



Should FASB and IASB be responsible for setting standards for nonfinancial information?

Green Paper
12 October 2018

*‘This House believes that
corporate sustainability reporting
should be mandated,
and standardised
by FASB and IASB,
for it to be most useful
for investors.’*

Richard Barker and Robert G. Eccles
Saïd Business School, University of Oxford

The goal of this ‘Green Paper’¹ is to contribute, in a neutral way, to a conversation that has been going on for some time amongst a variety of actors, concerning whether mandatory reporting standards are a prerequisite for effective ‘sustainability’ or ‘nonfinancial’ corporate reporting. Specifically, we ask whether the existing standard-setting regime for financial reporting – that of the US Financial Accounting Standards Board (FASB) and the International Accounting Standards Board (IASB) – should be extended to include setting standards for nonfinancial information. Our work was informed by interviews we did with 50 experts in this field (listed in the Appendix). We are grateful to them for taking the time to share their views with us.

This paper is the background reading for a debate on 11 December 2018 at the Oxford Union. This debate, on the motion that headlines this paper, will be on the public record. Based upon what we learn at the debate, and from feedback on the paper, we will produce a ‘White Paper’ in which we will give our own view on how best to ensure that the capital markets have the nonfinancial information they need to function properly.

¹ The Oxford English Dictionary definition of a Green Paper is ‘(in the UK) a preliminary report of government proposals published to stimulate discussion, from which statements of policy and proposals for legislative change emerge in the form of a White Paper.’

Contents

The question

- A focus on FASB and IASB 4
- A focus on investors 4
- What do we mean by nonfinancial information? 6
- A focus on Environmental, Social and Governance (ESG) information 8
- A focus on useful information 8
- What do we mean by standards? 9

The problem

- Inadequate ESG information 11
- An absence of ESG reporting standards 13
- A challenging problem 13

Institutional context

- Financial accounting standard setting 16
- MD&A and Management Commentary 20
- Organisations setting frameworks and standards for nonfinancial information 21
- Data ratings and rankings organisations 26
- Adoption in practice of frameworks and standards for nonfinancial information 28

Solutions

- The regulatory solution 30
- The market solution 35

Final reflections

40

Appendix – people interviewed

41

The question

The specific question asked in this paper – but not answered – is a simple one: should the US Financial Accounting Standards Board (FASB) and the International Accounting Standards Board (IASB) be responsible for setting standards for nonfinancial information? This is a reasonable question to ask since both bodies are expert in setting standards for information on company performance used by investors. Furthermore, through legislation and regulation, almost every listed company in the world must conform to one of these sets of standards.² This is a mandate that no institution has with respect to corporate nonfinancial reporting.³ If it were extended, it is possible that nonfinancial information would have the same credibility and utility as financial information.

In setting the scene for the paper, we address in this first section issues of scope, concerning the reasons for focusing on FASB and IASB, the meaning of nonfinancial information and standards, and the audience for whom standardised information is intended.

A focus on FASB and IASB

We focus on the arguments for and against FASB and IASB setting standards for nonfinancial information. How this might happen would be different in each situation, but our question is whether it is these bodies (and their associated foundations) that should be given this responsibility. It is possible that there are institutional solutions to this problem other than FASB and IASB, but that is beyond the scope of this paper. If the political decision is made that only a regulatory solution can create standards, FASB and IASB are the obvious places to start, because they are the ‘monopoly’ providers of corporate financial reporting standards.⁴ Our question is whether or not that political decision should be made.

A focus on investors

The *primary* focus for both FASB and IASB is meeting the financial reporting information needs of (equity and debt) investors in the capital markets. In the case of IASB, for example, its stated objective is to provide:

financial information about the reporting entity that is useful to existing and potential investors, lenders and other creditors in making decisions about providing resources to the entity’ (para. 1.2) ... (with respect to) ‘the amount, timing and uncertainty of (the prospects for) future net cash inflows to the entity and their assessment of management’s stewardship of the entity’s resources’ (para 1.3); IASB (2018).

The Chair of IASB, Hans Hoogervorst, commented that ‘our focus on financial reporting for capital market participants is deeply embedded in our DNA.’⁵ Similarly, FASB derives its purpose from the SEC’s mission to ‘protect investors; maintain fair, orderly, and efficient markets; and facilitate capital formation.’⁶

2 All US companies must conform to FASB’s ‘Generally Accepted Accounting Principles’ (U.S. GAAP). Approximately 120 nations and reporting jurisdictions permit or require IASB’s ‘International Financial Reporting Standards’ (IFRS), or near equivalent, for listed companies.

3 There are some minor exceptions to this; for example, Swedish state-owned enterprises have to report according to GRI, while South African companies have to file an integrated report or explain why not.

4 FASB and IASB are standard setters, not regulators, yet they play a central role within a broader regulatory structure.

5 ‘Shaping the future of corporate reporting,’ speech at Accountancy Europe conference, September 2017.

6 <https://www.sec.gov/about.shtml>

There are, of course, stakeholders other than investors with a legitimate interest in financial reporting, yet while these are acknowledged by FASB and IASB, their informational needs are not primary. As our research question is concerned specifically with FASB and IASB, this paper therefore maintains focus and consistency by means of adopting an ‘investor lens’ throughout.

It should be noted, however, that while this investor focus is clear-cut in principle, it is less so in practice. This is because information that is useful to investors can also be useful, for a different purpose, for a different set of stakeholders. An obvious example is corporate reporting with respect to climate change, where information on carbon emissions might be directly relevant to investors, for the purpose of evaluating the economic sustainability of the reporting entity’s business model, yet also relevant, for different purposes, for stakeholders such as government and environmental NGOs.

It is also important to note the sensitivity and polarisation that exists around the appropriateness of an investor orientation. When the topic of nonfinancial information enters the corporate reporting world, it can be seen as an attempt to use the tool of regulation over corporate reporting to accomplish policy objectives that ‘should’ be addressed by other means. Perhaps the most common example of this, which came after the Financial Crisis of 2007/2008, is a very specific provision in the ‘Dodd-Frank Wall Street Reform and Consumer Protection Act (the Act)’⁷ that requires companies ‘contracting to manufacture’ to report on their efforts to ensure that minerals such as tantalum, tin, gold or tungsten were not produced in the Democratic Republic of Congo and other designated countries or from scrap or recycled resources or to state if they are.⁸ Critics of this part of the legislation pointed to the clear effort to change corporate behaviour on a topic that may not be relevant to investors. In response, on 7 April 2017 the Securities and Exchange Commission (SEC) announced it would no longer enforce this clause in the Act, for a reason that ‘centers around the role of the agency in business: does it exist to protect investors, or should they also enforce practices deemed for the greater good? Further, if the commission seeks to protect the greater good – what resources are they to receive to enforce reporting practices?’⁹

Another example of how ‘value’ and ‘values’ can be confounded is the outcry that came when, under Chair Mary Schapiro, the SEC issued its ‘Commission Guidance Regarding Disclosure Related to Climate Change; Final Rule’ on 8 February 2010.¹⁰ The purpose of this nine-page document was ‘to provide guidance to public companies regarding the Commission’s existing disclosure requirements as they apply to climate change matters.’¹¹

It did not issue any new regulations, essentially saying ‘Go back and re-read Regulation S-K from a climate perspective.’ Again, however, there was evidence of a strong push-back to a perceived risk that reporting on nonfinancial issues under SEC enforcement would extend the Commission’s responsibility beyond what is was given by legislation. In this regard, the following, sceptical response was typical: ‘The bottom line is that while there are no completely new disclosure requirements here, the ‘interpretation’ could impose a world of hurt and uncertainty on firms without benefiting (and likely even hurting) investors.’¹²

7 <https://www.govtrack.us/congress/bills/111/hr4173/text>

8 <https://www.sec.gov/opa/Article/2012-2012-163htm--related-materials.html>

9 <https://www.supplychaindive.com/news/SEC-conflict-mineral-rule-dodd-frank-enforcement/440175/>

10 <https://www.sec.gov/rules/interp/2010/33-9106fr.pdf>

11 *Ibid.*, p. 6290

12 <https://www.forbes.com/sites/streettalk/2010/02/01/tools-streettalk-wordpress/#11b312c3516e>. accessed April 2018.

Of course, there are always critics of new reporting requirements or even interpretations about reporting requirements. There is always a legitimate debate about whether the costs to companies are worth the benefit to investors. Not surprisingly, both sides often have a different view. But when disclosure gets into the realm of the nonfinancial, even when it is intended to be about information that is material for investors, a common perception is that there are hidden (or not so hidden) political motives behind it, where disclosure is being used as a tool to advance a policy agenda that should be handled in other ways.

What do we mean by nonfinancial information?

IASB makes a distinction within corporate reporting, shown in Figure 1, between ‘financial reporting’ and ‘wider corporate reporting,’ where the former comprises information directly relevant to financial evaluations made by investors, and the latter comprises a broader range of indicators relevant to public policy-makers and other stakeholders. ‘Nonfinancial information’ comprises the intersection between these two reporting domains.

Figure 1 – The Scope of Corporate Reporting



Within the financial reporting domain, the intersection with wider corporate reporting is described as nonfinancial because it sits outside the financial statements.

The financial statements are well defined. They comprise the primary financial statements themselves – balance sheet, income statement, etc. – as well as all accompanying notes. This is the ‘back half’ of the annual report, all of which is subject to external audit. The defining characteristic of this information is that it relates entirely to amounts that are currently recognised in the financial statements. All of these data are commensurable, because all recognised amounts are expressed in the same unit of measurement, whether dollars or some other currency.

In contrast, nonfinancial information is less well defined; it is simply the residual in the information provided to investors, after taking out the financial statements. There is a sense in which it, too, is ‘financial’ because it is relevant to a financial evaluation of the corporation by its investors. Indeed, it might be considered to be a leading indicator of numbers that might, in due course, be included in future financial statements. It is therefore ‘nonfinancial’ only in the sense that it is not currently recognised in the financial statements.

There is nothing that is meaningfully close to a ‘theory’ of nonfinancial information,

analogous to the conceptual articulation of double-entry bookkeeping in US Generally Accepted Accounting Principles (GAAP) and International Financial Reporting Standards (IFRS). Nonfinancial information tends therefore in practice to take the form of a 'stakeholder demand' approach to information rather than a theory-based one. As a result, it typically comprises a somewhat eclectic mix of data and narrative on corporate strategy, business model, risk management, environmental, social, and governance (ESG) performance and targets, and so on.

Given the authoritative status of FASB and IASB, it is typically unambiguous whether an item 'belongs' in the financial statements. In contrast, there is no such clarity for nonfinancial information. What can be said categorically, however, is in the negative, as follows:

- The distinction between the financial statements and nonfinancial information is *not* a distinction between, respectively, numbers and narrative. Instead, both the financial statements and nonfinancial information are made up of both data and text.
- It is also *not* the case that financial statements are 'backward-looking' while nonfinancial information is 'forward-looking'. While it is true that the financial statements are grounded in events that have happened, and that expected future events are not recognised, it is also the case that the measurement of net assets concerns rights and obligations with respect to prospective economic benefits. Meanwhile, nonfinancial information includes reports on past performance and current position, and it is only partially concerned with projections into the future.¹³ In general, performance is about something that has already happened, not a projection of something that is going to happen, and so information about nonfinancial performance is no more forward-looking than is information about financial performance.
- It is also *not* the case that nonfinancial information (as defined here) is synonymous with labels that imply transfer payments from shareholders to 'make the world a better place' – for example, 'corporate philanthropy' or 'corporate social responsibility'. The focus on investors is a focus on the creation of economic value, no more and no less, and nonfinancial information is defined in that regard. This is consistent with the SEC's amendment to Dodd-Frank, as described above.

In summary, we adopt the following definition of nonfinancial information in this paper.¹⁴

Information is 'nonfinancial' if it is not recognised in the financial statements but is nevertheless useful in investors' decision-making. Such information can be either quantitative or qualitative, and either historical or forecast. While it may be useful to a wide range of stakeholders, nonfinancial information is designed specifically for the benefit of investors.

13 A common confusion arises here whenever companies give as a reason for a lack of nonfinancial reporting that it exposes them to legal liabilities from providing forward-looking information. Broadly defined in the PSLRA [Private Securities Litigation Reform Act of 1995], a forward-looking statement includes projections of financial matters, plans and objectives for future operations or future economic performance, as well as the assumptions underlying or relating to such statements; such information can be either financial or nonfinancial. Documents outside the financial statements, such as earnings calls and investor presentations, contain disclaimers that forward-looking information should not be relied upon as commitments because things change, and typically is a statement that the company has no obligation to update them as things change. For further discussion, see the CFA Institute (2014), 'Forward-Looking Information: A Necessary Consideration in the SEC's Review on Disclosure Effectiveness.'

14 We note that many do not even like the term nonfinancial, preferring alternatives such as 'extra-financial' or 'pre-financial'. We also note that there is no simple solution to this problem of labelling!

A focus on environmental, social and governance (ESG) information

Environmental, social and governance (ESG) information is only a subset of nonfinancial information. It does not, for example, include information related to the role of intellectual capital and (unrecognised) intangible assets in the generation of economic value, which is an increasingly important aspect of nonfinancial information. Nevertheless, we maintain a focus in this paper on ESG information. This is for the following three reasons.

