The UN Environment Inquiry

The Inquiry into the Design of a Sustainable Financial System has been initiated by the United Nations Environment Programme (UN Environment) to advance policy options to improve the financial system's effectiveness in mobilizing capital towards a green and inclusive economy—in other words, sustainable development. Established in January 2014, it published the first edition of '*The Financial System We Need*' in October 2015, with the second edition launched in October 2016. The Inquiry's mandate currently extends to the end of 2017, with work focused on deepening and taking forward its findings.

More information on the Inquiry is at: *www.unepinquiry.org* and *www.unep.org/inquiry* or from: Ms. Mahenau Agha, Director of Outreach *mahenau.agha@unep.org*.

Corporate Knights

Founded in 2002 by Toby A. A. Heaps and Paul Fengler, Corporate Knights (CK) is a media, research and financial information products company based in Toronto, Canada, focused on promoting "clean capitalism", an economic system where prices fully incorporate social, economic and ecological costs and benefits, and market participants are clearly aware of the consequences of their actions.

About this report

This report has been prepared by Toby A. A. Heaps (Corporate Knights) and Danyelle Guyatt (Collaborare Advisory). This work also benefitted from the support to the Inquiry from the governments of Germany, Italy, Switzerland, the United Kingdom of Great Britain and Northern Ireland, and the European Commission.

Comments are welcome and should be sent to *nick.robins@unep.org***.**

Acknowledgements

Many experts were consulted as part of the consultation process. They are listed in Appendix B.

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Executive Summary

In a time of heightened global uncertainty and rising social discontent, the opportunity to consider and make progress on addressing global inequality and combating systemic risks such as climate change is ever more pressing. A range of regulatory reforms, policies, standards and processes is being developed internationally to promote a more socially inclusive and fair economic system, including the formal adoption by the United Nations General Assembly of the Sustainable Development Goals (SDGs). This report examines how the international financial standards currently relate to the goals of sustainable development and explores opportunities for better alignment as a way to promote greater stability, resilience and fairness to the financial system.[1]

This report follows the UN Environment Inquiry's finding that a "quiet revolution" is taking place as policymakers and financial regulators address the need to forge robust and sustainable financial systems.[2] Despite this "quiet revolution", it is also evident that the sustainability adjustment process has been relatively fragmented and driven by "bottom-up" considerations at the country level. This has resulted in a lack of standardization across jurisdictions with the unintended consequence of increasing the costs associated with reporting and price discovery to adequately incorporate sustainability into the assessment of risk and materiality.

A fragmented response to sustainable development that is not incorporated into international financial standards also increases the risk that the synergies between fostering sustainable development and the stability of the financial system might be missed, particularly in relation to systemic issues such as climate change and global inequality.

There are parallels with financial inclusion and the commitment that G20 Finance Ministers and Central Bank Governors have expressed through the Global Partnership for Financial Inclusion and the development of the Financial Inclusion Action Plan in 2014.[3] The financial standards have evolved to reflect this growing commitment and priority with the incorporation of the notion of proportionality into the financial standards. This shift provides a platform to consider the wider social and environmental impacts of financing activities and how this might be reflected into financial standards to provide a consistent and socially beneficial outcome.

Synergies also exist with the G8's recent work and efforts in relation to "Impact Investing"[4] and the OECD work on this topic.[5] In particular, there is potential to explore ways to begin to standardize the finance industry's approach to measuring, managing and reporting the social and environmental impacts of their activities in a way that aligns with sustainable development and supports financial stability.

It is against this backdrop that the Inquiry sought to investigate the financial standards further, to consider to what extent they currently relate to sustainable development, how they can support and solidify the various G20 policy commitments and the evolving country-level regulations and industry activities in a way that builds on the synergies that already exist.

Key messages:

1. **Financial standards have a significant impact on achieving sustainable development**: This report suggests that while the omission of sustainable development from the core mandate of the financial standard-setting bodies may not prevent regulators or the finance sector from taking action, it has likely resulted in the actions being more sporadic and less effective than might otherwise be the case.

2. **Financial standards currently relate to sustainable development issues in a fragmented way:** Some activities and initiatives that the standard-setting bodies are participating in relate to sustainable development, although there is no overarching framework or agreement on the principles to guide these efforts, resulting in a somewhat patchy and fragmented approach with significant gaps and unintended consequences that could slow down progress.

3. **Unrealized synergies between financial standards and sustainable development could be built upon**: The 15 international financial standards reviewed in this report do not currently consider sustainable development in an explicit way within their mandate, although there are prevailing synergies between some of the standards on environmental issues, financial inclusion and improving industry culture that could be extended.

Financial Standards and Synergies with sustainable development	Not Explicit	Some Synergy (Environment)	Some Synergy (Inclusion)	Some Synergy (Culture)	Scope of Unintended Consequences *
Financial Stability Supervisory Structures					
Financial Stability Board (FSB):	✓	✓		✓	++++
No formal mention of social or environmental factors. Systemic risk posed by climate change prompted new Task Force on Climate-related Financial Disclosures. Due to report on recommended voluntary standards for corporate disclosure in December 2016.					
IMF/World Bank – Financial Sector Assessment Program (FSAP):	✓		✓		++++
Financial inclusion is considered as an explicit part of the FSAP process; environmental factors emerging on a bottom-up basis but not a formal part of the process.					
IMF – Report on Observance of Standards and Codes (ROSC):	✓		✓		++++
The G20/OECD corporate governance standards are one of the 12 recognized areas for assessment within the ROSC assessment.					
Banking regulation and standards					
Basel III – International Regulatory Framework for Banks:	✓	✓	✓		++++
Pillar 1 refers to environmental risks that might arise at the transaction level. Potential synergies with Pillar 2 (Supervisory Review) and Pillar 3 (Market Discipline)					
BCBS – Corporate Governance Principles for Banks:	✓			✓	++++
The Principles refer to culture and values including the promotion of responsible and ethical behaviour. But no explicit reference to social and environmental issues.					
BCBS – Core Principles for Effective Banking Supervision:	✓		✓		++
BCBS has been active on financial inclusion since 2010. Potential wider synergies with principles on corporate governance, risk management and disclosure/transparency.					
Corporate Governance					
G20/OECD Principles of Corporate Governance:	✓	✓	✓	✓	++
References to environmental, human rights and ethical factors, notably in terms of role of stakeholders, disclosure of non-financial information and responsibilities of the board. FSB launched peer review exercise on implementation of the principle.					

Securities Regulation and Standards					
IOSCO – Objectives and Principles of Securities Regulation:	✓		✓		++++
No formal mention of environmental or social issues. Clear synergies with principles on systemic risk, integrity and ethical behaviour, disclosure and certification (e.g. green bonds).					
IOSCO – Code of Conduct for Credit Rating Agencies:	✓			✓	++
Greater focus on improving the quality and integrity of the credit rating process, promoting independence, reducing conflict of interest and improving transparency and disclosure.					
Insurance Regulation and Standards					
IAIS – Insurance Core Principles, Standards, Guidance:	✓		✓		++++
No formal mention of environmental or social issues, but partnership on financial inclusion. Clear synergies with principles on corporate governance, corporate culture, assessment of materiality, internal risk management controls and systemic risk.					
Investment Regulation and Standards					
International Law – Fiduciary Duty:	✓			✓	+++++
France requested OECD to undertake work on the governance of investments by institutional investors in relation to ESG factors and risks, in particular those associated with climate change. Scheduled to publish in December 2016.					
IOPS – Principles for Private Pension Supervision:	✓		✓	✓	+++
No formal guidance on environmental and social factors. Clear synergies with principles of integrity, risk management, governance, alignment of interests, disclosure and transparency.					
OECD Core Principles of Occupational Pension Regulation:	✓		✓	✓	+++
Reference to the need for good governance and the principle of equal treatment. OECD/IOPS Good Practices for Pension Funds' Risk Management Systems makes reference to the possibility to add a socially responsible investment policy.					
Accounting and Financial Reporting Standards					
IASB – International Financial Reporting Standards:	✓	✓			+++++
Reference to impairment test for intangible assets, such as carbon allowances. Synergies with the principles of transparency, accountability and efficiency. Cooperating with the different groups on sustainability reporting.					
IAASB – International Standards on Auditing:	✓			✓	+++++
International Federation of Accountants (IFAC) has been active in exploring the role of the accounting profession in delivering the SDGs and has identified seven of the SDGs that are particularly pertinent to the profession.					

*The extent of the unintended consequences is represented by + signs where more + signs are indicative of a greater gap and unintended consequences. Source: Based on the authors' review of the financial regulations and standards, relevant literature and expert opinion as cited in this report

4. **Climate change is only recently gaining traction within the standard-setting community**: Up until now, the most high profile intervention on climate change issues by the international standard-setting bodies is the establishment of the FSB Taskforce on Climate-related Financial Disclosures that is due to report in December 2016 and is expected to make a valuable contribution to building a framework for improving disclosure and transparency on climate related risks (see Highlight: "FSB Taskforce on Climate-related Financial Disclosures").

5. **Building on financial inclusion towards social inclusion**: The shift towards considering and integrating financial inclusion into financial standards (through the principle of proportionality) provides a platform to consider opportunities for the finance sector to participate in and support the broader consideration of social and environmental factors.[6] The focus in particular has been on facilitating and encouraging access to financial products and services, with most of the financial standards evolving in some way to reflect financial inclusion. This provides a basis for widening the narrative and consideration of social issues, including the role that financial institutions could play in fostering greater equality and poverty alleviation through, for example, fair and transparent executive compensation packages, avoiding aggressive tax avoidance structures, reducing discrimination in the workplace, promoting and protecting human rights and health and safety standards with stakeholders and across the supply chain.
6. **Transforming culture and values**: The financial standards have evolved since the global financial crisis in an effort to promote higher standards of industry culture, ethics and trust. This has resulted in a range of new measures and additions to the financial standards that relate to codes of conduct, remuneration, governance and risk management processes. These efforts go hand in hand with shifting the mindset and behaviour towards thinking more sustainably and could be built upon to consider how the financial standards might explicitly incorporate sustainable development to underpin and guide the values, beliefs and culture of the industry.

Strategic recommendations:

Financial standards are designed to evolve in order to reflect the changing landscape that impacts the ability of standard-setting bodies to provide a stable, resilient and fair financial system. In this way, the emergence of sustainable development as a priority among policymakers and industry leaders presents an opportunity to consider how the financial standards might evolve to support this shift.

One of the challenges with incorporating environmental and social issues into the financial standards is that they do not explicitly list any particular "issue" or metric that should be taken into account, rather the principles are high-level and intended to offer a light hand, voluntary guidance for regulators to oversee the financial institutions under their purview. Consequently, the addition of sustainable development metrics into the standards themselves is less likely to gain headway than the incorporation of overarching 'principles' to better align the financial system with sustainable development. For this reason, the principle of "maximum social benefit" is proposed, along with some other suggestions as discussed below.

1. **Introduce a principle of "maximum social benefit"**: The introduction of a principle to encapsulate the goals of sustainable development would help to guide how the financial standards might evolve over time in a consistent and coherent way. The principle of "maximum social benefit" is based on the premise that the best financial system is one that produces the maximum social benefit as a result of the activities that it undertakes. In order to achieve this, the positive and negative externalities that are generated as a result of the finance sector's activities require greater attention.
2. **Build sustainable development into the core architecture of the financial standards.** Based on the analysis of the financial standards included in this review, five key "entry points" have been identified as offering the greatest opportunity to build sustainable development into the

frameworks that make up the financial standards, namely: systemic risk, governance, transparency, risk/materiality and culture (summarized below).

Principle of "Maximum Social Benefit": The best financial system is that which secures the maximum social benefit from the activities that the finance sector undertakes				
Five Entry points to integrate sustainable development into financial standards:				
(1) Systemic Risk	**(2) Governance**	**(3) Transparency**	**(4) Risk/Materiality**	**(5) Culture**
Incorporate environmental and social issues explicitly into the guidance for managing systemic risks	Embed environmental and social issues into the governance standards across all the finance sector actors	Measure and report the social and environmental performance and impacts of financial sector activities	Include social and environmental issues as part of the guidance for managing risks and assessing materiality	Align industry culture with sustainable development goals to shift values and behaviour

3. **Incorporate sustainable development into systemic risk considerations**: The pursuit of financial stability and the effective management of systemic risks could be enhanced by explicitly embedding sustainable development into the core narrative and early warning systems that are in place, particularly in relation to seismic shifts emanating from global inequality and climate change.

Possible Action	Regulatory bodies/groups
Incorporate environmental and social issues explicitly into the assessment and guidance framework for regulators to manage and build into early warning of systemic risks	FSB in cooperation with financial standard-setting bodies (Basel, IOSCO, IAIS, IOPS), oversight groups (IMF, World Bank, OECD) and expert groups (UN Environment, PRI, WEF)

4. **Strengthen governance**: There is a greater focus on governance and decision-making processes across the financial standards since the financial crisis to reduce conflict of interest and underpin clear lines of accountability – including through the updated G20/OECD Corporate Governance Principles. This could be extended to more explicitly consider how environmental and social considerations fit within the governance structures of financial institutions.

Possible Action	Regulatory bodies/groups
Develop guidance on governance frameworks to support the integration of environmental and social considerations into the decision-making process of financial institutions	FSB and OECD in cooperation with financial standard-setting bodies and expert groups

5. **Improve transparency:** Many of the financial standards have been strengthened to improve the transparency and disclosure requirements following the global financial crisis, including improved risk management processes and governance structures. There is an opportunity to widen the lens to further incorporate sustainability information as part of the disclosure frameworks, building on the Financial Stability Board's Task Force on Climate-related Financial Disclosures review.[7]

Possible Action	Regulatory bodies/groups
Build on the pending FSB Task Force guidance on climate risk disclosure to apply the disclosure standards to all regulated finance sector participants and monitor utilization	FSB in cooperation with other financial standard-setting bodies

6. **Widen the assessment of risk and materiality**: The financial standards have an opportunity to widen the guidance and assessment of risk and materiality to reinforce the growing evidence and commitment to pursue sustainable development as a means to underpin social progress and environmental protection alongside achieving financial strength and resilience.

Possible Actions	Regulatory bodies/groups
Widen the scope of the Financial Sector Assessment Program (FSAP) and the Reports on Observance and Standards of Codes (ROSC) to incorporate sustainable development into the assessment frameworks for all countries	The IMF and the World Bank, in consultation with regulators from countries (e.g. US, France, UK, Netherlands) and expert groups

7. **Transform culture**: Many of the financial standards have strengthened their guidance around improving the culture of the finance industry in the wake of the financial crisis. These efforts could be emboldened through the explicit incorporation of sustainable development into definitions of "good conduct" to better align values with behaviour that will ultimately provide greater societal benefits and financial stability over the long term.

Possible Actions	Regulatory bodies/groups
Develop guidance and an assessment framework to apply across the financial standards to align the values and behaviour of the finance sector with the goals of sustainable development	G20 in cooperation with financial standard-setters (FSB, Basel, IOSCO, IAIS, IOPS, Central Banks), standard-setting agencies (IMF, World Bank, OECD) and industry/subject specialists

1 Introduction

This report examines how the international financial standards currently relate to sustainable development and explores opportunities for better alignment as a way to promote greater stability, resilience and fairness to the financial system.[8] It follows the Inquiry's report (2015)[9] that a "quiet revolution" is taking place as policymakers and financial regulators address the need to forge robust and sustainable financial systems. The Inquiry observed that those governing the financial system, often in collaboration with industry actors, were leading the shift.

The Inquiry uncovered a wide variation in the extent to which countries are embracing sustainable development as part of the regulatory and policy frameworks, the extent to which these policies apply or relate to the finance sector and the way the industry itself has responded. As a result, there are a plethora of examples and leading actions to build on, both in terms of regulatory measures and industry-led actions across the banking, securities, insurance, investment and accounting sectors (see Appendix A).

Despite this "quiet revolution" it is evident from the Inquiry's findings that the adjustment process has been relatively fragmented and driven by "bottom-up" considerations at the country and sometimes state-wide level. This has resulted in a lack of standardization across jurisdictions with the unintended consequence of increasing the costs associated with reporting and price discovery to adequately incorporate sustainability into the assessment of risk and materiality.

A fragmented approach to sustainable development that is not incorporated into international financial standards also increases the risk that the synergies between fostering sustainable development and the stability of the financial system might be missed, particularly in relation to systemic issues such as climate change and global inequality.

In addition to the problem of fragmentation and inefficient price discovery, the existing practices that prevail in the finance sector have unintended consequences that the financial standards may not adequately capture. For illustrative purposes, some examples of unintended consequences of the financial sector on the real economy are presented in Figure 1.

Figure 1: Examples of harmful unintended consequences of the financial sector

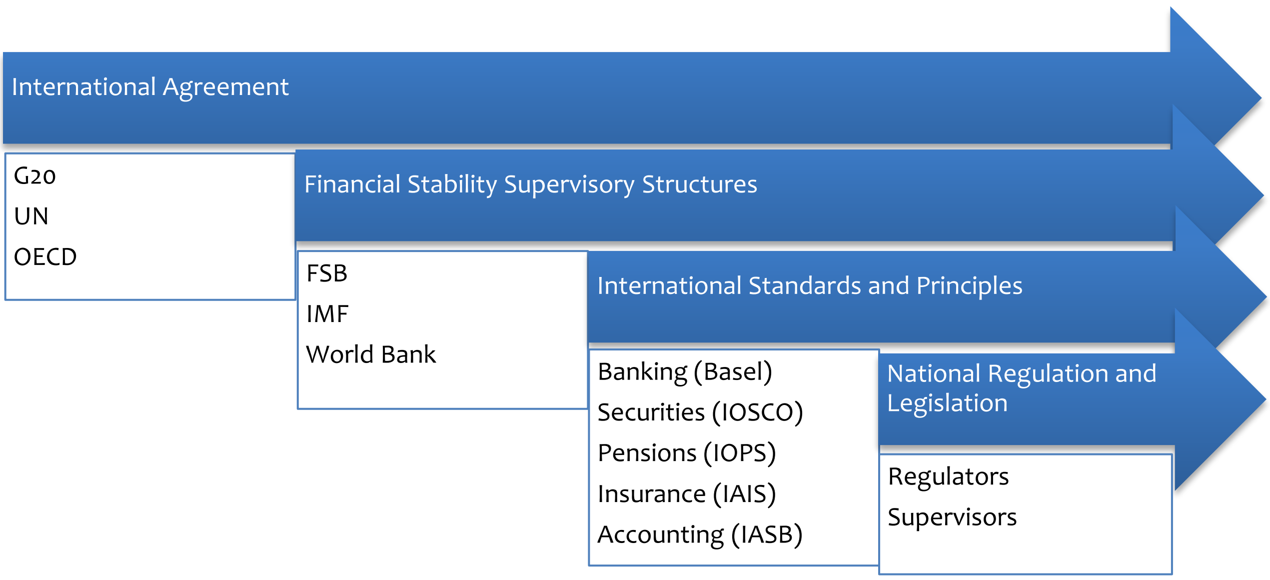
Financial sector activity/behaviour	Impact on the real economy
Focus on short-term return	Misallocation of resources and lack of finance available for long-term investments, including "green" infrastructure where the needs are large.[10]
Bias against financing SMEs in favour of large and secure (high-income) entities	Misallocation of resources and lack of finance available for small- and medium-sized entities where the cost of capital can be extraordinarily high.[11]
Perpetuation of self interest	Undesirable behaviour resulting in system-wide cultural problems with a lack of values and ethics.[12]
Lack of system-wide, integrated thinking	Focus on bottom-up measurement of historical risk/return to the detriment of considering large and future systemic risks that can destabilize the system.[13]

Behavioural biases and shortcomings	Bubbles, mania and emotion can overly influence asset values, resulting in excessive volatility and exaggerating peaks/troughs of economic cycles.[14]
Wide use and reliance on agents in the decision-making process	Can result in rent-seeking behaviour, conflict of interest and erosion of net benefits to society.[15]
Short-term trading	In the case of the commodities market, for example, this can have direct impacts on food security.[16] Also encourages companies to delay R&D expenditure.[17]
Failure to value natural capital	Can result in the misuse and waste of resources on a grand scale, undermining efforts to combat climate change and environmental protection.[18]
Excessive pay and compensation packages that encourage short-term risk-taking	Perpetuates the widening inequalities and the concentration of wealth, undermining efforts to combat poverty and improve wealth distribution.[19]

The impact of financial standards on sustainable development

Financial standards are the bedrock of the regulatory framework of the financial system that guides regulators on how they can best achieve their goals to provide a stable, resilient and fair financial system. As Figure 2 sets out, financial standards impact the regulations and supervisory standards at the national level, as well as help to inform and achieve the priorities at the international level such as the G20.

