, taxation, ethics and governance*. Palgrave Macmillan. <https://doi.org/10.1007/978-3-319-93266-8>
- Arvidsson, S. (2019b). An expose of the challenging practice development of sustainability reporting: From the first wave to the EU Directive (2014/95/EU). In S. Arvidsson (Ed.), *Challenges in managing sustainable business: Reporting, taxation, ethics and governance*. Palgrave Macmillan. [https://doi.org/10.1007/978-3-319-93266-8\\_1](https://doi.org/10.1007/978-3-319-93266-8_1)
- Aureli, S., Del Baldo, M., Lombardi, R., & Nappo, F. (2020). Nonfinancial reporting regulation and challenges in sustainability disclosure and corporate governance practices. *Business Strategy and the Environment*, 29(6), 2392–2403. <https://doi.org/10.1002/bse.2509>



- Barker, R., & Eccles, R. G. (2019). *Should FASB and IASB be responsible for setting standards for nonfinancial information?*. Saïd Business School, University of Oxford. <https://doi.org/10.2139/ssrn.3272250>
- Bartels, W., Fogelberg, T., Hoballah, A., & van der Lugt, C. T. (2016). *Carrots & Sticks: Global trends in sustainability reporting regulation and policy*. KPMG; Global Reporting Initiative (GRI); United Nations Environment Programme; Centre for Corporate Governance in South Africa.
- BBC News. (2021). Volvo Cars to go fully electric by 2030. <https://www.bbc.com/news/business-56245618>
- Bebbington, J., & Unerman, J. (2018). Achieving the United Nations Sustainable Development Goals: An enabling role for accounting research. *Accounting, Auditing & Accountability Journal*, 31(1), 2–24. <https://doi.org/10.1108/AAAJ-05-2017-2929>
- Beretta, S., & Bozzolan, S. (2008). Quality versus quantity: The case of forward-looking disclosure. *Journal of Accounting, Auditing and Finance*, 23(3), 333–376. <https://doi.org/10.1177/0148558X0802300304>
- Biondi, L., Dumay, J., & Monciardini, D. (2020). Using the International Integrated Reporting Framework to comply with EU Directive 2014/95/EU: Can we afford another reporting façade? *Meditari Accountancy Research*, 28(5), 889–914. <https://doi.org/10.1108/MEDAR-01-2020-0695>
- Bos, K., & Gupta, J. (2019). Stranded assets and stranded resources: Implications for climate change mitigation and global sustainable development. *Energy Research & Social Science*, 56, 101215.
- Brundtland, G. H. (Ed.) (1987). *Our common future: The World Commission on Environment and Development*. Oxford University Press.
- Butler, S. (2016). H&M factories in Myanmar employed 14-year-old workers. *The Guardian*.
- Cahan, S. F., De Villiers, C., Jeter, D. C., Naiker, V., & Van Staden, C. J. (2016). Are CSR disclosures value relevant? Cross-country evidence. *The European Accounting Review*, 25(3), 579–611. <https://doi.org/10.1080/09638180.2015.1064009>
- Chauvey, J.-N., Giordano-Spring, S., Cho, C., & Patten, D. (2015). The normativity and legitimacy of CSR disclosure: Evidence from France. *Journal of Business Ethics*, 130(4), 789–803. <https://doi.org/10.1007/s10551-014-2114-y>
- Chen, L., Feldmann, A., & Tang, O. (2015). The relationship between disclosures of corporate social performance and financial performance: Evidences from GRI reports in manufacturing industry. *International Journal of Production Economics*, 170, 445–456. <https://doi.org/10.1016/j.ijpe.2015.04.004>
- Chen, S., & Bouvain, P. (2009). Is corporate responsibility converging? A comparison of corporate responsibility reporting in the USA, UK, Australia, and Germany. *Journal of Business Ethics*, 87, 299–317. <https://doi.org/10.1007/s10551-008-9794-0>
- Cho, C. H., Laine, M., Roberts, R. W., & Rodrigue, M. (2015). Organized hypocrisy, organizational façades, and sustainability reporting. *Accounting, Organizations and Society*, 40, 78–94. <https://doi.org/10.1016/j.aos.2014.12.003>
- Cho, C. H., Michelon, G., Patten, D. M., & Roberts, R. W. (2015). CSR disclosure: The more things change ...? *Accounting, Auditing & Accountability Journal*, 28(1), 14–35. <https://doi.org/10.1108/AAAJ-12-2013-1549>
- Cordazzo, M., Bini, L., & Marzo, G. (2020). Does the EU Directive on non-financial information influence the value relevance of ESG disclosure? Italian evidence. *Business Strategy and the Environment*, 29(8), 3470–3483. <https://doi.org/10.1002/bse.2589>
- Crifo, P., Diaye, M.-A., & Pekovic, S. (2016). CSR related management practices and firm performance: An empirical analysis of the quantity–quality trade-off on French data. *International Journal of Production Economics*, 171, 405–416. <https://doi.org/10.1016/j.ijpe.2014.12.019>
- CSR Europe, & Global Reporting Initiative. (2017). *Member State implementation of Directive 2014/95/EU: A comprehensive overview of how Member States are implementing the EU Directive on Non-financial and Diversity Information*. CSR Europe.
