



Think Ahead



THE FUTURE OF FINANCIAL REPORTING 2022: THE DEVELOPMENT OF GLOBAL SUSTAINABILITY STANDARDS AND THEIR IMPACT ON CORPORATE REPORTING

A discussion paper based on the British Accounting and Finance Association (BAFA),
Financial Accounting and Reporting Special Interest Group (FARSIG) Virtual Symposium, 14 January 2022.

About ACCA

ACCA (the Association of Chartered Certified Accountants) is the global professional body for professional accountants.

We're a thriving global community of **241,000** members and **542,000** future members based in **178** countries and regions, who work across a wide range of sectors and industries. We uphold the highest professional and ethical values.

We offer everyone everywhere the opportunity to experience a rewarding career in accountancy, finance and management. Our qualifications and learning opportunities develop strategic business leaders, forward-thinking professionals with the financial, business and digital expertise essential for the creation of sustainable organisations and flourishing societies.

Since 1904, being a force for public good has been embedded in **our purpose**. In December 2020, we made commitments to the **UN Sustainable Development Goals** which we are measuring and will report on in our annual integrated report.

We believe that accountancy is a cornerstone profession of society and is vital helping economies, organisations and individuals to grow and prosper. It does this by creating robust trusted financial and business management, combating corruption, ensuring organisations are managed ethically, driving sustainability, and providing rewarding career opportunities.

And through our cutting-edge research, we lead the profession by answering today's questions and preparing for the future. We're a not-for-profit organisation.

Find out more at www.accaglobal.com

THE FUTURE OF FINANCIAL REPORTING 2022:

THE DEVELOPMENT OF GLOBAL SUSTAINABILITY STANDARDS AND THEIR IMPACT ON CORPORATE REPORTING

A discussion paper based on the British Accounting and Finance Association (BAFA), Financial Accounting and Reporting Special Interest Group (FARSIG) Virtual Symposium, 14 January 2022.

Silvia Gaia

Reader in Accounting
University of Essex

Simone Aresu

Associate Professor in Accounting
University of Cagliari

Penny Chaidali

Lecturer in Accounting
University of Cardiff

Omiros Georgiou

Senior Lecturer in Accounting
University of Manchester

Michael John Jones

Emeritus Professor of
Financial Reporting,
University of Bristol

Andrea Melis

Professor of Corporate Governance
and Management Accounting
University of Cagliari

Luigi Rombi

Senior Lecturer in Accounting
University of Cagliari



For further information, please contact:

Sharon Machado, Head of Sustainable Business,
Policy and Insights, ACCA. Sharon.Machado@accaglobal.com

About Financial Accounting and Reporting Special Interest Group (FARSIG)

The FARSIG is a group set up under the aegis of the British Accounting and Finance Association (BAFA). The main purpose of FARSIG is to further the objectives of BAFA and for that purpose to:

- encourage research and scholarship in financial accounting and reporting
- establish a network of researchers and teachers in financial accounting and reporting
- enhance the teaching of financial accounting and reporting
- provide support for PhD students in financial accounting and reporting
- develop closer links with the accountancy profession in order to inform policy
- publish a newsletter and organise targeted workshops
- develop and maintain relationships with BAFA and the professional accountancy institutes
- provide a forum for the exchange of ideas among accounting academics.

The symposium, which is one of an annual series that started in 2007, provides a forum for academic, practitioner and policy-orientated debate. Such forums are useful for expressing and developing rounded opinion on the current meta-issues facing financial reporting. Furthermore, they serve to illustrate the policy relevance and impact of current academic and practitioner thinking and outputs, in accordance with calls from the Economic and Social Research Council for relevant and rigorous research combining practitioner and academic perspectives.

The authors would like to express their thanks to the five main speakers, both for their presentations and for their subsequent time and comments during the development of this discussion report. The authors have tried to capture faithfully the flavour of the original presentations. Nonetheless, although the original speakers were shown the commentary on their presentations, any errors or omissions remain our own. Thanks are also due to the Association of Chartered Certified Accountants (ACCA) for hosting the symposium and for its support of the publication of this discussion report. Finally, could any readers who wish to learn more about FARSIG or to become FARSIG members please contact Silvia Gaia (Chair of FARSIG) at sgaia@essex.ac.uk.

Silvia Gaia is the chairperson of the FARSIG Committee and a reader in accounting at the University of Essex. Simone Aresu is an associate professor in accounting at the University of Cagliari. Penny Chaidali is a lecturer in accounting at the University of Cardiff. Omiros Georgiou is a senior lecturer in accounting at the University of Birmingham. Mike Jones is an emeritus professor of financial reporting at the University of Bristol, UK. Andrea Melis is a professor of corporate governance and management accounting at the University of Cagliari, Italy and Luigi Rombi is a senior lecturer in accounting at the University of Cagliari.

Foreword



Sharon Machado
Head of Sustainable
Business, Policy and
Insights, ACCA

ACCA was pleased to host the 2022 symposium of the FARSIG, the annual discussion about the future of corporate reporting. The meeting was held virtually, thereby permitting a bigger and more globally distributed audience to take part in the valuable discussion between several parties – academics studying and teaching the subject, those involved with practical application of corporate reporting in one form or another, and standard setters.

The focus of the 2022 symposium on sustainability reporting and assurance offers direct support to the profession in accounting for a better world (ACCA 2022), in turn enabling sustainable business. From setting and implementing sustainable strategy and risk management to reporting and assurance, the profession has a key role in achieving sustainable business outcomes. ACCA's policy and insights work has identified that sustainable businesses tend to integrate in their decision-making the material economic, social and environmental (ESG) matters, for instance supply chain tensions linked to geopolitical and geo-economic challenges, climate crisis and social inequality. This approach to decision-making makes more possible the recognition and analysis of potential trade-offs, and indeed opportunities or synergies but, to do this, quality integrated sustainability reporting is essential.

Therefore, the symposium's discussions addressing sustainability reporting were a perfect response to this imperative. A range of issues were covered including:

- understanding and reporting the impact of climate change and other ESG matters necessary to support quality decision-making, not just by businesses but also by those in capital markets
- considerations for quality sustainability standard setting, including approaches to identifying what is material to business and other stakeholders
- the different roles of the profession, for instance internal audit and third-party assurers as well as internal and external reporters.

Similar discussions to these symposium discussions are being had by standard setters, including the International Sustainability Standards Board (ISSB), the US Securities Exchange Commission (SEC) and the European Financial Reporting Advisory Group (EFRAG), and this further highlights the relevance of the symposium's work.

One of the many objectives of the work of ACCA and other members of the symposium is to influence policy, regulation and standards through providing insight on the sustainability issues faced and responses to them by organisations and the profession. Some of ACCA's work here, to date and to come, explores what constitutes good integrated sustainability and financial reporting, and what organisations and professionals must do to be ready. We do this from the perspective of a variety of organisational forms, so from large to small, and private to public sector.

Looking to the future, more is required to connect the financial statements with the rest of the annual report and integrate them better within it. Therefore, ACCA is exploring related topics such as how innovation should be reflected in the reporting of intangibles, and the role of integrated reporting, <IR>, for instance, within the conceptual frameworks for reporting. These are just some of the topical areas to which accounting standard setters and regulators are turning their attention.

In the development of future corporate reporting, the interaction between accountants in business and practice with academics, such as that provided by the FARSIG symposium, is as important as ever. Therefore, I extend ACCA's thanks to the FARSIG for organising the conference, Silvia Gaia, chair of the FARSIG, for facilitating the brilliant discussion and to Simone Aresu, Penny Chaidali, Omiros Georgiou, Mike Jones, Andrea Melis and Luigi Rombi for providing this discussion paper based on the event.

1. Introduction

As 2022 began, the world continued to face an extraordinarily turbulent social, economic and political scenario. The pandemic crisis persisted. And the world continues to struggle with its economic and societal consequences.

The effects of COVID-19 on public health continue to be felt and pose a critical worldwide threat. COVID-19 vaccination has progressed steadily, but unevenly around the world. Disparities in progress on vaccination has created an uneven economic recovery that risks compounding pre-existing social fractures and geopolitical tensions. Vaccination and accelerated digitalisation enabled some countries to recover rapidly from the crisis, but many others are still struggling (World Economic Forum 2022). This clearly manifested in the unequal access to COVID-19 vaccines among countries (and, to some extent, within countries), and also in the uneven performance of large companies with broad access to financial markets and capital, contrasted to the performance of small and mid-sized enterprises, which, with limited financing options, were generally more exposed to the crisis (International Monetary Fund 2021).

Existing geopolitical and geo-economic tensions have been given renewed momentum by the pandemic crisis, with nationally focused political agendas (World Economic Forum 2022). Geopolitical tensions are spilling over into the economic sphere. Competition between the US and China is increasing. China's vaccine diplomacy and external financing strategy have allowed it to continue to expand its influence throughout developing countries, which may increasingly look to China for financial, technological and scientific support. Competition is no longer restricted to the exercise of 'soft power'. Other states are also showing greater willingness to project power abroad, with Russia's case and the war in Ukraine and its dramatic social, political and economic consequences, both within Ukraine and worldwide. Protectionism, inflation, supply chain disruptions, and debt are the result of this time of disruption, which has widened pre-existing societal fragmentation within and between countries, damaging economic and social structures and exposing weak safety nets. 'Social cohesion erosion', which affects social stability, individual well-being and economic productivity as a result of persistent public anger, distrust, lack of empathy, marginalisation of minorities, and political polarisation, is, indeed, globally, the risk that has most increased since the start of the pandemic crisis (World Economic Forum 2022).

Despite the dramatic social, economic, and political scenario, the most alarming long-term threats are all environmental. 'Climate action failure', 'extreme weather'

and 'biodiversity loss' rank as the three most potentially severe risks for the next decade (World Economic Forum 2022). COVID-19-related lockdowns caused a global dip in greenhouse gas (GHG) emissions but upward trajectories quickly resumed. Social, economic, political and environmental challenges are interconnected. On the one hand, there is clear evidence that rising physical risks (eg melting land ice, rising sea levels and prolonged periods of extreme heat and cold) and their associated consequences for human and economic systems are intensifying momentum for the transition (eg Ricke et al. 2018). Extreme weather events (cold fronts, fires, floods, heat waves, windstorms) are likely to cause loss of human life, damage to ecosystems, destruction of property and/or financial loss. On the other hand, post-COVID-19 recovery measures often neglect the green transition in favour of short-term social and economic stability (eg O'Callaghan and Murdock 2021). The economic rebound following the impact of the pandemic crisis has seen energy demand outstrip supply (eg Clark 2021). This is exacerbated by the energy crisis due to the war in Ukraine, and the related supply chain disruptions, resulting in sharply increased energy prices, even as the world turns against fossil fuels.

GOVERNMENTS, BUSINESSES AND SOCIETY ARE AT A FUNDAMENTAL CROSSROADS, FACING THE NEED TO TRANSITION AT VARYING PACES TO PREVENT SHORT-TERM DISRUPTIONS FROM OFFSETTING LONG-TERM GAINS
(WORLD ECONOMIC FORUM 2022).

Governments, businesses and society are at a fundamental crossroads, facing the need to transition at varying paces to prevent short-term disruptions from offsetting long-term gains (World Economic Forum 2022). Governments will probably face backlash whether climate action is too slow or too aggressive. Slow action could trigger further radicalisation among those communities who argue that governments do not act fast enough, while steeper transition costs (eg high and quick increases in the price of carbon and fossil fuels) could weaken public support for fast action. Similarly, the transition could lead to 'stranded' assets in carbon-intensive industries, but corporations

perceived as lagging (or, worse, as complicit in slowing down governments' climate action) could lose consumer and investor confidence. They could also face additional state intervention and liability risk through judicial action, reducing their long-term sustainability. There is a need for a 'socially just' and 'financially viable transition' that will make the consequences bearable for large parts of societies. Restoring trust and fostering cooperation within and between countries will be crucial to addressing these risks and preventing the countries of the world from drifting further apart (World Economic Forum 2022).

It was within this complex and unstable social, economic and political scenario that the latest annual BAFA FARSIG symposium on the 'Future of Financial Reporting' was held, with the support of ACCA, on a virtual platform, on 14 January 2022. Against a background of continuing major social, economic and political instability, risks and issues, there have also been continuing developments and challenges in how companies account for and report their overall performance. This has occurred in an area that is becoming mainstream in the accountancy profession and academia: sustainability accounting and reporting. The themes discussed at the symposium were significantly influenced by the increased environment-related risks and the extremely complex and disrupted overall social, political and economic scenario, which is also affecting the role of the bodies involved in standard setting. Indeed, the principles, concepts and elements that characterise how companies do (and should) report their overall performance are still under discussion. Relatively old questions (eg which stakeholders need what information? What information do investors need?) were debated together with relatively new questions: How are companies approaching data collection for sustainability reporting purposes? How are sustainability topics (and metrics) considered material? What are the roles of internal audit involvement and independent third-party assurance in the sustainability reporting process? Informed decision-making and proper stewardship of all the different resources (financial, natural, human, etc.) employed in a company's activities could, therefore, be enhanced, to the extent accounting is able, by using all its potential, to provide an answer to these critical questions.

The title of the 2022 FARSIG symposium was 'The Future of Financial Reporting: the development of global sustainability standards and their impact on corporate reporting'. This symposium brought together a number of high-profile speakers to discuss current issues and new developments and their effect on the future of financial reporting. Five such speakers attended the online symposium and provided their original views on significant issues in sustainability accounting and reporting. They highlighted the future opportunities and challenges that corporate reporting is facing from the perspectives of international standard setters, practitioners (in industry and the profession), and academia.