Figure 2: The Global Regulation Process



Source: Adapted from Davis, K. (2011) Regulatory Reform Post the Global Financial Crisis: An Overview

The international standard-setting bodies (SSBs) therefore play a crucial role in providing the governance architecture that oversees how the financial system functions at the international level. The role that the SSBs can play in integrating sustainable development into the financial system is vital, not only from the perspective of increasing the legitimacy of sustainable development among finance sector regulators and industry participants, but also for providing the necessary governance and guidance frameworks that is required to support this shift.

As Sections 3 and 4 in this report highlight, there is evidence of some synergies between the financial standards and the goals of sustainable development in relation to climate/environmental protection, financial inclusion and culture. However, none of the standards explicitly mention sustainable development as part of their mandate or oversight responsibilities and, while some efforts are emerging, these remain somewhat patchy. This may be perpetuating inefficiencies in terms of the price discovery and reporting of environmental and social issues, as well as undermining the credibility and effectiveness of government policies, regulations and industry-led activities that are making efforts to promote a more sustainable, stable and fair financial system.

Evolving financial standards in synchronicity with sustainable development

International financial standards are designed to evolve in order to reflect the changing landscape that impacts the ability of policymakers, regulators and SSBs to provide a stable, resilient and fair global financial system.

The most apparent and recent illustration of this evolutionary process is the dramatic shift we have seen in regulatory standards following the global financial crisis, including (inter alia) a greater emphasis on encouraging preparedness and early warning indicators of systemic risks, a more visible role and expanded use of instruments by central banks, tighter governance and oversight of risk management practices, higher standards of ethics and accountability to improve industry culture as well as promoting greater fairness through striving for financial inclusion across the financial sector.

Based on analysis of 15 international standards included in this review, five clear "entry points" have been identified as offering the greatest opportunities for incorporating sustainable development into the existing standards framework, these include:

1. **Systemic risks**: The pursuit of financial stability and the effective management of systemic risks could be enhanced by explicitly embedding sustainable development into the core narrative and paradigm of financial standards, particularly in relation to seismic shifts emanating from global inequality and climate change.

2. **Transparency:** Many of the financial standards have been strengthened to improve the transparency and disclosure requirements following the global financial crisis, including improved risk management processes and governance structures. There is an opportunity to widen the lens to further incorporate sustainability information as part of the disclosure frameworks, building on the Financial Stability Board's Task Force on Climate-related Financial Disclosures review.

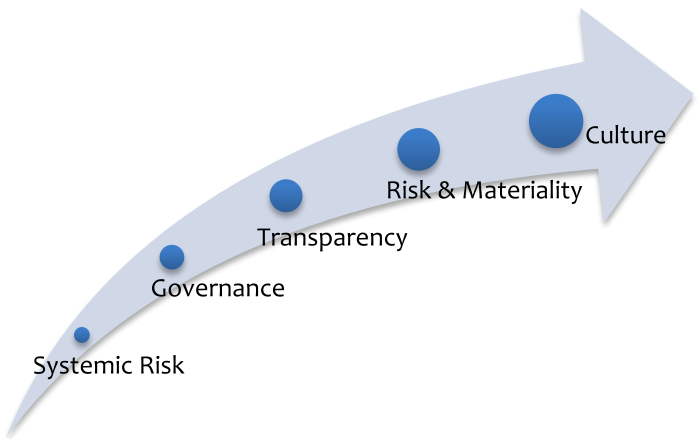
3. **Governance**: There is a greater focus on governance and decision-making processes across the financial standards to reduce the potential conflict of interest and underpin clear lines of accountability, including the updated G20/OECD Corporate Governance Principles. This momentum could be extended to explicitly consider how environmental and social considerations fit within the governance structures of financial institutions.

4. **Materiality**: There is an opportunity to reinforce the growing body of evidence and opinion that highlights the interdependency between social and environmental conditions with economic and financial outcomes through widening the definitions of risk and materiality. The incorporation of social and environmental issues into the assessment of financial materiality will better reflect the true value of assets by giving greater attention to the externalities and unintended consequences of the finance sector's activities.

5. **Culture**: Many of the financial standards have strengthened their guidance to improve the culture of the finance industry in the wake of the financial crisis. These efforts could be emboldened through the explicit incorporation of sustainable development into definitions of "good conduct" to better align values with behaviour that will ultimately provide greater societal benefits and financial stability over the long term.

Building on these five possible "entry points", Figure 3 represents a simplified depiction of how financial standards might evolve to incorporate sustainable development over time.

Figure 3: Evolving Financial Standards to Embed Sustainable Development



There is an opportunity to build on the synergies and extend the notion of sustainable development as international financial standards continue to evolve. This is not a straightforward task and the paper provides a number of suggestions as to how this might unfold, including the possible introduction of an overarching principle of "Maximum Social Benefit" that encapsulates the goals of sustainable development as they relate to financial standards in a coherent and consistent way.

The remainder of this report is structured as follows:

1. Definitions and methodology
2. Summary findings
3. Detailed findings
4. Possible actions and priorities
5. Conclusion

2 Definitions and Methodology

This section sets out the definitions, assessment criteria and methodology that were used to evaluate the 15 international financial standards included in this review as they relate to sustainable development (see Highlight: "Definition of Sustainable Development").

Highlight: Definition of Sustainable Development

Sustainable Development is defined by the UN as development that meets the needs of the present without compromising the ability of future generations to meet their own needs.[20]

(1) Sustainable development calls for concerted efforts towards building an inclusive, sustainable and resilient future for people and planet.

(2) For sustainable development to be achieved, it is crucial to harmonize three core elements: economic growth, social inclusion and environmental protection. These elements are interconnected and all are crucial for the well-being of individuals and societies.

(3) Eradicating poverty in all its forms and dimensions is an indispensable requirement for sustainable development. To this end, there must be promotion of sustainable, inclusive and equitable economic growth, creating greater opportunities for all, reducing inequalities, raising basic standards of living, fostering equitable social development and inclusion, and promoting integrated and sustainable management of natural resources and ecosystems.

This goal gained the support of 193 Member States of the United Nations for a new sustainable development agenda, "Transforming Our World: The 2030 Agenda for Sustainable Development". This agenda contains 17 goals and 169 targets.[21]

Sustainability criteria: In this report reference to "sustainability criteria" includes the environmental, social and governance (ESG) factors that will support the attainment of sustainability goals.[22] There are currently no agreed standardized sustainability criteria at the international level, although differing standards and emerging practices are being applied.

This review is not intended to be a complete evaluation of all the international and national financial standards that exist, but rather represents an assessment of the most pertinent global financial standards from a sustainable development perspective. The standards are also widely adopted and referenced by the major standard-setting bodies (including the FSB and IMF) and regulators across the developed and developing world. The 15 international standards included in this review include:

1. Financial stability supervisory structures
    i. Financial Stability Board
    ii. IMF/World Bank Financial System Stability Assessment
    iii. IMF Reports on Observance of Standards and Codes
2. Banking regulation and standards
    i. Basel III – International Regulatory Framework for Banks
    ii. BCBS – Corporate Governance Principles for Banks
    iii. BCBS – Core Principles for Effective Banking Supervision

3. Corporate governance standards
    i. G20/OECD Principles of Corporate Governance
4. Securities regulation and standards
    i. IOSCO Objectives and Principles of Securities Regulation
    ii. IOSCO Code of Conduct Fundamentals for Credit Rating Agencies
5. Insurance regulation and standards
    i. IAIS – Insurance Core Principles, Standards, Guidance and Assessment Methodology
6. Institutional investment regulation and standards
    i. International Law – Fiduciary Duty and Prudent Person Rule
    ii. IOPS – Principles for Private Pension Supervision
    iii. OECD – Core Principles of Private Pension Regulation
7. Accounting and financial reporting standards
    i. IASB International Financial Reporting Standards
    ii. IAASB International Standards on Auditing

Highlight: Financial standards as they relate to social and financial inclusion

Central to the goals of sustainable development is the need to foster social inclusion.

Social inclusion is defined by the World Bank as the situation where poor and marginalized people are empowered to take advantage of burgeoning global opportunities. "It ensures that people have a voice in decisions which affect their lives and that they enjoy equal access to markets, services and political, social and physical spaces."[23] Social inclusion is integral to the consideration of global inequality and how that can be redressed.[24]

Financial inclusion is essential for achieving social inclusion. It refers to the need to provide access to, and the use of, formal financial services by households and firms. Policymakers see it as a way to improve people's livelihoods, reduce poverty, and advance economic development.[25]

The G20 Finance Ministers and Central Bank Governors expressed strong support for financial inclusion and established the Global Partnership for Financial Inclusion in Seoul in 2010.[26] This was followed by the development of the Financial Inclusion Action Plan in 2014, which sets out a number of priorities and actions to facilitate financial inclusion.[27]

The international financial standards have also evolved to reflect this growing commitment and priority by incorporating the notion of proportionality into a range of core principles,[28] including the Financial Sector Assessment Program, Basel Committee on Banking Supervision, the Committee on Payments and Market Infrastructures, the Financial Action Task Force, the International Association of Deposit Insurers, International Association of Insurance Supervisors and International Organization of Securities Commissions.[29]

Financial standards and social inclusion: The evolution in financial standards to incorporate principles of proportionality[30] is designed to help balance the goals of financial inclusion, integrity and stability. It does not directly require financial inclusion or use this language, although guidance material is being developed and this is likely to evolve further, particularly in relation to digital financial inclusion, which provides new opportunities and risks for policymakers and regulators to navigate.[31]

This shift towards considering and integrating financial inclusion into financial standards provides a platform to consider opportunities for the finance sector to participate in and support the broader notion of social inclusion where financial institutions consider the way they can manage and encourage greater equality and poverty alleviation through, for example, fair and transparent executive compensation packages, avoiding aggressive tax avoidance structures, reducing discrimination in the workplace, promoting and protecting human rights and health and safety standards, with stakeholders and across the supply chain.

The following criteria were applied in categorizing and evaluating the global financial standards with respect to sustainable development:

1. **Environment**: To what extent does the standard reflect climate change and environmental protection in its definitions, metrics and guidance material? (See Highlight: "Climate change and sustainable development")
2. **Inclusion**: To what extent does the standard consider inequality and foster social inclusion as part of supporting the stability of the financial system and the allocation of resources that will be most beneficial to society in the long run? (See Highlight: "Financial standards as they relate to social and financial inclusion")
3. **Culture**: To what extent does the standard contribute to facilitating a shift in industry culture and behaviour that is longer-term and embeds values that will support sustainable development? (See Highlight: "Principle of maximum social benefit and allocative efficiency")

Highlight: Climate change and sustainable development

Tackling climate change and fostering sustainable development are two mutually reinforcing actions. As the UN noted: "sustainable development cannot be achieved without climate action, as many of the SDGs are actually addressing the core drivers of climate change."[32]

(1) **Maximize social benefit**: Financial institutions can consider the "maximum social benefit" emanating from their activities by explicitly considering, measuring and reporting the social and environmental impacts.

(2) **Systemic risk**: Financial institutions can influence the extent to which future systemic risks are incorporated into the financial system and the time horizon that governs capital allocation decisions in a way that can be more beneficial for society in the long run.[33]

(3) **Governance**: Financial institutions will be able to better address climate change risks and opportunities if an appropriate governance framework and decision-making process that support ongoing assessment and action are in place.[34]

(4) **Disclosure**: There is a growing realization that promoting greater transparency and disclosure on climate change risks and opportunities is vital to support financial assessments that incorporate such considerations, including disclosure by corporations and the financial institutions themselves.

(5) **Materiality assessments**: Financial institutions play a vital role in the global economy through

their decisions around what activities to finance, lend to, insure against and invest in. The financial assessments that underpin such activities influence where capital is diverted to in the economy and the extent to which such activities are socially beneficial or not. As such, the inclusion of climate change as part of the materiality assessment will better reflect the true value of assets.[35]

(6) **Culture and behaviour**: The culture and behaviour of the financial sector plays a significant role in determining the way capital is allocated and the extent to which the beliefs and values support a stable, resilient and fair financial system that is aligned with the goals of sustainable development.[36]

The categorization of the global standards and supervisory principles are presented in terms of the degree to which the standards reflect the goals of sustainable development as follows:

a. **Not explicit:** There is no explicit reference to issues relating to sustainable development within the currently defined scope of the standard, although there may be implicit linkages and synergies.

b. **Some synergy (environment):** There is some reference or activities related to climate change and environmental issues that could be extended.

c. **Some synergy (inclusion):** There is some reference or activities related to financial inclusion that could be extended to a wider interpretation of social inclusion.

d. **Some synergy (culture):** There is some reference or activities related to transforming the finance sector's culture and investment horizon that could be extended.

The methodology for assigning the categorization was based on a 3-stage process:

1. **Literature review**: A review of the relevant literature relating to sustainable development and the extent to which this fits within the financial standards framework. This review included a mapping of lessons learnt from other financial regulations that foster sustainable development, as well as relevant industry-led initiatives. The references are cited throughout this paper and some of the key initiatives are highlighted in Appendix A.
2. **Primary research**: The international financial standards were reviewed to assess the extent to which they currently explicitly mention issues related to sustainable development or participate in relevant initiatives, focusing in particular on the emerging synergies with the environment, inclusion and culture. This research also identified the gaps that exist within the financial standards as they relate to sustainable development and the unintended consequences that might arise as a result of these gaps. Section 3 summarizes the findings of this review.
3. **Consultation with experts**: Based on a combination of the literature review and primary research, key issues were compiled to discuss with industry experts across the finance sector including experts in banking, insurance, investment and accounting/auditing. This interaction, combined with the literature review and the primary research of the financial standards, helped to formulate the recommendations and possible near-term priorities in terms of evolving financial standards in a way that might better align with sustainable development. Appendix B lists the experts who were consulted as part of this consultation process.

3 Summary findings

This section presents the highlights of the assessment of 15 international financial standards that were included in this review in terms of their relationship with sustainable development, including the synergies between sustainable development and the existing financial standards framework, and the gaps and possible unintended consequences that the financial standards could have on achieving sustainable development.

The synergies between the financial standards and sustainable development, along with the gaps and unintended consequences that might arise are summarized in Figure 4. The full and detailed review of the standards is provided in Section 4.

The first 4 columns of Figure 4 highlight the synergies between financial standards and sustainable development in terms of whether the relationship is made explicit as part of the core mandate or guidance material (column 2), or whether the standard might make reference to issues related to climate change and/or environmental protection (column 3), to social issues or financial inclusion (column 4) or culture change and codes of conduct (column 5). The final column denotes the scope of the unintended consequences as a result of the gap between the financial standards and sustainable development its likely impact on achieving SDGs, with a higher rating indicating a greater potential negative implication.

Figure 4: Synergies between Financial Standards and sustainable development

<table>
<tr><th>Financial Standards and Synergies with sustainable development</th><th>Not Explicit</th><th>Some Synergy (Environment)</th><th>Some Synergy (Inclusion)</th><th>Some Synergy (Culture)</th><th>Scope of Unintended Consequences *</th></tr>
<tr><td colspan="6">Financial Stability Supervisory Structures</td></tr>
<tr><td>Financial Stability Board (FSB):</td><td>✓</td><td>✓</td><td></td><td>✓</td><td>++++</td></tr>
<tr><td colspan="6">No formal mention of social or environmental factors. Systemic risk posed by climate change prompted new Task Force on Climate-related Financial Disclosures. Due to report on recommended voluntary standards for corporate disclosure in December 2016.</td></tr>
<tr><td>IMF/World Bank – Financial Sector Assessment Program (FSAP):</td><td>✓</td><td></td><td>✓</td><td></td><td>++++</td></tr>
<tr><td colspan="6">Financial inclusion is considered as an explicit part of the FSAP process; environmental factors emerging on a bottom-up basis but not a formal part of the process.</td></tr>
<tr><td>IMF – Report on Observance of Standards and Codes (ROSC):</td><td>✓</td><td></td><td>✓</td><td></td><td>++++</td></tr>
<tr><td colspan="6">The G20/OECD corporate governance standards are one of the 12 recognized areas for assessment within the ROSC assessment.</td></tr>
<tr><td colspan="6">Banking regulation and standards</td></tr>
<tr><td>Basel III – International Regulatory Framework for Banks:</td><td>✓</td><td>✓</td><td>✓</td><td></td><td>++++</td></tr>
<tr><td colspan="6">Pillar 1 refers to environmental risks that might arise at the transaction level. Potential synergies with Pillar 2 (Supervisory Review) and Pillar 3 (Market Discipline)</td></tr>
<tr><td>BCBS – Corporate Governance Principles for Banks:</td><td>✓</td><td></td><td></td><td>✓</td><td>++++</td></tr>
<tr><td colspan="6">The Principles refer to culture and values including the promotion of responsible and ethical behaviour. But no explicit reference to social and environmental issues.</td></tr>
</table>

BCBS – Core Principles for Effective Banking Supervision:	✓		✓		++
BCBS has been active on financial inclusion since 2010. Potential wider synergies with principles on corporate governance, risk management and disclosure/transparency.					
Corporate Governance					
G20/OECD Principles of Corporate Governance:	✓	✓	✓	✓	++
References to environmental, human rights and ethical factors, notably in terms of role of stakeholders, disclosure of non-financial information and responsibilities of the board. FSB launched peer review exercise on implementation of the principle.					
Securities Regulation and Standards					
IOSCO – Objectives and Principles of Securities Regulation:	✓		✓		++++
No formal mention of environmental or social issues. Clear synergies with principles on systemic risk, integrity and ethical behaviour, disclosure and certification (e.g. green bonds).					
IOSCO – Code of Conduct for Credit Rating Agencies:	✓			✓	++
Greater focus on improving the quality and integrity of the credit rating process, promoting independence, reducing conflict of interest and improving transparency and disclosure.					
Insurance Regulation and Standards					
IAIS – Insurance Core Principles, Standards, Guidance:	✓		✓		++++
No formal mention of environmental or social issues, but partnership on financial inclusion. Clear synergies with principles on corporate governance, corporate culture, assessment of materiality, internal risk management controls and systemic risk.					
Investment Regulation and Standards					
International Law – Fiduciary Duty:	✓			✓	+++++
France requested OECD to undertake work on the governance of investments by institutional investors in relation to ESG factors and risks, in particular those associated with climate change. Scheduled to publish in December 2016.					
IOPS – Principles for Private Pension Supervision:	✓		✓	✓	+++
No formal guidance on environmental and social factors. Clear synergies with principles of integrity, risk management, governance, alignment of interests, disclosure and transparency.					
OECD Core Principles of Occupational Pension Regulation:	✓		✓	✓	+++
Reference to the need for good governance and the principle of equal treatment. OECD/IOPS Good Practices for Pension Funds' Risk Management Systems makes reference to the possibility to add a socially responsible investment policy.					
Accounting and Financial Reporting Standards					
IASB – International Financial Reporting Standards:	✓	✓			+++++
Reference to impairment test for intangible assets, such as carbon allowances. Synergies with the principles of transparency, accountability and efficiency. Cooperating with the different groups on sustainability reporting.					
IAASB – International Standards on Auditing:	✓			✓	+++++
International Federation of Accountants (IFAC) has been active in exploring the role of the accounting profession in delivering the SDGs and has identified seven of the SDGs that are particularly pertinent to the profession.					