- ESG provides a common theme in all of the major institutional initiatives that are designed to address nonfinancial reporting (see 'Institutional Context' below). The same cannot be said for intellectual capital, nor for any other aspect of nonfinancial reporting. ESG therefore provides a natural focus for an overall evaluation of the corporate reporting landscape.
- There is a considerable body of work relating to ESG reporting in corporate practice, reporting frameworks, academic research, and so on. An ESG focus allows us to draw upon this body of work.
- A reasonable presumption is that the 'right' institutional structure for setting ESG standards would also be appropriate for other aspects of nonfinancial information. While maintaining a narrow ESG focus in our paper has the benefit of reducing complexity, it most likely does not reduce the generalisability of our arguments.

A focus on useful information

There are essentially two dimensions to useful information. The first is whether it is the type of information that is in principle useful, and the second is whether it can in practice be relied upon. These two dimensions are described by both FASB and IASB as, respectively, relevance and faithful representation.

Importantly, there can be trade-offs between these two dimensions, as for example when the most relevant information about a phenomenon may be a highly uncertain estimate. Financial accounting traditionally 'resolves' such trade-offs in favour of faithful representation, with the presumption being that a distinctive strength of accounting is that it reports reliably on observable, historical performance, and that it avoids entering into speculation about uncertain future outcomes.¹⁵ It is primarily for this reason that balance sheets generally have little to say about the economic value of intangible assets, and why accounting standard-setters have little time for the presumption that valuation methods in themselves offer sufficient foundation for financial statement recognition.

As described in IASB's conceptual framework (IASB, 2018), financial reports should faithfully represent the substance of the phenomena that they purport to represent, which ideally means that the representation should be: complete (including all information necessary for an understanding of the phenomenon being depicted); neutral (without influencing users by means of slanting, weighting, emphasising, de-emphasising or otherwise manipulating information); and free from error (which means accurate in so far as that is possible, including transparency when amounts reported are unverifiable estimates). In addition, the usefulness of information is enhanced if it is comparable, verifiable, timely and understandable. The comparability of information matters because users' decisions involve

15 Barker, R. and Penman, S. (2018). 'Moving the Conceptual Framework Forward: Accounting for Uncertainty.' *Contemporary Accounting Research* (forthcoming).

choosing between alternatives, meaning that information about a reporting entity is more useful if it can be compared with similar information about other entities and with similar information about the same entity for another period or another date.¹⁶ The verifiability of information matters because it gives users greater confidence that any given ‘faithful representation’ is actually what it claims to be, while timeliness ensures that data are current. With respect to understandability, it is assumed that financial reports are prepared for users who have a reasonable knowledge of business and economic activities and who review and analyse the information diligently. To that end, classifying, characterising and presenting information clearly and concisely makes it understandable.

Relevance vs materiality

For IASB, and similarly for FASB, information is *relevant* if it is ‘capable of making a difference in the decisions made by users,’ while it is *material* if, given its nature or magnitude, ‘omitting it or misstating it could influence investors’ decisions.’ (IASB, 2018)

Unhelpfully, these definitions are essentially two different ways of saying the same thing. The word ‘important’ could equally well be used: the requirement is to report information to investors if it matters for their decision-making. It is, for example, difficult to imagine an item being either relevant but not material, or else material but not relevant, and the benefit of the distinction is therefore at best unclear.

In the nonfinancial reporting world, ‘materiality’ is typically used to mean the same thing as ‘relevance’ in the financial reporting world. We follow that usage here. This is in part because simplicity dictates choosing one word over the other, but also because the concept of materiality also has legal significance, giving it greater consequence for our paper. In the US, for example, materiality is a fundamental principle of mandated disclosure. According to the US Supreme Court, information is material if there is ‘a substantial likelihood that the disclosure of the omitted fact would have been viewed by the reasonable investor as having significantly altered the “total mix” of information made available.’

It is also worth clarifying that, consistent with our investor lens, we define materiality with respect to the decision-making of investors. The evaluation of materiality with respect to other stakeholders remains important through this lens, yet only in the instrumental sense that a company’s interactions with its shareholders affects value created for its investors.

What do we mean by standards?

Our headline question refers to the setting of standards. While we leave open the question of whose responsibility the standard-setting should be, we need to define here what we mean by standards.

At a minimum, having standards for corporate reporting implies that, within any given jurisdiction, there is a single set of principles and rules governing what should be reported, and how.¹⁷ In the case of FASB and IASB, the implication is that all corporations applying the standards of either body are presumed to be essentially consistent with one another in terms of the scope of financial reporting, the recognition and measurement of items

¹⁶ In this regard, consistency, although related to comparability, is not the same. Consistency refers to the use of the same methods for the same items, either from period to period within a reporting entity or in a single period across entities. Comparability is the goal; consistency helps to achieve that goal.

¹⁷ We do not expand here upon the distinction between principles and rules, although we note that a general perception that the IFRS is more the former and US GAAP more the latter.

required to be included in the financial statements, and the presentation and disclosure of information relating to those items. In this regard, the existence of a standard presupposes promulgation by a single source of authority (rather than by different, potentially conflicting and irreconcilable sources). To be effective in practice, it must also be the case that the standard is either mandatory or else generally accepted.

In order to have substance, a standard must be discriminating and prescriptive. In other words, it must be possible to demonstrate whether or not a standard has been met. A set of principles, or a general framework, is insufficient in this regard. To illustrate the difference, a standard for carbon reporting, if developed, would have much the same 'look and feel' as a financial accounting standard: it would set out which carbon emissions should be recognised (for example, whether or not they should be restricted to an entity's own, directly-controlled operations); it would also set how they should be measured, presented and disclosed; and it would require consistent, auditable compliance across all reporting entities. In contrast, it would be far more challenging to set a standard with respect to whether and how well an entity's business model is adapted to climate-related impact. The uncertain scope, entity-specificity, subjectivity, extended time horizon and variation in reporting method would make it difficult, in practice, for there to be anything other than broad guidance with respect to best practice in corporate reporting. Inevitably, there is a grey scale here; the basic point is that not all reports of economic activity are equally standardisable. Consider, for example, that it is feasible to set standards with respect to recognised net assets, but not for business valuation.¹⁸ Accordingly, financial statements do not purport to represent the economic value of reporting entities, but instead are restricted to representing only the carrying amounts of the specific assets and liabilities that are recognised, either individually or in groups.

¹⁸ Standards are about topically-specific disclosures, both quantitative and qualitative. Frameworks are organising formats for disclosing particular types of information, but which remain agnostic on standards.

The problem

What is the problem that we picture being solved by nonfinancial reporting standards? This is a matter both of nonfinancial data being somehow inadequate, and also of reporting standards being somehow the solution to that inadequacy. We address both of these issues in this section, maintaining our focus on ESG as the exemplar of nonfinancial.

Inadequate ESG information

Conceptually, and in the context of investors' need to anticipate and value future events and expected cash flows, it is straightforward to identify a demand for ESG information as a supplement to the financial statements. Consider again the obvious example of climate change. The scientific consensus is unambiguous that global warming is 'real' and will continue.¹⁹ The implication is that the conditions under which business will operate in the future will be different from those that we have experienced in the past. There is, of course, considerable uncertainty about this, but there are also large amounts of data, for example on expected rises in sea levels and on associated exposures to flooding. Yet the financial statements – by design – report on the past: they concern transactions and events that have happened, not those which have yet to happen. This is fine, for the purpose of investment analysis, if past performance is a good predictor of the future. If it is not, however, and there is instead the disruptive effect of events such as climate change, then there is a need to supplement financial information with whatever information we have that will enhance investors' confidence in their anticipation of the future.

This conceptual argument is strengthened by increasing empirical evidence that ESG performance is positively related to financial performance, and that incorporating ESG data into investment decisions can contribute to superior returns over time.²⁰ The implications of this evidence are twofold. First, ESG data appear to be relevant to investors as they seek to better understand the sustainability of financial performance. Second, ESG data appear not to have been effectively impounded in share prices (historically, at least), leading to abnormal gains for strong ESG performers and abnormal losses for weak ESG performers.

None of this is to claim that investors simply do not have ESG data made available to them. Indeed, there has been a dramatic growth in ESG reporting – which, in itself, adds further evidence that such data are perceived to be useful in investors' decision-making.

The most comprehensive global survey of corporate responsibility reporting found that around three quarters of the 4,900 companies studied issued some form of sustainability report (KPMG, 2017). The study provides evidence that these high levels of reporting can be found across all industry sectors, with no sector having fewer than 60% of its companies issuing reports. Moreover, the study found that, instead of the once commonplace practice of standalone sustainability reports being largely independent of mainstream corporate

19 IPCC, 2014: Climate Change 2014: Synthesis Report. Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change.

20 See, for example, Eccles, Robert G., Ioannis Ioannou, and George Serafeim. 'The Impact of Corporate Sustainability on Organisational Processes and Performance.' *Management Science* 60, no. 11 (November 2014): 2835–2857. See also Khan, M., G. Serafeim and A. Yoon (2016). Corporate Sustainability: First Evidence on Materiality, *Accounting Review* 91 (6): 1697-1724.

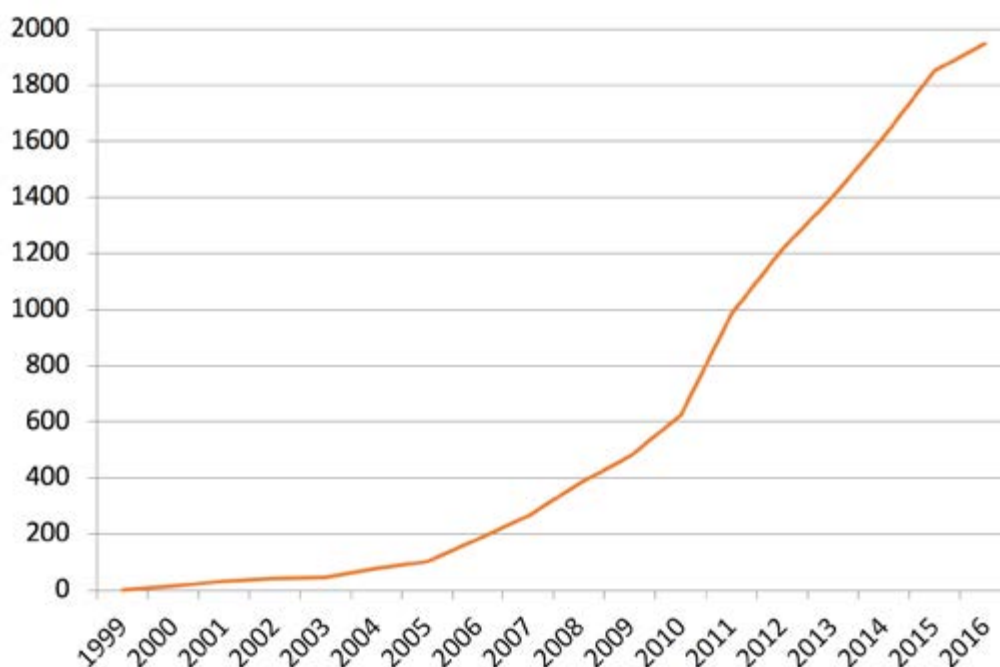
reporting, 'most of the world's biggest companies now integrate financial and non-financial data in their annual financial reports.' On the specific issue of carbon emissions and climate change, the study found that, in 2017, as many as 67% of the world's largest companies (G250) disclosed targets to cut their carbon emissions.

A visual indicator of this increase in ESG reporting is shown in Figure 2, which plots the number of Multinational Enterprises (MNEs) issuing 'sustainability' reports, globally, based upon data in Global Reporting Initiative's (GRI) reporting database. The rate of growth is dramatic. There were fewer than 20 MNE reporters in the year 2000 and fewer than 100 in 2004, yet more than 1000 by 2012 and almost 2000 by 2016.

Other indicators point similarly to a dramatic increase in ESG reporting. According to the Governance & Accountability Institute, for example, 85% of the companies in the S&P 500 Index® published a sustainability report in 2017, up from 29% in 2011.²¹ A 2016 report by KPMG, GRI, United Nations Environment Programme and the Centre for Corporate Governance in Africa found usage, in 19 countries and regions, of 248 mandatory sustainability reporting instruments (up from 35 in 2006) and, in 71 countries and regions, of 135 voluntary such instruments (up from 25 in 2006).²² The Sustainability Accounting Standards Board (SASB) studied the 2017 10-K and 20-F filings of the top 10 companies in each of its 79 industries and found that 73% of companies reported on at least three-quarters of the sustainability topics for their industry and 42% reported on every SASB topic.²³

Figure 2 - Growth in Nonfinancial Reporting

The chart shows the number of MNEs issuing a sustainability report, globally, based upon data in the Global Reporting Initiative (GRI) reporting database: <http://database.globalreporting.org/search/>



21 <https://www.ga-institute.com/press-releases/article/flash-report-85-of-sp-500-indexR-companies-publish-sustainability-reports-in-2017.html>.

22 <https://assets.kpmg.com/content/dam/kpmg/pdf/2016/05/carrots-and-sticks-may-2016.pdf>, p. 9.