For 2022, the symposium provided a forum for both practitioners and academics to hear and engage in a state-of-the-art debate with the following well-informed speakers, listed in alphabetical order.

- **Carol Adams**, Professor of Accounting, Durham University, 'Key considerations for sustainability reporting standard setters'.
- **Diogenis Baboukardos**, Associate Professor, Audencia Business School, 'Climate change reporting and capital markets: Where we are. Where we are heading to'.
- **Harry Briggs**, who, at the time of presenting in the symposium, was Project Lead for ESG Reporting, Accounting for Sustainability (A4S), 'ESG reporting – what are corporates doing?'
- **Jeffrey Hales**, Professor of Accounting, University of Texas, Austin, who was chair of the Standards Board at the Sustainability Accounting Standards Board (SASB) (when the symposium took place), 'Sustainability Disclosure and Capital Markets'.
- **Rachel Neill**, Chief Impact Officer, Connected Asset Management, 'Sustainability reporting: considerations for market players'.

The symposium was held using, as in the previous year, a virtual platform to foster worldwide attendance and participation. The five presentations, which had different durations depending on the topic addressed, were followed by an informed and lively panel discussion, moderated by the chair of FARSIG, Silvia Gaia, where the speakers shared their wisdom by answering a series of questions raised by the symposium audience.

Issues raised by the symposium

Before introducing the arguments raised in the presentations given during the symposium, the main themes presented and debated at the symposium are briefly summarised in Table 1.1, which also presents the key symposium themes since the first event in 2008. During this year's symposium there was a critical examination of some of the key questions concerning sustainability accounting and reporting.

- What role do standard setters play in achieving harmonisation in sustainability reporting?
- How are companies approaching data collection for sustainability reporting purposes?
- How are sustainability topics (and metrics) considered material?
- What is the role of internal audit involvement in the sustainability reporting process?
- What is the role of independent third-party assurance?
- What is the role of sustainability reporting in capital markets?

- What is the role of sustainability reporting for market players?
- How can companies improve sustainability reporting?
- What are the challenges that will arise from disclosure regulation?

The speakers provided their informed views on these issues, which continue to present standard setters, practitioners and academics with important challenges. The pace of change is accelerating and is unlikely to reduce. If, for example, some years ago, some market players were questioning whether climate change was

real, this is no longer the case. The common themes that emerged during the event were discussed in more depth during the panel discussion.

Table 1.1. reports a summary of the key topics raised at the ‘Future of financial reporting’ symposia since their establishment in 2008. The main themes covered in 2022 were: sustainability reporting standard-setting; the actual (and potential) impacts of sustainability reporting for market players; the role of sustainability disclosure in capital markets; climate change reporting and capital markets; and ESG reporting.

TABLE 1.1: Overview of key symposia themes, 2008–2022

2022	<ul style="list-style-type: none"> • Harmonisation in sustainability reporting standard setting • Materiality in sustainability reporting • Sustainability reporting in capital markets • Sustainability reporting for market players • Climate-related disclosures prototype • A roadmap to improving sustainability reporting 	2021	<ul style="list-style-type: none"> • The endorsement board • Reliability of financial reporting in extraordinary times • Narratives in corporate annual reports • The standard setting for financial and non-financial information 	2020	<ul style="list-style-type: none"> • Accounting regulation for non-financial information • Accounting for intangibles • Accountancy profession • Integrated Reporting
2019	<ul style="list-style-type: none"> • Conceptual Framework • Narratives in corporate annual reports • Accounting in the public sector 	2018	<ul style="list-style-type: none"> • The role of accounting in shaping capitalism • The role of Big Data and artificial intelligence (AI) in corporate reporting and investment • Digital reporting • Conceptual Framework • Integrated Reporting 	2017	<ul style="list-style-type: none"> • The evolution of corporate reporting • Corporate reporting vs financial reporting • Financial narratives • Accountancy profession • Future of Chinese and Western auditing
2016	<ul style="list-style-type: none"> • The use of information by capital providers • Conceptual Framework: measurement • Transparent corporate reporting • Integrated Reporting and the capital markets • The perceived role of the accountant in the society 	2015	<ul style="list-style-type: none"> • Accounting for goodwill • Corporate governance • Integrated reporting • Sustainability accounting • IASB and politicisation of standard setting 	2014	<ul style="list-style-type: none"> • Conceptual Framework, measurement • EU Accounting Directive for SMEs • UK FRS: tax implications • The use of information by capital providers • Compliance with mandatory disclosure requirements
2013	<ul style="list-style-type: none"> • Conceptual Framework, recognition and measurement • Regulatory Framework, governance and ‘balanced reporting’ • International Financial Reporting Standards (IFRS) adoption and national accounting practices • Nature and complexity of crises 	2012	<ul style="list-style-type: none"> • Asset and liability recognition • Measurement, fair value and confidence accounting • Regulatory Framework and complexity of financial statements • Fraud and accounting scandals 	2011	<ul style="list-style-type: none"> • Complex financial instruments, asset and liability recognition and measurement • Regulatory environment, complexity of financial statements • IFRS adoption and political interface • Carbon accounting
2010	<ul style="list-style-type: none"> • The role and need for global accounting standards • Understandability and usefulness • Political concerns • Sustainability accounting 	2009	<ul style="list-style-type: none"> • Regulatory change • The convergence of global standards through IFRS • Fair value • Corporate governance • Asset securitisation and the ‘credit crunch’ 	2008	<ul style="list-style-type: none"> • Conceptual Framework • Income measurement • Fair value • Financial communication

Sources: Jones and Slack 2008; 2009; 2010; 2011; 2012; 2013; Jones et al. 2014; 2015; 2016; 2017; 2018; 2019, 2020, 2021.

Some of the most important developments that have occurred in accounting and corporate reporting in relation to sustainability standards during 2021 and 2022 are discussed below.

The harmonisation of standards for sustainability accounting and reporting is of great importance in enhancing the comparability, consistency and, ultimately, the usefulness of the sustainability-related information contained in corporate reports (eg sustainability reports). Many global businesses and investors have called for clarity and simplification in the corporate sustainability disclosure landscape, which has become very complex over time.

In response, in June 2021 the International Integrated Reporting Council (IIRC) and the SASB merged into the Value Reporting Foundation. Then, in November 2021, the IFRS Foundation announced its plans for establishing the International Sustainability Standards Board (ISSB) to develop a comprehensive global baseline of high-quality sustainability disclosure standards to meet investors' information needs. The IFRS Foundation also announced its plan to consolidate with the Value Reporting Foundation. Effective on 1 August 2022, the Value Reporting Foundation consolidated into the IFRS Foundation, which established the first ISSB. SASB standards are now under the oversight of the ISSB. The latter plans to build upon the SASB standards and embed an industry-based standards development approach into its standards development process. The aim is to guide companies' disclosure, to their investors, of financially material sustainability information, ie information that is reasonably likely to affect the financial performance of the typical company in an industry. Meanwhile, the ISSB has encouraged preparers and investors to continue fully supporting and using the SASB Standards until they are succeeded by the IFRS Sustainability Disclosure Standards.

The ISSB's agenda for 2022 includes several projects, because all active SASB standards projects (Greenhouse Gas Emissions in Marine Transportation, Human Capital, etc.) were transferred to the ISSB. Importantly, in March 2022, ISSB launched a consultation on its first two

proposed standards: the Exposure Draft IFRS S1 on General Requirements for Disclosure of Sustainability-related Financial Information, and Exposure Draft IFRS S2 Climate-related Disclosures. Both proposals were developed in response to requests from G20 political leaders and the International Organization of Securities Commissions (IOSCO) for, among other things, enhanced information from companies on sustainability-related risks and opportunities. Specifically, the Exposure Draft IFRS S1 General Requirements for Disclosure of Sustainability-related Financial Information proposes overall requirements for a corporate entity to disclose sustainability-related financial information about its significant sustainability-related risks and opportunities. It also proposes that a corporate entity provides the market with a complete set of sustainability-related financial disclosures. The Exposure Draft IFRS S2 Climate-related Disclosures proposes the establishment of reporting requirements for a corporate entity to disclose information about its exposure to significant climate-related risks and opportunities, enabling users to assess the effects of these risks and opportunities on the entity's enterprise value; to understand how the entity's use of resources (and corresponding inputs, activities, outputs and outcomes) support its response to and strategy for managing its significant climate-related risks and opportunities; and to evaluate the entity's ability to adapt its planning, business model and operations to those risks and opportunities. At the time of writing, the ISSB is redeliberating both proposals following feedback on the Exposure Drafts received during the consultation, which ended in July 2022.

This changing scenario in sustainability reporting is influencing companies, preparers and users of corporate reports as well as the accountancy profession and all stakeholders (including academics). Many of these issues were, either directly or indirectly, presented and discussed during the 2022 'The Future of Financial Reporting' symposium. Each of the five speakers offered a range of informed perspectives. The issues specifically addressed during the 'virtual' symposium are now presented, and then discussed, in more depth in the following sections.



MANY GLOBAL BUSINESSES AND INVESTORS HAVE CALLED FOR CLARITY AND SIMPLIFICATION IN THE CORPORATE SUSTAINABILITY DISCLOSURE LANDSCAPE, WHICH HAS BECOME VERY COMPLEX OVER TIME.

2. Symposium papers

(in alphabetical order by speaker)

2.1 Key considerations for sustainability reporting standard setters

Carol Adams

Professor Carol Adams is an internationally recognised researcher in corporate accounting and reporting and its role in the relationship between the business, society and the environment. Her research has been published in *Accounting Auditing & Accountability Journal*; *Accounting, Organizations and Society*; *The British Accounting Review* and *Critical Perspectives on Accounting*, among other journals. Carol was a member of the IIRC's capitals collaboration group and the founding editor of the *Sustainability Accounting, Management and Policy Journal*. She has written several professional reports, has made submissions to several public consultations, and writes on her website <https://drcaroladams.net/>.

Carol started by highlighting the key questions for sustainability reporting standards setters: How does corporate reporting and governance over report content influence corporate responses to sustainable development? Which stakeholders need what information? What information do managers want to report? What information do investors need? She highlighted that although she had listed these in order of importance, the last one is where there has been a lot of attention. She also pointed out that there are no investment returns on a dead planet, and although we can try and take shortcuts to get toward investors' needs, at the end of the day, everyone needs sustainable development.

SHE ALSO POINTED OUT THAT THERE ARE NO INVESTMENT RETURNS ON A DEAD PLANET, AND ALTHOUGH WE CAN TRY AND TAKE SHORTCUTS TO GET TOWARD INVESTORS' NEEDS, AT THE END OF THE DAY, EVERYONE NEEDS SUSTAINABLE DEVELOPMENT.

Carol pointed out that unintended consequences of sustainability reporting standards could be substantially negative. Carol then discussed the results emerging from a study that she recently published with Dr Abhayawansa (Adams and Abhayawansa 2022) in relation to the call

for harmonisation that coincided with the pandemic. Specifically, she identified and discussed three myths that are used to support this call for harmonisation: i) claims that there is an urgent need for a global sustainability standard-setting body, which the IFRS Foundation should set up; ii) assertions that financial materiality should be paramount in the determination of what to disclose and iii) the idea that the focus should be on the use of consistent and comparable metrics as a priority. She clarified that she is not suggesting that the IFRS Foundation does not have a role to play, but that we need to do much more to incorporate sustainable development issues. She underlined the impacts of these issues beyond those on asset valuations and liabilities. She added that there is a need for consistent and comparable metrics, and this must be a priority since investors like the metric idea owing to its simplicity. Nonetheless, she emphasised the need to be careful about what we wish for in calling for and focusing on metrics, because the chosen metrics influence the internal processes of an organisation one way or another and, in her opinion, they influence the extent to which the organisation is aligned with sustainable development.

Carol then discussed how identifying material impacts on sustainable development is critical for identifying financial matters, enhancing companies' engagement with the sustainable development goals (SDGs), enhancing stakeholder trust, and enhancing investor decision-making. Carol also discussed how academics responded to the IFRS consultation paper on sustainability reporting. Specifically, she noted that 72% of those responses were opposed to the IFRS Foundation trustees' proposals on key issues (Adams and Mueller 2022). She underlined that the dissenting majority collectively has substantial research records in sustainability reporting and its outcomes for organisations and society. Carol illustrated the key concerns of the opposers, which are: the lack of analysis and evidence on which the proposals were based; being dismissive of this Global Reporting Initiative (GRI) approach; that financial materiality alone will not satisfy investors' needs; and that sustainable development requires a multi-stakeholder approach, so the ISSB should focus on incorporating sustainability matters into standards set by the IASB.

Carol then discussed her as yet unpublished work on the integration of sustainable development and the SDGs into organisational decision making.

2.2 Climate change reporting and capital markets: Where we are. Where we are heading to.

Diogenis Baboukardos

Diogenis Baboukardos is an associate professor at Audencia Business School (France). He is also a research affiliate of the Adam Smith Observatory of Corporate Reporting Practices at the University of Glasgow, a visiting research fellow at the University of Essex, and secretary of the BAFA FARSIG, and he serves in editorial positions for several academic accounting journals.

Diogenis has extensively researched issues about corporate reporting and particularly companies' sustainability and climate change reporting. His research has been published in various academic journals and funded by professional bodies and regulators (such as the UK Financial Reporting Council (FRC) and – ACCA). He is also involved in consultancy projects about the application of the UN's SDGs in local councils in the UK.