- Davis, G., & Searcy, C. (2010). A review of Canadian corporate sustainable development reports. *Journal of Global Responsibility*, 1(2), 316–329. <https://doi.org/10.1108/20412561011079425>
- de Villiers, C., & van Staden, C. J. (2006). Can less environmental disclosure have a legitimising effect? Evidence from Africa. *Accounting, Organizations and Society*, 31(8), 763–781. <https://doi.org/10.1016/j.aos.2006.03.001>
- du Toit, E. (2017). The readability of integrated reports. *Meditari Accountancy Research*, 25(4), 629–653. <https://doi.org/10.1108/MEDAR-07-2017-0165>
- Dumay, J., Frost, G., & Beck, C. (2015). Material legitimacy: Blending organisational and stakeholder concerns through non-financial information disclosures. *Journal of Accounting and Organizational Change*, 11(1), 2–23. <https://doi.org/10.1108/JAOC-06-2013-0057>
- Dumay, J., & Hossain, M. A. (2019). Sustainability risk disclosure practices of listed companies in Australia. *Australian Accounting Review*, 29(2), 343–359. <https://doi.org/10.1111/auar.12240>
- Dumay, J., La Torre, M., & Farneti, F. (2019). Developing trust through stewardship: Implications for intellectual capital, integrated reporting, and the EU Directive 2014/95/EU. *Journal of Intellectual Capital*, 20(1), 11–39. <https://doi.org/10.1108/JIC-06-2018-0097>
- Dye, S. (2017). Telia to pay \$965m to settle Uzbek bribery claims. *Financial Times*.
- Eccles, R., & Serafeim, G. (2011). *Accelerating the adoption of integrated reporting*. InnoVatio Publishing Ltd.
- Eccles, R. G., & Klimenko, S. (2019). The investor revolution. *Harvard Business Review*, 97(3), 106–116.
- Edelman. (2020). Washington, DC: Depicting trans spatialities. In *Trans vitalities* (pp. 30–56). Routledge. <https://doi.org/10.4324/9781351128025-3>
- European Commission. (2019). *The European Green Deal*. European Union.
- European Union. (2014). Directive 2014/95/EU. *Official Journal of the European Union*, 214(330), 1–9.
- European Union. (2017). Guidelines on non-financial reporting (methodology for reporting non-financial information) (2017/C 215/01). *Official Journal of the European Union*, 2017(251), 1–20.
- European Union. (2019a). Guidelines on non-financial reporting: Supplement on reporting climate-related information. *Official Journal of the European Union*, 2019(C 209), 1–30.
- European Union. (2019b). Regulation (EU) 2019/2088 of the European Parliament and of the Council of 27 November 2019 on sustainability-related disclosures in the financial services sector. *Official Journal of the European Union*, 1–114.
- Eurosif. and ACCA. (2013). What do investors expect from non-financial reporting?
- Fink, L. (2020). A fundamental reshaping of finance. <https://www.blackrock.com/au/individual/larry-fink-ceo-letter>
- Foley, S. (2002). The man who fell to Earth: Knives are out for a corporate legend. *Independent*.