*The extent of the unintended consequence is represented by + signs where more + signs are indicative of a greater gap and unintended consequences. Source: Based on the authors' review of the financial regulations and standards, relevant literature and expert opinion as cited in this report

Synergies:

The key takeaway from Figure 4 in terms of the existing synergies between the financial standards as they currently relate to the goals of sustainable development is that there are some sporadic signs of action taking place across the financial standards as well as some latent synergies that could be extended.

1. **Climate change is recently gaining traction within the standard-setting community**: Up until now, the most high profile intervention on climate change issues by the international standard-setting bodies is the establishment of the FSB Taskforce on Climate-related Financial Disclosures that is due to report in December 2016, which will make a valuable contribution to building a framework for improving disclosure and transparency on climate related risks (see Highlight: "FSB Taskforce on Climate-related Financial Disclosures").
2. **Building on financial inclusion towards social inclusion**: There has been a move towards incorporating financial inclusion into the financial standards over recent years. The focus in particular is on facilitating and encouraging access to financial products and services, with most of the financial standards evolving in some way to reflect financial inclusion. This builds a solid platform for widening out the narrative and consideration to social inclusion, including the role that financial standards could play in encouraging financial institutions to consider how their business operations have an impact on redressing extreme poverty, inequality and abuse of human rights within their operations and across the supply chain.
3. **Transforming culture and values**: The financial standards have evolved since the global financial crisis in an effort to promote higher standards of industry culture, ethics and trust. This has resulted in a range of new measures and additions across the financial standards in relation to codes of conduct, remuneration, governance and risk management. These efforts go hand in hand with shifting the industry's mindset and behaviour and could be built upon to consider how the standards might explicitly incorporate sustainable development to underpin and guide the industry's values, beliefs and culture.

Gaps/unintended consequences:

The final column of Figure 4 highlights the scope for unintended consequences that emanate from the financial standards, with the largest potential impact coming from:

> **The FSB:** Plays a key role as the overriding body responsible for overseeing financial stability across the SSBs including systemic risks. While the FSB has started to consider some issues related to sustainable development, the potential is clear for this to be developed and applied across the SSBs in a more coherent and consistent way, including through the possible development and application of an overarching principle such as "maximum social benefit" to frame how the standards might evolve over time.
>
> **The FSAP and ROSC assessments:** Countries widely rely on them to provide an overall "health check" of the financial performance and development at the state level. They are crucial for reinforcing the financial standards that underpin the assessment framework and sending

appropriate signals to country leaders as to what constitutes good financial "health". The absence of a wider application of sustainable development (beyond financial inclusion) undermines the legitimacy and perceived interconnectedness of these issues with financial performance for policymakers.

The core IOSCO and IAIS standards: They are the bedrock for the standards that underpin the securities and insurance sectors respectively, hence play a vital role for influencing the interpretation of the regulations at the state level. The absence of any reference to environmental or social issues within definitions or guidance on risk management, materiality, governance, codes of conduct or considerations of systemic risk undermines the efforts by some state regulators and industry groups to integrate sustainability into decision-making processes in a more coherent way.

Fiduciary duty: Investor duties are the foundation for the core duties of pension funds and as such play a key part in influencing how pension funds interpret their role and the way that sustainability issues might fit within that role. While UN Environment and PRI together with other state activities have made considerable effort to clarify the interpretation of the law, uncertainty is still hampering the wider integration of sustainability into investment processes in a meaningful way. Following a request by the French COP21 Presidency, the OECD is now conducting work on fiduciary duties and how institutional investors can be encouraged to invest responsibly, which will also be an important development to watch.

The accounting and auditing standards: Are essential for setting standards for reporting, disclosure and definitions of materiality that are used by listed entities and reinforced across all of the SSB frameworks. While some efforts are under way to solidify the reporting and disclosure standards on sustainability information, there is still some way to go before these issues are captured in any meaningful way within the core financial standards, particularly in relation to their impact on definitions of materiality.

This is not to suggest or imply that the other standards or SSBs in Figure 4 are less important, but that the signalling strength of the five standards mentioned above in terms of their impact on sustainable development is likely to be the most significant. In particular, the absence of sustainable development from within the core framework of these financial standards has likely resulted in a number of unintended consequences that could undermine sustainable development, some of which are highlighted below.

1. **Weaken the alignment of national and international policy goals**: Some of the interviewees noted that the omission of sustainable development from the standards that govern the finance sector makes it more challenging for states to develop and implement their policy measures in a consistent and coherent way, in some cases polarizing the objectives of fostering sustainable economic growth, social inclusion, climate change and environmental protection.[37]

2. **Undermine industry initiatives**: The lack of reference to sustainable development within the financial standards creates a perception across the finance industry that social and environmental issues are "sideline activities", which could undermine the legitimacy and effectiveness of existing and emerging industry-wide practices.[38]

3. **Narrow the framing of systemic risk**: The absence of sustainability considerations within systemic risk considerations undermines the ability for policymakers, regulators and the finance sector to build

the capacity to consider future systemic risks that might emanate from social and environmental factors, including (but not limited to) the early detection and response to global inequality and climate change.[39]

4. **Failure to address information asymmetry**: The lack of standardization on how sustainability issues should be measured and reported has resulted in a proliferation of different reporting initiatives to close the information gap, resulting in some confusion about what should be measured and reported, likely resulting in higher reporting costs and lower efficiency in terms of price discovery. While efforts are under way to address these challenges, the role of the SSBs as part of this process will be an important determinant as to how this evolves and its impact on financial standards.[40]

5. **Perpetuate short-term mindset**: While some reference is made to the risks of short-termism in some of the financial standards as a general observation, this is somewhat detached and not translated into the application of the standards as it relates to the governance, risk management processes, assessment of materiality or the industry culture that prevails across the financial sector.[41]

6. **Miss an opportunity to reinforce and solidify ethics and values**: The question of how to instil ethics and integrity into the financial sector is a subject that is referred to from a legal/compliance perspective in most of the financial standards. However, no consistent framework for assessing or fostering ethical behaviour exists and no link is made to the overarching principles that underpin sustainable development. The absence of any framework in this regard makes it much more difficult to achieve (or indeed monitor) behaviour change.[42]

4 Detailed findings

This section presents the detailed findings and analysis on the 15 financial standards in terms of their relationship to sustainable development and the gaps and unintended consequences that might arise as a result.

4.1 Financial stability supervisory structures

This section explores the financial stability supervisory structures as they relate to the goals of sustainable development across the following 3 areas:

i. Financial Stability Board

ii. IMF/World Bank Financial System Stability Assessment

iii. IMF Reports on Observance of Standards and Codes

4.1.1 Financial Stability Board

Summary Assessment

Synergies with sustainable development:

(1) The Task Force on Climate-related Financial Disclosures is developing voluntary, consistent climate-related financial risk disclosures for companies in providing information to investors, lenders, insurers, and other stakeholders (see Highlight: FSB Taskforce on Climate-related Financial Disclosures").

(2) The FSB has a guidance paper on financial institutions and risk culture (2014)[43] and another on principles for sound compensation practices (2009).[44]

(3) The FSB Compensation Monitoring Contact Group hosted a roundtable in May 2016 to share experiences and lessons on the use of compensation tools to address misconduct in banks.[45]

(4) The FSB has recently announced a consultation on the OECD/G20 Principles of Corporate Governance.[46]

Gaps/unintended consequences:

(1) Consideration of climate change disclosure requirements is framed as a bottom-up information asymmetry issue rather than a systemic risk or one that is related to culture and behaviour.

(2) No explicit reference is made to environmental or social considerations as part of the systemic risk framework, therefore no guidance is provided on how regulators might consider these issues as part of their oversight responsibilities.

(3) No reference is made in FSB papers or guidance material on inequality as a potential economic and financial systemic risk.

(4) There is no consideration of broader issues related to organization and industry behaviour such as short-termism, values, trust and integrity.

The FSB is an international body that monitors and makes recommendations about the global financial system to promote financial stability. It was established in April 2009 at the initiative of the G20 as a successor to the Financial Stability Forum, with a broadened mandate to promote financial stability.[47] The

FSB has designated standards under 12 policy areas as being key for sound financial systems and deserving of priority implementation.[48] These standards are broadly accepted as representing minimum requirements for good practice that countries are encouraged to meet or exceed. The FSB also lists a wider Compendium of Standards that currently includes 246 standards that relate in turn, to the 12 priority policy areas.[49]

The FSB agreements and standards are non-binding and operate by moral suasion and peer pressure as the platform to set internationally agreed minimum standards to be implemented at the national level. The FSB states that it "seeks to strengthen financial systems and increase the stability of international financial markets. The policies developed in the pursuit of this agenda are implemented by jurisdictions and national authorities."[50]

In this way, the FSB plays a key role in supporting states to come together to formulate international agreement on areas as they relate to financial stability, while at the same time setting the scene for appropriate regulatory measures and policies to be implemented at the national level.

Synergies with sustainable development

While sustainable development is not mentioned in the FSB's charter or mandate, it has the potential to consider sustainable development issues as they relate to the goal of promoting financial stability. This was recently demonstrated by the request of the G20 finance ministers in April 2015 for the FSB to examine the issue of financial stability in the face of climate change. Critical issues to consider include an understanding of the scale of the physical and transitional issues, the adequacy of market information as well as the preparedness of financial institutions to understand the long-term risks attached to climate change.

This led to the establishment of the Task Force on Climate-related Financial Disclosures (TCFD) to develop voluntary, consistent climate-related financial risk disclosures for companies in providing information to investors, lenders, insurers, and other stakeholders. The TCFD is considering the physical, liability and transition risks associated with climate change and what constitutes effective financial disclosures across industries. The work and recommendations of the TCFD are expected to help firms understand what financial markets want from disclosure in order to measure and respond to climate change risks, and encourage firms to align their disclosures with investors' needs (see Highlight: "FSB Taskforce on Climate-related Financial Disclosures").

Gaps/unintended consequences

While the FSB acknowledges and is investigating the disclosure standards around climate change risks for listed corporations, there are some opportunities to expand the consideration of this issue. First, the disclosure review will reportedly only apply to listed corporations and will not extend to other financial agents, such as central banks and institutional investors. Article 173 of the French Law on energy transition for green growth is a useful example to draw upon in terms of developing disclosure requirements for institutional investors as they relate to climate risks (see Appendix A).

Second, the TCFD is framed from the presumption that bottom-up risk assessment of climate change will be enhanced by improved disclosure, without explicitly considering the system-wide risks that bottom-up analysis might not adequately capture. It also presumes that improved disclosure will result in increased utilization of the information to underpin financial decisions, which will need to be assessed and monitored to ensure that disclosure does not become purely a compliance exercise.

In addition to the issue of climate change, there are other areas related to sustainable development that the FSB is not currently considering but which may also help to improve the stability of the financial system, such as the role of culture change in supporting a more stable financial system and the systemic pressures that build from rising global inequality. The FSB has a guidance paper on financial institutions and risk culture (2014)[51] and another on principles for sound compensation practices (2009)[52] however neither of these papers tackle the broader issues related to organization and industry culture such as short-termism, values, trust and integrity that some have argued is just as important as knowledge and incentives in driving behaviour.[53]

Also, no FSB paper currently mentions inequality as a potential economic and financial systemic risk, despite the growing evidence that this is a major structural issue facing all global economies and financial systems that needs to be addressed.[54]

Highlight: FSB Taskforce on Climate Related Financial Disclosures

The Task Force will present a final report for consultation by end December 2016. A speech by Mark Carney, the Chair of the FSB,[55] gave an indication that there would be an expectation for utilization of carbon disclosure to build market discipline, such as:

(1) Governments providing guidance on carbon pathways or an indicative carbon pathway[56] so that the agents within the financial system can build carbon risk assessments into their frameworks; and

(2) Agents within the financial system considering stress testing techniques and scenario analysis as part of their risk management framework in relation to climate change risks.

It is clear that the FSB's focus on disclosure of carbon risk is an important development in considering climate change. The report will have implications for a myriad of global standards and regulations over the coming years in terms of improving reporting and utilization of carbon risk information.

4.1.2 IMF/World Bank Financial Sector Assessment Program

Summary Assessment

Synergies with sustainable development:

(1) The FSAP process underwent an extensive review following the financial crisis, resulting in a shift in focus towards systemic risk to promote financial stability.[57]

(2) Financial inclusion is considered as an explicit part of the FSAP process, including issues related to access and use of financial services by households and firms.[58]

(2) The World Bank assesses the financial development conditions in terms of institutions, markets and infrastructure. Issues related to development of domestic capital markets are particularly important in developing and low-income countries.[59]

Gaps/unintended consequences:

(1) Consideration of climate change is not a standard component of the FSAP review process, although it could be included in countries where climate change is an immediate and present threat.

(2) A broader definition of social issues is not included beyond financial inclusion (for either

developed or developing countries).

(3) Systemic risk alert – The absence of sustainability considerations within FSAPs could undermine the ability for policymakers, regulators and the finance sector to consider future systemic risks that might emanate from social and environmental factors, including (but not limited to) the early detection and response to rising inequality and climate change.[60]

The FSAP is an analysis of a country's financial sector with a focus on two major components: a financial stability assessment (by the IMF)[61] and a financial development assessment (by the World Bank).[62] The global financial crisis demonstrated the need for greater surveillance and assessment to promote financial and economic stability and the FSAP is now a mandatory review process that encompasses 25 jurisdictions that are prioritized according to the size and connectedness of the financial centres.[63]

Synergies with sustainable development

The Inquiry (2015) highlighted the integration of sustainable development metrics into the FSAP as a possible option to explore, as achieving sustainable development is strongly aligned with the goals and objectives to promote a more robust and stable financial system. The FSAP process underwent an extensive review following the financial crisis, resulting in a shift in focus towards systemic risk to promote financial stability.[64] At the same time over recent years, the FSAP framework expanded to integrate the notion of financial inclusion (broadly defined as the access to and use of formal financial services by households and firms).[65]

More specifically, the development assessment focuses on medium- to long-term needs for the deepening and strengthening of the financial sector for low-income and developing countries, including assessments of: (1) financial sector infrastructure development needs; (2) financial sector oversight; (3) public policies affecting financial sector activity; (4) the impact of an underdeveloped financial sector on financial stability; and (5) long-term financial sector reforms.

Gaps/unintended consequences

Despite this review process, at present the definition of financial development in the FSAP framework does not relate to the broader definition of sustainable development as defined in this report and elsewhere that seeks to promote both social inclusion (of which financial inclusion is an enabler) and climate change/environmental protection measures.

While financial inclusion is an integral component of achieving social inclusion outcomes, questions remain about the broader activities of the financial sector in terms of redressing the social imbalances that perpetuate social exclusion. For example, it does not consider the role that the finance sector could play in reducing global inequality that is structural and embedded into the corporate pay scales (including those of the financial institutions). In addition, it does not incorporate considerations around aggressive tax avoidance strategies that may undermine governments' ability to fund social inclusion programmes (see Highlight: Financial standards as they relate to social and financial inclusion).

Climate change is increasingly recognized as a systemic risk that has impacts on the finance industry, as on all sectors of the global economy. Some financial institutions recognize that climate change increases uncertainty and investment risk, while also producing new opportunities, although the level of action is sporadic and patchy at best.[66] Reflecting these risks and capturing new opportunities is therefore crucial if the industry is to carry out its functions successfully and underpin a stable financial system. By not incorporating climate change into FSAP reports on a consistent basis, this large and systemic risk might be overlooked.

Another consequence is that it makes it more challenging for countries to align their economic and financial structures and frameworks around achieving their social and environmental goals in a unified way. It also sends a signal to country leaders that sustainable development objectives are not part of the core 'globally accepted' policy framework and are therefore not a priority for achieving economic and financial stability, resilience and fairness.

This separation can result in environmental and social issues being confined to considerations around aid and development budgets, as a wealth transfer payment that takes place with a distinct set of parameters from the financial sector. In other words, sustainable development remains firmly wedged on the public sector balance sheet and a government 'obligation', rather than becoming more integral to how the financial system functions and allocates capital. In an environment of constrained fiscal balances, this places sustainable development in a precarious position.

4.1.3 IMF/World Bank Reports on Observance of Standards and Codes

Summary Assessment

Synergies with sustainable development:

(1) The G20/OECD corporate governance standards[67] are included as one of the 12 areas for review, which reinforces the strong governance principles that will support good decision-making and alignment of interests. These are integral components to achieving sustainable development outcomes.

Gaps/unintended consequences:

(1) No explicit reference to standards or codes beyond the G20/OECD corporate governance principle that explicitly consider climate change, environmental protection or social issues as part of the evaluation process.

ROSCs summarize the extent to which countries observe certain internationally recognized standards and codes. The IMF/World Bank have recognized 12 areas that comprise: accounting; auditing; anti-money laundering and countering the financing of terrorism (AML/CFT); banking supervision; corporate governance; data dissemination; fiscal transparency; insolvency and creditor rights; insurance supervision; monetary and financial policy transparency; payments systems; and securities regulation.[68]

Reports summarizing countries' observance of these standards are voluntary and are prepared and published either as part of the FSAP analysis or as a stand-alone report at the request of the member country. They are used to help sharpen the institutions' policy discussions with national authorities, and in the private sector (including by rating agencies) for risk assessment. Short updates are produced regularly and new reports are produced every few years.

Synergies with sustainable development

The ROSC standards mirror those that are also referenced in the FSAP framework and standards, hence the two logically reinforce each other at the global level. The G20/OECD corporate governance standards are included as one of the 12 standards that are assessed,[69] which reinforces the strong governance principles that can support good decision-making and alignment of interests. These are integral components to achieving sustainable development outcomes.

Gaps/unintended consequences

Beyond the G20/OECD corporate governance standards, the ROSC does not cross reference to codes or standards that incorporate principles related to sustainable development, either in relation to climate change or social issues. Financial inclusion is included to the extent that it is also incorporated within the core areas of the review process.

Similar to the FSAP arguments previously discussed, this omission reinforces the perception that social, environmental, financial and economic goals might be distinct objectives that are perhaps not compatible with each other, which is contrary to the emerging evidence and efforts to align the two at the country and industry level.[70]

4.2 Global Banking Regulations and Standards

This section includes an assessment of the following banking regulations and standards:

i. Basel III – International Regulatory Framework for Banks

ii. BCBS – Corporate Governance Principles for Banks

iii. BCBS – Core Principles for Effective Banking Supervision

4.2.1 Basel III Accord – International Regulatory Framework for Banks

Summary Assessment

Synergies with sustainable development:

(1) Pillar 1 makes reference to environmental risks that might arise at the transaction level, which could impact the ability of the borrower's ability to repay a loan.

Gaps/unintended consequences:

(1) No guidance is provided for supervisors on the incorporation of sustainability issues into bank lending policies, processes and disclosure requirements.

(2) No mention of environmental or social considerations in Pillars 2 and 3 of the Accord.

(3) While it is still too early to evaluate the impact of the Basel III measures,[71] Pillar 1 could undermine environmentally and socially beneficial investments due to reduced appetite for long-term risk, which, in turn, might discourage the financing of social and environmental initiatives that typically require long-term loans.[72]

The Basel III Accord represents the most important financial standard that applies to the banking sector at the global level, with widespread adoption by both developed and developing countries. In response to the credit crisis and the need to improve liquidity and prudential standards to improve the stability of the global financial system, the Basel Committee on Banking Supervision (BCBS) developed it to strengthen the regulation, supervision and risk management of the banking sector. According to the BCBS, these additional measures are aimed to:[73]

Improve the banking sector's ability to absorb shocks arising from financial and economic stress, whatever the source;

Improve risk management and governance; and

Strengthen banks' transparency and disclosures.