Diogenis' presentation at the symposium offered a state-of-the-art review of research in climate change reporting and capital markets. His discussion focused on the research evidence showing how capital markets react to climate change reporting and outlined the research developments about the ISSB climate-related disclosures prototype. Diogenis also presented findings from research on companies' disclosures on climate change reporting in extractive industries, and indicated future challenges for climate change reporting.

Do participants in capital markets care about climate change?

According to a 2021 survey of more than 400 institutional investors, there is a strong belief that climate risk reporting is as important as financial reporting, with almost one-third of respondents attributing to it higher importance than financial reporting (Ilhan et al. 2021). Similarly, as Diogenis explained, findings from a PwC study (2021) showed that ESG is at the core of investors' decision-making, with the reduction of Scope 1 and 2 GHG emissions being first of the ESG issues, as highlighted by 65% of respondents and the reduction of Scope 3 GHG emissions ranking fifth in respondents' priority list (34%).

Diogenis then presented findings from archival research that has examined the relevance of carbon emissions to investment decision-making. Matsumura et al. (2014) examined the effects of carbon emissions and the voluntary disclosure of carbon emissions on firm value. The results indicate that higher carbon emissions are negatively associated with firm values, whereas the act of disclosing emissions has a positive effect. The negative association between higher carbon emissions and firm value was also confirmed by Griffin et al. (2017).

THE RESULTS INDICATE THAT HIGHER CARBON EMISSIONS ARE NEGATIVELY ASSOCIATED WITH FIRM VALUES, WHEREAS THE ACT OF DISCLOSING EMISSIONS HAS A POSITIVE EFFECT.

Nonetheless, in their study, the act of formally disclosing emissions did not affect firms' equity value. Research by Clarkson et al. (2015) showed that total carbon emissions are negatively associated with firm values but when decomposing to the portion of a firm's free annual allowances from the EU Emissions Trading Scheme and the portion that exceeds these allowances, it is only the latter component that is priced negatively.

As Diogenis argued, one cannot easily disentangle whether the effect of carbon emissions examined in the aforementioned stream of research is related to the companies' reporting practices or to better carbon performance. The reason for that is that without regulation that will require all companies to disclose their carbon emissions, only companies that have incentives to do so will disclose. Further, surveys show that investors find existing climate disclosures uninformative and management discussions on climate risks and quantitative information on these risks are imprecise, while the current quality of ESG reporting is found good by only one-third of investors.

ISSB and its climate-related disclosures prototype

Diogenis' presentation discussed the IFRS Foundation's formation of the ISSB, in November 2021, to develop high-quality global sustainability disclosure standards to address investors' information needs. Earlier, in March 2021, a Technical Readiness Working Group (TRWG) had been formed to facilitate a smooth transition to the ISSB. Along with the announcement of the creation of the ISSB in November 2021, the TRWG published a climate-related disclosures prototype. According to IFRS Foundation (2021: 7), the prototype *'would apply to climate-related risks that the entity is exposed to, including but not restricted to physical and transitional risks, and climate-related opportunities available to and considered by the entity'*.

Diogenis explained that within the prototype, one could identify four main disclosure areas: governance; strategy; risk management; and metrics and targets. While the information on the first three disclosure pillars is narrative, usually found at the front end of an annual report, the metrics and targets pillar relate to more quantitative measurements. Diogenis pointed to the complexity of the prototype, considering the lengthy technical protocols (581 pages) that accompany the actual prototype because of the diverse reporting needs of various sectors in different industries.

Climate change reporting in extractive industries – an ACCA and Adam Smith Observatory of Corporate Reporting Practices study

Before the release of the prototype, Diogenis and a team of researchers from the Adam Smith Observatory of Corporate Reporting Practices, with the support of ACCA, had conducted a comparative study of the 2019 and 2020 annual reports of 56 publicly listed companies that apply IFRS, in the extractive industries. The study's sample included some of the largest polluters worldwide: companies with the most significant carbon emissions during the period 2016–18, measured by the mean value of their Scope 1 and Scope 2 emissions. The findings of the Baboukardos et al. (2021) study are relevant to the proposals of the ISSB prototype. For instance, drawing on the prototype, the strategy pillar emphasises the importance of reporting on the business model and particularly on how the business model addresses issues related to climate change. According to Baboukardos et al. (2021), in 2020, almost 90% of the companies (50) in the study's sample identified issues linked with climate-change risk; 44 companies considered these issues to be core components of their business model narrative, and half of these companies (22) reported international initiatives for climate change, such as the 2015 Paris Agreement, in their business model disclosures. As Diogenis commented, the findings of the 2020 annual reports' analysis showed an improved trend since the 2019 sample, where 43 companies explicitly discussed their business model while 34 recognised the need to address the climate-change risk in their business model and only 13 considered international initiatives for combating climate change in the discussion of their business model.

Regarding reserves and resources statements, the 2021 study found that 41 companies (73% of the sample) disclosed a reserves/resources statement accompanied by relevant numerical data in 2020 compared with 33 (59%) companies in 2019 (Baboukardos et al. 2021). The findings in both 2020 and 2019 revealed that none of the companies in the samples offered an evaluation of their climate-change risks in relation to their projects. The study also highlighted that 26 companies (46%) disclosed a scenario analysis which considered climate change risks in 2020 – an improvement compared with the 13 companies (23%) providing a scenario analysis in 2019. Nevertheless, only 9 out of the 26 companies in 2020 reported specific quantitative data on relevant climate-change factors, assumptions and impacts within their scenario analysis (Baboukardos et al. 2021).

Baboukardos et al. (2021) show that, in 2020, the vast majority of companies in the extractive industries provided some metrics, with carbon emissions being the most typical example. Diogenis stated that very few companies (5 out of 56) did not disclose information about their carbon emissions. Of the 51 companies that reported climate change metrics, only 3 (5%) managed to integrate

this set of information fully with financial data such as key performance indicators (KPIs): 15 companies (27%) accomplished a partial integration of climate change and financial information, while the remaining 33 companies (59%) reported climate change metrics separately from their financial information (Baboukardos et al. 2021).

Discussing the back end of the annual report and, specifically, the financial statements, Diogenis stated that the 2021 study showed that companies did not engage much with climate change reporting. In particular, the number of companies discussing climate change risk implications was significantly smaller than those that disclosed climate change information at the front end of their annual report (Baboukardos et al. 2021).

Diogenis mentioned that, in their accounting policies notes for the year 2020, only 18 companies deemed climate change to be a critical factor in their assessment and estimations of uncertainty for provisions and contingent liabilities (Baboukardos et al. 2021). This is a minor improvement since 2019 (17 companies). Despite the significant increase in the number of companies that considered climate change as an essential element of their policies for impairment testing (from 10 companies in 2019 to 17 companies in 2020), as Diogenis pointed out, the total number remains small.

Climate change has caught some attention in the auditors' reports. In 2020, the audit report of 13 companies (compared with 8 in 2019) linked climate-change risks with key audit matters (Baboukardos et al. 2021).

All in all, the research conducted by Baboukardos et al. (2021) suggests that companies in the extractive industries disclose, to some extent, information about climate change, though their disclosures lack details. Considering that these companies are the largest polluters, Diogenis noted that one would expect the level of climate change-related disclosures by companies in other sectors to be even lower, making the prototype adoption even more challenging.

Future challenges

Discussing the challenges of adopting the prototype, Diogenis pointed first to the issue of the measurement of carbon emissions. As he mentioned, measuring Scope 1 emissions is relatively straightforward as regulators provide detailed lists of emissions factors for the different types of fuel used in owned or controlled sources. Measuring Scope 2 emissions is more challenging since it is not possible to trace the type of fuel mix used by a company to produce consumed energy back to a particular generation facility (Brander et al., 2018). Also, in this case there are problems with dual reporting (ie reporting Scope 2 emissions using location and market-based methods). The measurement of Scope 3 emissions is complicated as it results from sources not owned or controlled by the company, such as extraction and

production of purchased materials, transportation of purchased fuels, and use of sold products and services.

The second challenge relates to companies' selection of transition climate change risk reporting over physical climate change risk reporting. In earlier literature, researchers have focused on the transition effect, which is linked to additional reputational and litigation risks (see, for example, Schiemann and Sakhel 2019). Nevertheless, there is a gap in knowledge of physical risks due to the limited information provided by companies, primarily through their disclosures of corporate social responsibility (CSR) activities.

Researchers who find existing disclosures on climate risks 'uninformative', with their associated quantitative information being 'imprecise', call for standardised and mandatory climate risk reporting (Ilhan et al. 2021). Using the example of the UK's carbon emissions reporting, Downar et al. (2021) argue that such a mandate could have a real effect (ie lower carbon emissions) without adversely affecting the financial operating performance of the treated firms. Nonetheless, as Diogenis stressed, the example of China's 2008 mandate requiring firms to disclose CSR activities contradicts the above findings. Chen et al. (2018) found that in the case of China, the

mandate led to a decrease in profitability, with the cities most impacted by the CSR disclosure mandate experiencing a decline in their SO₂ emission levels and in their quantity of industrial wastewater. These findings, thus, present a third challenge – the different effects of the climate change reporting mandate on the financial performance of firms in other countries or regions.

Finally, according to Diogenis, the fourth challenge relates to the 'financialisation' of climate change.

As he mentioned, the study by Baboukardos et al. (2021) shows that companies in the extractive sector might find the potential impact of climate change beneficial for their operational performance and value. Nevertheless, other experimental findings showed that giving managers financial incentives to adopt climate-change-related actions has a negative effect on a company's overall performance in relation to climate change (see, for example, studies by Ioannou et al. 2016; Martin and Moser, 2016; and Church et al., 2019). In concluding his presentation, Diogenis stated that the challenge to be addressed relates to the regulation's primary purpose: is that to alter companies' behaviour in a way that will be more environmentally friendly or should it focus on capital markets' maintenance and enhancement?



2.3 ESG reporting – what are corporates doing?

Harry Briggs

In his career, Harry Briggs has focused on sustainability reporting and due diligence, dealing with the ins and outs of non-financial reporting within the accounting industry.¹

Harry started by pointing out that it is an exciting time for asset managers because private equity has greatly raised awareness on sustainability issues over the last 18 months. He also specified that private equity and asset management generally focus very much on the enterprise value aspect of sustainability. Even so, in his opinion, this is a great starting point. It is quite an exciting time to be working in that sector and seeing how this is playing out, especially on clients' requests for ESG due diligence on deals and several inquiries on sustainability reporting.

Harry stated that he believed there would be a lot of activity on sustainability, not only in the UK but also in Europe, in the 12 months following the symposium. He also added that the SEC is consulting on mandatory climate disclosure, and the US will catch up in a year or two. Harry also explained that he had the privilege of leading a project for Accounting for Sustainability (A4S), on sustainability reporting. As part of this process, he had engaged with many multinational companies and other stakeholders, resulting in many technical contributions to the field of sustainability reporting that helped him understand more about the process that multinationals are going through when implementing sustainability reporting.

Key points for implementing climate disclosure

Harry then outlined the focus of implementation by listing the key points to be considered. Specifically, he focused on the materiality, and the necessity of data collection, governance and creating a roadmap to better reporting.

Starting with materiality, Harry argued that any sort of best practice guidance for materiality can be broken down into several steps. Specifically, the consultation process should start from a high degree of stakeholder consultation followed by an analysis of results and an analysis of the likelihood of crystallisation and potential impact of risk events.

Harry specified that he voluntarily chose the word 'stakeholder' rather than 'shareholder' since we should not focus just on creditors and investors. In addition, he emphasised that the consultation process should include the opinions of internal and external stakeholders so as to cover a whole raft of different topics, many of which can be interconnected since various stakeholders may care about different aspects under the 'sustainability umbrella'.

Then, Harry highlighted the necessity of performing some form of analysis overlays to identify all those topics presented by stakeholders and choose those to be considered material. He outlined the necessity of identifying the potential impacts of those topics and the likelihood that such impact would occur and, as part of that process, of defining what each impact is and what that impact means to those involved in the process.

Current problems with sustainability reporting

Harry then proceeded by highlighting what was happening in practice. Specifically, he pointed out that many of his clients had not gone through the proposed process. Although Harry outlined some examples where firms have performed this process well, they have spent a lot of time, energy, and effort doing it. Despite this, for the most part this process was not done well, and what he saw happening was sustainability reporting teams deciding those items themselves rather than going through a consultation process. In addition, Harry noticed that any consultation firms did was most often with the investor relations team because they have a relationship with the investors, so the managers were trying to understand what their investors cared about. Harry pointed out that this process is flawed because it is entirely dependent on the investor relations team and their degree of engagement on sustainability with their investors. Nonetheless, Harry also noted that he had seen some excellent cases where investor relations teams had run specific roadshows to talk to investors about sustainability. In his opinion, where that happened, high-quality feedback would come through the investor relations team to the sustainability reporting team. Still, in many other cases the investor relations teams would not proactively raise sustainability with the investors. Harry thus stressed that when firms are doing this kind of consultation, the result is that the process starts from a flawed base that will not provide a complete list of sustainability issues to analyse.

On this point, Harry also noted the relevance of firms' output from the materiality process. Specifically, he saw that a relevant portion of corporations report a very high number of metrics. But Harry questioned the materiality of these metrics given that some companies list over 100 of them. While he allowed that it is conceivable that an organisation could be so large, complex, and varied that 100 metrics might be appropriate, he said it is nonetheless unlikely that most organisations would have 100 metrics that are all material.