23 <https://www.sasb.org/wp-content/uploads/2017/12/2017State-of-Disclosure-Report-web.pdf>, p. 2.

An absence of ESG reporting standards

Quantity does not, however, guarantee quality. While institutional and retail investors are increasingly interested in ESG data which affect financial performance, they face challenges with respect to finding data that can be regarded as relevant, reliable, complete and comparable. In other words, ESG data lack the defining characteristic of being standardised, and so they lack the critical attributes associated with data in the financial reports that are prepared according to financial reporting standards.

In a 2016 survey of 582 institutional investors, the most frequently cited barrier to ESG-informed investing by 60% of respondents was a lack of standards for measuring ESG performance, followed by 53% who cited lack of ESG performance data reported by companies.²⁴ In a survey of 750 retail investors, these numbers are 39% and 48% respectively. Similarly, in a 2017 CFA Institute survey of 1,588 portfolio managers and research analysts, 55% cited lack of appropriate quantitative ESG information, 50% cited lack of comparability across firms, and 45% cited questionable data quality/lack of assurance as factors limiting their ability to use nonfinancial information in investment decisions.²⁵ Sixty-one percent of respondents also felt that public companies should be required to report at least annually on a cohesive set of sustainability indicators.

In practice, much ESG reporting consists of 'boilerplate' language, which is largely useless to investors. A CFA Institute study found that such vague, non-specific information was used more than 50 percent of the time when companies addressed a SASB topic, which is only a slight improvement over FY 2015, when it was used in about 53 percent of available disclosures.²⁶

Moreover, and to add to the difficulties faced by investors, there are several NGOs that are each attempting to create frameworks or set standards for nonfinancial information, along with various data vendors selling such information, put together in a variety of ways. There is variation among the NGOs and also between them and the data vendors, with the result that there exist very different (often irreconcilable) assessments of a company's nonfinancial performance on any given issue.²⁷

A challenging problem

It is one thing for there to be an investor demand for ESG information, but meeting that demand is quite another. In practice, there are several distinct reasons why ESG reporting (and, more generally, nonfinancial reporting) is inherently challenging in relation to financial reporting. Indeed, it could reasonably be claimed that a reason for financial reporting being relatively well developed is that it is also relatively straightforward to achieve.

24 Eccles, Robert G. and Mirtha Kastropeli 'The Investing Enlightenment: How Principle and Pragmatism Can Create Sustainable Value through ESG', State Street (March, 2017).

25 'Environmental, Social and Governance (ESG) Survey', CFA Institute, 2017. https://www.cfainstitute.org/learning/future/Documents/ESG_Survey_Report_July_2017.pdf

26 Ibid.

27 One group addressing this issue is the 'Aggregate Confusion' research project at the MIT Sloan School's Sustainability Initiative, <http://mitsloan.mit.edu/sustainability/aggregateconfusion>.

These challenges can be summarised as follows, though no doubt other issues could be added to this list.

- Financial accounting is anchored in transactions that take place in markets, and for which there is typically, therefore, a fairly straightforward paper trail. In contrast, ESG issues are rarely 'transacted' in this way. A governance structure, for example, is not something that is exchanged, while environmental externalities are by definition outside markets.
- The social 'need' for financial accounting is obvious in a world where market-based wealth creation is central, and money fungible. Financial accounting is indispensable in writing and settling contracts, determining dividend payments, evaluating corporate tax obligations, and so on. ESG is in contrast more indirect, and it does not have this property of being a benchmark against which other activities are both measured and enabled.
- There is a clear relationship, expressed in the form of valuation models, between financial accounting data and value creation, so that (for example) it is conceptually straightforward that reported, historical performance with respect to revenue or expenses can be related directly to prospective cash flow generation and so to valuation. In contrast, the relationships between ESG data and value creation are at best indirect and, at worst, they are infeasible to establish. The challenge here is in determining which ESG information is in principle useful to investors and what, in practice, they are supposed to do with it.
- While all amounts in financial statements are expressed in monetary units, nonfinancial measures tend to capture a variety of different attributes. This applies in part because of measuring physical or intangible properties, rather than monetary attributes, but also because of the context-specificity of the item in question. A consequence is that there is lower commensurability across types of nonfinancial information which, again, challenges investors in finding correspondence with (monetary) equity valuation.
- Taken together, a natural consequence of the points above is that measurement is less well developed for nonfinancial than for financial information. An exception, which illustrates the progress possible for nonfinancial metrics, is the Greenhouse Gas (GHG) Protocol, which is at least as well 'defined' as a typical accounting standard. In many other areas, while it might in principle be possible to determine metrics, these have at best been determined (or accepted) only partially in practice.
- A closely related issue is that of difference in the scope of the reporting entity, and in the relationship between that which is controlled and that which is reported on. A financial reporting entity is clearly defined with respect to control over its net assets. In contrast, nonfinancial reporting is more likely to be concerned with extending beyond those boundaries, for example including analysis of prevailing supply chain conditions, or of Scope 2 and Scope 3 carbon emissions as defined in the GHG Protocol. The implication is that data demands for nonfinancial reporting are that much greater.
- The picture is complicated even further by the call for nonfinancial reporting to be concerned with both dependency and impact, and with capturing materiality for a

range of stakeholders, in order to report on materiality to shareholders.²⁸ Financial reporting, in contrast, is far less demanding in its core purpose and scope.

- By reaching beyond financial data to explore ESG aspects of the underlying business model, ESG reporting becomes drawn much more into differences across different industries and locations, adding a layer of specificity and complexity. While it is also the case that companies are categorised by industry for the purposes of financial analysis, making the difference here more one of extent rather than of type, the domain of nonfinancial reporting is in practice inherently less standardised (or standardisable).
- A further issue is one of time horizon, whereby nonfinancial reporting is often faced with the challenge of capturing current risks and opportunities with respect to long-term trends, the most obvious example being that of climate change. In contrast, financial reporting tends to be concerned with the narrower and much more simple case of the here and now, of net assets at the balance sheet date.²⁹
- Finally, another issue is that the purpose of nonfinancial information in practice is less clear. This is not just that 'value' and 'values' can be confounded with each other, as discussed above. It is also because the difference between these two domains can be genuinely difficult to determine. It is a matter of judgement, for example, whether, at what point in time, and with what effect, a current externality becomes internalised, with economic consequences for investors.

28 'Dependency' refers to reliance on, and use of, some form of resource (such as natural capital), while 'impact' refers to a negative or positive effect of business activity on a resource.

29 This amounts to subjectivity with respect to the question of materiality, given inherent entity specificity and indirect, long-term economic effects.

Institutional context

What are the current ‘rules of the game’ for corporate reporting, and who decides? In this section, we describe the institutional landscape for corporate reporting, starting with financial accounting and then extending to nonfinancial information. In brief summary of this section, Table 1 provides some descriptive data for the institutions that we review.

Table 1 – Corporate Reporting Institutions

Name	CDSB	FASB	GRI	IASB	IIRC	SASB	TCFD
Founded	2007	1973	1997	2001	2010	2011	2016
Budget (\$ million)	0.5	42	14	43	2.2	8	n/a
Employees	9	60+	87	134	20	38	n/a
Full-time Board	No	Yes	No	Yes	No	No	No
Scope	Nonfinancial (Climate)	Financial	Nonfinancial (Climate)	Financial	Nonfinancial (Climate)	Nonfinancial (Climate)	Nonfinancial (Climate)
Audience	Investor	Investor	Stakeholder	Investor	Investor	Investor	Investor
Framework	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Standards	No	Yes	Yes	Yes	No	Yes	No
Stance on whether to include non-financial information in mainstream report	Yes	No	No	No	Yes	Yes	Yes
Data source	CDSB, August 2018	2017 FAF Annual Report	2017 GRI Annual Report	2017 IFRS Foundation Annual Report	IIRC, August 2018	SASB, August 2018	fsb-tcfd.org *

*TCFD is less formally an ‘institution’ than the other organisations listed in this table

Financial accounting standard setting

It is useful to put our research question in historical perspective. Today we take for granted that companies (both public and private) have to conform to accounting standards, that listed companies have to report in a well-defined way according to those standards, that the reported numbers are rigorously audited, and that the firms doing those audits are rigorously assessed themselves for the quality of their work. These are all social constructs that are part of the ‘plumbing’ which has produced deep and liquid capital markets and that has contributed to substantial wealth creation all over the world.

It wasn’t always so. In the United States, accounting standards, financial reporting requirements and associated audits only came into existence with the formation of the Securities and Exchange Commission (SEC) in 1934. The SEC itself was born as a result of the stock market crash of 29 October 1929 and the Great Depression which followed, and it assumed a mission ‘to protect investors, maintain fair, orderly, and efficient markets, and

facilitate capital formation.³⁰ Central to this mission is the role of transparency, explicitly within a capital markets context:

The laws and rules that govern the securities industry in the United States derive from a simple and straightforward concept: all investors, whether large institutions or private individuals, should have access to certain basic facts about an investment prior to buying it, and so long as they hold it. To achieve this, the SEC requires public companies to disclose meaningful financial and other information to the public. This provides a common pool of knowledge for all investors to use to judge for themselves whether to buy, sell, or hold a particular security. Only through the steady flow of timely, comprehensive, and accurate information can people make sound investment decisions.³¹

The Securities Act of 1933 requires companies to make regular financial disclosures and the SEC was given authority to monitor the quality of those disclosures. Prior to that, listed companies reported financial information on a voluntary basis, and every accounting firm had its own accounting standards and auditing procedures. For 40 years, the SEC delegated accounting standard-setting to bodies established by the accounting profession. In 1972, the profession recommended that a separate organisation, the Financial Accounting Foundation (FAF), be established, through which the FASB came into being in 1973.

The FAF 'is the independent, private-sector, not-for-profit organisation, based in Norwalk, Connecticut, responsible for the oversight, administration, financing, and appointment of the Financial Accounting Standards Board (FASB) and the Governmental Accounting Standards Board (GASB).³² The collective mission of these organisations is 'to establish and improve financial accounting and reporting standards to provide useful information to investors and other users of financial reports and educate stakeholders on how to most effectively understand and implement those standards.'³³ The FAF is governed by a board of trustees³⁴ to whom the FAF management team is responsible. The FAF is supported by three revenues streams: (1) accounting support fees that finance FASB pursuant to Section 109 of the Sarbanes-Oxley Act of 2002 (\$23.9 million in 2015), (2) accounting support fees that finance GASB pursuant to Section 978 of the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 (\$7.4 million in 2015), and (3) sales and licensing of copyrighted FASB and GASB materials (\$17.5 million in gross revenues and \$4.3 million net of direct costs in 2015).³⁵ The accounting support fees are paid by listed companies based on their average market capitalisation.³⁶

In turn, FASB 'is the independent, private-sector, not-for-profit organisation... that establishes financial accounting and reporting standards for public and private companies and not-for-profit organisations that follow Generally Accepted Accounting Principles (GAAP).' The seven FASB board members are full-time appointments made by the FAF and serve for a term of five years, which can be extended to 10. FASB is supported by Advisory Groups, which serve as resources to the board members and staff, and which include the Financial Accounting

30 <https://www.sec.gov/Article/whatwedo.html>

31 Ibid

32 <http://www.accountingfoundation.org/jsp/Foundation/Page/FAFSectionPage&cid=1176157790151>

33 <http://www.fasb.org/jsp/FASB/Page/SectionPage&cid=1176154526495>

34 <http://www.accountingfoundation.org/jsp/Foundation/Page/FAFLandingPage&cid=1176164681018>

35 http://www.accountingfoundation.org/annual_reports/2015/financials.html

36 <http://www.accountingfoundation.org/jsp/Foundation/Page/FAFSectionPage&cid=1351027545591>

Standards Advisory Council (FASAC), the Investor Advisory Committee (IAC), the Not-for-Profit Advisory Committee (NAC), and the Small Business Advisory Committee (SBAC).

In the rest of the world, the dominant standard-setter is the International Accounting Standards Board (IASB), which was originally established in 1973 as the International Accounting Standards Committee (IASC), with a mission to formulate and publish, in the public interest, accounting standards to be observed in the presentation of audited accounts and financial statements and to promote their worldwide acceptance.³⁷ Until 2002, only a few countries used IASC standards, and they did so mostly because they lacked their own standard-setting infrastructure.³⁸ This changed as the European Community developed plans for harmonising its capital markets. The IASB was established on 1 April 2001 and it took over the work of the IASC. A critical milestone was reached when, on 19 July 2002, a regulation was passed by the European Parliament and the European Council of Ministers requiring the adoption of IFRS (International Financial Reporting Standards), with the result that all EU listed companies were required to prepare their financial statements following IFRS from 2005.^{39,40} Such regulations subsequently came into force in all major jurisdictions around the world, even including the option to use IFRS for companies listed on US stock markets.