The reforms specifically targeted two areas, first the bank-level, or microprudential, regulation, to help raise the resilience of individual banking institutions to periods of stress. The second area was in relation to macroprudential, system-wide risks that can build up across the banking sector as well as the procyclical amplification of these risks over time.[74] The reforms resulted in a combination of increased capital requirements, tighter liquidity requirements and also a greater role for supervisors and regulatory authorities to challenge banks and stress testing.[75]

Synergies with sustainable development

A review of the Basel III Accord in terms of its explicit mention of issues related to sustainable development reveal that there is some mention of environmental risks in Pillar 1 that might arise at the transaction level, which could impact the ability of the borrower's ability to repay a loan. However, this is narrowly defined in terms of transaction-specific risks and does not constitute broader macroprudential or portfolio-wide risks for the bank.[76]

Issues related to financial or social inclusion are not mentioned in Pillar 1, 2 or 3 of the Basel III Accord.

There is some requirement to disclose senior bank staff remuneration as part of Pillar 3, although no guidance is provided on how to interpret the information, how it might relate to alignment of interests, time horizon or culture.

Gaps/unintended consequences

In regard to Pillars 2 and 3 of the Accord, the omission of environmental and social risks from the definitions of materiality and disclosure requirements could send an unintended signal to bank regulators (and therefore banks themselves) that these issues are not central to the consideration of risks and therefore do not need to be considered as part of the banking sector's materiality assessment or reporting frameworks.

Concerns have also been raised that Pillar 1 of the Basel III Accord could inadvertently undermine sustainable development as more stringent capital and liquidity requirements could reduce banks' appetite for long-term risk, which, in turn, might discourage the financing of social and environmental initiatives that typically require long-term loans.[77] It is still too early to evaluate the impact of the Basel III measures as some are yet to become fully effective as minimum standards,[78] nevertheless, the evidence thus far suggests that the inadvertent impact on bank lending for environmental or social projects might not be as dramatic as some had feared it would be.

For example, a study by the IMF (2014) estimated that 86% of 2,079 banks had already met the minimum threshold for the Net Stable Funding Ratio (NSFR) at end 2012. The NSFR aims to encourage banks to hold more stable and longer-term funding sources against their less liquid assets, thereby reducing maturity transformation risk. In particular, it requires banks to maintain a stable funding profile in relation to their on- and off-balance sheet activities.[79] Some concerns were expressed that this measure could penalize long-term sustainable investments: "…as it would force banks to seek longer term (and therefore more expensive) funding for themselves. If so, these higher costs of funding would likely be reflected in higher pricing on debt for clean energy projects." (Source: BNEF, 2013:3)

Some projects and debt arrangements may well have become more expensive as a result of this measure, but given the evidence that compliance with the requirements was already high at the end of 2012, the potential impacts are likely to be modest. However, in some countries where banks rely more on short-term wholesale funding, such as Australia, France and Sweden, further adjustments are required to meet the thresholds where the effects could be more pronounced, these include those.

Another study that considered the effects of Basel III on green banking reform examined this proposition by interviewing regulators in countries that have green banking guidelines in place and concluded that the stricter capital and liquidity requirements: "Would have only a marginal impact on lending to support environmentally sustainable activity. This is not least because bank financing of infrastructure projects, such as those relating to renewable energy, is influenced by a number of factors that relate to the economic and political riskiness of the project. These criteria are much more important in determining whether the bank lends than the regulatory capital or liquidity requirements." Alexander (2014:16).[80]

A study on bank lending practices in the UK[81] found that tighter liquidity regulations on UK banks introduced by the UK Financial Services Authority (FSA) in 2010 had no discernible impact on the overall size of bank balance sheets or on lending to the non-financial sector either through reduced lending supply or higher interest rates on loans.[82] Overall, the authors found that banks replaced claims on other financial institutions with cash, central bank reserves and government bonds – and so reduced the interconnectedness of the banking sector without affecting overall lending to the real economy. In other words, the banks accommodated the requirement for greater (and more reliable) liquidity by switching assets from intra-financial loans (intra bank loans to other financial institutions) to high quality liquid assets, with no significant changes in overall balance sheet size being observed.

Some countries (such as China, Brazil and Peru) are going beyond the minimum Basel III requirements and are issuing guidelines for the banking sector to explicitly incorporate environmental, and in some cases, social issues into the lending and risk assessment process of banking financial institutions. Some of the regulators also have mechanisms in place to monitor, enforce and penalize non-compliance (see Appendix A for examples).

4.2.2 BCBS – Corporate Governance Principles for Banks

Summary Assessment

Synergies with sustainable development:

(1) The Principles make some reference to corporate bank culture and values including the promotion of "responsible and ethical behaviour" by reinforcing the "tone at the top" to align with corporate values, promote risk awareness, ensure the channels of communication are working with disciplinary procedures for non-compliance.

Gaps/unintended consequences:

(1) There is no mention of how environmental or social issues or the pursuit of sustainable development might fit into a bank's governance framework.

(2) There is no mention of how sustainable development might be reflected into a bank's values and culture.

(3) No consideration of how environmental or social issues might be reflected into decision-making such as through considering performance metrics, compensation structures, resource

allocation/internal priorities and values that underpin behaviour.[83]

The BCBS's Corporate governance principles for banks[84] are a revised set of principles issued in 2015 that place greater emphasis on the critical importance of effective corporate governance for the safe and sound functioning of banks. The principles stress the importance of risk management as part of a bank's overall corporate governance framework, and promote the value of strong boards and board committees together with effective control functions.

Synergies with sustainable development

The BCBS corporate governance principles make reference to corporate bank culture and values. Specifically, the document identifies issues related to "responsible and ethical behaviour" by reinforcing the "tone at the top" where the board should set and adhere to corporate values, promote risk awareness, ensure the channels of communication are working effectively to disseminate and embed these values and have disciplinary procedures in place for non-compliance. This is relevant to the consideration of issues related to sustainable development as transforming culture is one of the crucial ingredients for promoting a more stable and sustainable financial system that integrates the objectives sustainable development into its core functioning.

Gaps/unintended consequences

The BCBS has gone some way to consider governance, culture and ethics in the banking sector, however, it is widely acknowledged that this is an area that regulators and standard-setters have been reticent to get too involved in, as the issues tend to be outside of their more narrowly defined prudential/risk management frameworks.

The standards as they currently exist do not mention how environmental or social issues or the pursuit of sustainable development might fit into a bank's governance framework.

There is no mention of how sustainable development might be reflected into a bank's values and culture. Nor is there any consideration of how environmental or social issues might be reflected into decision-making such as through considering: (i) performance metrics; (ii) compensation; (iii) processes by which decisions are made and resources are allocated; and (iv) behaviour that is encouraged, tolerated and punished (values and reward sharing).[85]

This absence of reference to environmental and social pursuits creates the impression among employees that these activities are separate from a bank's 'core' activities. A closer connection between these activities and attitudes would be an important feature of achieving and sustaining culture change across the industry and removing some of the unintended obstacles in the way of sustainable development being embedded into the financial system.

In practice, the alignment of corporate culture and values into the banking sector has been a challenging area to change and improve, with some commentators suggesting that governance processes alone will not work but rather that a change is needed in the business processes that banks adopt and the repetitive behaviours that these produce (as opposed to writing culture statements or values posters).[86]

4.2.3 BCBS – Core Principles for Effective Banking Supervision

Summary Assessment

Synergies with sustainable development:

(1) BCBS guidance was issued in 2010 on "Microfinance activities and the core principles for effective banking supervision"[87] the first set of guidelines issued by the Basel Committee related to financial inclusion.

(2) Basel formed a Workstream on Financial Inclusion in 2012 to better understand the local country contexts and regulatory and supervisory constraints.

(3) The BCBS released updated Core principles for effective banking supervision in October 2012 that included reinforcement of the proportionality concept.

(4) BCBS report in 2015 that focused on the outcomes of a survey as part of the Basel Workstream "Practice in the regulation and supervision of institutions relevant to financial inclusion."[88]

Gaps/unintended consequences:

(1) There is no mention of how climate change might fit into a central bank's supervision of financial institutions.

(2) There is no consideration of how social issues might fit into the supervisory framework for central banks that extends beyond financial inclusion.

The BCBS's Core principles for effective banking supervision are directed towards the regulatory agencies of commercial banks, including central banks and other national regulatory agencies (this vary depending on the governance structure of individual countries).[89] The 29 Core Principles are categorized according to supervisory powers, responsibilities and functions, and supervisory expectations of banks. Some enhancements have been introduced into the Core Principles in areas to strengthen supervisory practices and risk management.[90]

Synergies with sustainable development

These principles do not make explicit reference to environmental issues or climate change, although this is not surprising as no specific risk factors are identified in this report as it is a high-level document. The aim is to set the guiding principles on how supervisors can best oversee the activities of the banks over which they preside.

Nevertheless, a recent addition to the principles does include specific reference to financial inclusion. The BCBS notes that the SSBs have been engaging on the relevance of financial inclusion objectives to banking regulation and supervision for more than a decade, focusing initially on microfinance activities which culminated in the production of a guidance document on microfinance activities,[91] the first set of guidelines issued by the Basel Committee related to financial inclusion.

Following the release of this guidance, a Workstream on Financial Inclusion (Workstream) was launched in November 2012 by the Basel Consultative Group (BCG) of the Basel Committee. The goal of the Workstream is to ensure a more in-depth understanding of the country contexts and regulatory and supervisory constraints faced by both member and non-member jurisdictions associated with inclusive finance. It focuses on identifying and managing opportunities and challenges in proportionate prudential regulation and supervision of banks and other deposit-taking institutions engaged in serving poor and low-income customers as important actors in a broader financial ecosystem.

As part of this Workstream, a survey was conducted on country member states to better understand the full range of financial products and services that low-income and poor households may use to manage income and expenses, accumulate assets and mitigate economic shocks. This survey produced a report, which noted that financial inclusion raises issues that are relevant not only to the Basel Committee, but to other global SSBs. The Basel Committee noted (2015:4):[92] "…the global financial crisis has prompted new thinking about the relationships among the core safety and soundness objective of banking supervision and the objectives of financial inclusion, financial integrity and financial consumer protection. Awareness of the risks of financial exclusion has also increased."

As the BCBS noted, innovations that serve the needs of excluded or underserved low-income households have potential to extend the reach and nature of financial services provided by banks and non-banks, including through the use of digital financial technology (or what can be termed 'fintech' solutions) that cross the divide of availability and access to services in a more cost effective way than was previously possible. "Banks and non-banks are developing new, cost-effective digital ways of serving poor and low-income customers who are often difficult to reach through traditional means….Digital transactional platforms combine elements of a payments instrument with the capacity to store value for future use and can offer poor and low-income customers an affordable alternative to traditional transactional banking – an alternative that is generally suitable to their typically small and unpredictable income stream. These platforms are sometimes used alongside a core processing system, reducing the costs of serving poor and low-income customers." (Basel, 2015:4).[93]

This highlights the important interaction between fintech solutions and financial inclusion outcomes that could directly benefit the poor and lower-income customers.

Gaps/unintended consequences

In some areas, the principles would have a bearing on environmental and social issues if the more widely agreed definitions of what factors constituted risk and return included such metrics, most notably these include:

> Principle 14 – Corporate governance: While this principle does not make any reference to environmental or social issues, it is clear that a supporting governance framework that encompasses consideration of long-term systemic risks would also consider these issues.
>
> - Depending on the FSB's forthcoming Taskforce report on climate disclosure, this could be one area to build in such issues into the governance framework.
>
> Principle 15 – Risk management process: These principles focus on the need to "identify, measure, evaluate, monitor, report and control or mitigate all material risks on a timely basis and to assess the adequacy of their capital and liquidity in relation to their risk profile and market and macroeconomic conditions."
>
> - Again, there is no mention of social or environmental issues in this principle; yet, it could become part of the architecture by either adding additional words "social, environmental, market and macroeconomic conditions" to the principle, or alternatively to solidify the banking sector's understanding of what constitutes a "material risk" and include sustainable development issues at that level.
>
> Principle 17 – Credit risk: A credit risk management process that takes into account risk appetite, risk profile and market and macroeconomic conditions.
>
> - Similarly, social or environmental issues could become part of the framing such that "social, environmental, market and macroeconomic conditions" are referenced in the principle, or alternatively to strengthen the banking sector's understanding of how

environmental and social issues could impact their credit risk assessment both at the transaction level and also in terms of the portfolio wide implications for the banks.

Principle 28 – Disclosure and transparency: That banks and banking groups regularly publish information related to their financial condition, performance, risk exposures, risk management strategies and corporate governance policies and processes.

- The wider understanding by supervisors of what this disclosure might look like going forward could also include disclosure of banks risk management and governance framework in relation to environmental and social issues.

4.3 International Corporate Governance Standards

This section examines the G20/OECD Principles of Corporate Governance as it relates to the goals of sustainable development across the following areas:

4.3.1 G20/OECD Principles of Corporate Governance

Summary Assessment

Synergies with sustainable development:

(1) Investment chain – Reference is made to the need to manage agency issues and conflict of interest for assets managers, proxy advisors, analysts, brokers and rating agencies.

(2) Active ownership – Recommendation that disclosing voting policies and practices is considered good practice.

(3) Engagement – Direct dialogue between investors and corporate directors is encouraged as part of being an active owner.

(4) Fees – When an active corporate governance policy is used to justify management fees, the nature and practical implementation of an active corporate governance policy should be transparent.

(5) Company objectives and non-financial reporting – Companies are encouraged to disclose policies relating to business ethics, the environment, human rights, including where relevant within their supply chain, and other public policy commitments.

Gaps/unintended consequences:

(1) No reference is made to responsible investment or ESG policies and how these might relate to good corporate governance practices.

(2) Business ethics is presented as an activity that is separate to a company's "commercial objectives".

(3) There is no reference to sustainability reporting frameworks within the principles on reporting and disclosure.

(4) The principles do not address the appropriate governance structures to guide decisions around sustainability issues.

The G20/OECD Principles of Corporate Governance were launched at the meeting of G20 Finance Ministers and Central Bank Governors in Ankara on 4-5 September 2015. They were subsequently endorsed at the G20 Leaders Summit in Antalya on 15-16 November 2015.

The Principles were originally developed by the OECD in 1999, then updated in 2004. The 2015 revision of the Principles of Corporate Governance addresses some of the new and emerging issues, recognizing the growing complexity in the financial system, the proliferation of high-frequency trading, the investment chain and agency issues, the importance of active ownership and good governance frameworks to guide decision-making.

The Principles represent a globally recognized benchmark for assessing and improving corporate governance. They have been adopted as one of the Financial Stability Board's key standards for sound financial systems, and have been used by the World Bank Group in more than 60 country reviews worldwide as part of the FSAP and ROSC assessments. They also serve as the basis for the guidelines on corporate governance of banks issued by the BCBS.

The FSB recently launched a peer review exercise on the implementation of the Principles.[94] The objective of the review is to focus on how the Principles have been applied to publicly listed, regulated financial institutions. The review hopes to identify effective practices and areas where good progress has been made while noting gaps and areas of weakness. It will also inform work that is under way to revise the OECD's Assessment Methodology that is used by the World Bank as the basis for country assessments undertaken as part of its Corporate Governance Report of Standards and Codes initiative and will provide input to governance-related aspects of the FSB's broader work on conduct for financial institutions.

Synergies with sustainable development

There are a number of clear synergies between the principles and sustainable development, the overarching one being the goal to help policymakers evaluate and improve the legal, regulatory, and institutional framework for corporate governance, with a view to supporting economic efficiency, sustainable growth and financial stability.

The revised principles have a greater focus on the "investment chain" and agency issues, including explicit reference to asset managers within the institutional investment section and the importance of managing potential conflict of interests in regard to the use of proxy advisors, analysts, brokers and rating agencies.

In a newly added chapter on institutional investors, stock markets and intermediaries, there is also a greater focus on the importance of "active ownership" with the recommendation that disclosing voting policies and practices is considered good practice.

The principles make reference to "engagement" as an emergent practice whereby direct dialogue between investors and corporate directors takes place, including reference to national Stewardship Codes (although no position is taken on the merit of these in relation to good practice).

The principles also note that when an active corporate governance policy is used to justify management fees, the nature and practical implementation of an active corporate governance policy, including staffing, should be transparent to beneficiaries who rely on institutions with such active corporate governance policies.

There is reference to 'company objectives and non-financial reporting', which encourages companies to disclose policies relating to business ethics, the environment, human rights, including where relevant within their supply chain, and other public policy commitments.

Gaps/unintended consequences

The revised principles do not make reference to responsible investment policies and how this might relate to good corporate governance practices.

The reference to 'non-financial' reporting is limited by the inclusion of the preceding words "In addition to their commercial objectives, companies are encouraged to disclose policies related to business ethics…" (2015:43).[95] This reinforces the perception that such issues are not related to the commercial activities of a company but are ancillary to it.

The reference to reporting and disclosure requirements does not mention the sustainability reporting practices that have emerged.

The principles do not address sustainability issues and the appropriate governance structures that might facilitate good decision-making on these issues across the organization.

4.4 Securities Regulation and Standards

This section explores the securities regulations and standards as they relate to the goals of sustainable development across the following areas:

i. IOSCO Objectives and Principles of Securities Regulation

ii. IOSCO Code of Conduct Fundamentals for Credit Rating Agencies

4.4.1 IOSCO Objectives and Principles of Securities Regulation

Summary Assessment

Synergies with sustainable development:

(1) Principle 6 – Systemic Risk – While environmental or social issues are not mentioned, there are clear synergies between this principle on systemic risk and the goals of sustainable development.

(2) Principles relating to integrity and ethical behaviour of sell-side securities analysts - Principle 23 relates to sustainable development and the need to transform the industry's values and behaviour on a more sustainable pathway.[96]

(3) Principles relating to 'Issuers' include Principles 16 (full, timely and accurate disclosure of material financial and non-financial information), 17 (treat holders in a fair and equitable manner) and 18 (accounting standards should be high and internationally acceptable quality).

(4) Of relevance to the issuance of 'green bonds' is the guidance accompanying Principle 16 that includes mention of the need for sufficiency, accuracy, timeliness and accountability for disclosure, including measures such as certification and documentation.

Gaps/unintended consequences:

(1) There is no reference to climate change or social inclusion in regard to definitions of materiality or considerations of systemic risk.[97]

(2) Reference is made to the risks of short-termism although the principle only makes reference to

hedge funds and no other type of securities market.

(3) There is no link between short-termism and the role of sell-side analysts in the extended documentation on sell-side analysts.[98]

(4) The question of how to instil ethics and integrity into organizations and individuals is a subject that is lightly referenced from a legal/compliance perspective, but there is no consistent framework for assessing or indeed fostering such an outcome.

The International Organization of Securities Commissions (IOSCO) is the international body that brings together the world's securities regulators and is recognized as the global standard-setter for the securities sector. IOSCO was established in 1983 and its membership regulates more than 95% of the world's securities markets in more than 115 jurisdictions; securities regulators in emerging markets account for 75% of its membership.

Cooperation and information exchange has been an increased focus of IOSCO since the financial crisis, where the members have resolved to:

> Cooperate in developing, implementing and promoting adherence to internationally recognized and consistent standards of regulation, oversight and enforcement in order to protect investors, maintain fair, efficient and transparent markets, and seek to address systemic risks;
>
> Enhance investor protection and promote investor confidence in the integrity of securities markets, through strengthened information exchange and cooperation in enforcement against misconduct and in supervision of markets and market intermediaries; and
>
> Exchange information at both global and regional levels on their respective experiences in order to assist the development of markets, strengthen market infrastructure and implement appropriate regulation.

The IOSCO Objectives and Principles of Securities Regulation document sets out 38 principles of securities regulation which are based upon three objectives:[99]

> Protect investors;
>
> Ensure that markets are fair, efficient and transparent; and
>
> Reduce systemic risk.