Harry then proceeded to the data collection area, clarifying how firms are approaching sustainability reporting. Collection of sustainability data should be the same process as collection performed for financial reporting,

¹ At the time the Symposium was held (January 2022), Harry was a director of ESG reporting and advisory at KPMG. At the time of writing the discussion paper (November 2022), Harry is a Director/Founder at Terra Instinct Limited.

because now the users of the firm's sustainability report are making the same kinds of decisions and putting the same weight on the sustainability report as on the financial report. He stated that this has not always been the case. Still, increasing emphasis is being placed on the sustainability report. All the concerns a firm has about the completeness and accuracy of its financial report need to be duplicated for sustainability reporting.

ALL THE CONCERNS A FIRM HAS ABOUT THE COMPLETENESS AND ACCURACY OF ITS FINANCIAL REPORT NEED TO BE DUPLICATED FOR SUSTAINABILITY REPORTING.

Harry had found, when engaging with multinationals, that there were apparent gaps among organisations in the level of detail of documentation. From his experience, he noted that one must go through thorough documentation and control from the lowest level up. Harry added that data owners had collected the raw data. How that data is passed up through the organisation to the reporting team should be checked, as should the way the reporting team process the data into the summary metrics and how these metrics get into a report and get issued to the market. He clarified that one would need to do quite a lot of work to understand the process since it is rather flawed. Specifically, he had found that controls on sustainability data are minimal, and they focus on management reviews; typically, controls are analytical. As an example, he said that firms would look at the data for one period, compare it with another period and try to control for why a specific metric moved upward or downward, trying to rationalise that movement as part of the judgement of the individual who operates a control rather than being able to explain those differences.

He also continued to emphasise that the kinds of controls that firms could potentially automate were severely lacking. Many organisations have talked about doing it and moving sustainability reporting into a source-control-like environment. He also noted that processes need to have some level of governance over them. When asked about the process, the A4S participants' answer was emphatic: the audit and risk committee. Harry then specified that it is necessary for anyone with sufficient knowledge of sustainability reporting to be able to challenge the management and an external assurance provider or even an internal audit provider. Harry then noted that, in his experience, that was lacking.

Similarly, he continued, when exploring the role of internal audit involvement in the sustainability reporting process, he had noticed that it was severely limited. He specified that only a handful of A4S participants have engaged

with the internal audit over the process and control of sustainability reporting. The others, he continued, just had an engagement model with some concerns about the level of skill within the internal audit department to help them to review that process effectively. He then highlighted that he would like to see a massive uptick of internal assurance over the process performed by any company.

A roadmap to better reporting

Harry then showed a roadmap to better reporting involving different key points, such as upskilling, a proactive consultation, a parity with financial reporting and an improvement of resources dedicated to the process. In referring to the necessary upskilling, Harry specified that boards need to understand fully the rationale for sustainability reporting. Now, he argued, the starting point is making that link between sustainability and value creation, depending on the materiality approach he had discussed. In his opinion, this approach should be enough. Boards could go beyond that and adopt a more holistic sustainability approach, which would be fine, but in practice this would remain the one that will get the most traction with the board.

Harry then stressed the necessity of a proactive consultation. Specifically, he underlined that organisations need to revisit their materiality process and ensure sufficient consultation. He also noted that firms must identify which stakeholders they consider relevant users of sustainability reporting and perform a rationalisation of existing metrics so that quality exceeds quantity in the metrics adopted.

Harry also stated that, nowadays, there needs to be parity between sustainability reporting and financial reporting, understanding that all data matters because people make decisions using this information. In his opinion, a culture shift is needed throughout the organisation to recognise that firms now operate in an environment whereas much emphasis is being placed on sustainability performance as on financial performance. The quality of data and reporting needs to reach a standard where reasonable assurance can be obtained. This means that detailed process and control documentation, and engagement from the financial reporting team and internal audit are critical to achieving this. In his opinion, most firms are guessing some level of assurance and performing a sort of cherry-picking of metrics they know they could verify again.

Harry concluded by stressing the relevance of resource allocation in this process, since implementing all the above points would involve a significant investment of time and money. In his experience, many sustainability teams cite a lack of resources as a key restraining factor. Since part of the upskilling journey is to engage leadership and draw the link between sustainability performance and enterprise value, this process adds value to a business and must be viewed in that context.

2.4 Sustainability disclosure and capital markets

Jeffrey Hales

Jeffrey Hayles spoke as the Bake Chair in Global Sustainability Leadership, the Charles T. Zlatkovich Centennial Professor, the executive director of the Global Sustainability Leadership Institute at the University of Texas at Austin, and as the chair of the SASB.²

Jeffrey is a graduate of the accounting programme at Brigham Young University and received his PhD from Cornell University. He is a past editor of *Contemporary Accounting Research and Accounting Horizons* and has served on the editorial boards of several other journals. In 2009–2010 Jeffrey was a research fellow at the Financial Accounting Standards Board (FASB) in Norwalk Connecticut. In addition, he served as a member of the FASB's Advisory Council from 2016 to 2019. In the UK, he served on the FRC's 'Future of Corporate Reporting' advisory group. Also, from 2013 to 2020 he was a member of the Climate Disclosure Standards Board.

Jeffrey's speech at the symposium was about the role of sustainability disclosure in capital markets. Jeffrey began by saying that it is generally agreed that sustainable development is crucial to the survival of our planet. He noted that although we shouldn't rely on capital markets to be the only solution to sustainability issues, we also shouldn't ignore the role that they can play in making sustainable capital investments. For this, we need information, not only accounting information from a traditional revenue and expense perspective but also information that goes beyond that, enabling us to understand the activities in which the businesses are engaging.

Jeffrey explained that the aim of his presentation is to discuss the role of capital markets in sustainable development. He said he wanted, first, to outline a few trends currently happening in capital markets and then discuss the approach taken by the SASB.

Trends in the reporting landscape

Jeffrey showed recent trends in sustainability reporting. He first described how voluntary sustainability reporting has become the norm since the early 2000s for the largest 250 companies in the world and the 100 largest companies within 52 countries. Jeffrey noted that it seems that we have reached a steady state where most large companies, and increasingly smaller ones, are reporting on their sustainability. He then discussed the trend among the Standard & Poor's (S&P) 500 companies of mentioning standards in their sustainability reports. He noted that since 2012 there has been particular use of the standards by the SASB and the Taskforce on Climate-related Financial Disclosures (TCFD), which has been directed by demands from the investor community.

Two Examples: The role of capital markets and the need for industry tailoring

Jeffrey proceeded to discuss two examples of recent trends in sustainability reporting:

The first example relates to the requirements for 10-K reporting that the SEC mandates be filed by public companies in the US. Presenting the list of items required, Jeffrey focused on the item 'Mine Safety Disclosures', specifically for companies that own or operate mining operations. Jeffrey explained that in the US, since the 1970s, there has been a mine health and safety administration regulatory agency that oversees the safety of mine facilities and their employees. Since the early 2000s, this agency has posted its findings publicly on its website, usually within 24 hours. The Dodd–Frank Act in 2000 mandated that companies also include this information in their financial reports. This was explicitly motivated by the intention of improving safety rather than aiding investors in assessing financial performance.

Jeffrey went on to present some graphs from Christensen et al. (2017) showing the safety citation rates and injury rates under the MINER Act and under the Dodd–Frank Act over a period of 10 years. The graphs, interestingly, show that although there was not much change in these rates following the MINER Act, the rates declined once the information was included in the annual reports. Disclosure in annual reports is thus conducive to improvements in the health and safety of the companies' employees. The graphs also show that there is a decline in labour productivity for the same period, however, demonstrating the trade-off between improving the safety of employees and their productivity. Jeffrey presented the statistics from the paper showing that in the pre-Dodd–Frank era when information was required by a regulatory agency and publicly disclosed, the capital markets did not react to the information. In the post-Dodd–Frank era, when information has also been provided in annual filings, there has been a negative market reaction to the imminent danger orders. There is also evidence that the labour productivity trade-off is being offset by managers who are trying to make sure that they don't have negative investor reactions to this information.

The paper's findings on the mutual fund ownership sensitivity to imminent danger orders were also discussed. There is some evidence that in the pre-Dodd–Frank era, mutual funds were shifting their holdings in response to imminent danger orders, suggesting, to some degree, that sophisticated investors were able to obtain the information from the agency website and respond to it. In practice, this response did not lead to an immediate or measurable negative capital market reaction and thus, this information did not have a strong disciplining effect.

² At the time of writing the report, Jeffrey's position has changed since he is no longer the Chair of SASB but a member of the International Sustainability Standards Board (ISSB), appointed by the IFRS Foundation Trustees (effective July 2022).

Nonetheless, the statistics show that the shift in holdings doubled in the post-Dodd–Frank era. Jeffrey commented that the findings overall demonstrate that markets can augment regulatory efforts and that governments need to act as a coordinating body in the identification of what is needed for sustainable development. He also repeated that although we can't expect the capital markets to do everything, we should also not ignore that providing value-relevant information to investors can help them to make better investments and can also lead to very real positive impacts. Jeffrey added that disclosing any bit of information will not necessarily lead to this reaction, but it will if it is something that the markets believe is relevant.

WE SHOULD ALSO NOT IGNORE THAT PROVIDING VALUE-RELEVANT INFORMATION TO INVESTORS CAN HELP THEM TO MAKE BETTER INVESTMENTS AND CAN ALSO LEAD TO VERY REAL POSITIVE IMPACTS.

The second example discussed by Jeffrey relates to applying an industry-specific approach to thinking about sustainability. Climate risk is a good example in this case as it manifests itself through transition and physical risks and depends heavily on the types of activities in which companies engage. Carbon Disclosure Project (CDP) data shows us that 85% of GHG emissions come from relatively few industries, such as power utilities, gas exploration companies, airlines, chemicals companies, and so on. Jeffrey commented that this is important as it shows that we need to take into account the key business activities of companies when emphasising achieving 'net zero' emissions. The SASB's Climate Risk Framework focuses on financial impacts for cost structure, revenue growth, liabilities, asset impairments, etc. Jeffrey presented some examples of what SASB standards ask automobile companies to disclose, such as the sales-weighted average passenger fleet fuel economy by region. Such requirements are based on what would be discussed in a boardroom about the design of automobiles and issues that concern investors.

Overview of SASB standards

Jeffrey went on to present the approach that SASB takes in developing standards for sustainability. He first noted that the standards focus on financial materiality because they are aimed at providing information that would be useful to the decisions of investors. Cost-effectiveness for the companies providing the information is another important consideration. Standards developed for specific industries are based on academic research and news reports. Overall, the standards are aimed at improving the quality of the information in the marketplace and are thus based on evidence of what matters to investors.

The research underlying the SASB standards begins with a universe of ESG issues. The five broad dimensions considered in developing the standards are: social capital; human capital; business model and innovation; leadership and governance; and environment. There are 26 high-level themes underlying these five dimensions. For example, themes such as GHG emissions and air quality relate to the environmental dimension. SASB standards are then developed by identifying the issues most likely to be financially material for each of 77 industries across 11 different sectors. For example, issues such as coal operations and construction materials relate to the extractive industry. Industry-specific disclosure topics include detailed guidance on how to produce accounting metrics that give overall support to performance reporting by companies.

Jeffrey finished his presentation by discussing the increasing use of SASB standards globally: 55% of the S&P Global 1200 are now using the standards and about half of all the companies are outside the US. Jeffrey concluded that, although much has been achieved, there is still a long way to go in getting high-quality disclosure for the key issues that relate to enterprise value creation over the longer term and for that information to be directly comparable between companies and to be easily accessible to investors. Referring back to the example of mine safety, Jeffrey repeated that it demonstrates how capital markets can play a vital role in supporting sustainable development.

2.5 Sustainability reporting: considerations for market players

Rachel Neill

Rachel spoke as chief impact officer at Connected Asset Management. She is currently responsible for measuring and reporting on the social and environmental impact of the investments made by Connected. Previously, Rachel was head of sustainable investment at Smart Pension, a technology-based master trust. While in this role, alongside the trustees, she developed and implemented smart responsible investment strategies, including smart climate policy. Before this, she held roles in product design, credit analysis and asset management at various global banks. She has also championed diversity and inclusion in her roles and leads this work at Connected Asset Management. Rachel is a chartered financial analyst (CFA) charter holder and a member of the CFA Institute. She is an active volunteer at the CFA UK Society, including contributing to the Society's response to the FCA's climate reporting proposals.

As Rachel explained, Connected Asset Management's mission is to take impact investing from niche to mainstream. The company focuses on pension-type investments that have a positive and measurable impact on the planet and society. Connected is also a certified B Corp (one of the 100 asset managers worldwide to have achieved this status), and thus goes through quite a rigorous assessment, as the company has to report and measure various KPIs and prove that its business is being used as a force for good.

During the symposium, Rachel spoke on the actual and potential impacts of sustainability reporting for market players.

She described the reporting journey in financial markets in relation to the pace of change, focusing on climate and the challenges ahead. Rachel stated that actions on climate change should be the focus, as climate change is the most serious risk humanity is facing, with different impacts on society (eg mass migration due to food shortage).

The pace of change is accelerating

Rachel argued that the pace of change is accelerating, and this will continue.