Analogous to FAF and FASB is the IFRS Foundation (Foundation) and IASB (the Board). The Trustees of the IFRS Foundation are responsible for the governance and oversight of IASB. Trustees are appointed for renewable three-year terms. They do not get involved in technical accounting issues, which are the province of IASB in its capacity as the independent standard-setting body of the Foundation.⁴¹ The Board is supported by the IFRS Interpretations Committee, which facilitates the application of IFRS Standards.⁴² The Board, whose members are appointed by the Trustees, comprises 'an independent group of experts with an appropriate mix of recent practical experience in setting accounting standards, in preparing, auditing, or using financial reports, and in accounting education. Broad geographical diversity is also required.⁴³ There are currently 14 full-time board members. Each serves a five-year term which is renewable for three years and up to five for up to a total of 10 years.

Like FASB, IASB has a variety of consultative groups including advisory bodies (Accounting Standards Advisory Forum and IFRS Advisory Council) and standing consultative groups (such as the Capital Markets Advisory Committee, the IFRS Taxonomy Consultative Group and the World Standard-setters Conference), as well as ad hoc transition resource groups (TRGs) for the implementation of new standards and project consultative groups for projects in progress (which include the Management Commentary Consultative Group).⁴⁴

Whereas FAF is ultimately accountable to the SEC, the Trustees are ultimately accountable to a Monitoring Board which was established in 2009, with responsibilities 'to ensure

37 <http://www.fasb.org/jsp/FASB/Page/SectionPage&cid=1176156304264>

38 Ibid

39 <https://www.icaew.com/library/subject-gateways/accounting-standards/worldwide-adoption-of-ifrs>

40 Regulation (EC)No 1606/2002 of the European Parliament and of the Council of 19 July 2002 on the application of international accounting standards

41 <http://www.ifrs.org/about-us/our-structure/>

42 <http://www.ifrs.org/groups/ifrs-interpretations-committee/>

43 <http://www.ifrs.org/groups/international-accounting-standards-board/>

44 <https://www.ifrs.org/about-us/consultative-bodies/>

that the Trustees continue to discharge their duties as defined by the IFRS Foundation Constitution, as well as approving the appointment or reappointment of Trustees. The Monitoring Board meets the Trustees at least once a year, or more often if appropriate.⁴⁵

The analogy between these two major accounting standard-setting organisations breaks down here because the SEC is a regulator authorised by country legislation, which bestows clear authority to FASB, while IASB has no direct regulatory role in any of the jurisdictions in which its standards are adopted. An implication is that, in contrast to FASB, various regulatory and other bodies play an important role in the effective functioning of IASB, for example the Ministry of Finance in China, and (in Europe) the Accounting Regulatory Committee (ARC) and the European Financial Reporting Advisory Group (EFRAG).

Another big difference is how the organisations are funded. FASB, through FAF, gets the majority of its funding through accounting support fees from legislation. IASB, in contrast, is primarily funded through contributions (£24 million in 2016) to the Foundation from more than 150 organisations of varying types (e.g., companies, banks and other financial institutions, ministries of finance, other governmental bodies, securities exchanges, and professional accounting associations).⁴⁶ The five largest contributors are the nine international accounting firms (a total of £7,644,962 with the Big Four each contributing £2.5 million), the European Union (£3,805,945), Japan (£2,276,991), China (£2,088,090), and the United Kingdom (£861,876). The other main source of revenue in 2016 was publications and related activities (£6,139,000). The total of £30,597,000 (\$43,299,000) is about the same as FAF's 2016 budget of \$41,900,000.

Since they are essentially two accounting standard-setting organisations, each with their own set of standards, why not have just one? At one point in time there was hope for this. On September 18, 2002, FASB and IASB announced the 'Norwalk Agreement' with the aim of creating convergence between these two sets of accounting standards.⁴⁷ Despite the good intentions and in spite also of considerable success in the enactment of several joint projects, the Norwalk Agreement is effectively dead for a variety of reasons including differences in approaches to standard-setting and political pressures on both organisations.⁴⁸ That said, FASB and IASB continue to operate in essentially very similar ways and with a high degree of alignment. They share very similar conceptual frameworks, and they also have essentially similar, and equally comprehensive, accounting standards that deal specifically with a range of accounting topics. In both cases, these standards are generally applicable, and not restricted to particular industries; for example, IASB's most recent standard (IFRS 17) addresses insurance contracts (which could in principle be held by any entity) and it is not concerned directly with the insurance industry itself.

Overall, and whatever the similarities and differences between FASB and IASB, and in the organisations that oversee and fund them, it is clear that for both there is substantial institutional infrastructure in place –uniquely so–in the domain of corporate reporting. This is in itself enough to at least raise the question of whether these well-established organisations for setting standards for financial information can, and should, extend their remit to nonfinancial information.

45 <http://www.ifrs.org/groups/ifrs-foundation-monitoring-board/>

46 See pp. 40-44 of 'IFRS Foundation Annual Report 2016' for a list of these organisations. <https://www.ifrs.org/-/media/feature/about-us/funding/annual-report-2016.pdf>

47 http://www.fasb.org/intl/convergence_iasb.shtml

48 <http://www2.cfo.com/gaap-ifrs/2014/10/split-convergence/>

MD&A and Management Commentary

Supplementing US GAAP financial disclosures is the 'Management Discussion & Analysis of Financial Position and Results of Operations' (MD&A), for which the closest equivalent for IFRS is 'IFRS Practice Statement: Management Commentary: A framework for presentation' (Management Commentary). While the purposes of both documents are similar –to give management the opportunity to put the financial results in the larger context of the company's strategy and known trends and uncertainties 'through the eyes of management' –there is an important difference between the two. The MD&A is required of all companies whose stock is listed in the US and must be included in the 10-K (domestic issuers) or 20-F (foreign registrants), formally filed for the public record with the SEC.⁴⁹ In contrast, the Management Commentary is a 'Practice Statement' and as such is a voluntary disclosure, which is not required for IFRS compliance unless a country requiring IFRS mandates it (which no country does at present).

The MD&A was adopted in 1980.⁵⁰ The content of the MD&A, as well as monitoring and enforcement, is the responsibility of the SEC's 'Division of Corporation Finance (Corporation Finance),' not FASB. While there have been several updates regarding the content and form of the MD&A, it remains pretty much the same document as envisioned in 1980. The most recent interpretive release on the MD&A was published on December 19, 2003.

... MD&A should not be merely a recitation of financial statements in narrative form or an otherwise uninformative series of technical responses to MD&A requirements, neither of which provides the important management perspective called for by MD&A. Instead, the release encourages top-level management involvement in the drafting of MD&A, and provides guidance regarding: overall presentation and focus of MD&A (including through executive-level overviews, a focus on the most important information and a reduction of duplicative information); emphasis on analysis of financial information; known material trends and uncertainties; key performance indicators, including non-financial indicators; liquidity and capital resources; and critical accounting estimates.⁵¹

Along similar lines, IASB explains that:

A narrative report that relates to financial statements that have been prepared in accordance with IFRS. Management commentary provides users with historical explanations of the amounts presented in the financial statements, specifically the entity's financial position, financial performance and cash flows. It also provides commentary on an entity's prospects and other information not presented in the financial statements. Management commentary also serves as a basis for

49 The SEC's Regulation S-K requires that certain sustainability-related information be disclosed. It sets forth the specific disclosure requirements associated with Form 10-K and other SEC-required filings and, among other things, requires that companies describe known trends, events, and uncertainties that are reasonably likely to have material impacts on their financial condition or operating performance in the Management Discussion & Analysis of Financial Position and Results of Operations (MD&A) section of Form 10-K or 20-F. In the MD&A section, companies must 'provide investors and other users with material information that is necessary to [form] an understanding of the company's financial condition and operating performance, as well as its prospects for the future.' Also, under Item 503(c) of Regulation S-K, companies are required to disclose risk factors – factors that may affect a company's business, operations, industry or financial position, or its future financial performance.

50 See <https://www.sec.gov/rules/interp/33-8350.htm> for a history of the MD&A.

51 The release does not create new legal requirements, nor does it modify existing legal requirements. <https://www.sec.gov/news/press/2003-179.htm>.

*understanding management's objectives and its strategies for achieving those objectives.*⁵²

The development of the Management Commentary began in 2002 with a project team involving Germany, New Zealand, the United Kingdom, and Canada and was published on 8 December 2010, 30 years after the MD&A.⁵³ In its November 2017 Board meeting, IASB decided to take on a project to revise and update the Practice Statement.⁵⁴ This is explicitly the domain within which IASB is exploring whether and (if so) how to meet investors' needs for nonfinancial information.

Organisations setting frameworks and standards for nonfinancial information

In contrast with the relatively concentrated and mature domain of accounting standard-setting, there are a number of organisations working to enhance the provision of nonfinancial information. Here there are essentially two types of organisation: one the one hand, NGOs setting standards or frameworks for nonfinancial information; on the other hand, a range of mostly commercial organisations, including data vendors, and others providing various types of sustainability ratings of companies and, more recently, of company portfolios.⁵⁵ The first type is of most relevance for this paper. It can be characterised as comprising: two organisations focused on nonfinancial standard-setting in general – Global Reporting Initiative (GRI) and the Sustainability Accounting Standards Board (SASB); one organisation that is focused on a framework for nonfinancial information in general – the International Integrated Reporting Council (IIRC); and two organisations focused on frameworks for climate disclosures – the Climate Disclosure Standards Board (CDSB) and the Task Force on Financially-related Climate Disclosures (TCFD). An important feature that these organisations have in common is that they set no national boundaries, as is the case with US GAAP and IFRS, and instead they all have a global focus.⁵⁶

The organisations that are focused on nonfinancial reporting in general – GRI and SASB – are quite different from one another in two respects. The first is that, in terms of audience, GRI is concerned with all stakeholders and SASB with investors, such that GRI's definition of materiality includes externalities while that for SASB is concerned with investors alone. The second difference concerns the positioning of reporting, whereby the format for GRI is a separate sustainability report, while for SASB it takes the form of information that should be included in the US Form 10-K (and in the equivalent formal filing requirement in other countries).

GRI is the grandparent of organisations setting standards for nonfinancial information. It was started in 1997 as a joint project of the nonprofit Ceres and the Tellus Institute.⁵⁷ While it is not a data vendor, GRI has a database of sustainability reports prepared in line with its

52 IFRS Practice Statement 1 (2010). Management Commentary A framework for presentation.

53 See <https://www.iasplus.com/en/standards/other/management-commentary#link0> for a history of the Management Commentary.

54 <https://www.ifrs.org/issued-standards/management-commentary-practice-statement/>

55 The CFA Institute lists such organisations https://www.cfainstitute.org/ethics/topics/Pages/esg_resources.aspx

56 While some may associate the Sustainability Accounting Standards Board (SASB) with the US because of its framing around the 10-K and the Global Reporting Initiative (GRI) with the rest of the world, this is inaccurate.

57 <https://www.globalreporting.org/Information/about-gri/Pages/default.aspx>

guidance.⁵⁸ On 4 November 2015 GRI announced the formation of a separate entity, the Global Sustainability Standards Board (GSSB), which has responsibility for standard setting. GRI is analogous to the FAF and the IFRS Foundation, and the GSSB to FASB and IASB.

Given its multistakeholder approach to standard-setting, GRI's definition of materiality is grounded in the concept of 'impact' which 'refers to the effect an organisation has on the economy, the environment and/or society, which in turn can indicate its contribution (positive or negative) to sustainable development. It does not refer to an effect upon an organisation, such as a change to its reputation.'⁵⁹ For GRI, a topic is material if it has significant impact or has a substantive influence on the assessments and decisions of stakeholders, or both. While investors are considered a stakeholder, they are only one of many.

GRI is based in Amsterdam, with an overall operating budget of approximately \$14m, a full-time technical staff of 87, a 48-person Stakeholder Council, and part-time boards for both GRI and GSSB, each made up of 15 members. Funding comes from three main sources, which are governments and foundations (\$5.4 million), corporate engagement and memberships (\$4.6m), and GRI services (\$3.9 million).⁶⁰

The analogue to FASB's Concept Statements and IASB's Conceptual Framework is the 'GRI Standards':

The modular, interrelated GRI Standards are designed primarily to be used as a set, to prepare a sustainability report focused on material topics. The three universal Standards are used by every organisation that prepares a sustainability report. An organisation also chooses from the topic-specific Standards to report on its material topics – economic, environmental or social.

Preparing a report in accordance with the GRI Standards provides an inclusive picture of an organisation's material topics, their related impacts, and how they are managed. An organisation can also use all or part of selected GRI Standards to report specific information.⁶¹ There are three 'universal standards': 'GRI 101: Foundation,' 'GRI 201: General Disclosures,' and 'GRI 103: Management Approach.' Accompanying these are the 200 series of economic standards, the 300 series for environmental standards, and the 400 series for social standards. These standards include guidance on how the company should report in quantitative or qualitative terms.