The IOSCO Objectives and Principles of Securities Regulation have been endorsed by both the G20 and the FSB as the relevant standards in this area. They are the overarching core principles that guide IOSCO in the development and implementation of internationally recognized and consistent standards of regulation, oversight and enforcement. They form the basis for the evaluation of the securities sector for the FSAPs as discussed earlier in this report.

The document itself is very high-level and principle-based (12 pages in total) with 3-4 bullet points for each segment of the securities market, although it has been supplemented by specific guidelines in some areas (such as credit rating agencies that will also be considered in this paper). The IOSCO methodology document that accompanies the principles is quite extensive and detailed (over 200 pages) and is used by regulators to evaluate the implementation of the IOSCO principles at the state level.[100]

Synergies with sustainable development

There is no explicit link or reference to sustainable development in the core document or the guidance or methodology documents, which is not surprising in itself as no specific financial metrics or variables are mentioned, but rather the focus is on core principles for securities regulators as they relate to the major actors in the securities markets, including issuers; auditors/credit rating agencies/service providers; collective investment trusts; market intermediaries; secondary markets and clearing and settlement systems.

One of the trends we have seen across the industry is stock exchanges introducing social and environmental data into the listing and ongoing reporting requirements (see Appendix A). It is important to note that the listing standard requirements are not regulated by IOSCO but are rather left to each exchange to determine with local regulators to oversee. Consequently any further efforts in this direction will come from the exchanges themselves rather than IOSCO.

Nevertheless, some potential synergies could be built upon, including:

> Principle 6 – Systemic Risk – While environmental or social issues are not mentioned, the synergies are clear between this principle on systemic risk and the goals of sustainable development.
>
> Principles relating to integrity and ethical behaviour of sell-side securities analysts (principle 23) relates to sustainable development and the need to transform the industry's values and behaviour on a more sustainable pathway.
>
> Principles relating to 'Issuers' include Principles 16 (full, timely and accurate disclosure of material financial and non-financial information, 17 (treat holders in a fair and equitable manner) and 18 (accounting standards should be high and internationally acceptable quality). These principles are equally as relevant for data related to social and environmental issues as they are for other financial and non-financial metrics.
>
> Of relevance to the issuance of 'green bonds' is the guidance accompanying Principle 16 that includes mention of the need for sufficiency, accuracy, timeliness and accountability for disclosure, including measures such as certification and documentation.

Gaps/unintended consequences

While there is no specific link to sustainable development, some commentators argued at a more general level that some sustainable development issues need to be reflected into the IOSCO framework, particularly in relation to disclosure of climate change risk information and ESG information.[101] Indeed, in 2014 the Principles for Responsible Investment (PRI) and Ceres' Investor Network on Climate Risk (INCR) networks partnered with UNEP FI to reach out to the IOSCO Secretariat and its Executive Board on the need for IOSCO involvement in the disclosure of corporate sustainability information.[102] To some extent, the FSB has taken up this high-level challenge around principles related to disclosure on climate risk through the taskforce process. However, there are other possible elements of the IOSCO framework where sustainable development issues and approaches could be considered and made more explicit, as discussed below.

> Principle 6 – The Regulator should have or contribute to a process to monitor, mitigate and manage systemic risk, appropriate to its mandate – the potential that an event, action, or series of events or actions will have a widespread adverse effect on the financial system and, in consequence, on the economy. Securities regulators are concerned about systemic risk because

it not only has the potential to harm a large number of investors and market participants, but because it can also have a widespread negative effect on financial markets and the economy.

- Systemic risks posed by environmental and social issues could be incorporated into investor protection standards, disclosure and transparency requirements, business conduct regulation and resolution regimes for market intermediaries.

Principle 8 – The Regulator should seek to ensure that conflicts of interest and misalignment of incentives are avoided, eliminated, disclosed or otherwise managed – the principle highlights as an example the alignment of interest issues that arise for credit rating agencies (CRA) who are hired by issuers and may not be completely independent or free of conflict in their research. Principles 22 and 23 also refer to CRAs and other 'evaluative' service providers including sell-side analysts – and the need for monitoring, registration and ongoing supervision.

- This also relates to any ratings of sustainable investment products (such as Green Bonds or Morningstar sustainability product ratings) and highlights the need to ensure that ratings agencies and research firms that provide advice on the green or sustainability credentials of investment products are independent from the issuer and/or equity holder.

Principles relating to 'Issuers' include Principles 16 (full, timely and accurate disclosure of material financial and non-financial information, 17 (treat holders in a fair and equitable manner) and 18 (accounting standards should be high and internationally acceptable quality).

- These principles are equally as important for data related to sustainable development as they are for other financial and non-financial metrics, although the challenge is that environmental and social metrics are not embedded in accounting standards and are therefore not captured as part of the disclosure requirements for issuers or listed entities.
- In relation to the issuance of 'green bonds' is the guidance accompanying Principle 16 that includes mention of the need for sufficiency, accuracy, timeliness and accountability for disclosure, including measures such as certification and documentation. This highlights the need for some widely accepted certification standards that can then be included in the guidance documentation for regulators at the nation state level to validate the claim that an issue is indeed 'green'.

Principles relating to integrity and ethical behaviour of sell-side securities analysts (principle 23) where regulation requires analysts, and/or the firms that employ analysts, to act honestly and fairly with clients. This is not very thoroughly defined in comparison to the new guidelines for CRA, although there is some reference to regulators addressing these issues through a variety of mechanisms, including "fit and proper" requirements, statutory disqualification, industry and codes of conduct.

- This relates to the ongoing discussion about the need for culture change inside the financial system, including (but not limited to) investment banks and sell-side analysts. While the IOSCO preamble mentions short-termism and high turnover as being a problem for financial stability, no link is made between short-termism and the role of sell-side analysts in their extended documentation on sell-side analysts, which rather focuses on conflict in interest from a legal perspective.[103]

- In addition, the question of how to instil ethics and integrity into organizations and individuals is a subject that is lightly made reference to from a legal/compliance perspective, but there is no consistent framework for assessing or indeed fostering such an outcome across any of the core regulatory bodies.

4.4.2 IOSCO Principles and Code of Conduct Fundamentals for Credit Rating Agencies

Summary Assessment

Synergies with sustainable development:

(1) The greater focus on integrity, risk management, alignment of interests, disclosure and transparency are all principles that are at the core of embedding sustainable development into the functioning of the financial market system.

Gaps/unintended consequences:

(1) There is no reference to environmental or social issues in regard to principle that relates to the 'Quality and Integrity of the Credit Rating Process'.

(2) The principles relating to CRA Process place emphasis on historical analysis that could limit the scope and potential integration of some sustainability issues that are more forward looking.

(2) The principle on CRA Process does not include any requirement for evaluating systemic risks that might impact individual ratings, which might lead to risks such as climate change and social inclusion being overlooked by CRAs.[104]

(3) The principle on CRA Process does not delineate between financial and non-financial data and metrics, another factor that could discourage the CRAs from valuing data that relate to sustainability issues.

(4) Transparency and Timeliness – The guidance emphasizes the importance of revising ratings as and when new information presents itself, although this could, in effect, encourage a short-term mindset and be inadequate for large, system-wide issues such as climate change.

(5) Disclosure and Communication with Market Participants – a CRA needs to disclose how it complies with the IOSCO Code and more specifically, how it fits into its own code of conduct, methodologies and historical performance. There is no explicit mention of environmental or social issues.

In the wake of the 2008 financial crisis, the IOSCO Chairman's Task Force on Credit Rating Agencies (the "CRA Task Force") – undertook a study of the role of CRAs in the structured finance market and made a series of recommendations to address concerns regarding the quality of information that CRAs relied on, the timeliness of reviewing existing ratings and making downgrades as appropriate, and the possible conflict of interest arising from CRAs advising issuers on how to design structured finance products.

In 2009 the Task Force became a permanent committee of IOSCO with a mandate to regularly discuss, evaluate, and consider regulatory and policy initiatives vis-à-vis CRA activities and to facilitate regular dialogue between securities regulators and the credit rating industry.

In 2013, under the guidance of IOSCO the 'supervisory core colleges' were established for Fitch, Moody's, and S&P. The S&P and Moody's college is chaired by the U.S. Securities and Exchange Commission (SEC), and Fitch is chaired by the European Securities and Markets Authority (ESMA). IOSCO intends that these supervisory colleges to operate as a forum for regulators to exchange information about internationally active CRAs, including their compliance with local/regional laws and, moreover, the establishment and operation of rating models and methodologies, controls and procedures to promote a better understanding of the risks faced or posed by the internationally active CRA and how relevant supervisors are addressing these risks.

The new IOSCO CRA Principles (2015) address four key objectives to promote informed, independent analyses and opinions by CRAs, namely:

Quality and integrity of the credit rating process;

Independence and conflicts of interest;

Transparency and timeliness of ratings disclosure; and

Confidential information.

While the Principles are intentionally high-level, the Code of Conduct Fundamentals for CRA (the "IOSCO CRA Code") offers a set of more robust, practical measures to guide the implementation of the Principles.

Synergies with sustainable development

The new IOSCO CRA Code (2015) is broken into the following five sections, none of which specifically address or mention issues related to sustainable development although it is apparent that these issues potentially fit within this framework. More specifically, the greater focus on integrity, risk management, alignment of interests, disclosure and transparency are all principles that are at the core of embedding sustainable development into the functioning of the financial market system.

Gaps/unintended consequences

While there is a philosophical alignment between the Code and sustainable development principles, the interpretation could be expanded in a number of ways to either explicitly mention issues related to sustainable development and/or provide more scope for these issues to be incorporated into CRA rating processes, including:

1. The Quality and Integrity of the Credit Rating Process – This principle concerns itself with the need to establish, maintain, document, and enforce a credit rating methodology that is "rigorous, capable of being applied consistently, and, where possible, result in credit ratings that can be subjected to some form of objective validation based on historical experience."

    The emphasis on historical experience in this statement could be a factor that limits the scope and potential integration of some environmental and social issues that might be more forward looking and are not adequately captured by historical analysis.

    On a related point, the Code does not include any requirement for evaluating systemic risks that might impact individual ratings, including but not limited to stress testing and scenario analysis. Such a requirement would allow for the inclusion of issues such as climate change to be considered in a more robust and explicit way.

    There is no explicit delineation in the Code between financial and non-financial data and metrics, another factor that could discourage the CRA's from valuing data that might expand beyond traditional financial metrics such as environmental and social issues.

2. Transparency and Timeliness – This principle maintains that a CRA should assist investors and other users of credit ratings in developing a greater understanding of credit ratings by disclosing in plain language, among other things, "the nature and limitations of credit ratings and the risks of unduly relying on them to make investment or other financial decisions."

   The guidance emphasizes the importance of revising ratings as and when new information presents itself, although this could in effect, encourage a short-term mindset and be inadequate for large, system-wide issues such as climate change. The focus on the limitations of the ratings and the assumptions that are made in relation to financial outcomes could explicitly mention time horizons and uncertainties that these present to begin to account for the impact of such issues on short- and medium-term outcomes.

3. Disclosure and Communication with Market Participants – A CRA needs to disclose how it complies with the IOSCO Code and, more specifically, how it fits into its own code of conduct, methodologies and historical performance.

   At this stage within IOSCO, the question as to what is an appropriate methodology is left entirely at the discretion of the CRAs. While there is some discussion within the CRAs about environmental and social issues, the evidence suggests that these issues are not reflected into their methodologies in a consistent or meaningful way.[105]

   The PRI has recently announced a call for credit rating agencies to incorporate ESG into their credit analysis in a more systematic and transparent way. A 'Statement on ESG in credit ratings' was launched on 26 May 2016, signed by 100 investors and 6 CRAs. This includes the participation in a series of Ratings Forums with the goal to develop a better understanding of ESG issues as they relate to creditworthiness and to formulate practical solutions for more systematic and transparent incorporation of ESG in credit ratings and analysis.[106]

   The outcome of this assessment could be shared with the IOSCO CRA team to evaluate the potential inclusion of such issues into the Code in a way that encourages a more holistic approach to considering ESG issues as part of CRA methodologies and processes.

4.5 Insurance Industry Regulations and Standards

This section explores the International Association of Insurance Supervisors (IAIS) Insurance Core Principles, Standards, Guidance and Assessment Methodology as it relates to the goals of sustainable development.

4.5.1 IAIS – Insurance Core Principles, Standards, Guidance and Assessment Methodology

Summary Assessment

Synergies with sustainable development:

(1) ICP 7 Corporate Governance – The need to establish and implement a corporate governance framework that provides for sound and prudent management and oversight of the insurer's business and adequately recognizes and protects the interests of policyholders.

(2) ICP 7.2.3 Culture – The need to promote a culture that reflects the fundamental corporate values and includes norms for responsible and ethical behaviour applicable to all employees.

(3) Systemic risk – The focus of IAIS analysis in relation to potential global systemically important insurers (G-SIIs) does not mention of climate change in the G-SIIs documentation, although it is clear that the systemic importance of these institutions could be equally relevant for the management and response to climate change as it would be for other 'shocks' to the system.

(3) Access to Insurance Initiative (A2ii) – The A2ii is a global partnership with the mission to inspire and support supervisors to promote inclusive and responsible insurance, thereby reducing vulnerability.[107] A clear parallel exists between the A2ii goals and the goals of sustainable development, particularly in relation to social inclusion.

(4) Lessons from other values-based initiatives – The IAIS co-operates with the Islamic Financial Services Board, a body that develops standards for the insurance sector that comply with Islamic law.[108]

Gaps/unintended consequences:

(1) Systemic risk – There is at present no mention of systemic issues such as climate change and the extent to which this might impact the operating environment for insurers during times of crisis.[109]

(2) Risk Management and Internal Controls – The increased focus on risk and internal controls could also encompass consideration of risks that relate to sustainable development issues, although not made explicit.

(3) Materiality – ICP 8.1.7 states that insurers should assess material risks both qualitatively and, where appropriate, quantitatively. There is no reference or mention of social or environmental risks as part of this process.

The International Association of Insurance Supervisors (IAIS) is the international standard-setting body responsible for developing principles, standards and other supporting material for the supervision of the insurance sector and assisting in their implementation. It was established in 1994 as a voluntary membership organization of insurance supervisors and regulators. Its mission is "to promote effective and globally consistent supervision of the insurance industry in order to develop and maintain fair, safe and stable insurance markets for the benefit and protection of policyholders and to contribute to global financial stability."[110]

The IAIS works with other global standard-setting bodies. For example it is part of the Joint Forum of senior finance sector regulators alongside the BCBS and IOSCO, although the function of this has diminished somewhat as the FSB scope has widened.[111]

Synergies and gaps/unintended consequences

The IAIS performs a range of activities, some of which relate to sustainable development indirectly or at least do not conflict with sustainable development, including:

1. The development and guidance on implementation on the Insurance Core Principles (ICPs) has some relevance to sustainable development issues, although not explicitly. The Principles, like other standards, are not legally binding but represent de facto high-level good practices of the insurance activities and its supervision. The ICPs are reinforced through the IMF/World Bank and their FSAP projects, which helps to facilitate convergence in national regulatory and supervisory set-ups. Some of the links to sustainable development goals and activities that could be deepened include:

ICP 7 Corporate Governance – The need to establish and implement a corporate governance framework that provides for sound and prudent management and oversight of the insurer's business and adequately recognizes and protects the interests of policyholders.

- This relates to the goals of sustainable development in particular the wider goal of social inclusion.

ICP 7.2.3 – The need to promote a corporate culture that reflects the fundamental corporate values and includes norms for responsible and ethical behaviour applicable to all employees. The Board should take the lead in setting the appropriate tone at the top (which is the same wording as for Basel Banking standards). This includes adherence to the corporate values by the Board and a strong risk culture avoiding excessive risk taking.

- This is relevant to the sustainable development debate in so far as the approach that the standards bodies take with respect to culture in the finance sector needs to be considered, and how that can be transformed over time to promote greater trust and integrity at the industry level.

ICP 8 Risk Management and Internal Controls – The need for effective systems of risk management and internal controls, including effective functions for risk management, compliance, actuarial matters and internal audit.

- The increased focus on risk and internal controls could also encompass consideration of risks that relate to sustainable development issues.

8.1.7 – Insurers should assess material risks both qualitatively and, where appropriate, quantitatively. Appropriate consideration should be given to a sufficiently wide range of outcomes, as well as to the appropriate tools and techniques to be used. The interdependencies of risks should also be analysed and taken into account in the assessments. This will include, inter alia, adequate and comprehensive internal financial, operational and compliance data, as well as external market information about events and conditions that are relevant to decision-making. Information should be reliable, timely, accessible, and provided in a consistent format.

- Related to the risk management processes and relevance to sustainable development issues, the reference to qualitative and quantitative data, the use of appropriate tools and the need to consider information that is relevant to decision-making equally applies to sustainable development issues (although not defined) as it would for more traditional financial metrics.

2. Involvement in cross-border and systemic issues, resulting in the development of the Common Framework (ComFrame) for the supervision of International Active Insurance Groups (IAIGs). ComFrame emerged out of the recognition that more tailored and coordinated supervision was required across jurisdictions to assist supervisors in collectively addressing "group-wide activities and risks, identifying and avoiding regulatory gaps and coordinating supervisory activities under the aegis of a group-wide supervisor."[112] The framework is intended to facilitate sharing and cooperation while at the same time improving efficiency through streamlining compliance and reporting demands.

This framework is steeped in the context of promoting financial stability and encouraging sound behaviour among IAIGs, including during times of crisis. There is at present no mention of systemic issues such as climate change and the extent to which this might impact the operating environment for insurers during times of crisis, although this can be considered to be consistent with the description about avoiding pro-cyclical behaviour such as "building up high sales of products that expose IAIGs to significant risks in a downturn or fire sales of assets during a crisis."[113]

3. Systemic risk – The IAIS is participating in a global initiative, along with other standard-setters, central banks and financial sector supervisors, and under the purview of the FSB and G20, to identify global systemically important financial institutions (G-SIFIs). The focus of IAIS analysis is in relation to potential global systemically important insurers. The IAIS has developed an initial assessment methodology to identify any insurers whose distress or disorderly failure, because of their size, complexity and interconnectedness, would cause significant disruption to the global financial system and economic activity. Any such insurers should be regarded as systemically important on a global basis. The IAIS has also developed a framework of policy measures for G-SIIs.[114]

   While there is not explicit mention of climate change in the G-SIIs documentation, it is clear that the systemic importance of these institutions would be equally relevant for the management and response to climate change as it would be for other 'shocks' to the system. An additional overlay that might consider, for example, the concentration of the risk exposure to assets and liabilities in regions that are more prone to extreme climactic events would be needed to build a stronger connection.

4. Access to Insurance Initiative (A2ii) – The A2ii is a global partnership with the mission to inspire and support supervisors to promote inclusive and responsible insurance, thereby reducing vulnerability. The Initiative is the implementation partner of the IAIS on access to insurance. The goal is to strengthen the capacity of policymakers, regulators and supervisors seeking to advance inclusive insurance markets, particularly for low-income clients, by promoting sound, effective and proportionate regulation and supervision of insurance markets based on the IAIS standards and is helping to mobilize the reforms in regulation and supervision required for the development of inclusive insurance markets.

   A clear parallel exists between the A2ii goals and the goals of sustainable development, particularly in relation to social inclusion. The fact that this is supported by the IAIS is a helpful opening to also consider how environmental degradation and climate change issues can be reflected in the IAIS activities, including closer alignment and reflection of the work of the Principles for Sustainable Insurance (PSI).[115]

5. Lessons from other values-based initiatives – The IAIS is cooperating with the Islamic Financial Services Board (IFSB), a body that develops standards for the insurance sector that comply with Islamic law (especially the Islamic insurance concept of Takaful[116]). In 2008, the two organizations signed a working agreement enhancing their cooperation in the area of prudential regulations for the companies offering Takaful.