At the start of the century, some investment fund trustees commonly questioned whether climate change was real, but this is no longer the case. Starting from 2004, when the principle 'who cares wins' was dominant, many changes have occurred. For instance, in 2006, the Principles for Responsible Investment (PRI) launched an initiative that involved 100 signatories and US\$10 trillion of assets under management. In the same year, the Stern report (Stern 2006) explored the economic challenges of climate change (eg unabated climate change could cost the world at least 5% of GDP each year). After 2006, two

important events affected financial markets: the 2008 global financial crisis and the 2020 COVID pandemic. Both crises, Rachel said, have highlighted the interdependence between societies, economies and financial markets and shown that financial markets cannot be seen as isolated, but should be seen as connected with wider society and with the world. Then, importantly, there has been the 2015 Conference of the Parties (COP) 21 and the Paris Agreement. Also, in the same year, the TCFD was created by the Financial Stability Board (FSB) and then, in 2017, the UN Environment Programme (UNEP) Finance Initiative (FI) began a series of 'TCFD Pilot Projects' for banks, investors, and insurers. COP 26 in 2021 has also helped to find the right framework for a green, net-zero finance strategy. According to the latest TCFD status report (TCFD 2021), mentioned by Rachel, more than 2,600 companies have expressed their support for the TCFD recommendations, an increase of over one-third since the 2020 status report (TCFD 2020), so TCFD recommendations are getting quite a lot of momentum.

Consultations specifically targeted at the financial sector are also growing in number, as Rachel explained. For instance, in 2018 the UK's Financial Conduct Authority (FCA) began its work on climate-related disclosures and the Department for Work and Pensions (DWP) asked pension schemes to start considering financially material factors, including ESG and climate change. In 2020, the UK updated the stewardship code (FRC 2020) and there have also been more consultations by the DWP and the FCA. As an example of the growing interest of regulators, Rachel argued that while only two consultations (one from the DWP and one from the FCA) were held in 2018 and 2020, there were seven consultations in 2021 (four from the FCA and three from the DWP). As an example, the consultation on Paris-aligned reporting for pensions (DWP 2022), has required certain trustees of occupational pension schemes to calculate and report a metric specifying the extent to which their investments are aligned with the Paris Agreement goal of limiting global warming to 1.5–2°C. Finally, as mentioned by Rachel, around 4,000 asset managers, representing over US\$121trillion of assets under management (AUM), have signed up to the UN PRI.

Three consultations affecting the market

In general, while its focus has been on climate, the FCA also consulted on diversity and inclusion on boards and the DWP consulted on social risks and opportunities by occupational pension schemes, so there is a broader coverage. Rachel then focused on three FCA consultations affecting the market: one on climate disclosures for listed firms (FCA 2021a), one on climate disclosures for asset managers (FCA 2021b) and the last one on sustainability disclosure requirements (SDR) and investment labelling (FCA 2022). Rachel explained that two consultations closed in 2021 and the FCA published policy statements just before Christmas 2021 on the third consultation (on SDR and investment labelling).

Rachel then described the three consultations.

i. FCA consultation on climate-related disclosures for listed firms (FCA 2021a)

The first FCA consultation on climate disclosures for listed firms required listed firms to make climate-related disclosures in line with TCFD on a 'comply or explain' basis. Disclosures need to be made in the annual financial reports, and if they are in another document, the reasons should be explained. This new rule applies for accounting periods beginning on or after 1 January 2022. Rachel then touched on a couple of points that financial market players are mulling over. The first point is sequencing along the investment chain. Rachel argues that asset owners and pension firms/pension schemes, required under regulation to report under TCFD from October 2021, are going to ask the asset managers the information (eg climate-related information) that is needed for the funds in which they invest. Asset managers, in turn, are going to ask the companies in which they are investing, through those funds, to report on climate-related disclosures under TCFD. Since the FCA consultation requires listed firms to make climate-related disclosures on a 'comply or explain' basis, an issue arises along the investment chain about sequencing, for both timing and determining what is mandatory versus what is compliant.

ASSURANCE IS ANOTHER IMPORTANT POINT AT THE MOMENT, WITH THE RISK THAT THIS REPORTING WILL NOT GO THROUGH ANY SORT OF INDEPENDENT THIRD-PARTY ASSURANCE.

According to Rachel, assurance is another important point at the moment, with the risk that this reporting will not go through any sort of independent third-party assurance. The question, in her view, is whether there should be a carbon data specialist dealing with assurance, or whether there should be some other sort of financial reporting assurance. Rachel argued that this still needs to be discussed, but at the moment a third-party assurance is often missing. As far as the 'comply or explain' principle is concerned, Rachel argued that if a financial market player believes that climate change is financially material and can affect the value of an investment, then at a minimum a company should be required by law to explain how it has considered climate risk in its strategy and operation. According to Rachel, if companies have not considered climate change as financially material, they should be required to explain why. She added that there is a lot of discussion within the financial markets industry about which requirements should be mandatory and which should be disclosed on a 'comply or explain' basis. As an asset manager, Rachel is requiring firms to report even though the regulation may not say so.

Rachel also mentioned the initiative launched in January 2022 by State Street Global Advisors (SSGA), one of the world's largest investment managers, of requiring their portfolio companies to align their disclosures to the TCFD recommendations, including reporting on board oversight on climate-related risks and opportunities, Scope 1 and 2 GHG emissions, and targets for emissions reduction. Rachel explained that SSGA stated that it will take voting action against companies that do not meet these disclosure expectations, using stewardship activities to try and force that change. Rachel then added a few other comments on the FCA consultation on climate disclosures for listed firms. As the consultation addresses only listed entities, according to Rachel there can be a disconnection between private markets and listed issuers' initiatives. She then cited Larry Fink, who stated at COP 26 that having different disclosure standards for private and public companies could create an opportunity for arbitrage where carbon-heavy companies shift to private markets.

Rachel then discussed issues about data and methodological gaps. She suggested that some companies are going to struggle to report specific data on emissions or follow a prescribed methodology. There is no scope for proxy data in this consultation, an aspect that the industry is considering. Rachel then explained that FCA is also encouraging listed companies, when making their disclosures, to consider the SASB metrics for their sector against the TCFD's recommendations. For instance, from a financial decision-making perspective, SASB measurements of risks associated with oil and gas reserves would be useful for users, but these measurements are not captured in the TCFD metrics, even for Scope 3 emissions. Rachel worried that, despite the usefulness of this information, oil and gas companies are probably unlikely to adopt those SASB metrics voluntarily.

ii. FCA consultation on climate-related disclosures for asset managers and owners (FCA 2021b)

Rachel then discussed the second FCA consultation on climate disclosures for asset managers and owners. This consultation required in-scope firms to make disclosures on an annual basis, at both an entity level and a product or portfolio level. The FCA is seeking to implement two phases. The first phase will involve asset management firms with over £50bn in assets under management (AUM) and asset owner firms with assets over £25bn. It has applied to 34 asset managers and 12 asset owners from 1 January 2022. The second phase is for smaller firms, with an AUM threshold of £5bn, applicable from January 2023. As Rachel explained, once both phases have been implemented, the rules will cover over £12 trillion of AUM and about 98% of both the UK asset management market and assets directly held by UK owners.

Rachel then illustrated some considerations that financial markets are making. The first one is about the carbon reporting of asset classes. Rachel pointed out that when

we think about the different asset classes from an equity perspective, concepts and methods are a little bit more advanced and embedded, while when we think about carbon emission reporting for things such as derivatives or venture capital, it becomes a little trickier. Indeed, as Rachel argued, carbon data of sovereign and investment funds come out only with a two-year lag. The size threshold is another interesting point because, if climate change is financially material, then it should apply to all market players. Given the size threshold specified in the consultation, however, we could see a scenario where large asset managers assess climate-related risks earlier than smaller asset managers (which might hold either stranded assets or assets having no liquidity), with potential risks and problems of competitiveness. Rachel also added that this second consultation and the policy statement do not cover overseas funds marketed in the UK so again the level playing field is a consideration. There is also a concern that firms may choose favourable proxy data when they are reporting, to look less 'bad'. Another potential problem relates to Scope 3 emissions and how to address double counting. Rachel argued that some asset managers are creating their own ways of dealing with this (and measuring it), as currently there is no generally accepted way of dealing with Scope 3 emissions.

Another issue, highlighted by Rachel, deals with resource requirements and skill sets because financial market players are experts in financial reporting, not in climate reporting and, thus, there is a skills gap. One last aspect of this second consultation relates to the audience. Retail investors and institutional investors understand the information differently and, thus, the information package has to be presented differently: it has to be usable by both groups.

iii. FCA consultation on SDR and investment labelling (FCA 2022)

Rachel then touched very briefly on the third consultation, that on SDR and investment labelling. The EU has got a similar regulation as it is trying to label different products in terms of genus and greenness. In this consultation, potential problems relate to balancing information relevant to the audience (ie making sure that retail investors are getting information that they can understand and making sure that the information and how we label it conveys what the products are actually doing), the consistency with other regimes, the definition of terms (eg the difference between a transitioning product and a sustainable product can be complicated for a retail investor), third-party assurance (as the consultation does not require third-party assurance on the labelling so there is a potential for 'greenwashing'), and the absence of a task force on social and governance-related disclosure to make it broader and not limited to climate.

Challenges ahead

Rachel then encouraged financial market players to move beyond climate and to measure and report on issues broader than climate. She argued that we need to keep in mind the interconnectivity of systems as a whole, rather than focusing solely on reaching targets for GHG emissions reduction. The FCA and DWP have done a good job with two additional consultations covering social considerations. Also, importantly, the UK minister for pensions wrote a letter asking pension scheme chairs to reflect and act on considerations of the social factors, how they are engaging with their asset managers, and how they are stewarding their assets and pension schemes. Rachel also mentioned the Investment Big Bang initiative, an open letter by the previous UK prime minister, Boris Johnson and his chancellor to UK institutional investors, asking them to invest in longer-term assets and for the social good.

THE ANNUAL GAP IN THE FUNDING NEEDED TO ACHIEVE THE UN SDGS IS FAR GREATER THAN WHAT GOVERNMENTS CAN PROVIDE, AND PRIVATE CAPITAL NEEDS TO BE MOBILISED TO HELP ADDRESS THAT GAP.

Rachel then highlighted that the annual gap in the funding needed to achieve the UN SDGs is far greater than what governments can provide, and private capital needs to be mobilised to help address that gap. According to Rachel, the financial market players are aware of this gap and reporting and measurement will be the key to reducing it.

To conclude, Rachel covered a couple of the challenges that market participants need to think about in relation to sustainability reporting. She explained that we talk a lot about the users of financial information, so reporting needs to be fit for purpose, particularly when reporting to retail investors, pension savers, institutional investors and asset owners. Reporting needs to convey what is really happening 'under the hood' but in an understandable way. Also, Rachel mentioned the Taskforce on Nature-related Financial Disclosures (TNFD), which is much more concerned with dealing with nature and related financial disclosures. The TNFD guidelines have been adopted by some governments. This shows an appreciation and consideration that we need to think beyond looking at climate in a very narrow way. Given that there are three important elements (profit, planet and people), Rachel suggested shifting the view from risk and return, to risk, return and impact. The final point she touched on was related to the lack of resources and necessary skill sets: CFA is doing a lot, through certification, to allow asset managers to upskill, and new teams and consultants can help to fill that resource gap.

2.6 Panel discussion section

Silvia Gaia moderated a very interesting panel discussion, where she asked the five presenters to answer some relevant questions raised by the audience.

The first question addressed by the panel, raised by Giovanna Michelin, dealt with the fact that there is a concentrated focus on climate change while we are also facing a lot of different environmental and ecological issues that are interconnected with each other. Silvia Gaia therefore asked the presenters what they think we can do as academics, practitioners, regulators and citizens to focus more on an analysis that considers ecological issues and their interconnections together. This question related to Carol Adams' presentation on sustainable development; therefore, Carol was the first to address the question. She argued that we really need to change the way businesses think and put sustainable development at the centre of their strategy and thinking about products and services. Carol added that there are a lot of interdependencies among sustainable development issues and, by picking only one issue, there is a danger that we are going to impose more damage on other areas. Jeffrey Hales added his opinion, arguing that what we need is continued academic research on this, even though it is a challenge. Much research focuses on very narrow perspectives. For instance, as accounting scholars, we focus very closely on aspects of climate change, while scholars dealing with other ecological issues may not. Jeffrey said that we need academic research that considers system-level interrelationships. Ultimately, he argued, we can facilitate national and international efforts to set climate-related restrictions and to facilitate a transition, helping companies to determine where there is a real opportunity to create value for a wide set of stakeholders. Jeffrey also observed that cross-disciplinary research is important, but we need to knock down the barriers between the different institutions. This is difficult to achieve as neither colleges nor academic journals are structured to favour cross-disciplinary research.

JEFFREY ALSO OBSERVED THAT CROSS-DISCIPLINARY RESEARCH IS IMPORTANT, BUT WE NEED TO KNOCK DOWN THE BARRIERS BETWEEN THE DIFFERENT INSTITUTIONS.