The Sustainability Accounting Standards Board (SASB) was founded in July 2011, with a structure explicitly designed to mimic that of FASB. In contrast to GRI, SASB is focused on investors only, and its definition of materiality is accordingly taken directly from the guidance provided by FASB, the SEC, and the Supreme Court. SASB is headquartered in San Francisco, with some staff in New York City and Washington, DC, and has a total team of 38. It has an \$8 million annual budget from a mix of sources: membership, earned income from standards-related education and resources, grants from market participants, and grants from traditional philanthropists (foundations and individuals). SASB is governed by a part-time, unpaid board (The SASB Foundation Board) of up to 21 members, which

58 <http://database.globalreporting.org/>

59 <https://www.globalreporting.org/standards/questions-and-feedback/materiality-and-topic-boundary/>

60 <https://www.globalreporting.org/resource/library/GRI%20Annual%20Report%202016-2017.pdf>

61 <https://www.globalreporting.org/standards/gri-standards-download-center/?g=cfad5262-187d-4828-83c9-c9a4616114aa>

oversees the strategy, operations and finances of the organisation and appoints the independent SASB Standard Setting Board, which in turn has authority for the process and content of the standards.

SASB's conceptual framework 'sets out the basic concepts, principles, definitions, and objectives that guide the appointed technical Sustainability Accounting Standards Board members in its approach to setting standards for sustainability accounting. A companion document, the SASB Rules of Procedure, is focused on the governance processes and practices for standards setting. Together, these documents provide direction for the SASB and its work.⁶² SASB uses 'Industry Working Groups (IWGs)' comprised of companies, investors, and other experts who work to determine what is material based on the definition above.⁶³ It has established the SASB Industry Classification System (SICS)TM composed of 11 sectors, which subdivide into 79 industries. The material issues for each of these 79 industries are identified, along with the suggested key performance indicator (KPI), quantitative or qualitative for reporting on each. This industry-specific approach is a distinctive SASB feature, and quite different from the approach taken by FASB, IASB or GRI.

The International Integrated Reporting Council (IIRC) was founded in 2010 (as the International Integrated Reporting Committee). Explicitly high-level, IIRC seeks to encourage business reporting and thinking that brings financial, ESG and other aspects of corporate performance together, in an integrated approach, to reporting on the creation of value. IIRC defines an integrated report as: 'a concise communication about how an organisation's strategy, governance, performance and prospects, in the context of its external environment, lead to the creation of value in the short, medium and long term. The Framework enables a business to bring these elements together through the concept of 'connectivity of information', to best tell an organisation's value creation story.'⁶⁴

The IIRC is based in London, with an overall operating budget of approximately \$2.2 million, a full-time staff equivalent of 20 (31 individuals), and a part-time board made up of 11 members, with a maximum of two three-year terms. Funding comes from a range of sources, including IIRC Council members, <IR> Network participants, in-kind arrangements such as pro bono secondments and the IIRC offices, the <IR> Training Programme and IIRC events.

The 'International <IR> Framework' is a slim, 35-page, principles-based framework composed of eight guiding principles (strategic focus and future orientation, connectivity of information, stakeholder relationships, materiality, conciseness, reliability and completeness, and consistency and comparability) and 10 content elements (organisational overview and external environment, governance, business model, risks and opportunities, strategy and resource allocation, performance, outlook, basis of preparation and presentation, and general reporting guidelines).⁶⁵ Its definition of materiality is from an investor, not stakeholder/impact, focus: 'Relevant matters are those that have, or may have, an effect on the organisation's ability to create value. This is determined by considering their effect on the organisation's

62 <https://www.sasb.org/wp-content/uploads/2017/02/SASB-Conceptual-Framework.pdf>, p. 1

63 <https://www.sasb.org/standard-setting-archive>

64 <http://integratedreporting.org/what-the-tool-for-better-reporting/>

65 <http://integratedreporting.org/wp-content/uploads/2013/12/13-12-08-THE-INTERNATIONAL-IR-FRAMEWORK-2-1.pdf>

strategy, governance, performance or prospects.’⁶⁶ The IIRC’s high-level approach precludes its engagement at the level of setting standards, and its approach is to encourage and in substance endorse the use of established standards (such as GRI or SASB) and/or approaches to measurement (such as the greenhouse gas protocol, GHG).

The Climate Disclosure Standards Board (CDSB) is a consortium of business and environmental organisations, formed at the World Economic Forum’s annual Davos meeting in 2007.⁶⁷ Its focus is investors and, accordingly, ‘the CDSB Framework is designed for the purpose of reporting climate-change-related and environmental information in mainstream reports. The materiality position therefore adopted by CDSB aligns as far as possible with features of the mainstream reporting model, so that climate-change-related and environmental information may be prepared and presented in a structured way within the architecture of existing mainstream reports.’⁶⁸

CDSB is based in London, with an overall operating budget of approximately \$0.5 million, a full-time technical staff of nine people, and a part-time board made up of 10 members, with representatives from the nine organisations that make up the consortium and the Chair of the Technical Working Group.⁶⁹ Funding comes from various philanthropic and charitable foundations with a focus on climate change or environmental matters, as well as support from CDP, which hosts the CDSB Secretariat.

Similar to the IIRC, CDSB seeks to avoid duplicating existing efforts, preferring to recommend the use of approaches to measurement and reporting that are either common in practice or required by regulation. Operating with a technical working group of over 40 members, representing leading companies, NGOs, academia and accounting firms, CDSB’s distinctive contribution is in shaping the debate with respect to climate-related reporting. This is done, for example, through the ‘CDSB Framework for reporting environmental information & natural capital: Advancing and aligning disclosure of environmental information in mainstream reports,’ as well as through position papers on specific topics, such as organisational boundaries and materiality with respect to climate reporting.⁷⁰

Similar to CDSB, in its focus on climate-related information for an investor audience, is the Task Force on Climate-related Financial Disclosures (TCFD).⁷¹ On 9 November 2015 the Financial Stability Board (FSB) announced that it would propose to the G20 Leaders that an industry-led disclosure task force (modelled on the successful example of the FSB’s Enhanced Disclosure Task Force) be established ‘to develop voluntary, consistent climate-related disclosures of the sort that would be useful to lenders, insurers, investors and other stakeholders in understanding material risks.’⁷² On 4 December 2015 the FSB Chair Mark Carney, Governor of the Bank of England, announced that it would establish the TCFD⁷³ and

66 <http://integratedreporting.org/wp-content/uploads/2013/12/13-12-08-THE-INTERNATIONAL-IR-FRAMEWORK-2-1.pdf>, p. 18.

67 https://www.cdsb.net/sites/cdsbnet/files/cdsb_climate_change_reporting_framework_edition_1.1.pdf

68 <https://www.cdsb.net/what-we-do/reporting-guidance/materiality>

69 <http://cdsb.net/about-cdsb/leadership-governance/cdsb-board-members> for further information

70 <https://www.cdsb.net/sites/cdsbnet/files/position-relevancematerialityboundariesassurance.pdf>

71 <https://www.fsb-tcfid.org/>

72 https://www.fsb-tcfid.org/wp-content/uploads/2016/01/FSB_Disclosure-task-force-on-climate-related-risks.pdf.

73 <https://www.fsb-tcfid.org/wp-content/uploads/2016/01/12-4-2015-Climat-change-task-force-press-release.pdf>

its members, including Michael R. Bloomberg as Chair, were announced on 21 January 2016.⁷⁴

The recommendations in the TCFD's final report, published in June 2017, were designed to be adaptable by all organisations (including financial institutions of all types), for inclusion in financial filings (and thus not requiring a separate report). An emphasis was placed on soliciting decision-useful, forward-looking information on financial impacts (thus being investor, lender, and insurer rather than multi-stakeholder focused), with a strong focus on risk and opportunities related to the transition to a lower-carbon economy (thus including both upside and downside).⁷⁵ Towards these ends, the TCFD made specific (high-level) recommendations with respect to governance, strategy, risk management and metrics and targets.⁷⁶ A notable, innovative recommendation was that there should be explicit scenario modelling, for example of corporate adaptation with respect to two-degree global warming. The TCFD was explicit about wanting to integrate existing standards and frameworks. Similar to the IIRC and CBSI, it published a framework, not a set of reporting standards, and it is agnostic about which metrics a company should use.⁷⁷

GRI, SASB, IIRC and CDSB all have in common that they are members of the Corporate Reporting Dialogue (CRD), an initiative of the IIRC 'designed to respond to market calls for greater coherence, consistency and comparability between corporate reporting frameworks, standards and related requirements.'⁷⁸ The CRD has published a Corporate Reporting Landscape map, designed to provide 'a simple navigational tool' of corporate reporting initiatives, and a 'Statement of Common Principles of Materiality', designed to reconcile nuanced differences across definitions used by different bodies. The CRD also includes among its eight members FASB, IASB, CDP (see below) and the International Organisation for Standardisation (ISO). Not included, although also with an institutional presence in this area, are organisations such as the Natural Capital Coalition (NCC, see below) and the World Business Council on Sustainable Development (WBCSD, see below); overall, and notwithstanding the efforts of the CRD, the corporate reporting framework and standard-setting landscape is fragmented and not amenable to a simple categorisation.

NCC has published the Natural Capital Protocol which it describes as 'a unique global multi-stakeholder collaboration that brings together leading initiatives and organisations to harmonise approaches to natural capital.'⁷⁹ Unlike the reporting frameworks and standards reviewed above, the Protocol is explicitly designed for use by business managers, to better inform internal decision making; it is therefore not a reporting framework. It is nevertheless important and worthy of mention in a review of the corporate reporting landscape, because the incubation of concepts, ideas and practices within corporations can be viewed as an essential early stage in the development of what later become corporate reporting norms. In other words, it is difficult to standardise reporting practice when there is little established

74 <https://www.fsb-tcfd.org/wp-content/uploads/2016/02/20160121-TCFD-members-press-release.pdf>

75 <https://www.fsb-tcfd.org/wp-content/uploads/2017/06/FINAL-TCFD-Report-062817.pdf>

76 Ibid. p. iv.

77 A study of climate disclosures of 15 large oil & gas companies, the year before the TCFD's recommendations, found that while much of this information was being provided, yet in a sustainability report or website, not the 10-K or 20-F. See https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3091232 and <http://sloanreview.mit.edu/article/why-companies-should-report-financial-risks-from-climate-change/>

78 <http://corporatereportingdialogue.com/>

79 <https://naturalcapitalcoalition.org/>

practice upon which such standards can be grounded.⁸⁰ In this regard, it is noteworthy that the Protocol – similar to the IIRC, CDSB and TCFD – does not make recommendations about which approaches to apply in seeking to measure corporate impact and dependency; rather, the approach is to encourage experimentation, and the development and sharing of best practice.

Similar to NCC in its focus on working with corporations, WBCSD has a distinctive role with respect to corporate reporting. It played an instrumental role in establishing initiatives such as the greenhouse gas protocol, and the creation of NCC, and it has created the Reporting Exchange, an online platform for the communication and sharing of best practice in corporate reporting. As with NCC, WBCSD illustrates a ‘bottom-up’ approach, which starts with the development of practice at the corporate level and builds upwards and outwards to external reporting.

Data ratings and rankings organisations⁸¹

The final institutional category relevant to this review comprises a substantial ecosystem of organisations that provide: data on corporate environmental, social, and governance performance on particular issues; overall ratings and rankings of companies, sometimes including sub-dimensions; and tools for evaluating a company’s ESG performance.⁸² This ecosystem can be understood to exist largely as a market response to the demand for nonfinancial information, given the absence of standards and reporting requirements.

Some of the companies in this ecosystem have a particular subject matter focus, such as climate or human rights, whereas others address the full range of ESG issues. While most of them see investors as the primary target audience for their data, others are more focused on the company itself, where they are attempting to reinforce ‘good’ behaviour and change ‘bad’ behaviour by publishing rankings and other information and enabling direct engagement on ESG issues. The origins of the earliest organisations providing such data go back to the late 1980s and early 1990s when, albeit in the relatively niche market at that time of ‘Socially Responsible Investors,’ sustainability was becoming a topic of increasing focus for investors, yet there was a relative paucity and suspect quality of data being provided by companies.

These organisations collect the information for the data they provide in a variety of ways such as surveys sent to companies (e.g., CDP and RobecoSAM),⁸³ going through company documents (such as sustainability reports) and coding up the data according to their own framework and conventions (e.g., IW Financial, MSCI, oekom research, RepRisk, Sustanalytics, Trucost, and Vigeo Eiris), using natural language processing and artificial intelligence technologies to scrape the web of unstructured data (e.g., TruValue Labs), or surveying individuals about their perceptions of a company along various dimensions (e.g., Corporate Human Rights Benchmark, Ethisphere Institute, JUST Capital, and Reputation

80 <https://naturalcapitalcoalition.org/protocol/>

81 For more details with respect to this section, see Eccles, R. and J. Strohle (2018), ‘Exploring Social Origins in the Construction of ESG Measures,’ https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3212685

82 For a good review of this ecosystem see Brown, B. and M. Wallace (2018) ‘The ESG Ecosystem: Understanding the Dynamics of the Sustainability Ratings & Rankings Landscape,’ , Brown Flynn .