While this is not directly related to the issues of sustainable development, it demonstrates the potential for the IAIS framework to consider wider societal values as they relate to insurance principles that could be further extended.

4.6 Institutional Investment Standards and Regulations

This section explores the following global standards and regulations that impact institutional investors as they relate to the goals of sustainable development:

i. International Law – Fiduciary Duty and Prudent Person Rule

ii. IOPS – Principles for Private Pension Supervision

iii. OECD – Core Principles of Private Pension Regulation

4.6.1 International Law – Fiduciary Duty and Prudent Person Rule

Summary Assessment

Synergies with sustainable development:

(1) Fiduciary duty and acting in the best interest of beneficiaries could be enhanced by the integration of sustainable development considerations as it could encourage a longer-term investment framework.

(2) It could help to encourage wider thinking by investors about the potential risks and opportunities as part of their assessment of risks and opportunities, including the consideration of sustainability issues that might otherwise be overlooked.

(3) Following the request by the French COP21 Presidency, the OECD is conducting work on fiduciary duties and how institutional investors can be encouraged to invest responsibly and is due to report in December 2016.[117]

(4) UNEP FI/PRI are undertaking ongoing work and efforts to encourage alignment of fiduciary duty interpretation across jurisdictions.[118]

Gaps/unintended consequences:

(1) The "best interest" of beneficiaries has become equated to short-term financial interests, creating a disconnection between institutional investor practices and their fiduciary duties.[119]

(2) Growing evidence of short-termism and its damaging effects on market functioning and stability,[120] over-reliance on modern portfolio theory that may not adequately capture behavioural biases and externalities and the resulting over-reliance on financial metrics versus sustainability metrics as an "accepted" part of the valuation framework used by financial analysts and investors.

Under fiduciary law, institutional investors – including pension funds, asset managers, mutual funds, insurance companies, sovereign wealth funds and other collective investment vehicles – are mandated to manage (or oversee) assets in the best interests of individual beneficiaries (or the ultimate owners of the capital). Fiduciary duty principles are well established in common law countries, with the overarching principles across all jurisdictions being the duty to act prudently and in accordance with the purpose for which investment powers are granted (also known as the duty of loyalty). More specifically, the duty to act in the interests of the beneficiaries means that no investment decision should be made solely in the interests of or to give effect to the personal views of the decision maker.

Synergies with sustainable development

There is a lively debate and shift in the interpretation of the common law as it relates to fiduciary duty and, more specifically, the definition of what constitutes the best interest of beneficiaries. This has in part been driven by the significant growth in the uptake and integration of ESG issues into the investment process by institutional investors around the world and the need to clarify how these commitments can not only fit with, but also enhance, investors' ability to fulfil their fiduciary duty obligations.[121]

Gaps/unintended consequences

As Hawley et al. (2014) noted, "best interest" has become equated to short-term financial interests, giving rise to "a disconnect between institutional investor practices and a balanced application of fundamental fiduciary principles." (Hawley et al, 2014:2).[122]

Some of the concerns being raised in regard to the interpretation of fiduciary duty are in relation to the growing evidence of short-termism and its damaging effects on market functioning and stability,[123] the over-reliance on modern portfolio theory that may not adequately capture behavioural biases and externalities, and the resulting over-reliance on financial metrics versus non-financial metrics (or what has become more widely referred to as ESG metrics) as an "accepted" part of the valuation framework used by financial analysts and investors.

Legal experts, industry thought leaders, academics, policymakers and regulators have been looking at how long-term non-financial risks related to ESG metrics can become a more widely accepted component of an investor's fiduciary duty. For example, in 2005 the Freshfields/UNEP FI report concluded that: "integrating ESG considerations into an investment analysis so as to more reliably predict financial performance is clearly permissible and is arguably required in all jurisdictions."[124] This sparked widespread debate and further investigation at the national level in the UK and South Africa,[125] resulting in explicit reference to consideration of all factors – including ESG issues – that may impact long-term performance.

Despite this debate and the resulting shift in some countries, it is clear that there is a lack of global agreement on the interpretation of fiduciary duty as it relates to ESG issues. The consensus is growing on the need for wider debate, acceptance and integration of fiduciary duty as it related to ESG issues across all jurisdictions as investors are, in a large part, global investors and the outcomes of their investment decisions are impacted by the prevailing laws that affect investments in all markets.[126]

In 2015 a joint report was issued on Fiduciary Duty in the 21st century by the Principles for Responsible Investment (PRI), UNEP FI, UN Global Compact and the Inquiry that looked at this issue in more depth. The report proposed a series of global recommendations, including the need to:

1. Clarify that fiduciary duty requires investors to take account of ESG issues in their investment processes;
2. Strengthen implementation of legislation and codes; and
3. Support efforts to harmonize legislation and policy instruments on responsible investment globally, with an international statement or agreement on the duties that fiduciaries owe to their beneficiaries.

In February 2016, the UNEP FI, PRI, and the Generation Foundation announced a follow-on project to harmonize a global understanding of fiduciary duty that incorporates sustainability. The project is focusing on encouraging governments and regulatory agencies in eight jurisdictions (Australia, Brazil, Canada, Germany, Japan, South Africa, the UK and US) to clarify the scope of fiduciary duty and its application to local legal frameworks in their respective regions. It will also consider China (including Hong Kong), India, Malaysia, Singapore and the Republic of Korea, and will make country-specific recommendations accordingly. It aims to develop an international statement on fiduciary duty and sustainable development, which would create a cohort of signatories committed to integrating sustainability into their fiduciary duties.

Highlight: Actions by regulators and industry groups on fiduciary duty

As Lake (2015)[127] observed, many regulators have already taken some steps to align fiduciary duty interpretation with sustainable investment, such as in the UK, the Netherlands, Sweden, Canada, Australia, France, Norway, New Zealand, Brazil and Denmark. Most of these actions include some need for pension funds to include reference to whether ESG issues are considered in their investment policies and/or statements.

In addition to the UNEP FI/PRI initiative that is under way, the French COP21 Presidency requested that the OECD investigate fiduciary duties and how institutional investors can be encouraged to invest responsibly. It is due to report in December 2016.

Another significant development related to investor duties was Article 173 of the French Energy Transition Law, which came into effect on 1 January 2016. It not only strengthened mandatory carbon disclosure requirements for listed companies, but also introduced carbon reporting requirements for French institutional investors on a comply or explain basis.[128] The first reporting is due in 2017 and smaller investors (with AUM less than EUR500 million) are exempt from the requirement to provide detailed reporting but are still required to provide a general overview of how they integrate ESG factors. The more detailed requirement for other investors includes the following two components:

1. Reporting on the integration of ESG criteria, including:

- The approach with regards to the consideration of ESG issues in investment policy and risk management;

- For an asset management company, the list and percentage share of funds (in assets under management) that integrate ESG criteria;

- The methodology used for analysing the criteria and justification of that approach;

- Information on the results of the analysis and actions taken.

2. Reporting on the integration of climate change-related risks, including:

- Both physical risks (exposure to physical impacts directly caused by climate change) and transition risks (exposure to the changes caused by the transition to a low-carbon economy);

- An assessment of the contribution to meeting the international target of limiting global warming and to achieving the objectives of the French Low-carbon Strategy (which was adopted in November 2015 and includes sector-specific targets and carbon budgets).

While this law only applies to French investors and relates specifically to carbon exposure, some commentators have suggested that this could be replicated by other countries and could also be widened to include other environmental and social metrics in the future that are consistent with the goals of sustainable development.

4.6.2 IOPS – Principles of Private Pension Supervision

Summary Assessment

Synergies with sustainable development:

(1) Principle 5: Risk-based Supervision – While sustainable development issues are not explicitly mentioned as part of this supervisory framework, it is possible that national regulators could include reference to environmental and/or social issues as they relate to systemic risk and the framework used to evaluate pension funds under their supervision (such as stress testing, scenario analysis).[129]

(2) Principle 7: Consultation and Cooperation – There is potential for supervisors to make reference to emerging industry standards and practices that are evolving in relation to sustainable development issues such as the PRI initiative, which an increasing number of pension funds and asset managers are becoming signatories to across a number of countries.

(3) The greater focus on integrity, risk management, alignment of interests, disclosure and transparency are all principles that are at the core of embedding sustainable development into the functioning of the financial market system.

Gaps/unintended consequences:

(1) The IOPS Principles as they currently stand make no explicit reference to sustainability issues or how regulators of pension funds might consider these issues as part of their function.

(2) There is no formal or informal guidance for regulators on how they might consider the integration of long-term, sustainability metrics into risk management frameworks of pension funds, resulting in a somewhat fragmented and patchy response among regulators and across the industry.[130]

(3) There is no reference to the emerging national regulations or the industry-based principles and initiatives that to varying degrees incorporate sustainable development issues, which could create a disconnect and/or uncertainty among pension funds (who are global investors) as to how these actions fit with their broader regulatory obligations.

The International Organisation of Pension Supervisors (IOPS) is an independent international body representing those involved in the supervision of private pension arrangements. The IOPS currently has 87 members and observers representing 75 countries and territories worldwide. It was formed in July 2004 under the instigation of the OECD and the International Network of Pension Regulators and Supervisors (INPRS). The IOPS Secretariat is hosted by the OECD.

The IOPS:

- Acts as a standard-setting body on pension supervisory matters and regulatory issues,
- Promotes international co-operation on pension supervision,
- Provides a worldwide forum for policy dialogue on pension supervision, and

Promotes, conducts and facilitates research in co-operation with relevant international bodies.

The IOPS Principles of Private Pension Supervision were revised in 2010 and cover topics such as objectives, independence, adequacy of resources and powers, risk orientation, proportionality and consistency, consultation and cooperation, confidentiality, transparency and governance.[131] IOPS member authorities are generally the pension fund regulatory body at the state level that use the Principles as a basis for benchmarking and self-assessment. The Principles have been incorporated into the OECD Core Principles of Occupational Pension Regulation and have been used by the IMF and the World Bank in the FSAP. The IOPS Principles were also adopted by the International Association of Entities Supervising Pension Funds (AIOS).

Synergies and gaps/unintended consequences on sustainable development

The IOPS Principles as they currently stand make no explicit reference to issues related to sustainable development or how regulators of pension funds might consider these issues as part of their function. However, there is potential for inclusion or synergies with sustainable development issues in some of the principles, namely:

Principle 5: Risk-based Supervision – This principle refers to the need for supervisory authorities to adopt a risk-based approach with a suitable risk assessment methodology (as the industry develops the necessary expertise). In the more detailed Methodology for Review document,[132] the IOPS mentions a toolkit for Risk-based Supervision[133] that focuses on the "identification of potential risks faced by pension funds and the assessment of the financial and operational factors in place to minimize and mitigate those risks."

- While sustainable development issues are not explicitly mentioned as part of this supervisory framework, it is possible that the national regulators and international SSBs could include reference to environmental and/or social issues as they relate to systemic risk and the framework used to evaluate pension funds under their supervision (such as stress testing, scenario analysis).
- While there is nothing precluding them from doing so, the integration of environment and social issues into such frameworks in the investment industry is a relatively new development[134] and, as such, it would be beneficial to develop an IOPS Guidance document that makes reference to how supervisors might also consider the way long-term, non-financial metrics might be embedded into risk management frameworks of pension funds.[135]

Principle 7: Consultation and Cooperation – This Principle refers to the need for pension authorities to consult with the bodies they are overseeing and cooperate with other supervisory agencies domestically and internationally.

- There is potential for supervisors to make reference to emerging industry standards and practices that are evolving in relation to sustainable development issues such as the PRI initiative in their response to Principle 7, which an increasing number of pension funds and asset managers are becoming signatories to across a number of countries.

In addition to the opportunities to include sustainable development issues as part of the risk management framework and cooperation activities of the supervisory agencies of pension funds, a more explicit reference could be made regarding how regulators might consider emerging issues at the state level that are impacting the pension fund industry, such as the emerging trend towards investors seeking to integrate sustainability considerations into their investment processes.

4.6.3 OECD Core Principles of Private Pension Regulation

Summary Assessment

Synergies with sustainable development:

(1) Principle 1: Conditions for effective regulation – Reference is made to the need for well-functioning capital markets and financial institutions, which could be interpreted to also include the extent to which issues related to sustainable development are incorporated as a core part of the stability of the financial system.

(2) Long-term – Reference is made to the G20/OECD High-level Principles of Long-Term Investment Financing, which in turn make reference to the Principles for Responsible Investment in the introduction.

(3) Principle 2: Establishment of pension plans, pension funds and pension entities – Refers to the legal structures and accounting, technical, financial, managerial and governance requirements, which could also be interpreted to include the extent to which the proposed directors have adequate skills, expertise and risk management capabilities that consider financial as well as non-financial (systemic) issues, which can also include those related to sustainability issues.

(4) Principle 3, Governance – Notes that lack of knowledge can instigate moral hazard and agency problems.

(5) Risk and disclosure – Greater focus on risk management and improved disclosure in the revised principles.

(6) Equal treatment – Principle 8 refers to the need to establish procedures that ensure fair and equal treatment of members, which relates to the principles of financial and social inclusion.

Gaps/unintended consequences:

(1) There is no explicit reference to environmental or social issues which could reinforce the perception that these are separate to a pension fund's responsibilities and create uncertainty in terms of regulatory oversight of industry initiatives that focus on sustainability issues.[136]

(2) Risk and Materiality – there is no guidance on assessing the appropriate methodologies for valuing assets (in Principle 4) that might incorporate sustainability issues, although the OECD/IOPS Good Practices for Pension Funds' Risk Management Systems makes reference to the possibility to add a socially responsible investment policy to the overall investment strategy (although no guidance is provided on what this might entail).

(3) Investment policy – There is no mention of the need for the investment policy to address or mention the pension fund's consideration or reflection of sustainability issues as part of the investment process (Principle 4).

(4) Systemic risk – There is no consideration of how systemic risks might impact valuations and asset-liability techniques, which could undermine the ability for regulators to oversee how pension

funds are considering large and future systemic risks (including but not limited to climate change and inequality).

(5) Disclosure to members and beneficiaries – There is reference to the need for appropriate disclosure and education to members in Principle 5, but this does not include reporting of pension funds' exposure and impact of their investments on social and environmental issues.

The OECD Core Principles of Occupational Pension Regulation were initially developed in 2001, updated in 2004 and are currently under review following a consultation period that ended in October 2015 on what was referred to as the (draft) Core Principles of Private Pension Regulation. The amendments were designed to reflect the change in the pension fund landscape and the increased prevalence of defined contribution funds, as well as the change to risk management systems and approaches in the aftermath of the financial crisis.[137]

The OECD recommendation notes that an additional aim of the revisions was to improve consistency with other OECD guidance documents, such as the G20/OECD High-level Principles of Long-term Investment Financing by Institutional Investors,[138] the Recommendation of the Council on Good Practices for Financial Education Relating to Private Pensions and the G20/OECD High-level Principles for Financial Consumer Protection. They also reflect the recommendations contained in the OECD Roadmap for the Good Design of Defined Contribution Pension Plans.

The amendments include general principles that are applicable to all funded private pension plans (six core principles), as well as specific principles for occupational (two core principles) and personal pensions (two core principles).

Synergies with sustainable development

The draft Principles highlight links to the G20/OECD High-level Principles of Long-term Investment Financing by Institutional Investors throughout the document, which are principles that are designed to support longer-term investment horizons among pension funds. A growing school of thought suggests that this link is essential to encourage more pension fund investment in long-term infrastructure assets (including 'green' assets) that are less liquid, more risky and have a longer time horizon than other, shorter-term, securities-traded investments like equities and bonds.[139] The OECD has established the Green Investment Finance Forum, which is an annual event aimed to "promote dialogue and understanding between a wide range of countries and institutions interested in mobilizing private investment financing for low carbon and climate-resilient infrastructure."[140]

Gaps/unintended consequences

Despite this potential high-level synergy between the OECD's guidelines, there is no explicit reference within the draft Principles themselves to green investing or sustainable development issues. The areas with the greatest potential to interpret the principles as they relate to sustainable development issues include:

> Principle 1: Conditions for effective regulation: Includes reference to the need for well-functioning capital markets and financial institutions, which could be interpreted to also include the extent to which issues related to sustainable development are incorporated as a core part of the stability of the financial system;

Principle 2: Establishment of pension plans, pension funds and pension entities: Refers to the legal structures and accounting, technical, financial, managerial and governance requirements, which could also be interpreted to include the extent to which the proposed directors have adequate skills, expertise and risk management capabilities that consider financial as well as non-financial (systemic) issues, which can also include those related to sustainable development.

Principle 3: Governance: Includes reference to the need for appropriate control, communication and structures to encourage good decision-making, transparency, review and assessment. The reference to delegation to seek expert advice on issues could equally be applied to consider issues related to sustainable development, which might require specialist advice or input.

Principle 4: Investment and risk management: Includes reference to the need for a structured risk management process and appropriate methodologies for valuing assets, which could also be extended to incorporate issues related to sustainable development to the extent that these issues might impact individual asset values and portfolio wide assumptions around risk/return.

Principle 6: Supervision: Cross references to the IOPS Principles while also making reference to the 'social' as well as financial role that pension providers and products have in providing a secure retirement income. This could be interpreted to also be relevant to sustainable development issues that some have argued will impact intergenerational equity and the retirement future of current, as well as future generations.[141]

4.7 Accounting and Financial Reporting Standards

This section explores the accounting and financial reporting standards as they relate to the goals of sustainable development across the following areas:

i. IASB International Financial Reporting Standards

ii. IAASB International Standards on Auditing

4.7.1 IASB International Financial Reporting Standards

Summary Assessment

Synergies with Sustainable Development:

(1) Transparency – Enhancing the international comparability and quality of financial information, enabling investors and other market participants to make informed economic decisions.

(2) Accountability – Reducing the information gap between the providers of capital and the people to whom they have entrusted their money, to hold management to account.

(3) Efficiency – Contribute to economic efficiency by helping investors to identify opportunities and risks across the world, thus improving capital allocation.

(4) Impairment: IAS 36 – The valuation of tangible and intangible assets, including the measurement of inventories, can be affected by environmental impairment.

(5) Provisions: IAS 37 – The IASB is reportedly reviewing accounting standards on provisions, including as it relates to waste disposal, pollution, decommissioning and restoration expenses.

(6) Cooperation with the International Integrated Reporting Council as it developed an integrated reporting framework that integrates sustainability. It is also a participant in the Corporate Reporting

Dialogue that seeks to develop a more coherent and comparable corporate reporting framework on sustainability.

Gaps/unintended consequences:

(1) There is no joining up of the IFRS with the emerging sustainability reporting frameworks, although some cooperation is taking place.

(2) The industry's reliance on the IFRS to provide the basis for assessment of financial resilience and exposure to material financial risks/opportunities means that the absence of sustainability issues implies to the users that these are not material factors to consider.

(3) The accounting standards are widely relied upon as the basis and underpinning for good transparency and corporate reporting; as such, the separation of sustainability reporting from the framework makes it more difficult to agree on a unified approach.

(4) Lack of standardization on sustainability issues has resulted in confusion about what should be measured and reported, likely resulting in higher costs and lower efficiency in terms of price discovery.

The International Accounting Standards Board (IASB) is an independent group of 14 experts with an appropriate mix of recent practical experience in setting accounting standards, in preparing, auditing, or using financial reports, and in accounting education. IASB members are responsible for the development and publication of the International Financial Reporting Standards (IFRS).

The IFRS is the most widely adopted set of accounting rules used to maintain records and produce financial reports that are comparable, reliable, understandable and consistent across national borders. The US is the only significant market that has not adopted the standards and uses the Generally Accepted Accounting Principles.

The IFRS sets out the guidance for the presentation of financial statements and related notes. While it does not provide explicit guidance on supplementary disclosures such as Management Discussion and Analysis, it does provide a broad, non-binding commentary for the presentation of narrative reporting. The general characteristics of financial statements that must be reflected under the IFRS are fair presentation; going concern; accrual basis of accountancy; materiality and aggregation; offsetting (in certain circumstances); frequency of reporting; comparative information; and consistency of presentation.