- Gray, R. (2010). Is accounting for sustainability actually accounting for sustainability ... and how would we know? An exploration of narratives of organisations and the planet. *Accounting, Organizations and Society*, 35(1), 47–62. <https://doi.org/10.1016/j.aos.2009.04.006>
- Gröjer, J. E., & Johanson, U. (1998). Current development in human resource costing and accounting: Reality present, researchers absent? *Accounting, Auditing & Accountability Journal*, 11(4), 495–506. <https://doi.org/10.1108/09513579810231501>
- Hall, P., & Soskice, D. (2001). An introduction to variety of capitalism. In *Varieties of capitalism: The institutional foundations of comparative advantage* (pp. 1–69). Oxford Scholarship Online. <https://doi.org/10.1093/0199247757.003.0001>
- Helfaya, A., & Whittington, M. (2019). Does designing environmental sustainability disclosure quality measures make a difference? *Business Strategy and the Environment*, 28(4), 525–541. <https://doi.org/10.1002/bse.2262>



- Helfaya, A., Whittington, M., & Alawattage, C. (2019). Exploring the quality of corporate environmental reporting: Surveying preparers' and users' perceptions. *Accounting, Auditing & Accountability Journal*, 32(1), 163–193. <https://doi.org/10.1108/AAAJ-04-2015-2023>
- Hepburn, C., O'Callaghan, B., Stern, N., Stiglitz, J., & Zenghelis, D. (2020). Will COVID-19 fiscal recovery packages accelerate or retard progress on climate change? *Oxford Review of Economic Policy*, 36, S359–S381. <https://doi.org/10.1093/oxrep/graa015>
- Hinze, A.-K., & Sump, F. (2019). Corporate social responsibility and financial analysts: A review of the literature. *Sustainability Accounting, Management and Policy Journal*, 10(1), 183–207. <https://doi.org/10.1108/SAMPJ-05-2017-0043>
- International Integrated Reporting Council. (2021). *The international <IR> framework*. International Integrated Reporting Council.
- KPMG. (2015). *KPMG international survey of corporate responsibility reporting*. KPMG International.
- KPMG. (2019). *KPMG survey of corporate responsibility reporting 2017: The road ahead*. KPMG International.
- Krasodomska, J., & Cho, C. H. (2017). Corporate social responsibility disclosure: Perspectives from sell-side and buy-side financial analysts. *Sustainability Accounting, Management and Policy Journal*, 8(1), 2–19. <https://doi.org/10.1108/SAMPJ-02-2016-0006>
- La Torre, M., Sabelfeld, S., Blomkvist, M., & Dumay, J. (2020). Rebuilding trust: Sustainability and non-financial reporting and the European Union regulation. *Meditari Accountancy Research*, 28(5), 701–725. <https://doi.org/10.1108/MEDAR-06-2020-0914>
- La Torre, M., Sabelfeld, S., Blomkvist, M., Tarquinio, L., & Dumay, J. (2018). Harmonising non-financial reporting regulation in Europe: Practical forces and projections for future research. *Meditari Accountancy Research*, 26(4), 598–621. <https://doi.org/10.1108/MEDAR-02-2018-0290>
- Leong, S., & Hazelton, J. (2019). Under what conditions is mandatory disclosure most likely to cause organisational change? *Accounting, Auditing & Accountability Journal*, 32(3), 811–835. <https://doi.org/10.1108/AAAJ-12-2015-2361>
- Levi-Faur, D. (2005). The global diffusion of regulatory capitalism. *The Annals of the American Academy of Political and Social Science*, 598, 12–32.
- Mistry, V., Sharma, U., & Low, M. (2014). Management accountants' perception of their role in accounting for sustainable development: An exploratory study. *Pacific Accounting Review*, 26(1/2), 112–133. <https://doi.org/10.1108/PAAR-06-2013-0052>
- Mori Junior, R., Best, P. J., & Cotter, J. (2014). Sustainability reporting and assurance: A historical analysis on a world-wide phenomenon. *Journal of Business Ethics*, 120(1), 1–11.