83 In addition to the data vendors, RobecoSAM is a sustainability investing specialist that surveys companies, and that does not sell its data but uses it for its own investment purposes and for creating indices, such as the Dow Jones Sustainability Indices. Every year it invites 3,400 companies from around the world to answer a questionnaire of 80-120 items regarding ESG factors, thus generating its own dataset. See <http://www.robecosam.com/>

Institute). Some organisations are aggregators of data from a variety of sources, like CSR Hub (which provides ‘transparent ratings and rankings of 17,913 companies from 133 countries, driven by 556 industry-leading ESG data sources’)⁸⁴ and the recently formed World Benchmarking Alliance (Aviva, the UN Foundation, BSDC,⁸⁵ and Index Initiative which aims to develop, fund, house and safeguard free publicly available corporate sustainability benchmarks aligned with the SDGs’).⁸⁶ Mainstream data vendors such as Bloomberg and Thomson Reuters serve as distribution channels for many different vendors of nonfinancial information. These firms, and others such as S&P Capital IQ and FactSet, also provide financial information. Nonfinancial data vendors are providing both services and data analysis tools of ever increasing number, diversity and technical sophistication.

Organisations in this domain can be highly influential, suggesting an important need to understand the role that they play. An important example is that of the NGO CDP (formerly the Carbon Disclosure Project), which has leveraged an investor voice to bring about substantial voluntary corporate reporting.⁸⁷ Every year CDP surveys some 6,300 companies regarding environmental risks (climate, water, and forestry). The process begins by sending a letter signed by 650 investors representing \$87 trillion in assets under management.⁸⁸ In 2018 a change to a sector-focused approach will align this information request with the recommendations from the TCFD.⁸⁹

According to the non-profit Global Initiative for Sustainability Ratings (GISR), ‘more than 100 sustainability raters administer questionnaires to thousands of companies worldwide, comprising a mix of investor and consumer-facing instruments ranging from issue-specific (e.g., climate change) to multi-issue (integrated environmental, social, and corporate governance factors) ratings, rankings, and indices.’⁹⁰ GISR notes that ‘a single large company may receive more than two dozen surveys annually, all of which seek information –often duplicative –tailored to meet the data needs of various ratings.’⁹¹ Responding to these surveys is time consuming and often involves a number of functions in addition to the sustainability group, such as legal, environmental health & safety, human resources, investor relations, and procurement.⁹² ‘Survey fatigue’ is a common complaint. Companies also complain about getting different scores from different vendors. The MIT Sloan School has a research project called ‘Aggregate Confusion’ that is addressing this issue.⁹³ They have found correlations between different rating agencies to be as low as 10%, with it being possible for a top performer according to one rating organisation to be at the tail end of another. Such variation puts the burden on the investor to decide which source is most relevant for his or her purposes, with the simplest such decision being to go for the largest data-universe (i.e., MSCI or Sustainalytics)

One consequence of having so many organisations doing ratings is that the rating

84 <https://www.csrhub.com/>

85 Business & Sustainable Development Commission, <http://businesscommission.org/>

86 <https://www.worldbenchmarkingalliance.org/>

87 <https://www.cdp.net/en>

88 <https://www.cdp.net/en/info/about-us>

89 <https://www.cdp.net/en/companies-discloser/disclosure-in-2018>

90 <https://shift.tools/resources/1570>

91 Ibid.

92 Ibid., p. 13.

93 <http://mitsloan.mit.edu/sustainability/aggregateconfusion>

organisations are themselves being rated. In 2013, for example, SustainAbility's 'Rate the Rater' report found the three most credible ratings to be CDP, Dow Jones Sustainability Index, and Access to Medicines Index, and the least credible to be Vigeo Ratings, CR Magazine's 100 Best Corporate Citizens List, and Fortune's Most Admired Companies.⁹⁴

The last 10 years have seen rapid consolidation in the data vendor space.⁹⁵ While this consolidation may lower transaction costs for investors, it is unlikely to resolve the low correlation problem. Doing this would, at the least, require measurement standards and reporting requirements for nonfinancial information. Should these exist, vendors would then have to determine if and how they wanted to adapt their rating methodologies and the tools they provide for analysing these data.

The relationship between data and tools is very different in the financial and nonfinancial reporting worlds. In the former, data originally comes from listed companies who have to report it using a set of accounting standards. Data vendors such as Bloomberg and Thomson Reuters all report the same data. Tool builders start with the same set of data as well, although they make their own adjustments to the GAAP-based numbers as part of their tool kit. In the nonfinancial reporting world, since there are no standards and reporting requirements, the data vendor must first source and aggregate the data using its own proprietary methodology. These data vendors then create tools for using the data. Thus, the data and the tool are inseparable, and it is difficult to know the relative weighting of each in the overall quality of data provided. In contrast, financial analysis tools all start with the same underlying data and data quality and so the value is clearly in the tool.

Adoption in practice of corporate reporting frameworks and standards

As already noted, FASB and IASB together have, in substance, global regulatory standard-setting authority, meaning that either US GAAP or IFRS is mandatory for publicly traded companies all over the world. In sharp contrast, no such claim can be made for nonfinancial reporting standards. There is, however, evidence of increasing (voluntary) adoption of nonfinancial standards and frameworks.

To illustrate, the IIRC estimates – using various pieces of research from third parties – that around 1,600 companies in 67 countries are using the principles of integrated reporting, including over 300 in Japan (according to KPMG research), around 500 in South Africa (including around 330 listed on the Johannesburg stock exchange), and around half of the CAC40 in France (according to the local Institute of Directors), a third of FTSE 350 companies in the UK (according to Deloitte), and a quarter of Australia's largest 200 companies (according to KPMG Australia), along with small, but growing, take-up in countries including South Korea, Italy, Sri Lanka, Brazil, the Netherlands and Spain.⁹⁶

SASB, in contrast, does not expect widespread adoption of its standards before codification in late 2018, yet – through its Alliance Membership Program and Investor Advisory Committee – it counts the support of investors representing over \$26 trillion in assets under management. Moreover, several early adopter companies (20 as of July 2018) have not

94 <http://sustainability.com>

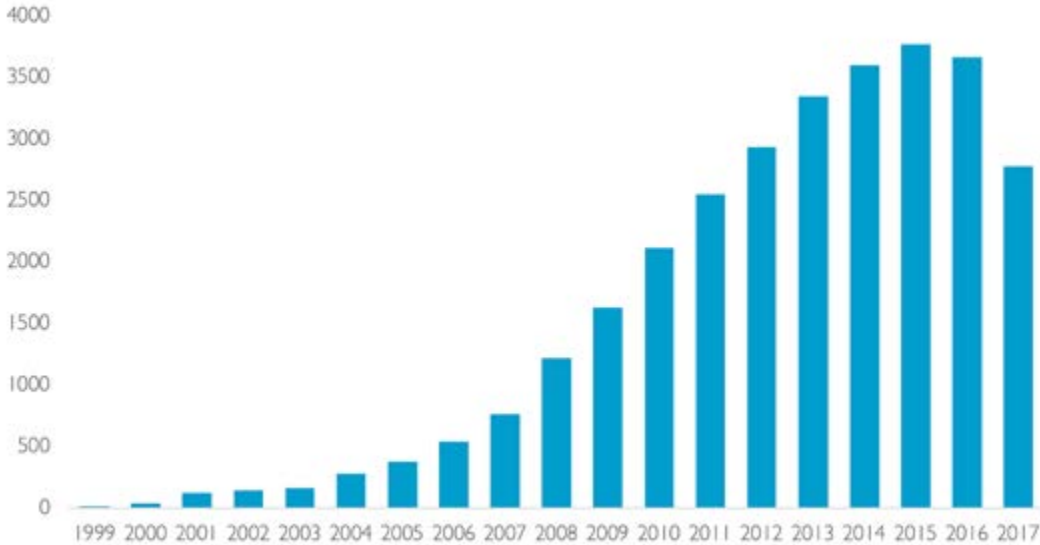
95 <https://www.wbcsd.org/Overview/News-Insights/General/News/Birds-of-a-feather-flock-together-BrownFlynn-joins-WBCSD>

96 Data direct from IIRC, August 2018.

waited for codified standards and have reported SASB metrics publicly, while approximately 150 more companies have publicly mentioned SASB’s importance to their reporting, either as something they are studying, as an input to their materiality assessment, or as the basis for their materiality assessment for sustainability reporting.⁹⁷

As noted above, GRI has the longest history of supporting nonfinancial information. As of August 2018, it had a database through 2017 of 30,471 reports based on the GRI standards and a total of 48,690 reports containing sustainability information from 12,651 organisations. Figure 3 shows the growth in number of reports based on the GRI standards to this date. Since the registration of reports with GRI is an ongoing process, the number for 2017 will continue to increase. In the prior two years approximately 3,500 such reports had been published.⁹⁸

Figure 3 – Number of Published GRI Reports (1999–2017)



As a final example, CDSB reports that its Framework was used in CDP responses in 2016 for 374 companies, with an aggregate market capitalisation of \$5.2 trillion, across 34 countries and 10 sectors. In addition, the CDSB Framework is referenced in five stock exchanges (Australia, Egypt, London, Chile and Singapore), as well as being referenced in the guidance of the EU Non-Financial Reporting Directive, in the TCFD Recommendations, and as a tool for compliance with the reporting requirements of the UK Companies Act 2006.⁹⁹

It is telling that each of these three example organisations (the IIRC, SASB and CDSB) reports in a different way on uptake of their frameworks and standards, based in each case upon estimates, and also in each case on uptake that is partial and, to some extent, vague or ambiguous. This is to be expected, of course, in a context of voluntary adoption and emergent practice, and yet the contrast is striking between these examples and the relatively unambiguous and universal claims that can be made by FASB and IASB.

97 Data direct from SASB, August 2018.
 98 Data direct from GRI, August 2018.
 99 Data direct from CDSB, August 2018.

Solutions

This paper has so far defined nonfinancial reporting, provided evidence that the demand for such reporting is currently being met only partially, and identified several reasons why nonfinancial reporting is inherently challenging in relation to financial reporting. In addition, the paper has provided an overview of the institutional landscape for corporate reporting, in which the relatively developed and longstanding regime for financial reporting stands in contrast with its nascent equivalent in the nonfinancial domain.

The obvious next question is how, from an institutional perspective, the demand for nonfinancial reporting can be met most effectively. In this section, we set out two alternative 'solutions' – being, first that IASB or FASB should set standards for nonfinancial reporting (we call this 'the regulatory solution') and, second, that the demand for nonfinancial reporting should instead be met by 'natural' economic forces of the markets, and of institutions created outside of regulatory 'imposition' (we call this 'the market solution').

The regulatory solution

There are certain preconditions required for it to be desirable to have mandatory standards set by a regulatory authority. These can be summarised as follows.

First, there must be metrics available, or at least the possibility that they can be developed. Such metrics might vary on a scale from being relatively objective (for example, tons of CO₂ emissions) to being conventionally accepted proxies for something that is difficult to measure directly (for example, tons of CO₂ equivalent as a proxy for all greenhouse gas emissions that contribute to global warming). If, however, there is an inherent absence of measurability, then it is not possible to develop standards for reporting. For example, if 'social capital' is a construct that eludes specification, then it cannot form a basis for setting standards.

The second precondition is that the benefits from standardisation should outweigh the costs. Given that there are costs to reporting entities in acquiring and presenting information according to standardised requirements, then there should ideally be consequentially enhanced decision-making by the users of that information, with the effect that there is an overall net benefit in the more effective use of economic resource. The benefits can of course be difficult to determine, but the cost-benefit test is nevertheless clear in principle. The costs can include not just those of acquiring and presenting information, but also of doing so in a way that is harmonised and comparable across reporting entities; it can, for example, be less costly for a single body to determine the rules to be applied by all, rather than to have a situation where either individual entities somehow coordinate in order to report in a standardised way, or else users of information somehow make adjustments to reported data in order to achieve standardisation.

The final precondition is that there should be some sort of difference in incentives between users and preparers of reported information, which causes 'market failure' and, thereby, a case for some form of regulatory intervention. In the case of financial reporting, for example, if corporate managers have a private economic incentive to report good news but to suppress bad news, or else to represent their performance in a way that is unduly positive in relation to the performance of others in the industry, then some form of corrective is

required in order to ensure that investors are not misled. This doesn't necessarily require regulatory standard setting but – especially in the typical case where collective action by investors is either infeasible or costly – it is natural to fall back on some form of externally imposed solution, on a 'rule maker' with a remit to ensure that all companies play by the same set of rules, creating a level playing field for them and investors.'¹⁰⁰

The history of financial reporting is instructive here. Over a long period of time, in the US and elsewhere, there has been an inexorable evolution from an absence of standards, to relatively 'light touch' self-regulation, to independent, regulatory standard setting, to the development of governance mechanisms to ensure that the standard-setter is itself held to account. There are arguably similar developments underway already with respect to a regulatory approach for nonfinancial reporting, albeit that these are modest. Perhaps most notable is the 'EU Accounting Directive for Non-financial Reporting' (the Directive), compliance with which is mandatory in the annual reports of European public companies from 2018.¹⁰¹ The Directive requires reporting of policies and impact on such things as environmental protection, social responsibility and treatment of employees, respect for human rights, anti-corruption and bribery and diversity on company boards. In 2017, the European Commission published some guidelines for this reporting, with the implementation of the Directive being the responsibility of the member states. While the Directive remains very high level and non-prescriptive, and therefore a far cry from IFRS, its issuance nevertheless suggests the early stages of regulatory nonfinancial standard setting.