Synergies with sustainable development

While the IFRS does not explicitly incorporate or mention social and environmental considerations as part of the accounting standards, there are some synergies in terms of the goals, objectives and the framework that have developed over the years, including some cooperation in the development of reporting frameworks that incorporate sustainability issues.

1. Cooperation – in 2013 the IASB entered into a memorandum of understanding with the International Integrated Reporting Council (IIRC) to cooperate with the IIRC's efforts to develop an integrated corporate reporting framework.[142] It is also a participant in the Corporate Reporting Dialogue that seeks to develop a more coherent and comparable corporate reporting framework on sustainability.[143]

2. Transparency – enhancing the international comparability and quality of financial information, enabling investors and other market participants to make informed economic decisions. This is equally as relevant on environmental and social metrics as it is on other metrics.
3. Accountability – reducing the information gap between the providers of capital and the people to whom they have entrusted their money, to hold management to account. This principle is vital and integral to the attainment of sustainable development.
4. Efficiency – contribute to economic efficiency by helping investors to identify opportunities and risks across the world, thus improving capital allocation. Allocative efficiency of capital is integral to the goals of sustainable development where the real costs and needs of the economy, society and the environment are taken into account in a holistic way that recognizes the interdependencies.
5. Impairment: IAS 36 – The valuation of tangible and intangible assets, including the measurement of inventories, can be affected by environmental impairment. Intangible assets, which include greenhouse gas emission allowances, are subject to an impairment test on their carrying value if they exceed the amount recoverable from use or realization.
6. Provisions: IAS 37 – Provisions include possible liabilities that give rise to a provision, such as waste disposal, pollution, decommissioning and restoration expenses. A provision is recognized when (a) an entity has a present obligation as a result of a past event, (b) it is probable that a transfer of economic benefits will be required to settle the obligation, and (c) a reliable estimate of the obligation can be made. The IASB is reviewing accounting standards on provisions. The IASB is reportedly reviewing accounting standards on provisions including as it relates to waste disposal, pollution, decommissioning and restoration expenses.

Gaps/unintended consequences

Sustainability issues are not explicitly referenced within the IFRS standards or within the IASB's revised exposure draft Conceptual Framework in 2015 that is due to be finalized in 2017,[144] despite its apparent support and cooperation with the IIRC and the growing momentum across the accounting profession.[145]

The proposed definition of materiality within the IASB Conceptual Framework focuses on how much the absence or omission of information could influence the extent to which the users of the accounting statements make assessments about the company's current and future prospects. The intended audience is primarily users of financial statements and not the wider stakeholders of the reporting entity.[146]

The industry's reliance on the IFRS to provide the basis for assessment of financial resilience and exposure to material financial risks/opportunities means that the absence of reference to environmental and social issues (or even the emerging reporting frameworks on these issues) within the IFRS standards or the Conceptual Framework implies to the users of this information that these are not material factors to consider.

This lack of standardization on environmental and social issues has resulted in the emergence of a range of sustainability reporting groups to close the existing information gap, potentially resulting in confusion about what should be measured and reported and what might be material, likely resulting in higher reporting and price discovery costs and lower efficiency (Appendix A). Indeed, this is the genesis of the establishment of the Corporate Reporting Dialogue, which will be an important initiative to watch in terms of its impact on financial standards.

Based on the interviews that were conducted as part of this study, there is still no international agreement across the finance or corporate world as to what reporting approach is the most suitable, although there is widespread agreement that a standardized approach would simplify the process of reporting, assessing, auditing and interpreting the data in a meaningful way. Indeed, this was heralded as the goal of the Integrated Reporting Initiative approach, although that has not become embedded as a 'standard' as such as is still relatively new, with most companies that do report sustainability issues adopting the GRI framework at the global level, or the SASB framework for US-based entities.

4.7.2 IAASB International Standards on Auditing

Summary Assessment

Synergies with sustainable development:

(1) Assurance – Enhancing the quality and consistency of auditing standards strengthens public confidence in the global auditing and assurance profession. This assurance is equally as important for sustainability metrics as it is for other metrics.

(2) Engagement – IFAC has been closely involved in participating and facilitating discussions and actions related to examining the role of the accounting profession to the SDGs, with a particular focus on building the skills and education of the accounting profession to help meet the sustainable development goals.[147]

(3) IAASB Standard – The International Standard on Assurance Engagements (ISAE) 3000, Assurance Engagements other than Audits or Reviews of Historical Financial Information is available for assurance of sustainability reporting when it is separate to the financial statements.

Gaps/unintended consequences:

(1) The main challenge is that globally applied assurance standards for sustainability disclosures vary in their approach and are not widely used in all regions. Moreover, the assurance standards tend to alter depending on how the sustainability information is reported and whom they target.[148]

(2) International Standards on Auditing (ISA 720) require the auditor of financial statements to read sustainability disclosures only if they are included with audited financial statements. Otherwise the ISAE3000 or AA1000AS are commonly used.

The International Auditing and Assurance Standards Board (IAASB) is an independent standard-setting body within the International Federation of Accountants (IFAC). The IAASB sets international standards for auditing, assurance and other related areas, as well as facilitating their adoption and implementation. The IAASB's medium-term strategy addresses the following three main themes in the public interest:

Supporting global financial stability;

Enhancing the role, relevance and quality of assurance and related services in an evolving world; and

Facilitating adoption and implementation of the standards.

A component of the IAASB remit is the oversight, adoption and implementation of the International Standards on Auditing (IAS), the professional standards for the financial audit of financial information. These standards are used by European Union countries as mandated in the Audit Directive of May 2006 and are similar to General Accepted Auditing Standards (GAAS) that are used in Canada and the US and the Hong Kong Standards on Auditing. Other major markets have adopted the use of IAS.

Synergies with Sustainable Development

The IFAC itself has been closely involved in participating and facilitating discussions and actions related to examining the role of the accounting profession to the SDGs. A series of multi-stakeholder roundtable discussions led by the IFAC identified seven of the SDGs that are particularly pertinent to the profession.[149] IFAC stated as a result of these discussions:[150] "It is crucial for the accountancy profession to also consider its contribution, directly and indirectly, to achieving the Goals. We need to articulate how accountancy and the profession currently facilitate achievement, and where there is room for improvement. One step in the right direction is to build on a strong and diverse profession that can continue to develop professional accountants with the relevant skills and awareness to contribute to sustainable and resilient organizations, capital markets, and economies."

In addition to building skills and awareness is the potential to reflect sustainability disclosures as a core part of the auditing standards (or the ISAs).

Gaps/unintended consequences

Similar to the situation with reporting sustainability information, the main challenge is that globally applied assurance standards for sustainability disclosures vary significantly in their approach and are not widely used in all regions. Moreover, the assurance standards tend to alter depending on how the sustainability information is reported and whom they target.[151]

For example, International Standards on Auditing (ISA 720) requires the auditor of financial statements to read sustainability disclosures if they are included with audited financial statements. Where environmental or social risks are likely to have an impact on the financial statements, a financial statement auditor may choose to evaluate the design and implementation of environmental and social controls.

When sustainability disclosures are reported separately from the financial statement then the assurance is undertaken as a stand-alone exercise. The most common standard used is the IAASB's International Standard on Assurance Engagements (ISAE) 3000, Assurance Engagements other than Audits or Reviews of Historical Financial Information. It came into force in December 2003 and is used by accounting firms to guide their assurance engagements on sustainability reports.

The other most prominent global auditing standards of sustainability reporting are the AA1000 Assurance Standard (AA1000AS) which is related to the Accountability Principles Standard, a UK-based think tank and independent advisory firm. It tends to emphasize whether the organization and its sustainability reporting respond to stakeholder concerns.

5 Possible Actions and Near-Term Priorities

Financial standards are designed to evolve in order to reflect the changing landscape that impacts the ability of policymakers, regulators and standard-setting bodies to provide a stable, resilient and fair global financial system. In this way, the emergence of sustainable development as a policy and industry priority presents an opportunity to consider how the financial standards might evolve to incorporate sustainable development in a more consistent way.

This is not a straightforward task and the following suggestions are indicative of some possible areas for discussion and debate, rather than intended to represent a prescriptive list of definitive recommendations.

Summary of possible actions:

A summary of the gaps/unintended consequences alongside some of the possible actions that relate to each of the financial standards included in this review is provided in Figure 5. We recognize that it is necessary to prioritize actions and that some of the recommendations will have more impact than others. Those areas are denoted with an [*] are the areas that might become near-term priorities for the G20 and SSBs to purse, discussed further below.

Figure 5: Possible actions to better align financial standards with Sustainable Development

Financial Standards	Gaps/Unintended Consequences	Possible Actions
Financial Stability Supervisory Structures		
Financial Stability Board (FSB):	No explicit reference to environmental or social considerations as part of the systemic risk framework (particularly climate change and inequality). FSB Taskforce focused only on climate reporting for listed entities. No consideration of broader issues related to organization and industry behaviour such as short-termism, values, trust and integrity.	[*] Explore the development of an overarching principle of maximum social benefit to integrate sustainable development across all the financial standards. [*] Incorporate environmental and social issues explicitly into the assessment and guidance framework for regulators to manage and build into early warning of systemic risks. Consider widening the climate risk reporting requirements to social metrics. Build sustainable development into guidance on code of conduct and culture.
IMF/World Bank – Financial Sector Assessment Program (FSAP):	Climate change is not a standard component of the FSAP review process for all countries. A broader assessment of social issues is not included beyond financial inclusion.	[*] Incorporate explicit assessment of sustainable development into FSAP assessment and ROSC reports for developed and developing countries.
IMF – Report on Observance of Standards and Codes (ROSC):	No reference to standards or codes (beyond the G20/OECD corporate governance principle) that explicitly considers climate change, environmental protection or social issues.	[*] See FSAP above.
Banking regulation and standards		
Basel III – International Regulatory Framework for Banks:	No guidance on the incorporation of sustainability issues into bank lending policies, processes and disclosure requirements. No mention of environmental or social	Develop guidance for supervisors to oversee the incorporation of sustainability issues into bank lending policies, processes and disclosure that builds on country level experience such as in China, France, Brazil and Peru. Develop window guidance measures for regulators to evaluate

	considerations in Pillars 2 and 3 of the Accord. Pillar 1 could undermine environmentally and socially beneficial investments.	credit flows to sustainability beneficial sectors of the economy.
BCBS – Corporate Governance Principles for Banks:	No mention of how environmental or social issues might fit into a bank's governance framework. No mention of how sustainable development might be reflected into a bank's values and culture.	[*] Develop BCBS-backed Principles that focus on 'Sustainable Banking Culture and Values' to explore how sustainable development fits into improving bank culture and best practice. Consider adding reference to "social, environmental, market and macroeconomic conditions" into Principles 15 and 17.
BCBS – Core Principles for Effective Banking Supervision:	No mention of how climate change might fit into a central bank's supervision of financial institutions. No consideration of how social issues might fit into the supervisory framework for central banks that extends beyond financial inclusion.	Principle 14 – Corporate governance: Introduce sustainability issues into the governance framework. Principles 15 and 17 – Risk management and Credit Risk: Consider adding additional words "social, environmental, market and macroeconomic conditions". Principle 28 – Disclosure and transparency: Include disclosure of banks risk management and governance framework in relation to sustainability issues.
Corporate Governance		
G20/OECD Principles of Corporate Governance:	No reference to responsible investment or ESG policies and how these might relate to good corporate governance practices. Business ethics is presented as an activity that is separate to a company's commercial objectives. No reference to sustainability reporting frameworks within the principles on reporting and disclosure. The principles do not address the appropriate governance structures to guide decisions around sustainability issues.	[*] OECD guidance on governance frameworks within financial institutions to support the integration of environmental and social considerations into the decision-making process of financial institutions. Include reference to ESG and responsible investment within future updates of the principles. Highlight sustainability reporting standards and good conduct in future updates of the principles.
Securities Regulation and Standards		
IOSCO – Objectives and Principles of Securities Regulation:	No reference to environmental or social issues in regard to definitions of materiality or considerations of systemic risk. No reference to short-termism beyond hedge funds. No link between short-termism and the role of sell-side analysts in the extended documentation requirements of sell-side analysts. No framework is provided for encouraging or assessing good practice in ethics and integrity beyond legal/compliance requirements.	[*] Systemic risk – IOSCO could work with FSB to incorporate sustainability risk (rising inequality, immigration patterns, environmental degradation, and climate change). [*] Culture – IOSCO, together with other regulatory agencies, could embark on a wider and deeper assessment of the issues around integrity and trust to formulate and agree a set of standards and principles that explicitly incorporate sustainable development. Expand metrics – The inclusion of sustainability metrics could be considered as part of the methodology and assessment of the core Principles. Transparency – Consider revisiting the Joint Forum on Enhanced Disclosure that was established in 1999[152] and widen the scope to also consider non-financial reporting including on sustainability issues. Certification – The G20 and IOSCO could play a role in facilitating the broad agreement, acceptance and adoption of 'green bond'

		principles that brings together issuers, investors and G20 regulators to find common ground. Impact investing – The OECD and IOSCO could consider revisiting the previous initiatives of the G8 Impact Investing working group to consider and formulate a standard set of metrics that could be used to assess and report on positive social and environmental impacts from investments, partnering with industry experts on impact investing. Short-termism – IOSCO, together with the OECD and other regulatory agencies, could, in consultation with subject experts, formally consider the fundamental drivers of short-termism, the impacts that it has across the different securities markets, where the greatest risks are and the potential solutions at the market wide and organizational levels to support behaviour change.
IOSCO – Code of Conduct for Credit Rating Agencies:	No reference to environmental or social issues in regard to principle that relates to the 'Quality and Integrity of the Credit Rating Process'. Emphasizes historical analysis that could limit the scope and potential integration of some sustainability issues that are more forward looking. No requirement for evaluating systemic risks that might impact on individual ratings, which might lead to sustainable development risks being overlooked. No delineation between financial and non-financial data and metrics, which could discourage the CRAs from valuing data that relate to sustainability issues. Transparency and Timeliness – The guidance emphasizes the importance of revising ratings as and when new information presents itself, which could encourage a short-term mindset and be inadequate for large, system-wide issues such as climate change. Disclosure and Communication with Market Participants – No explicit consideration or mention of environmental or social issues.	[*] Systemic risk – Introduce a requirement to evaluate systemic risks that might impact individual ratings, including but not limited to stress testing and scenario analysis. Transparency and Timeliness – Explicitly mention time horizons and uncertainties that these present to begin to account for the impact of social and environmental issues on short- and medium-term outcomes. Disclosure and Communication with Market Participants – The outcome of a joint PRI/CRA initiative could be shared and built upon by IOSCO to evaluate the potential inclusion of such issues into the Code in a way that encourages a holistic approach to considering sustainability issues as a core function of CRA methodologies and processes.
Insurance Regulation and Standards		
IAIS – Insurance Core Principles, Standards, Guidance:	Systemic risk – There is at present no mention of systemic issues such as climate change and the extent to which this might impact on the operating environment for insurers during times of crisis. Risk Management and Internal Controls – No explicit reference to sustainable development issues. Materiality – ICP 8.1.7 states that insurers should assess material risks both	[*] Incorporate into systemic risk – Consider the extent to which social and environmental issues can pose a systemic risk and what additional metrics might be needed to embed consideration of these issues into the IAIS ComFrame framework. Globally Systemically Important Insurers implications – Consider the exposure to systemic risks particularly in relation to climate change exposure and the extent to which the insurers are not only considering adaptation risks but also the extent to which their investments and insurance activities are evolving to foster climate mitigation. Widen umbrella of collaboration – The collaboration between

	qualitatively and, where appropriate, quantitatively. There is no reference or mention of social or environmental risks as part of this process.	IAIS and groups such as the A2ii and Islamic Finance groups highlight the potential for alliance between groups on issues that are cross-cutting over the insurance industry, such as the Principles for Sustainable Insurance initiative.
Investment Regulation and Standards		
International Law – Fiduciary Duty:	"Best interests" of beneficiaries has become equated to short-term financial interests, creating a disconnection between institutional investor practices and their fiduciary duties.	Materiality – Make explicit reference to the sustainability considerations as part of investment analysis in fiduciary duty law (such as in the UK and South Africa). Standardization – Harmonize legislation and policy instruments to support sustainable development as it relates to institutional investment. Collaboration – G20 support for the joint efforts of the OECD work on fiduciary duty and Principles for Responsible Investment/UNEP FI to develop an international statement on the duties that fiduciaries owe to their beneficiaries that incorporate the goals of sustainable development.
IOPS – Principles for Private Pension Supervision:	No reference to sustainability issues or how regulators of pension funds might consider these issues as part of their function. No formal or informal guidance for regulators on how they might consider the integration of long-term, sustainability metrics into risk management frameworks of pension funds. No reference to the emerging national regulations or the industry-based principles and initiatives that reflect incorporate sustainable development issues.	[*] Financial stability – Inclusion of a core set of sustainability indicators that can be included in the IOPS guidelines regarding the consideration of systemic risk and financial stability. Include explicit reference in the IOPS Principles to the Principles for Responsible Investment. Disclosure – Include reference to sustainability issues as part of the transparency and disclosure standards of pension funds, drawing lessons from country level legislation (such as France and South Africa). Materiality – Agreement and integration of a core set of sustainability metrics that can be included in the IOPS guideline's definition of materiality. Risk management – Consider guidance as to how supervisors might consider long-term, non-financial metrics into risk management frameworks of pension funds.
OECD Core Principles of Occupational Pension Regulation:	No explicit reference to environmental or social issues. Risk and Materiality – No guidance on assessing the appropriate methodologies for valuing assets (in Principle 4) that might incorporate sustainability issues. Investment policy – No mention of the need for the investment policy to address sustainability issues as part of the investment process (Principle 4). Systemic risk – No consideration as to how systemic risks might impact valuations and asset-liability techniques. Disclosure to beneficiaries – Principle 5 does not include reporting pension funds' exposure and impact of their investments on social and environmental issues.	[*] Include reference to systemic risks, including sustainable development issues, and how these might impact valuations and long-term future projections. Include requirement for pension funds to measure and report their exposure to social and environmental issues, starting with carbon risk exposure and 2-degree stress testing. OECD/IOPS – Develop guidance for regulators and private pension funds that explicitly makes reference to sustainability issues and how this fits within the core principles of pension fund oversight, including the goals of long-term investment and the G20/OECD green financing initiatives. Consider including reference to the 'social' as well as financial role that pension providers and products have in providing a secure retirement income.
Accounting and Financial Reporting Standards		
IASB – International	There is no joining up of the IFRS	Consider developing IASB-backed guidance for the preparation of

Financial Reporting Standards:	standards with the emerging sustainability reporting frameworks, although there is some cooperation to agree a platform. No reference to the SDGs within the standards or other guidance material.	corporate reporting in relation to the treatment of sustainability metrics and the SDGs. Continue to work with other agencies to develop, agree and endorse a 'minimum' best practice disclosure requirement on industry specific sustainability information (including guidance on metrics and narrative).
IAASB – International Standards on Auditing:	Assurance standards tend to alter depending on how the sustainability information is reported and whom they target.	Collaborate with the IASB and other relevant standard-setting agencies and groups to develop globally accepted guidance for the auditing of sustainability reports.

Near term priorities:

Drawing from the analysis of the financial standards as presented in Section 4, the five most accessible "entry points" for incorporating sustainable development appear to be in relation to definitions and guidance on systemic risk, governance, transparency, risk/materiality and culture. As a result, some of the actions that specifically relate to each of these areas have been suggested as near-term priorities.

The analysis of the financial standards also revealed that the absence of an agreed framework or consideration as to whether sustainable development might fit within the governance framework has resulted in a somewhat patchy and disjointed approach.