Silvia Gaia then intervened by asking the panel what standard setters and regulators should do to develop these interconnections and to raise companies' awareness of the importance of this issue. Carol Adams replied, highlighting the importance of collaboration between, for instance, the ISSB and GRI. Carol emphasised the importance of creating collaborations between standard setters rather than having only one standard-setting

organisation dealing with this. This is because a single standard-setting body would not be able to cover all the issues, and we would see increasing stakeholder activism about the lack of accountability. Carol added that she expects lots of research in the future about the intended and unintended consequences of the ISSB standards that will emerge. Jeffrey also voiced his opinion: for years we have been hearing a call for consolidation and one overall standard setter, but he believes, from experience, that there is no appetite among existing standard setters and no existing standard setter thinks that there should be just one setter. Generally, he said, current standard setters have different roles and different functions. For instance, five organisations were involved in the value reporting foundation and consolidated into the integrated reporting initiative. Those five organisations were trying to explain to the marketplace that different constituents have different needs and different information and regulatory gaps exist among them, and it is probably not going to serve those constituents well if one organisation tries to set standards for them all. In Jeffrey's view, we are at the front end of a very big opportunity for creating some type of coherence among a reasonably operable system, but we also run the risk of having regional mandates all around the world that are hard to reconcile with each other. Jeffrey added that we should aim to provide interoperable standards and EFRAG's role is developing in this sense. The more that can be produced under a single report, or a small set of reports, that could meet multiple needs, then the more interoperable the system would be. This is on the condition that we recognise that just one report with one set of information cannot meet the needs of all stakeholders. Harry Briggs liked Jeffrey Hales' view and added that he had heard this view quite a lot when dealing with multinationals. Companies frequently map the metrics into the standards and are quite worried when they are technically not complying with one standard because of minor nuances. Thus, finding out these minor nuances will make the uptake of that approach a lot easier. Harry also argued that, interestingly, companies consider disclosure based on TCFD guidelines as a standalone block of information. Harry believed that any set of standards, whether it is one or multiple, should help companies to articulate the risks and opportunities and potential benefits of what they are doing. Losing specific links would imply losing the benefit of providing specific types of information (eg on climate). To further explain this point, Harry stated that if we picked up that day's *Financial Times*, we would find news about a huge company under huge pressure for its focus on sustainability and this company needs to be able to handle that, proving and showing the benefits of what it is doing. Harry also added that there are a lot of different levers pulling against the value of a company all the time. Just because you are working on sustainability and the value of your company decreases, it does not necessarily mean that one is driving the other. There can be other things going on. For companies, the key is to

FOR COMPANIES, THE KEY IS TO BE ABLE, CONSTANTLY, TO ARTICULATE THE BENEFIT OF WHAT THEY ARE DOING ON SUSTAINABILITY, TO BE ABLE TO HOLD THE FIRM UP UNDER THE KIND OF PRESSURE THAT WE SEE.

be able, constantly, to articulate the benefit of what they are doing on sustainability, to be able to hold the firm up under the kind of pressure that we see.

Jeffrey Hales then participated again in the discussion, arguing that disclosure consequences depend heavily not only on specific companies' choices but also on the rest of the system and on what local regulators require. Also, the auditors' role has an effect. Auditors can push the data aggregation, or they can ask for separation of different aspects. Investors are also important. So, interoperability, Jeffrey argued, is required and it is not under any one entity's control, and it is going to be a challenge to make the system more cohesive, efficient, and functional.

Silvia Gaia then moved on to another important question, raised by Richard Murphy, on whether we are happy with sustainability reporting being an externality as far as 'back end' financial statements are concerned, or whether we should be demanding that it be on the balance sheet. Harry Briggs replied, referring to his presentation, in which he had talked about parity between financial and sustainability reporting. Harry stated that equal prominence does not necessarily mean incorporating sustainability reporting into financial reporting. He added that he does not know much about recognising it on the balance sheet, but that quite a lot of academic work has been done on the feasibility of that. Generally, Harry said that a lot of work being done on sustainability reporting has highlighted that it is not feeding through and not being reflected in the financial reporting. This point should be a key focus of accounting standard setters and regulators. For instance, in the UK it has been part of a thematic review by the FRC because, as we see an increase in sustainability reporting, we see business models changing to improve sustainability and various commitments being made. To wrap up, Harry concluded that he is not sure we need to go as far as putting sustainability into the balance sheet, but that we need better work to connect and integrate sustainability in the existing financial statements and accounting standards. Jeffrey Hales added a consideration related to this point. He argued that one problem would be the double entry system of debit and credit, which requires a particular measurement that is either the amount spent on goods/services or some sort of estimate such as the market value. Moreover, once sustainability is on the balance sheet there are questions of subsequent measurement, and this aspect has implications for subsequent performance

reporting. Jeffrey continued by explaining that the balance sheet is helpful for assessing liquidity, for lenders, and for understanding what assets are under the control of the company. Non-financial information may not have the same value if included within the balance sheet. Moreover, disclosure outside the balance sheet is useful as it is more flexible (eg there can be more than one measurement related to each different type of business activity) and possibly the placement of non-financial information outside the balance sheet is the best approach for this kind of performance reporting. Carol agreed with Jeffrey's view, arguing that we are already seeing some attempts to express sustainability impacts in financial terms. She has concerns about these attempts. Accountants could spend ages doing this without finding an agreement because it is subjective. Carol suggested that there is no need to translate everything into dollars to be able to understand it. A problem with more than one standard, as Carol argued, is related to the presence of politics as, for instance, we see investors funding the initiatives that they think are easier to implement and more convenient for them, not necessarily those improving sustainable development. The ideal scenario would be to see investors funding different, heterogeneous initiatives.

A PROBLEM WITH MORE THAN ONE STANDARD, AS CAROL ARGUED, IS RELATED TO THE PRESENCE OF POLITICS AS, FOR INSTANCE, WE SEE INVESTORS FUNDING THE INITIATIVES THAT THEY THINK ARE EASIER TO IMPLEMENT AND MORE CONVENIENT FOR THEM, NOT NECESSARILY THOSE IMPROVING SUSTAINABLE DEVELOPMENT.

Mandating disclosure could help but ideally with different standards, and not just a single set of standards. Carol suggested that, rather than having mandatory financial materiality standards, we should have mandatory standards on the impact of organisations on sustainable development in the context of planetary boundaries. Jeffrey then added that he was part of the ISSB technical writers working group, and so he is also aware of the consultations conducted by EFRAG. There have been efforts for the last five years to broaden disclosures on sustainable development. Nonetheless, the efforts have been made primarily to try to serve the needs of investors rather than those of different stakeholders. Richard Murphy, who posed the initial question to the panel, intervened to explain why he believes that climate change information should be included in the balance sheet. His point of view is that auditors and companies care about a company's going concern status, and this can be derived only from the balance sheet. Therefore, it would

be important to understand whether climate change investments/costs can be afforded by the company. To estimate whether they can be afforded, auditors would need to scrutinise true and fair information, which can emerge only from the balance sheet. To manage the transition to being sustainable, a provision should be included with care (and not just to close down the accounts). Companies, Richard argued, should represent in the balance sheet the replacement cost of the assets that are going to be necessary for the entity to continue as a going concern, so that users can understand the cost of capital that a company is going to incur to remain in business: otherwise being environmentally insolvent. Richard generally believes that we would also need debits and credits for climate change, to know whether this business had sufficient capital and risk management to achieve this outcome and, if not, where it is going to obtain them. Harry Briggs added a reply to Richard's point, agreeing that he has explained an important user's concern. For instance, if a company discloses a net zero plan, that plan is going to change its business model and, thus, this choice has a direct impact on cash flow and the estimates for items on the balance sheet.

IF A COMPANY DISCLOSES A NET ZERO PLAN, THAT PLAN IS GOING TO CHANGE ITS BUSINESS MODEL AND, THUS, THIS CHOICE HAS A DIRECT IMPACT ON CASH FLOW AND THE ESTIMATES FOR ITEMS ON THE BALANCE SHEET.

The final question addressed by the panel, raised by Yen-Pei Chen (ACCA), related to the implementation of SASB standards outside North America, given that SASB standards have been increasingly adopted by businesses outside the US in recent years. Jeffrey Hales, as chairman of the SASB, replied by arguing that the standards were initially developed for US capital markets. Also, the replicability of a standard greatly depends on the specific industry. From an investor perspective, there are industries (eg the mining industry) where many issues are relevant anywhere in the world and that means an industry-specific standard is replicable. On the other hand, other industries (eg the financial and medical sectors) are differently structured in different markets around the world because of different jurisdictions, oversight and regulation, which can create challenges such as for the availability of information. Jeffrey then mentioned diversity issues: it is not clear yet what we mean by that and what metrics can be captured. Also, there are some nations where it is not legal for companies to ask for the type of information (eg on ethnicity) that investors might want.

Further questions were answered using the online chat facility. For instance, Richard Martin (ACCA) asked Carol Adams whether the prototype climate-related financial disclosure standard issued by various organisations (eg CDP) at the end of 2020 was more in line with her idea of sustainability standards. Carol replied that that prototype was confused and conceptually flawed, as not translatable to the range of sustainable development issues that companies, their investors and national governments are concerned about.

Richard Martin (ACCA) also asked Harry Briggs whether the sustainability standards now being developed are likely to multiply the metrics to be disclosed beyond what are useful. Harry replied that new standards will not necessarily increase the metrics being reported. They may provide a larger menu of potential metrics to report but if the materiality process is run correctly, a company should still only report on those issues that are material to its business (which will also depend on how materiality is defined).

Another question in the online chat facility came from Stuart Cooper, who asked Rachel Neill whether B Corp status is important (or essential) in changing thinking and enabling action on the SDGs. Rachel replied that the B Corp assessment does not score companies directly and explicitly against the SDGs so B Corp status may not directly enable action on the SDGs. Nonetheless, B Corp firms have a 'mission-lock' clause about using their business as a force for good and, as a consequence, it could be argued that B Corp firms are indirectly addressing the SDGs.

Dewi Wulansari (Sheffield University Management School) asked whether deforestation is becoming an area of concerns also for investors and what the investment communities can do to have their investee account for deforestation-related issues. Rachel Neill answered that already 30 financial institutions are committed to publicly disclosing any deforestation risk and mitigation activities in their portfolios, and report on their progress. More and more players are looking at how investment solutions can address deforestation, but not every asset manager pays enough attention yet. There is also the TNFD, which is considering how the likes of deforestation can be accounted for.

MORE AND MORE PLAYERS ARE LOOKING AT HOW INVESTMENT SOLUTIONS CAN ADDRESS DEFORESTATION, BUT NOT EVERY ASSET MANAGER PAYS ENOUGH ATTENTION YET.

Overall, the panel provided a very good and interesting debate on the topics of the symposium.



3. Discussion

The 2022 FARSIG symposium brought together five authoritative speakers who provided different perspectives on the development of global sustainability standards and their impact on corporate reporting. The themes that emerged from the speakers' presentations and the panel discussion were various.

During the presentations, the speakers discussed the harmonisation of sustainability reporting standard-setting, how to define materiality in sustainability reporting, the role that sustainability reporting plays in capital markets, the role of sustainability reporting for market players, how companies can improve sustainability reporting, and the challenges that will arise from the ISSB's climate-related disclosures prototype. The need to move beyond climate change and think of environmental matters in a more interconnected way and the possibility of incorporating sustainability information in the financial statements were also debated during the symposium. These main themes are summarised and discussed in the following sections.

Harmonisation in sustainability reporting standard-setting

The harmonisation of standards for sustainability is of great importance in enhancing the comparability, consistency and usefulness of the sustainability-related information contained in corporate reports. In her presentation, Carol Adams discussed three myths that she believes are used to support this call for harmonisation. The first myth relates to the belief that the IFRS Foundation should be the body in charge of leading global sustainability standard-setting. She argued that although the IFRS Foundation has an important role to play, other actors must be involved. She also outlined that several concerns have been raised in the responses to the IFRS consultation paper on sustainability reporting (IFRS 2021), indicating that the IFRS alone will not be able to answer the call for harmonisation. The second myth is that financial materiality is paramount in determining what to include in sustainability reporting. Carol contended that focusing on financial materiality is short-sighted. Instead, the focus should be on identifying the materiality of an organisation's impacts on sustainable development. The third myth is that the need for consistent and comparable metrics must be a priority. While she agreed that there is a need for consistent and comparable metrics, and this is key given that investors like the metric idea owing to its simplicity, we should not focus only on metrics. Attention should be given to the internal processes, as these define the extent to which the organisation is aligned with sustainable development.

In relation to the role played by standard setters in enhancing harmonisation, Jeffrey Hales contended that

there is no appetite for consolidating all standard setters and no standard setter thinks that there should be just one. Each standard setter has a role to play. He believes that it is important to create coherence among them, although this is challenging because there is a risk of creating regional mandates around the world that are hard to reconcile. The creation of interoperable standards is key, and Jeffrey believes that EFRAG can play a key role in this process. Using a single report, or a small set of reports, that could meet multiple needs will help to increase the interoperability of the standards. It is acknowledged that one report with one set of information cannot meet the needs of all stakeholders. Harry Briggs has shared Jeffrey Hales' view and added that any standards, whether single or multiple, should help companies to articulate the risks and opportunities and potential benefits of what they are doing.

Materiality in sustainability reporting

The concept of materiality is becoming increasingly important in sustainability reporting. On the one hand, it is widely agreed that companies should disclose information on sustainability issues that are considered material. On the other hand, there is tension over how to identify 'material information'. Carol Adams and Harry Briggs touched on the concept of materiality in their presentations. Carol argued that we should move away from the concept of financial materiality and focus on what is material for sustainable development. This will allow the identification of financial matters, enhance companies' engagement with the SDGs, enhance stakeholder trust, and foster improved investor decision-making. Materiality was also covered by Harry Briggs, who commented on the process that companies should follow to identify what is material in relation to sustainability reporting. Companies should consult with internal and external stakeholders to collect different but interconnected views on what should be considered material. These views should be then analysed by defining what 'impact' means and considering the potential impact of the topics raised, the likelihood that each impact will occur, and what each impact means to those involved in the process. Harry pointed out that in practice companies rarely go through this proposed process. When they attempt to do it, they do not engage with a wide range of stakeholders, but consult only the investor relations team. This results in a flawed base that will not provide a complete list of sustainability issues to analyse.