Although there has been no equivalent legislation in the US, the SEC found out, somewhat inadvertently, that there is strong interest in nonfinancial information. On 13 April 2016 it issued its 'Concept Release: Business and Financial Disclosure Required by Regulation S-K,' which was 'part of an initiative by the Division of Corporation Finance to review the disclosure requirements applicable to registrants to consider ways to improve the requirements for the benefit of investors and registrants.'¹⁰² Section F of the Release concerns 'Disclosure of Information Relating to Public Policy and Sustainability Matters.'¹⁰³ It discusses a number of the issues addressed in this paper, including materiality, whether the purpose of disclosure is to inform investors or instead to achieve other policy goals, whether it should be mandatory or voluntary, and whether standards would be useful. In relation to the scope of the Concept Release, a disproportionate number of responses were about sustainability disclosure, the essence of which was summarised as follows by SASB:

*Consistent, true, and fair disclosure of performance on material sustainability topics – equal to the quality that markets have come to expect and rely on for financial information – can best be accomplished via the use of such a market standard. Standards provide a common reference point, create consistency with traditional financial data, extend the mosaic of information consistently, and make sustainability data an accepted part of the analytical and decision-making process.*¹⁰⁴

100 Bromwich, M. (1985). *The Economics of Accounting Standard Setting*. Englewood Cliffs, NJ: Prentice Hall.

101 Directive 2014/95/EU of the European Parliament and of the Council of 22 October 2014 amending Directive 2013/34/EU as regards disclosure of non-financial and diversity information by certain large undertakings and groups' - <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32014L0095> and https://ec.europa.eu/info/publications/170626-non-financial-reporting-guidelines_en

102 <https://www.sec.gov/rules/concept/2016/33-10064.pdf>

103 Ibid, pp. 204-215.

104 <https://www.sec.gov/comments/s7-06-16/s70616-25.pdf>

Whether or not the preconditions exist for it to be desirable to have mandatory standards set by a regulatory authority, a separate question is whether the responsibility for setting those standards should be assigned to FASB and IASB. There are several reasons, as follows, why such an assignment is arguably desirable.

- FASB and IASB each have an infrastructure and staff of highly skilled professionals, and a long track record of expertise in standard setting, including the process for getting input from all relevant stakeholders, drafting and re-drafting official positions, and publishing and disseminating authoritative documents (which, in the case of IASB, includes a formal process of translation into multiple languages). Both also have relatively secure sources of funding, coupled with widespread acceptance that maintaining such funding is important for the ongoing effective functioning of capital markets.
- FASB and IASB also each have well-established governance structures for overseeing their work, coupled with a high level of credibility in the investment community.
- The unambiguous materiality perspective for FASB and IASB is that of the investment community, which aligns with the scope of nonfinancial information as defined in this paper.
- FASB and IASB also each have credibility in the corporate community. With respect to financial reporting, there is absolute clarity within the corporate sector about the standards that are applied by all companies in such a way that is perceived to help create a level playing field. In contrast, there is no unambiguous and accepted authority with respect to nonfinancial reporting, and instead there is a confusing and costly plethora of disclosure burdens for companies.
- The natural focus for both FASB and IASB would be on integrating nonfinancial information into mainstream corporate reporting, and into existing security market filings. This would most likely also imply an emphasis on how financial and nonfinancial information should be integrated with each other, thereby enhancing the usefulness of both.

Against these arguments, there are corresponding counter-arguments. These may be summarised into the following three categories, which are concerned, respectively, with the in-principle feasibility of setting standards, the in-principle appropriateness of FASB and IASB as nonfinancial standard-setting bodies, and the practicality of assigning responsibility to FASB and IASB.¹⁰⁵

- The first issue is that, at present, the necessary preconditions might not exist for regulatory standard setting to be effective. At current levels of knowledge, many material ESG issues are difficult to quantify, and so do not lend themselves to standardisation. This may be in part because conditions remain at the ‘experimentation’ phase. It is arguably difficult, and perhaps too soon, to ‘pick a winner’ among the many NGOs working to develop standards for nonfinancial information, and so the natural foundation for standardisation may not yet be in place. There may be evidence for this in the willingness of the corporate sector to engage in ‘management accounting’

¹⁰⁵ In addition, NGOs might object to FASB and IASB extending their role out of fear that this will reduce the amount of reported nonfinancial information for stakeholders other than shareholders and other providers of capital.

initiatives, which as yet are out of scope for external reporting, such as the Natural Capital Protocol and The Prince's Accounting for Sustainability Project.

- Second, it is not obviously the case that expertise in setting financial accounting standards 'translates' into a corresponding capacity to set nonfinancial standards; indeed, it is possible that an excessive anchoring in the financial might actually be detrimental. Material nonfinancial information is commonly entity- and location-specific, while financial data are instead inherently amenable to aggregation and to similarity of treatment across different organisations.¹⁰⁶ Consider, for example, the case of water, soil, or other natural capital dependencies, the materiality of which will vary greatly across different contexts. It is accordingly possible that a 'different mindset' is called for in setting nonfinancial standards. This is arguably especially the case because there is also a different knowledge and skill-set to be acquired (natural capital is not, for example, part of the accountant's professional training) and also because financial and nonfinancial standards are at such different stages of evolution (by analogy, financial standard-setting is equivalent to running an established business, while nonfinancial is a start-up that calls for the management skills of the entrepreneur).
- Finally, there are practical concerns over assigning responsibility for nonfinancial standards to FASB and IASB. It is questionable, for example, whether nonfinancial is within remit, and whether political support and funding could realistically be found to extend the scope of activity. Further, it might be the case that extending to nonfinancial information would dilute focus on the existing remit of FASB and IASB, in some way compromising financial reporting. It might also be that, at least in their current respective states of evolution, the financial and nonfinancial worlds are just so different that they call for a fundamentally different institutional approach. There is, for example, greater urgency in the rapidly-changing nonfinancial sphere, to keep up with corporate, investor, political and scientific developments on issues such as climate change, and to respond to those developments in a timely fashion. In contrast, it is more 'natural' for the financial standard-setting response to be more institutionalised and slower, as was the case even in the 'urgent' case of revising accounting for financial instruments in the wake of the 2008 credit crisis.

A further issue arises because FASB and IASB set standards for required financial filings, with the implication that a regulatory solution would lead to mandatory reporting, and would 'move on' from the common, current practice of corporate citizenship reports, corporate social responsibility reports, sustainability reports, and so on. The issue here is the appropriate placement of nonfinancial information which, as defined in this paper, sits outside the financial statement (including footnotes), meaning that some form of change would be called for in the structure of mandatory corporate reporting. The UK's guidance on its 'Strategic Report' sets out some thinking along these lines, identifying distinct 'spaces' in which different forms of corporate reporting can be brought together in a single report for investors.¹⁰⁷

The obvious starting point for exploring a change in structure would be the MD&A in the US and the Management Commentary for IFRS. A change would need to go beyond the

¹⁰⁶ While, for example, there is some industry expertise in FASB and IASB, it is very selective (primarily for financial institutions); at SASB, in contrast, industry is the basic building block of standard-setting.

¹⁰⁷ Financial Reporting Council (2018). *Guidance on the Strategic Report*.

existing 'design principle' of both statements, being that they allow eyes-of-management flexibility, both in determining what is material nonfinancial information and in explaining its relationship to past and anticipated financial performance. The need for change would be twofold. First, the Management Commentary is not currently an IFRS requirement, and this optionality hardly accomplishes the desire to have comprehensive disclosures for all listed companies, as is the case for financial information. Without universal disclosure there is the risk that there will be bias in the information provided. Companies with good performance will report it and those with poor performance won't. Compounding this, the models developed by investment professionals are based on a comparative analysis. The fewer the companies that report, the less the value of the comparative analysis.

Second, even if the Management Commentary were to become mandatory, and so on a par with the MD&A, the problem of providing information according to a set of standards remains. Given the intended purpose of the MD&A and Management Commentary, there is no current regulatory mechanism for enforcing the use of measurement standards in these documents; yet such standards would need to be developed, and their application enforced, in order for nonfinancial reporting to realise informational benefits analogous to financial reporting. In the case of the MD&A, the Division of Corporation Finance determines its content and so it is outside of the remit of FASB. For this reason, almost no formal audits are done of the MD&A. The further one gets away from the financial statements, the more difficult it becomes to conduct an effective audit. Monitoring the quality of MD&A disclosures, which have become largely boilerplate checklists rather than the rich information they were intended to be, is not a high priority of Corporation Finance. In order for the MD&A to be an effective place for the disclosure of nonfinancial information according to a set of standards, it might be necessary to shift responsibility from Corporation Finance to FASB, with corresponding changes also required in jurisdictions applying IFRS.

A final consideration is that of the internal organisation of FASB, IASB and their respective governing foundations.¹⁰⁸ One can think of giving standard-setting responsibility to FAF and the IFRS Foundation, rather than directly to FASB and IASB. In both cases, a separate organisation could be created under the foundation (FAF already has both FASB and the Governmental Accounting Standards Board), which is an approach that might avoid some of the problems cited above. For example, a new organisation could be created with the mindset of a start-up rather than that of an established institution, it could bring together dedicated expertise with respect to ESG issues (and variations therein across industries), and it could be separately funded and create minimal organisational 'diversion' from the extant focus on financial reporting. Against these benefits, however, such an approach might also compromise the ability to better integrate financial and nonfinancial information.

A hybrid approach might also be possible, whereby FASB and IASB take on relatively 'low-hanging fruit', which align with the process already in place for setting financial reporting standards, and for there then to be a gradual evolution towards a separate body with a distinct nonfinancial remit. To illustrate, and building on existing work such as the GHG

108 A further question is whether this regulatory approach would just end up repeating for nonfinancial information what exists today for financial information – two sets of standards, US GAAP and IFRS. At present, ESG standard setting does not have this bifurcation, presuming instead that a single global standard would be preferable. Conceivably, FASB and IASB could form a joint task force on this issue, though this is unlikely given the practical and political constraints each would face taking on this unfamiliar initiative in the first place and given also the (ultimately unsuccessful) experience of the Norwalk Agreement to converge US GAAP and IFRS.

Protocol and the recommendations of the TCFD, it would be fairly straightforward for FASB and IASB to develop a reporting standard for carbon emissions, and for the experience gained in developing such a standard then to be used in guiding future decisions about institutional structure and organisational responsibility within FAF and the IFRS Foundation.

The market solution

While a regulatory solution implies some sort of conscious political or legislative process, the alternative would be simply to let market forces work and see what happens.

Such an approach might be desirable for the simple, practical reason that an effective regulatory solution might not be possible in the existing regulatory and political environment. Any regulatory attempt might fail, as did the Norwalk Agreement. Perhaps, even worse, it is possible that FASB or IASB, or some joint effort, would generate standards that would not be 'fit for purpose.' For example, they might attempt to be too prescriptive, giving insufficient regard to materiality, and so creating another version of the 'conflict minerals' problem, or alternatively they might be so narrow as to be 'tick-the-box' compliance exercises, or so broad as to be meaningless. From this perspective, even an incomplete and imperfect market solution is better than a poor regulatory solution.

Even a 'market' solution requires some form of institutional initiative, however, and the test here is whether the organisational forces behind a market-based solution would in the end prove more effective than those of regulation. In this regard, current practice suggests that there are two essential components for the mobilisation of a market voice, the first being an explicit expression of investor demand, and the second an organisational response to that demand from (in some combination) NGOs with a remit to develop nonfinancial reporting frameworks and standards, data vendors finding commercial opportunity in the area, and corporations, auditors and others working on the development of 'best practice' in nonfinancial measurement and reporting standards. In this section, we review each of these components in turn.

The market force in the market solution is the voice of investors, who are the 'customers' for the nonfinancial information that companies bring to the capital market. Investors can apply pressure on their portfolio companies to provide them with the nonfinancial information they think is important. There is a variety of mechanisms for doing this, including quarterly calls,¹⁰⁹ the annual general meeting (AGM), individual company meetings, and using proxy statements to demand a shareholder vote at the AGM.¹¹⁰ This market demand for nonfinancial information is most effective if asked of the CFO and head of investor relations, and coming from sector sell-side analysts and buy-side portfolio managers. In common practice today, however, most requests for nonfinancial information come from ESG specialists on both the sell and buy sides, with most responses coming from corresponding specialists from the companies (for example, from Corporate Social Responsibility (CSR) departments or sustainability managers). Moreover, requests for nonfinancial information are typically done on an individual basis, albeit by large asset owners, including: pension funds in the US (such as CalPERS, CalSTRS, and the New York State Common Retirement Fund), the

109 We note that, in practice, nonfinancial information is rarely discussed on these calls.

110 The prominent examples here are for oil & gas companies. See <https://media2.mofo.com/documents/frequently-asked-questions-about-shareholder-proposals-and-proxy-access.pdf> for a discussion of how shareholder proposals get put on the company's proxy statement.

Netherlands (APG and PGGM) and Sweden (AP1, AP2, AP3, AP4, and AP7); asset managers such as BlackRock, State Street, and Vanguard; and sovereign wealth funds such the Norwegian Norges Bank Investment Management. If enough important investors such as these are asking often enough for nonfinancial information, then companies will presumably get the message. Yet, as things stand today, a standard refrain from many companies is that investors aren't asking for this information, and that this is why they are not providing it.