- Mouritsen, J., Larsen, H. T., & Bukh, P. N. (2001). Valuing the future: Intellectual capital supplements at Skandia. *Accounting, Auditing & Accountability Journal*, 14(4), 399–422. <https://doi.org/10.1108/09513570110403434>
- Narayanan, V., & Adams, C. A. (2017). Transformative change towards sustainability: The interaction between organisational discourses and organisational practices. *Accounting and Business Research*, 47(3), 344–368. <https://doi.org/10.1080/00014788.2016.1257930>
- Pollack, E., & Allern, S. (2018). Disclosure of Scandinavian telecom companies' corruption in Uzbekistan: The role of investigative journalists. *European Journal of Communication*, 33(1), 73–88. <https://doi.org/10.1177/0267323117750697>
- Rajesh, R., & Rajendran, C. (2020). Relating environmental, social, and governance scores and sustainability performances of firms: An empirical analysis. *Business Strategy and the Environment*, 29(3), 1247–1267. <https://doi.org/10.1002/bse.2429>
- Ries, T. E., Bersoff, D. M., Adkins, S., Armstrong, C., & Bruening, J. (2018). Edelman trust barometer global report.
- Rimmel, G., & Jonall, K. (2011). Accounting scandals in Sweden—A long tradition. In M. Jones (Ed.), *Creative accounting, fraud and international accounting scandals* (pp. 359–377). John Wiley & Sons Ltd. <https://doi.org/10.1002/9781119208907.ch17>
- Rimmel, G., & Jonäll, K. (2013). Biodiversity reporting in Sweden: Corporate disclosure and preparers' views. *Accounting, Auditing & Accountability Journal*, 26(5), 746–778. <https://doi.org/10.1108/AAAJ-02-2013-1228>
- Roca, L. C., & Searcy, C. (2012). An analysis of indicators disclosed in corporate sustainability reports. *Journal of Cleaner Production*, 20(1), 103–118. <https://doi.org/10.1016/j.jclepro.2011.08.002>
- Rust, S. (2020). Investors react to EU Green Deal. <https://www.ipe.com/esg/investors-react-to-eu-green-deal/10042968.article>
- Sachs, S., Rühli, E., & Kern, I. (2009). Have your cake and eat it. In *Sustainable success with stakeholders* (pp. 155–168). Palgrave Macmillan. [https://doi.org/10.1057/9780230271746\\_11](https://doi.org/10.1057/9780230271746_11)
- Searcy, C., & Buslovich, R. (2014). Corporate perspectives on the development and use of sustainability reports. *Journal of Business Ethics*, 121(2), 149–169.
- Stavilöt, U. (2018). *From voluntary to mandatory sustainability reporting*. The Swedish Agency for Growth Policy Analysis.
- Suchman, M. C. (1995). Managing legitimacy: Strategic and institutional approaches. *Academy of Management Review*, 20(3), 571–610. <https://doi.org/10.2307/258788>
- Sustainability Accounting Standards Board. (2021). Why investors use SASB Standards. <https://www.sasb.org/investor-use/>
- Swedish Institute. (2020). Saving the climate. <https://sweden.se/climate/#from-resource-economy-to-bioeconomy>
- Task Force on Climate-Related Financial Disclosures. (2016). *Recommendations of the Task Force on Climate-related Financial Disclosures*. Financial Stability Board.
- The New York Times. (2005). Former Skandia head charged with fraud in Sweden.
- Tregidga, H., Milne, M., & Kearins, K. (2014). (Re)presenting 'sustainable organizations'. *Accounting, Organizations and Society*, 39(6), 477–494. <https://doi.org/10.1016/j.aos.2013.10.006>
- United Nations Development Programme. (2015). *Sustainable Development Goals*. United Nations Development Programme.
- Whitley, R. (1999). *Divergent capitalisms: The social structuring and change of business systems*. Oxford University Press.
- Whittington, R., & Mayer, M. (2002). *The European corporation: Strategy, structure, and social science*. Oxford University Press. <https://doi.org/10.1093/acprof:oso/9780199251049.001.0001>
- Wood, J. (2020). Why this moment could be decisive for tackling climate change: Report. <https://www.weforum.org/agenda/2020/07/how-covid-19-could-spark-climate-change-recovery-sustainability/>
- World Economic Forum. (2020). *The global risks report 2020*. World Economic Forum.
- Xie, J., Nozawa, W., Yagi, M., Fujii, H., & Managi, S. (2019). Do environmental, social, and governance activities improve corporate financial performance? *Business Strategy and the Environment*, 28(2), 286–300. <https://doi.org/10.1002/bse.2224>
- Yale University. (2020). Environmental Performance Index results. <https://epi.yale.edu/epi-indicator-report/EPI>
- Yin, R. K. (2017). *Case study research and applications: Design and methods (6th Edition on Kindle)*. Sage.

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