Sustainability reporting in capital markets

The presentations of Jeffrey Hales and Diogenis Baboukardos highlighted key points of sustainability reporting and capital markets. According to Jeffrey, capital markets play an important role in promoting sustainable development. Hence, they need information that goes beyond accounting information from a traditional revenue and expense perspective. Providing value-relevant information to investors can help them to make better investment decisions and can lead to positive impacts. Capital markets can augment the impact of regulatory efforts for sustainable development. Governments need to act as coordinating bodies in determining what is needed for sustainable development. Jeffrey outlined that there is still a long way to go in getting high-quality and comparable disclosures that are also easily accessible to investors. Diogenis' discussion focused on how capital markets react to climate change reporting. Using the empirical evidence produced by recent studies, he noted that nowadays investors perceive climate risk reporting to be as important as financial reporting, if not more so. The reduction of GHG emissions is among the ESG issues that most influence investors' decision-making processes. Carbon emission reporting is found to be value relevant: the level of carbon emissions is negatively associated with firm values. Diogenis also highlighted that investors perceive firm equity value to be overpriced in sectors potentially most affected by climate change. They also find quantitative disclosures or management discussions of climate risk to be 'imprecise'.

Sustainability reporting for market players

The actual and potential impacts of sustainability reporting for market players that might arise from three recent FCA consultations on climate and sustainability disclosures were discussed by Rachel Neill. In relation to the FCA consultation on climate-related disclosures for listed firms, Rachel asserted that one of the main concerns relates to the possibility of passing the disclosure requirement along the investment chain. Asset owners might ask asset managers to provide them with the relevant information, while the asset managers in turn might ask this to the companies in which they are investing. Additional difficulties might arise because of the lack of third-party assurance, methodological gaps, and the need for more clarity on what should be disclosed mandatorily and what should be disclosed on a 'comply or explain' basis. Moreover, since the FCA consultation focuses on listed firms, this might create opportunities for arbitrage where carbon-heavy companies shift to private markets. In relation to the 2021 FCA consultation on climate-related disclosures for asset managers and owners, the main issues that could arise relate to difficulties in evaluating the different asset classes and in defining the threshold used in determining what is material, which could lead to limited comparability between large and smaller asset managers. Other concerns related to the problems of

double counting for Scope 3 emissions and the presence of a skill gap in climate reporting. Lastly, in relation to the 2021 FCA consultation on SDRs and investment labelling, potential problems relate to the definition of terms, the reliance on third-party assurance, and the question of how to balance information relevant to the audience and create consistency with other regimes. For Rachel, the main challenge ahead for the financial market players is to move beyond climate and to measure and report on issues broader than climate.

A roadmap for sustainability reporting

In his presentation, Harry Briggs provided some insight into the areas in which companies need to work to improve sustainability reporting. First, there is a need for upskilling. Boards need to understand the rationale for sustainability reporting and, as a minimum, they should link sustainability and value creation using the materiality approach. Second, boards need to engage in proactive consultation in their materiality process, ensuring sufficient consultation with relevant stakeholders and rationalising the existing metrics used, so that quality exceeds quantity. Third, there is a need to create parity between sustainability reporting and financial reporting, making sure that it is understood that all data matters because people make decisions based on this information. A cultural shift throughout the organisation is needed to recognise that firms now operate in an environment where much emphasis is being placed on sustainability performance as financial performance. All the control processes that a firm has for ensuring the completeness and accuracy of its financial report need to be duplicated for sustainability reporting. However, controls for sustainability data are minimal. Oversight bodies with sufficient knowledge of sustainability reporting are needed to challenge the management, external assurance providers and internal audit providers. Last but not least, Harry outlined that companies need to allocate enough resources to sustainability reporting, since the lack of resources is a key restraining factor.

Climate-related disclosures prototype

Diogenis Baboukardos' discussed the climate-related disclosures prototype in his presentation. He argued that the adoption of the prototype is likely to be very challenging, considering that empirical evidence shows that companies operating in the extractive industries that are classified as the largest polluters worldwide provide disclosures on climate change that lack details. Because of this, he expected that the level of climate change-related disclosures by companies in other sectors would be even lower. According to Diogenis, the actual measurement of Scope 2 and 3 carbon emissions represents additional challenges that will arise from the protocol. Scope 2 emissions measurement is complicated by the difficulties in identifying the particular generation facility that provided the type of fuel mix the business uses to produce consumed energy. The measurement of Scope

3 emissions is complicated as it results from sources not owned or controlled by the company. A second challenge relates to a shift from transitional climate change risk reporting to physical climate change risk reporting, with very little being known about the latter. For Diogenis, how the climate change reporting mandate will affect firms' financial performance and the possible 'financialisation' of climate change represent additional challenges.

THE NEED TO START THINKING ABOUT ENVIRONMENTAL AND ECOLOGICAL ISSUES IN A MORE INTERCONNECTED WAY AND TO MOVE BEYOND CLIMATE CHANGE HAS BEEN OUTLINED BY THE SPEAKERS DURING THEIR PRESENTATIONS AND IN THE PANEL DISCUSSION.

The need to move beyond climate change

The need to start thinking about environmental and ecological issues in a more interconnected way and to move beyond climate change has been outlined by the speakers during their presentations and in the panel discussion. In her presentation, Rachel Neill identified that the main challenge ahead for the financial market players would be the need to move beyond climate issues, and to measure and report on broader concerns than climate. She outlined how the financial markets need to consider the interconnectivity of systems as a whole, and include other environmental and social factors, rather than focusing on just reaching targets for GHG emissions reduction. A similar view was provided by Carol Adams. Carol highlighted that there are a lot of interdependencies among sustainable development issues and, if the focus is on only one issue, there is a danger that this has a damaging impact on other important aspects of sustainable development. Jeffrey Hales added that more

interdisciplinary research on sustainability might help us to see these interdependencies. Academic research that considers system-level interrelationships can help companies to determine where there is a real opportunity to create value for a wide set of stakeholders. Carol Adams also emphasised that standard setters could play an important role in moving toward a more interconnected vision of sustainability issues, but for this to be achieved it is necessary that they collaborate. A single standard-setting body would not be able to cover all the issues.

Sustainability in the balance sheet

An important debate emerged during the panel discussion about whether sustainability reporting should be included in the financial statement. This had been brought to the speakers' attention by Richard Murphy, who argued that evaluating a company's going concern status is key, and this can be derived only from the balance sheet. Therefore, including sustainability in the balance sheet would allow annual report users to understand whether companies have sufficient capital and risk management to continue operating. Harry Briggs was not sure whether we need to go as far as putting sustainability into the balance sheet, but he suggested that we need better work to connect and integrate sustainability into the existing financial statements to achieve parity between financial and sustainability reporting. Jeffrey Hales argued that incorporating sustainability into the balance sheet is problematic as it entails a double-entry system of debit and credit that requires measurements, which are difficult to make in a reliable way. He also contended that non-financial information may not have the same value if included within the balance sheet, whereas disclosure outside the balance sheet is useful as it is more flexible and informative. Carol Adams agreed with Jeffrey Hales' view that putting sustainability information in the balance sheet would imply evaluating sustainability impacts in financial terms. This is, in her view, concerning. There is no need to translate everything into money to be able to understand it.



THE HARMONISATION OF STANDARDS FOR SUSTAINABILITY IS OF GREAT IMPORTANCE IN ENHANCING THE COMPARABILITY, CONSISTENCY AND USEFULNESS OF THE SUSTAINABILITY-RELATED INFORMATION CONTAINED IN CORPORATE REPORTS.

4. Conclusions

The 2022 FARSIG symposium on the 'Future of Financial Reporting' was held, with the support of ACCA, on a virtual platform, on 14 January 2022, against a background of continuing social, economic and political changes and continuing challenges to accounting and financial reporting.

The economic recovery witnessed in 2021 has been abruptly interrupted by the current energy crisis, which started in September 2021 and has been severely aggravated by the war in Ukraine that started in March 2022. The energy crisis and the war in Ukraine are causing severe disruption in the social, economic, and political spheres. The escalating increase in energy prices is disrupting supply chains and the production of goods and services, and pushing up inflation, which is reaching levels that have not been seen in several decades. This cost-of-living crisis is leading to an economic recession.

Global economic growth is expected to slow down from 6.0% in 2021 to 2.7% in 2023 (International Monetary Fund 2022). The cost-of-living crisis and the war in Ukraine will push more people into food insecurity and extreme poverty by the end of 2022 (UN Global Crisis Response Group on Food, Energy and Finance 2022), causing increases in inequalities within our societies, with the poor parts of populations becoming poorer. According to a study by the World Bank, we are unlikely to meet the goal of ending extreme poverty by 2030 (World Bank 2022). COVID-19 caused the biggest setback to global poverty-reduction efforts since 1990, and the situation is being made worse by the war in Ukraine. The crisis has also emphasised the global need for more energy resilience and a push for more renewable energy sources (UN Global Crisis Response Group on Food, Energy and Finance 2022).

Within this tense social, economic, and political scenario, environmental issues, such as climate change, extreme weather and biodiversity loss, represent the most severe risks for the next decade (World Economic Forum 2022). In 2021 and 2022, the UN Conference of the Parties focused on dealing with climate change and biodiversity issues. The COP26, which took place in Glasgow in November 2021, addressed climate change issues. It resulted in the signing of the Glasgow Climate Pact, which sets out what needs to be done to tackle climate change, and the Paris Rulebook, which provides guidelines on how to fulfil the Paris Agreement. The UN Biodiversity Conference (COP15), whose first part took place in October 2021 with the second part in December 2022, addresses agenda items aimed at developing the post-2020 global biodiversity framework.

As for accounting, there have also been some very important developments, which have occurred mostly in an area that is becoming mainstream in the accountancy profession: sustainability reporting. In June 2021, in response to a call for harmonisation in sustainability reporting, the IIRC and the SASB merged into the Value Reporting Foundation. Then, in November 2021, the IFRS Foundation established the ISSB to develop high-quality global sustainability disclosure standards to address investors' information needs. In March 2022, the ISSB launched a consultation on its first two proposed standards: the Exposure Draft IFRS S1 on General Requirements for Disclosure of Sustainability-related Financial Information and Exposure Draft IFRS S2 Climate-related Disclosures. The Exposure Draft IFRS S1 proposes requirements for corporations to provide the markets with a complete set of sustainability-related financial disclosures. The Exposure Draft IFRS S2 proposes establishing reporting requirements for corporations to disclose information about their exposure to significant climate-related risks and opportunities. The consultations on these exposure drafts ended in July 2022. At the time of writing this report, the ISSB is redeliberating both proposals in light of the feedback received.

This evolving scenario on sustainability reporting led to the 2022 FARSIG symposium on the 'Future of Financial Reporting', which discussed the development of global sustainability standards and their impact on corporate reporting. In particular, the speakers' presentations coalesced around the following central themes: the need for harmonisation in sustainability reporting and the role that standard setters play in this matter, the concept of materiality, the role of sustainability reporting for capital markets and market players, the need for a roadmap to improve sustainability reporting, and the challenges that will arise from the ISSB climate-related disclosures prototype.

The symposium provided interesting contributions to the debate on how the development of global sustainability standards can change corporate reporting. It highlighted the importance of creating interoperable standards that can enable disclosure that meets the information needs of multiple stakeholders. It also covered the importance of developing a concept of materiality that does not revolve

around financial aspects, but that allows identification of the key issues for achieving sustainable development. To achieve this, it is important that businesses consult internal and external stakeholders, and not only investors, to collect different but interconnected views on what should be considered material. The symposium also highlighted the important role that capital markets can play in promoting sustainable development, by disciplining companies that underperform on ESG issues and augmenting the positive impact of regulatory efforts. For this to happen, capital markets need value-relevant information to help investors make better investment decisions. The challenges that will arise from the FCA consultations on sustainability disclosures and the ISSB climate-related disclosures prototype are also outlined. These include possible opportunities for arbitrage, measurement difficulties, skill gaps, the definition of materiality thresholds, and impact on the financial performance of businesses, etc.

Lastly, the symposium provided important insights for companies that are aiming to improve sustainability reporting, by suggesting to them the need to upskill, engage in proactive consultation with relevant stakeholders in their materiality process, create parity between sustainability reporting and financial reporting, and allocate enough resources to sustainability reporting.

The symposium participants discussed issues of key importance in financial and non-financial accounting and reporting. By debating on the development of global sustainability standards and their impact on corporate reporting, the discussion highlighted the importance of achieving parity between financial and sustainability reporting, moving away from financial considerations in evaluating sustainable development and starting to think about environmental, ecological and social issues in a more interconnected way.

An aerial photograph of a cyclist riding a road bike on a dirt path that winds through a vast, green agricultural field. The rows of crops are visible, creating a grid-like pattern. The cyclist is positioned in the lower right quadrant of the frame, moving away from the viewer. The overall scene is bright and clear, suggesting a sunny day.