Another way for investors to express their demand for nonfinancial information is to supplement these individual requests with more aggregate ones, such as through different associations of investors of various kinds. While there are obvious challenges in constituting such an association, and in agreeing what the priorities should be for the group, this collective voice has the potential to be a powerful one, usually accompanied by a statement along the lines of 'We investors, representing \$X trillion in assets under management, respectfully request...' To some extent, this is already happening today. A strikingly effective example is that of CDP, which (as outlined above) uses a collective investor voice when it sends out letters to companies asking them to respond to its survey. Similarly, SASB has established an 'Investor Advisory Group (IAG)' comprised of 'leading asset owners and asset managers who recognise the need for consistent, comparable and reliable disclosure of material and decision-useful ESG information,'¹¹¹ and the IIRC has an '<IR> Investor Network' which 'enables investors to provide their perspective on needs and directions in corporate reporting.'¹¹² There are a number of other associations of investors which could be mobilised, such as the Council of Institutional Investors,¹¹³ the International Corporate Governance Network,¹¹⁴ the International Centre for Pension Management,¹¹⁵ the Ceres Investor Network on Climate Risk and Sustainability,¹¹⁶ and Principles for Responsible Investment.¹¹⁷

While this mobilisation of an investor voice is critical for a market solution, so too is some form of organisational response from reporting NGOs, data vendors, corporates, auditors and others. There are many different forms that such a response might take, and perhaps the spirit of a market solution is to allow practice to emerge, rather than to anticipate too precisely what the emergent outcome might be. Nevertheless, it can reasonably be speculated that market forces could result in nonfinancial standards through some combination of three mechanisms, being NGO consolidation, data vendor consolidation, and the 'bottom-up' emergence of best practice. We consider each in turn.

The first mechanism is that the major NGOs working in this domain (e.g., CDSB, GRI, IIRC and SASB) somehow merge together into a single organisation, let's call it 'Global Nonfinancial Standard NGO (GNSNGO),' reconciling all of their work into a single set of standards. While companies might not agree with the standards (they often complain about accounting standards but have to live with them), they would appreciate the clarity of having a single set to work with. Companies would like this even more if they no longer had to respond to all the different nonfinancial ratings and rankings organisations. If

111 <http://using.sasb.org/investor-advisory-group>

112 <http://integratedreporting.org/resource-type/investors>

113 <https://www.cii.org>

114 <https://www.icgn.org>

115 <http://icpmnetwork.com>

116 <https://www.ceres.org/networks/ceres-investor-network>

117 <https://www.unpri.org>

there is enough market pressure from investors for companies to report according to the standards of GNSNGO, then all of the data vendors would simply provide this nonfinancial information just as they provide financial information today. Data ratings and rankings organisations would have to incorporate this information in their products and companies would feel less compelled to provide additional information. If GNSNGO's standards were good enough, the major audit firms might even develop the ability to provide positive assurance on them compared to the negative assurance, at best, that is provided today on nonfinancial information.

It may, however, be unrealistic to expect the emergence of GNSNGO to happen by virtue of market forces alone. The proliferation of NGOs, many at far below any kind of significant scale, working in the same domain, is a common phenomenon. Experience suggests that this 'is what it is' and that market forces really don't exist to bring about consolidation for purposes of greater economic efficiency and effectiveness as happens in the for-profit sector. Each NGO has its own particular mission, key set of stakeholders (which often overlaps with those of its 'competitor' peers) and, perhaps most importantly, its own set of funders. Whether these funders are individuals, foundations, or for-profit organisations, they will enable the NGO to stand on its own for as long as they are willing to contribute funds.

In this particular case, there are additional, specific reasons not to expect consolidation. These include differences in: intended audience for the nonfinancial information (e.g., GRI is focused on all stakeholders and the others primarily on shareholders); mission (e.g., the IIRC is a framework setter and the others are standard setters, although perhaps a merger between the IIRC and one of them could be seen as a form of vertical integration); and geographical location (GRI in Amsterdam, SASB in San Francisco, and CDSB and IIRC in London), which is an especially important factor in small organisations, with country-based differences in the laws under which they are organised as nonprofits, and very different funding models, with little overlap in sources of funding.

The second mechanism is that standardisation might come from consolidation in the data vendor industry, even while multiple reporting NGOs continue to exist. While there are still a large number of ESG data vendors, over the past decade (and as discussed above) there has been substantial consolidation in this industry with the dominant firms now being ISS-oekom, MSCI, and Sustainalytics/Morningstar.¹¹⁸ If these three firms were to merge and acquire some of the remaining independent data vendors such as RepRisk and TruValue Labs, the consolidation would be substantially complete, at least within the US; this entity might be named 'Sole Global Nonfinancial Data' (SGNFD). Even in the absence of antitrust issues, however, this consolidation is unlikely to happen. These three large organisations all have a wide range of service offerings, with data being only one of them, and more important for some (e.g., Sustainalytics/Morningstar) than the others. Taking control of the market for nonfinancial information is unlikely to be a compelling economic proposition. The cost of doing this would be enormous. Either one data set is chosen, thereby rendering worthless the value implicit in the others, or costs would have to be incurred to create a new data set that combines the best of all worlds. Even if this were feasible, historical comparability would be lost, thereby reducing the value of this offering. Finally, as noted above, data and tools are highly integrated in these organisations, so all tools would have to be changed to incorporate the new standardised data, which would be an even more expensive undertaking.

118 Brown and Wallace, Op Cit.

Less dramatically, and again ignoring antitrust issues, an alternative might be that the data vendors form a trade association that develops an agreed-upon set of standards. As with other industry-based standard setting organisations, conventional wisdom is that having standards will expand the size of the market. Rather than competing on different approaches to measuring nonfinancial performance, companies would compete on the cost of delivering information prepared according to these standards and in tools for using the information based on these standards. This, too, might be unlikely to happen, however, given the investments these data vendors have made in their own data generation methodologies, and their understandable reluctance to share these methodologies with competitors in a way that would probably be necessary in a standard-setting process.

Finally, an extreme version of the market solution would be if one of the data vendors develops such a superior product offering, such as by taking a completely new high-tech, big data approach, that it renders obsolete the work of the NGOs and captures such a dominant share of the market that it becomes a *de facto* standard. If this solution didn't require any reporting by companies, it would make the regulatory question largely irrelevant. Of course, other issues would arise if a vendor ended up with something like 80% of the market, which could lead to a regulatory intervention of different kind.

The third mechanism, and perhaps the most feasible (although also most difficult to predict), would be the 'bottom-up' solution that emerges from the development of best practice. Many combinations and permutations with different sequences and timings are possible. One variant would be where, over time, the market 'speaks', and investors indicate a strong preference for certain measurement approaches over others, which companies then start to use. If enough companies start reporting to those consensus measurement approaches, one or more of the data vendors could develop a product offering around that, perhaps even replacing their existing offering. A group of investors might then go to a regulatory body, such as the SEC, and make the argument that it should mandate this standard. The argument would be that since many (most) companies are already using it, the value has been shown and there shouldn't be undue complaints from the companies about the cost of providing this information since they already are. Investors will also complain that the information is only being provided by companies performing well and that they need credible information from all companies.

A second variant is that one of the data vendors revises its product offering based on the standards of an NGO and it gains a dominant market share since investors prefer it.¹¹⁹ It would begin by coming up with a proxy for company-reported information, such as through big data, since it wouldn't have data from the companies it needs. Companies may decide that they'd rather be in control of the information prepared according to this standard and start providing it on a voluntary basis, which may also preclude having to continue to respond to dozens of different ratings. Or perhaps two or all of the big data vendors decide one set of NGO standards is better and then proceed in the same way. The calculus here would be that data based on a common set of standards would shift the focus to competing on perhaps higher margin tools, such that trading away any presumed data advantage and incurring the cost of revising their tools would be worth it. As above, when enough companies are in support, a critical mass of investors could ask for regulatory intervention to ensure that they are getting data from all companies.

119 This already exists (without the dominant market share) with Vigeo-EIRIS and GRI.

An open question with any market solution is where and how the information would be provided. There is nothing to preclude companies from placing this information in their MD&A or Management Commentary. Conversely, since there would be nothing requiring them to do so, it is likely that they would choose the less onerous and perceived less risky approach of placing it in a sustainability report or on a sustainability page of their website, the common practice today. Since there is no standard format for these reports or websites, it would be difficult for investors to find this information easily compared to, for example, a 10-K or 20-F. However, this problem could be solved by data vendors whose added value would be in gathering up nonfinancial information reported according to these standards, making them easily accessible to investors in a common format, probably along with tools for analysing this information.

Final reflections

Our discussion of the regulatory and market solutions is clearly a simplistic one in two ways. The first is that we have only sketched the outlines of each, ignoring nuance and details for the sake of brevity. The second is that we have framed our discussion as ‘one or the other’ when perhaps what is most likely over time will be a combination of both.

We are conscious of the fact that, by writing the paper and holding the Oxford Union debate, we are making a small intervention of our own on the topic of this paper. While we have not offered an opinion on what should be done, we believe that improving ESG data quality is an important issue. We wouldn’t have the deep and liquid capital markets we have today without high quality and comparable information on financial performance. For the markets to continue to generate wealth and ensure that the state of the world enables them to continue to do so, there is a need for nonfinancial information of equal quality and comparability.

While we therefore have a commitment on the question of *whether* there is a need for better nonfinancial reporting, we remain open on the question of *how* such a need should be met. We await with great interest the Oxford Union debate on this topic, after which we will publish a ‘White Paper’ presenting our view on the question of *how*.

Appendix – People interviewed

We are very grateful to the following individuals, all of whom kindly gave valuable time and insight in being interviewed for this paper. The list below includes only one job title for each individual, which may be current or past and is the role most directly associated with the subject of this paper. No content in the paper is directly attributable to any of these individuals. All errors or omissions are the responsibility of the paper’s authors.

Name	Title	Organisation
Jane Ambachtsheer	Global Head of Sustainability	BNP Paribas Asset Management
Jonathan Bailey	Head of ESG Investing	Neuberger Berman
Marty Bauman	Chief Auditor	PCAOB
Alan Beller	Director of Corporation Finance	SEC
David Blood	Senior Partner	Generation Investment Management
Else Bos	Executive Director	De Nederlandsche Bank
Helen Brand	CEO	ACCA
Herman Brill	Director - Office of Investment Management	UNJSPF
John Coates	Professor of Law and Economics	Harvard Law School
Sue Coffey	Executive Vice President	AICPA
Meredith Cross	Director of Corporation Finance	SEC
Jim Doty	Chair	PCAOB
Paul Druckman	Chair	UK Corporate Reporting Council
Michelle Edkins	Global Head, Investment Stewardship	BlackRock
Cindy Fornelli	Executive Director	Center for Audit Quality
Dan Goelzer	General Counsel	SEC
Russ Golden	Chair	FASB
Lois Guthrie	Founding Director	CDSB
Bob Herz	Chair	FASB
Keith Higgins	Director of Corporation Finance	SEC
Hans Hoogervorst	Chair	IASB
Richard Howitt	CEO	IIRC
Gary Kabureck	Board Member	IASB
Judy Kuszewski	Chair	GSSB
Eloy Lindeijer	Chief Investment Management, Member Executive Committee	PGGM
David Loweth	Technical Staff	IASB
Ian Mackintosh	Chair	CRD
Callum McCarthy	Chair	UK Financial Services Authority
Tim Mohin	CEO	GRI

Chuck Noski	Chair	FAF
Matt Orsagh	Director of Capital Markets Policy	CFA Institute
Vincent Papa	Director of Financial Reporting Policy	CFA Institute
Russell Picot	Chair	HSBC Bank (UK) Pension Scheme
Harvey Pitt	Chair	SEC
Terri Polley	President/CEO	FAF
Tom Quaadman	Executive Vice President	US Chamber of Commerce
Jean Rogers	Founder and former CEO	SASB
Samantha Ross	Chief of Staff	PCAOB
Lynn Forester de Rothschild	CEO	Coalition for Inclusive Capitalism
Mary Schapiro	Chair	SEC
Gordon Seymour	General Counsel	PCAOB
Anne Sheehan	Director of Corporate Governance	CalSTRS
Anne Simpson	Investment Director, Sustainability	CalPERS
Paul Simpson	CEO	CDP
Cristina Tebar-Less	Head, Responsible Business Conduct Unit	OECD
Han van der Hoorn	Senior Advisor	PGGM
Elisse Walter	Chair	SEC
Matthew Welch	President	SASB Foundation
Robert Youngman	Leader, Green Finance & Investment	OECD
Mark Zinkula	CEO	Legal & General IM

(Footnotes)

- 1 Data direct from CDSB, August 2018
- 2 Data from 2017 FAF Annual Report
- 3 Data from 2017 GRI Annual Report
- 4 Data from 2017 IFRS Foundation Annual Report
- 5 Data direct from IIRC, August 2018
- 6 Data direct from SASB, August 2018
- 7 Data from fsb-tcfd.org; note that TCFD is less formally an 'institution' than the other organisations listed in this table.



Saïd Business School
University of Oxford
Park End Street
Oxford OX1 1HP

www.sbs.oxford.edu