**CAPITAL MARKETS
NEED VALUE-RELEVANT
INFORMATION TO HELP
INVESTORS MAKE BETTER
INVESTMENT DECISIONS.**

References

- ACCA (2022), *Accounting for a Better World: Priorities for a Transforming Profession*. Downloadable from <<https://www.accaglobal.com/sg/en/professional-insights/pro-accountants-the-future/accounting-for-a-better-world.html>>, accessed 16 November 2022.
- Adams, C. A. and Abhayawansa, S. (2022), 'Connecting the COVID-19 Pandemic, Environmental, Social and Governance (ESG) Investing and Calls for "Harmonisation" of Sustainability Reporting', *Critical Perspectives on Accounting*, 82: 1–13.
- Adams, C. A. and Mueller, F. (2022), 'Academics and Policymakers at Odds: The Case of the IFRS Foundation Trustees' Consultation Paper on Sustainability Reporting', *Sustainability Accounting, Management and Policy Journal*, 13 (6), 1310-1333.
- Baboukardos, D., Dionysiou, D., Slack, R., Tsalavoutas, I. and Tsoligkas, F. (2021), *Climate-Change Risk-Related Disclosures in Extractive Industries: A Comparative Study*. Downloadable from <<https://doi.org/10.36399/gla.pubs.258686>>, accessed 28 July 2022.
- Brander, M., Gillenwater, M. and Ascui, F. (2018), 'Creative Accounting: A Critical Perspective on the Market-Based Method for Reporting Purchased Electricity (Scope 2) Emissions', *Energy Policy*, 112: 29–33.
- Chen, Y. C., Hung, M. and Wang, Y. (2018), 'The Effect of Mandatory CSR Disclosure on Firm Profitability and Social Externalities: Evidence from China', *Journal of Accounting and Economics*, 65 (1): 169–90.
- Christensen, H. B., Floyd, E., Liu, L. Y. and Maffett, M. (2017), 'The Real Effects of Mandated Information on Social Responsibility in Financial Reports: Evidence from Mine-Safety Records', *Journal of Accounting and Economics*, 64 (2–3): 284–304.
- Church, B. K., Jiang, W., Kuang, X. and Vitalis, A. (2019), 'A dollar for a Tree or a Tree for a Dollar? The Behavioral Effects of Measurement Basis on Managers' CSR Investment Decision' *The Accounting Review*, 94 (5): 117–37.
- Clark, A. (2021), 'Energy Crisis Sets Stage for Record Global Carbon Emissions', [website article] Bloomberg. 8 October 2021. <<https://www.bloomberg.com/news/articles/2021-10-08/energy-crisis-sets-stage-for-record-global-carbon-emissions>>, accessed 16 November 2022.
- Clarkson, P. M., Li, Y., Pinnuck, M. and Richardson, G. D. (2015), 'The Valuation Relevance of Greenhouse Gas Emissions under the European Union Carbon Emissions Trading Scheme', *European Accounting Review*, 24 (3): 551–80.
- Downar, B., Ernstberger, J., Reichelstein, S., Schwenen, S. and Zaklan, A. (2021), 'The Impact of Carbon Disclosure Mandates on Emissions and Financial Operating Performance', *Review of Accounting Studies*, 26 (3): 1137–75.
- DWP (Department for Work & Pensions (2022), *Government response: Climate and Investment reporting: setting expectations and empowering savers*, <<https://www.gov.uk/government/consultations/climate-and-investment-reporting-setting-expectations-and-empowering-savers/outcome/government-response-climate-and-investment-reporting-setting-expectations-and-empowering-savers#overview-responses-to-the-consultation>>, accessed 30 November 2022.
- FCA (Financial Conduct Authority (2021a), *Enhancing climate-related disclosures by standard listed companies*, <<https://www.fca.org.uk/publication/policy/ps21-23.pdf>>, accessed 30 November 2022.
- FCA (Financial Conduct Authority (2021b), *Enhancing climate-related disclosures by asset managers, life insurers and FCA-regulated pension providers*, <<https://www.fca.org.uk/publication/policy/ps21-24.pdf>>, accessed 30 November 2022.
- FCA (Financial Conduct Authority (2022), *Sustainability Disclosure Requirements (SDR) and investment labels*, <<https://www.fca.org.uk/publication/consultation/cp22-20.pdf>>, accessed 30 November 2022.
- FRC (Financial Reporting Council (2020), *The UK Stewardship Code 2020*, <https://www.frc.org.uk/getattachment/5aae591d-d9d3-4cf4-814a-d14e156a1d87/Stewardship-Code_Dec-19-Final-Corrected.pdf>, accessed 15 November 2022.
- Griffin, P. A., Lont, D. H. and Sun, E. Y. (2017), 'The Relevance to Investors of Greenhouse Gas Emission Disclosures', *Contemporary Accounting Research*, 34 (2): 1265–97.
- IFRS (International Financial Reporting Standards) Foundation (2021), *Climate-related Disclosures Prototype*, <<https://www.ifrs.org/content/dam/ifrs/groups/trwg/trwg-climate-related-disclosures-prototype.pdf>>, accessed 5 August 2022.
- Ilhan, E., Krueger, P., Sautner, Z. and Starks, L. T. (2021), 'Climate Risk Disclosure and Institutional Investors', ECGI Working Paper Series in Finance, Working Paper 661/2020, <https://ecgi.global/sites/default/files/working_papers/documents/ilhankruegersautnerstarksfinal.pdf>, accessed 17 November 2022.
- International Monetary Fund (2021), *Global Financial Stability Report: Preempting a Legacy of Vulnerabilities*, April. Downloadable from <<https://www.imf.org/en/Publications/GFSR/Issues/2021/04/06/global-financial-stability-report-april-2021>>, accessed 16 November 2022.
- International Monetary Fund (2022), *Countering the Cost-of-Living Crisis*, *World Economic Outlook*, October. Downloadable from <<https://www.imf.org/en/Publications/WEO/Issues/2022/10/11/world-economic-outlook-october-2022>>, accessed 19 November 2022.
- Ioannou, I., Li, S. X. and Serafeim, G. (2016), 'The Effect of Target Difficulty on Target Completion: The Case of Reducing Carbon Emissions', *The Accounting Review*, 91 (5): 1467–92.
- Jones, M.J., Melis, A., Gaia, S. and Aresu, S. (2014), *The Future of Financial Reporting 2014: Re-questioning Some Old Assumptions*, <<http://www.accaglobal.com/content/dam/acca/global/PDF-technical/financial-reporting/tech-tp-farsig14.pdf>>, accessed 15 November 2022.
- Jones, M.J., Melis, A., Gaia, S. and Aresu, S. (2015), *The Future of Financial Reporting 2015: Continual Evolution and Development*, <<https://iris.unica.it/retrieve/e2f56ed8-d21e-3eaf-e053-3a05fe0a5d97/Jones%20et%20al.%20%282015%29%20-%20ACCA%20discussion%20paper.pdf>>, accessed 16 November 2022.

- Jones, M.J., Melis, A., Gaia, S., Aresu, S. and Rombi, L. (2016), *The Future of Financial Reporting 2016: Measurement, Transparency and Decision Making*. A discussion paper based on the British Accounting and Finance Association (BAFA), Financial Accounting and Reporting Special Interest group (FARSIG) Symposium (London: ACCA).
- Jones M.J., Melis A., Gaia S., Aresu S. and Rombi L. (2017), *The Future of Financial Reporting 2017: Change, Narratives, Education and Globalisation*, A discussion paper based on the British Accounting and Finance Association (BAFA), Financial Accounting and Reporting Special Interest group (FARSIG) Symposium, <<https://iris.unica.it/bitstream/11584/235755/5/ACCA%20discussion%20paper%202017.pdf>>, accessed 16 November 2022.
- Jones M.J., Melis A., Gaia S., Aresu S., Rombi L. and Chaidali P. (2018), *The Future of Financial Reporting 2018: Digitalisation and Integrated Reporting*, A discussion paper based on the British Accounting and Finance Association (BAFA), Financial Accounting and Reporting Special Interest group (FARSIG) Symposium, <<https://iris.unica.it/retrieve/e2f56ed8-d773-3eaf-e053-3a05fe0a5d97/ACCA%20discussion%20paper%202018%20-%20final.PDF>>, accessed 30 November 2022.
- Jones M.J., Melis A., Gaia S., Aresu S., Rombi L. and Chaidali P. (2019), *The Future of Financial Reporting 2019: Current Developments in Financial Reporting (Private and Public Sectors)*, A discussion paper based on the British Accounting and Finance Association (BAFA), Financial Accounting and Reporting Special Interest group (FARSIG) Symposium, <<https://iris.unica.it/bitstream/11584/281673/1/Jones%20et%20al.%20%282019%29%20-%20ACCA%20discussion%20paper.pdf>>, accessed 16 November 2022.
- Jones M.J., Melis A., Gaia S., Aresu S., Rombi L. and Chaidali P. (2020), *The Future of Financial Reporting 2020: Communication, Standard Setting, Intangibles and Audit*, A discussion paper based on the British Accounting and Finance Association (BAFA), Financial Accounting and Reporting Special Interest group (FARSIG) Symposium, <<https://orca.cardiff.ac.uk/id/eprint/138306/1/PI-FARSIG-2020%20.pdf>>, accessed 16 November 2022.
- Jones M.J., Melis A., Gaia S., Aresu S., Rombi L., Chaidali P. and Georgiou O. (2021), *The Future of Financial Reporting 2021: Narrative, Non-Financial Reporting and the Impact of Brexit and the Coronavirus*, A discussion paper based on the British Accounting and Finance Association (BAFA), Financial Accounting and Reporting Special Interest group (FARSIG), <<https://orca.cardiff.ac.uk/id/eprint/147451/1/FARSIG%20discussion%20paper%202021.pdf>>, accessed 15 November 2022.
- Jones, M.J. and Slack R. (2008), *The Future of Financial Reporting 2008: Measurement and Stakeholders*, <<http://www.accaglobal.com/content/dam/accaglobal/PDF-technical/financial-reporting/tech-tp-farsig08.pdf>>, accessed 15 November 2022.
- Jones, M.J. and Slack, R. (2009), *The Future of Financial Reporting 2009: A Time of Global Financial Crisis*, <<http://www.accaglobal.com/content/dam/accaglobal/PDF-technical/financial-reporting/tech-tp-farsig09.pdf>>, accessed 15 November 2022.
- Jones, M.J. and Slack, R. (2010), *The Future of Financial Reporting 2010: Getting to Grips with the Credit Crunch*, <<http://www.accaglobal.com/content/dam/accaglobal/PDF-technical/financial-reporting/tech-tp-farsig10.pdf>>, accessed 15 November 2022.
- Jones, M.J. and Slack, R. (2011), *The Future of Financial Reporting 2011: Global Crisis and Accounting at a Crossroads*, <<http://www.accaglobal.com/content/dam/accaglobal/PDF-technical/financial-reporting/tech-tp-farsig11.pdf>>, accessed 15 November 2022.
- Jones, M.J. and Slack, R. (2012), *The Future of Financial Reporting 2012: Problems and Solutions*, <<http://www.accaglobal.com/content/dam/accaglobal/PDF-technical/financial-reporting/tech-tp-farsig12.pdf>>, accessed 15 November 2022.
- Jones, M.J. and Slack R. (2013), *The Future of Financial Reporting 2013: Still Grappling with Major Problems*, <<http://www.accaglobal.com/content/dam/accaglobal/PDF-technical/financial-reporting/tech-tp-farsig13.pdf>>, accessed 15 November 2022.
- Martin, P. R. and Moser, D. V. (2016), 'Managers' Green Investment Disclosures and Investors' Reaction', *Journal of Accounting and Economics*, 61 (1), 239–54.
- Matsumura, E. M., Prakash, R. and Vera-Munoz, S. C. (2014), 'Firm-Value Effects of Carbon Emissions and Carbon Disclosures', *The Accounting Review*, 89 (2): 695–724.
- O'Callaghan, B. J. and Murdock, E. (2021). *Are We Building Back Better? Evidence from 202 and Pathways to Inclusive Green Recovery Spending*. United Nations Environment Programme, March. Downloadable from <<https://www.unep.org/resources/publication/are-we-building-back-better-evidence-2020-and-pathways-inclusive-green>> accessed 16 November 2022.
- PwC (PricewaterhouseCoopers) (2021), *PwC's 2021 Global Investor Survey. The Economic Realities of ESG*, <<https://www.pwc.com/gx/en/corporate-reporting/assets/pwc-global-investor-survey-2021.pdf>>, accessed 01 August 2022.
- Ricke, K., Drouet, L., Caldeira, K. and Tavoni M. (2018), 'Country-level Social Cost of Carbon', *Nature Climate Change*, 8 (10), 895-900.
- Schiemann, F. and Sakhel, A. (2019), 'Carbon Disclosure, Contextual Factors, and Information Asymmetry: The Case of Physical Risk Reporting', *European Accounting Review*, 28 (4): 791–818.
- Stern, N. (2006), *Stern Review: The Economics of Climate Change*, <https://webarchive.nationalarchives.gov.uk/ukgwa/20100407172811/https://www.hm-treasury.gov.uk/stern_review_report.htm>, accessed 15 November 2022.
- TCFD (2020), *2020 Status Report: Task Force on Climate-related Financial Disclosures*, <<https://www.fsb.org/wp-content/uploads/P291020-1.pdf>>, accessed 15 November 2022.
- TCFD (2021), *2021 Status Report: Task Force on Climate-related Financial Disclosures*, <<https://www.fsb.org/wp-content/uploads/P141021-1.pdf>>, accessed 15 November 2022.
- UN Global Crisis Response Group on Food, Energy and Finance (2022), *Global Impact of War in Ukraine: Energy Crisis*. Downloadable from <<https://unctad.org/webflyer/global-impact-war-ukraine-energy-crisis>>, accessed 19 November 2022.
- World Bank (2022), *Poverty and Shared Prosperity 2022: Correcting Course*. Downloadable from <<https://openknowledge.worldbank.org/handle/10986/37739>>, accessed 19 November 2022.
- World Economic Forum (2022), *The Global Risks Report, 17th edn*. Downloadable from <<https://www.weforum.org/reports/global-risks-report-2022/>>, accessed 16 November 2022.

PI-FARSIG-2022

ISBN 978-1-898291-28-2

ACCA The Adelphi 1/11 John Adam Street London WC2N 6AU United Kingdom / +44 (0)20 7059 5000 / www.accaglobal.com