Combining these insights, there appears to be a need for an overarching principle that could guide and form the basis for evolution to the standards over time that would guide the incorporation of sustainable development into core frameworks (Figure 6).

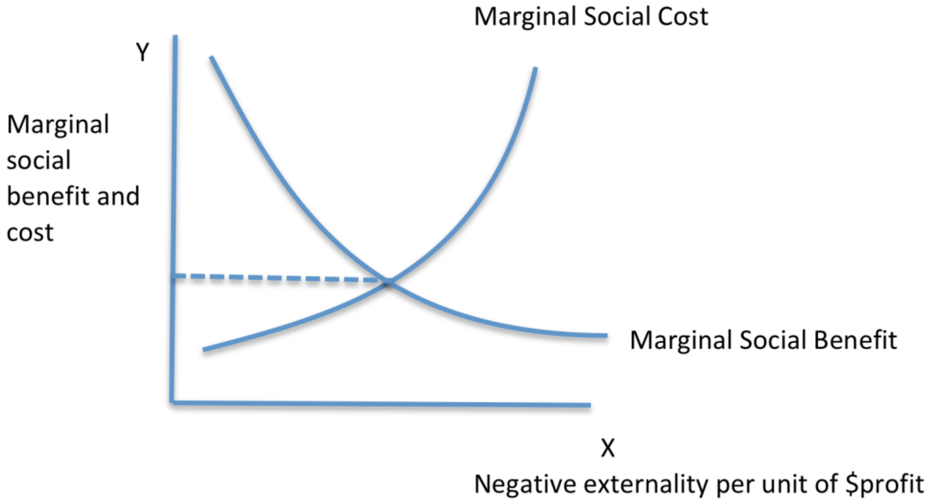
Figure 6: Framework for integrating Sustainable Development into financial standards

Principle of "Maximum Social Benefit": The best financial system is that which secures the maximum social benefit from the activities that the finance sector undertakes				
Five entry points to integrate sustainable development into financial standards:				
(1) Systemic Risk	**(2) Governance**	**(3) Transparency**	**(4) Risk/Materiality**	**(5) Culture**
Incorporate environmental and social issues explicitly into the guidance for managing systemic risks	Embed environmental and social issues into the governance standards across all the finance sector actors	Measure and report the social and environmental performance and impacts of financial sector activities	Include social and environmental issues as part of the guidance for managing risks and assessing materiality	Align industry culture with sustainable development goals to shift values and behaviour

1. **Introduce a principle of "maximum social benefit"**: The introduction of a principle to encapsulate the goals of sustainable development would help to guide how the financial standards might evolve over time in a consistent and coherent way. The principle of "maximum social benefit" is based on the notion that the best financial system is one that produces the maximum social benefit as a result of the activities that it undertakes. In order to achieve this, the positive and negative externalities that are generated as a result of the finance sector's activities require greater attention (see Highlight: The Principle of "Maximum Social Benefit" and Allocative Efficiency).

The Principle of Maximum Social Benefit is related to Dalton's principle of maximum social advantage from public finance[153] but in this context relates to the marginal social benefit of the finance sector's activities, taking into consideration the negative externalities that arise (simplistically depicted in Figure 7).

Figure 7: Principle of Maximum Social Benefit applied to the Financial System



Source: Adapted from Dalton (1922) Principle of Maximum Social Advantage

The principle posits is that in order to maximize the net social benefit of the finance sector's activities, the negative externalities that are generated as a unit of profit/revenue should also be taken into account (which includes both social and environmental externalities). The point at which the marginal social costs (negative externalities of the activities) meet the marginal social benefit will be the optimal and most beneficial point.

An example of what the application of this principle could mean in practice might be the introduction of additional bank lending criteria that encapsulate the explicit measurement and assessment of the environmental externalities from financing companies operating in high-carbon industries.[154] For pension funds, the allocation of capital to infrastructure might explicitly consider (alongside the expected financial risk and return) the social and environmental impacts of the different infrastructure opportunities that are available.[155]

Highlight: The Principle of "Maximum Social Benefit" and Allocative Efficiency

The proposed principle of "maximum social benefit" is based on an expanded notion of "allocative efficiency," whereby resources are allocated in a way that will be most beneficial for the economy, as well as for society and the environment. In this way, the capital requirements to meet the financing needs associated with the SDGs and to respond, and prepare for, climate change, become features of the workings of the financial sector in a more holistic way with G20 policy priorities.

Narrow definition: Allocative efficiency is most commonly defined as "the situation where the financial system allocates financial resources to the most productive and valuable use."[156] A narrow interpretation of allocative efficiency is that participants need sufficient information about the value and risks of various financial products and services to ensure that prices adjust in a way that will help allocate financial resources to productive uses.

The typical requirement to facilitate allocative efficiency in this narrow interpretation is the need for disclosure and transparency to enable the price adjustment process to work sufficiently.

Broader definition: A broader interpretation of allocative efficiency is that the efficient allocation of resources is vital for underpinning the economic and social purpose of markets, which is to "create long-term, sustainable value".[157]

Taking this broader definition, allocative efficiency puts the principle of "social benefit" at the centre of the discussion around the design of the financial system and the appropriate regulatory framework that might support this. The goal and focus shifts towards ensuring that the financial system facilitates the allocation of resources that will be most beneficial to society in the long run.

Policy implications: The principle of "maximum social benefit" would require the assessment of social and environmental outcomes *equally alongside* economic and financial outcomes.

Reducing information asymmetry and improving disclosure is an important component of ensuring that resources are allocated to areas of the economy where they are most valuable to society over the long term. Measuring and reporting the social and environmental impacts could be a core feature of the price discovery process for actors in the financial sector, reinforced through the financial standards.

The financial standards could incorporate an "externality test" as part of the regulatory and oversight responsibilities, requiring financial sector agents to measure, report and reduce the negative social and environmental externalities that emanate from their lending, financing and insurance activities.

In addition to enhancing social benefit through improved transparency and measuring externalities is the need to transform behaviour and culture.

Markets are comprised of people who make decisions based on the best information that they have available at the time, but it is their assumptions, attitudes, beliefs and values that influence their interpretation and assessment of this information and therefore the resulting pricing of assets. Investor behaviour is subject to biases that influence outcomes in ways that the more narrow definition of allocative efficiency does not allow for.[158]

In that sense the *determination* of the price setting process and the factors that influence such assessments is more important in terms of the generating the best allocation of resources and greatest social benefit in the long run than the actual price set in the market.

Consequently, increasing disclosure and measurement of social and environmental impacts is a crucial element of the principle of maximum social benefit, but equally important is the need to focus on fostering the "right" behaviour and culture in the finance industry that will embed beliefs and attitudes in a way that is in synchronicity with sustainable development – rather than operating parallel to or against it.

2. **Incorporate sustainable development into systemic risk considerations**: The pursuit of financial stability and the effective management of systemic risks could be enhanced by explicitly embedding sustainable development into the core narrative and early warning systems that are in place, particularly in relation to seismic shifts emanating from rising inequality and climate change.

The findings of our review of the financial standards identified a consistent lack of awareness or incorporation of environmental or social issues as part of the framing around systemic risk. This applies to the standards that govern the securities markets, as well as those relating to the insurance sector and investment. This opens up the possibility that the financial standards do not sufficiently encourage the industry to think about the large and systemic risks that might impact on their operations on an ongoing basis.

Most of the stress testing frameworks that have emerged within the finance industry as a result of the revision to the standards since the financial crisis have focused on assessing the outcomes of economic shocks to the system, such as tail risk events resulting in interest rate shocks, extreme inflation or growth outcomes. However, the underlying causes of such tail risk events could be given greater consideration to move the framing from 'reacting' to events as they unfold towards 'pre-emptive action' and minimizing the risk of the large-scale impacts to begin with as far as possible. Such assessments could draw on robust and credible sources such as the World Economic Forum's Global Risk framework, which also includes issues related to sustainable development.[159]

Possible Action	Regulatory Bodies/Groups
Incorporate environmental and social issues explicitly into the assessment and guidance framework for regulators to manage and build into early warning of systemic risks	FSB in cooperation with other financial standard-setting bodies, oversight groups (IMF, World Bank, OECD) and expert groups (WEF, UN Environment, PRI)

3. **Strengthen governance**: There is a greater focus on governance and decision-making processes across the financial standards since the financial crisis to reduce conflict of interest and underpin clear lines of accountability. This could be extended to more explicitly consider how environmental and social considerations fit within the governance structures of financial institutions.

Another repeated theme that emerged from the analysis of the financial standards is the important role that governance frameworks play in guiding and framing the decision-making processes across the financial institutions. The absence of reference to sustainability issues and how this fits within the governance frameworks of financial institutions could undermine the effectiveness of the goals to integrate sustainability issues. An additional reference to sustainable development could be included in future updates of the G20/OECD guidelines, in addition to developing some overarching guidelines on good governance of sustainability issues.

Possible Action	Regulatory Bodies/Groups
Develop guidance on governance frameworks to support the integration of environmental and social considerations into the decision-making process of financial institutions	FSB and OECD in cooperation with other financial standard-setting bodies and expert groups

4. **Improve transparency:** Many of the financial standards have been strengthened to improve the transparency and disclosure requirements following the global financial crisis, including improved risk management processes and governance structures. There is an opportunity to widen the lens to further

incorporate sustainability information as part of the disclosure frameworks, building on the Financial Stability Board's Task Force on Climate-related Disclosures review.

The pending FSB TCFD guidance on climate risk disclosure is likely to include not only reference to appropriate carbon risk-related metrics, but also the utilization of stress testing and scenario analysis, such as 2 degree alignment. While the details of the TCFD are not yet known, it is clear that there will be opportunities to build on the findings of this review in a number of ways. First, it could be extended to apply to all regulated financial institutions, not only listed entities (i.e. including pension funds and other financial agents). Second, given the FSB's role as the overseer of financial stability across all the SSBs, it would be a logical next step for the FSB to consider developing a framework to assess the implementation and utilization of the information across the financial community. This could result in the addition of reporting metrics around 'utilization' to demonstrate that climate issues have been taken into account as part of the risk and materiality assessment and do not become purely a compliance based reporting exercise. Finally, the disclosure guidelines would naturally evolve as and when new techniques and data emerges in relation to assessing climate risk.

Possible Action	Regulatory Bodies/Groups
Build on the pending FSB TCFD guidance on climate risk disclosure to apply the disclosure standards to all regulated finance sector participants and encourage utilization at the international and national level	FSB in cooperation with other financial standard-setting bodies and national regulators

5. **Widen the assessment of risk and materiality**: There is an opportunity for the financial standards to widen the guidance and assessment of risk and materiality to reinforce the growing evidence and commitment to pursuing sustainable development as a means to underpin social progress and environmental protection alongside achieving financial strength and resilience.

One of the challenges with incorporating environmental and social issues into the financial standards is that they do not explicitly list any particular "issue" or metric that should be taken into account, rather the principles are high-level and intended to offer a light hand, voluntary guidance for regulators to oversee the financial institutions under their purview. Consequently, requesting the addition of sustainable development metrics into the standards themselves is less likely to gain headway than incorporation into the 'principles' to better align the financial system with sustainable development outcomes. For this reason, the principle of "maximum social benefit" could help to contribute to widening the narrative and perspective on what constitutes risk and materiality and to give greater consideration to externalities that arise from the financial sector's practices.

There is also the possibility to incorporate sustainable development explicitly into the FSAP and ROSC assessments, which (unlike the standards themselves) are detailed and very specific in terms of the metrics and framework that are utilized. The addition of metrics related to financial inclusion is now part of the FSAP and ROSC framework, although the standards have only been modified to the extent that the principle of proportionality has been bolstered and some additional guidance material has been developed on financial inclusion. Similarly, the addition of sustainable development metrics into the FSAP and ROSC could help to close some of the gaps and unintended consequences that have been identified in this report without requiring a major overhaul of the financial standards themselves.

Possible Actions	Regulatory Bodies/Groups
Widen the scope of the Financial Sector Assessment Program and the Reports on Observance and Standards of Codes to incorporate sustainable development into the assessment frameworks for all countries	The IMF and the World Bank, in consultation with regulators from countries (e.g. US, France, UK, Netherlands) and expert groups

6. **Transform culture**: Many of the financial standards have strengthened their guidance around the culture of the finance industry in the wake of the financial crisis; these efforts could be emboldened by the explicit incorporation of sustainable development to better align values with behaviour and outcomes that provide greater societal benefits and financial stability over the long term.

The financial sector continues to be plagued by problems of poor conduct and ethics, which has undermined the wider trust in the financial system and the agents within it. One of the key findings in this review of the financial standards is that almost all of them have made some effort to tighten up and improve the code of conduct, governance or ethics of the industry in some way. These are all steps in the right direction, but there is still no overarching depiction of what good conduct looks like and how this might be achieved in practice. The banking sector in particular, given its large size and disproportionate impact on society, could benefit from a more focused set of principles to guide the evolution in its culture and values, including the incorporation of sustainable development and how institutions (and the individuals inside them) can contribute to shifting the financial system onto a more sustainable pathway.

Possible Actions	Regulatory Bodies/Groups
Develop BCBS-backed Principles that focus on 'sustainable banking culture and values' to go deeper into considering how sustainable development fits into bank culture and best practice	G20 and Basel in cooperation with other international agencies (IMF, World Bank, OECD, UN Environment) and subject experts on culture and behaviour change

6 Conclusion

We have a clear opportunity to build on the synergies between the goals of sustainable development and the evolution in financial standards. The benefits of this are two-way as it would not only help policymakers to better align their policy goals in a more consistent and effective way – it would also contribute to the goal of providing a stable, resilient and fair global financial system that serves to benefit all of society. In particular, it could assist in providing greater attention and scrutiny on minimizing the unintended consequences of the financial sector as highlighted in this report.

Despite the apparent benefits and synergies that exist between financial standards and sustainable development, this will not be a straightforward task and the conversation will need to be progressed through dialogue and alliances that involve multilateral groups, international SSBs, country regulators and industry experts.

The most obvious and perhaps least contentious place to continue this "joining up" of sustainable development with financial standards will be in building on the momentum of the FSB Task Force on Climate-related Financial Disclosures and the drive towards improved transparency. The addition of sustainable development into the country level financial assessment framework used by the IMF and the World Bank would also help to close some of the gaps that this review identified.

It is also worth exploring the establishment of early warning systems and management of systemic risks that explicitly incorporate sustainability issues, as the review of the standards found that the existing thinking around systemic risk currently overlooks this as it tends to focus on "reaction" to the symptoms rather than pre-emptive action to thwart the possible causes of financial instability.

There is also a strong case for exploring the establishment of guidance on governance frameworks to support decision-making that reflects sustainability considerations across all types of financial institutions, extending the G20/OECD Principles of Corporate Governance and the FSB's recent announcement to investigate governance standards across the finance sector.

Building on this momentum towards improved disclosure, pre-emptive systemic risk assessment and sustainability governance frameworks, a broader conversation on the principle of "maximum social benefit" would help to support the development of a solid and consistent approach to considering, measuring and reporting the environmental and social outcomes of the financial sector's activities alongside financial outcomes.

Such actions would not only contribute to improving the sustainability information that is available but would also send a strong signal to the financial community that these issues are being taken seriously by policymakers and SSBs. This could help to shift the finance sector from its "quiet revolution" and fragmented position on sustainability issues towards "full immersion".

Finally, and likely the most challenging transition of all, is the potential role that financial standards could play in supporting a shift in culture and behaviour that puts integrity, long-term thinking and social benefit at the core of the functioning of the financial system. Clearly financial standards are not the only lever available to facilitate culture change and much innovation will need to come from the industry itself; but it will be another key ingredient for sending a consistent and holistic signal to the financial community that "good conduct" includes the consideration of social and environmental outcomes.

Appendix A: Standards and Industry Initiatives

The following table summarizes some of the financial regulations at the state level, along with a selection of industry Initiatives, which all in some way enhance the goals of sustainable development.

Relationship to Global Financial Regulations	Examples of Country-level Standards	Examples of Industry-led Initiatives
Banking Standards (Basel)	China: The Green Credit Policy and the Green Credit Guidelines require banks to include covenants in their loan documentation to comply with environmental standards. Banks are also required to monitor borrowers' compliance with environmental regulations.	Sustainable Banking Network: A community of financial sector regulatory agencies and banking associations from emerging markets committed to advancing sustainable finance. The Network facilitates the collective learning of members and supports policy development and related initiatives to create drivers for sustainable finance.
	Brazil: Banco Central do Brasil has utilized Pillar 2 of Basel III to encourage banks to assess their exposures to carbon risk. This includes a regulation that provides guidelines for financial institutions to consider banks' exposures to social and environmental risks from their activities. It also requires banks to publicly disclose their sustainability risks under the disclosure rules of Pillar 3 (with penalties for non-compliance).	Equator Principles: A risk management framework adopted by financial institutions for determining, assessing and managing sustainability risk in project due diligence. The Principles apply to 1) project finance advisory services, 2) project finance, 3) project-related corporate loans, and 4) bridge loans. Currently, 84 financial institutions in 35 countries have officially adopted the principles, covering over 70% of international project finance debt in emerging markets.
	Peru: The Financial Regulation Authority has introduced a requirement that banks request project managers to complete a due diligence report on projects that includes consideration of social, environmental and economic risks related to the loan.	Natural Capital Declaration: A finance sector initiative, endorsed at CEO-level. It states that the financial sector can provide some of the tools required to support a transition to sustainable development and eradicating poverty by providing loans, equity, insurance and other financial products and services in a way that considers social and environmental externalities.
Securities Standards (IOSCO)	France: Section 225 of the "Grenelle II" Act requires that all listed companies with more than 500 employees (including banking and financial institutions) provide details in their annual reports "on how they take into account the social and environmental consequences of [their] activity and [their] social commitments in favour of sustainable development." The regulation is on a 'comply or explain' basis and also requires that the report is verified by an independent third party.	Sustainable Stock Exchange (SSE): The SSE is a peer-to-peer learning platform aimed at enhancing corporate transparency on ESG issues. The SSE is organized by the UN Conference on Trade and Development, the UN Global Compact, UNEP FI and the PRI. In September 2015 it launched a Model Guidance for exchanges on sustainability reporting. By mid-2016 more than 50% of stock exchanges around the world were providing guidance to issuers on reporting ESG information.

	UK: Under the Companies Act 2006 (Strategic and Directors' Reports) Regulations 2013, quoted companies are required to report their annual greenhouse gas (GHG) emissions in their directors' report. The regulation requires that the report enables readers of the emissions data to have a clear understanding of the operations for which emissions data has been reported, and if and how this differs from operations within the consolidated financial statement. Assurance is not mandatory but encouraged.	PRI and Credit Rating Agencies Collaboration: A 'Statement on ESG in credit ratings' was launched on 26 May 2016, signed by 100 investors and 6 CRAs. This includes the participation in a series of Ratings Forums with the goal to develop a better understanding of ESG issues as they relate to creditworthiness and to formulate practical solutions for more systematic and transparent incorporation of ESG in credit ratings and analysis.
	Brazil Stock Exchange: Report or Explain allows companies' progressive adhesion to the practice of reporting information and results related to the social, environmental and corporate governance issues. As of 2014, the initiative covers integrated reports and has been renamed "Report or Explain for Sustainability or Integrated Reports".	CDP: Provides a global reporting system that collects information from the world's largest organizations on their climate change risks, opportunities, strategies and performance, and the way in which they consume and affect natural resources including water and forests.
	South Africa: Since 2010 the Johannesburg Stock Exchange has required (on a comply or explain basis) that listed companies publish an integrated report in accordance with the King III Code. India: Requirement in 2014 under the Companies Act (Section 135: Corporate Social Responsibility) that companies spend 2% of their net profit on social development. Follows mandatory corporate reporting on environmental and social issues introduced in 2013.	Green Bond Standards: The International Capital Market Association-backed Green Bond Principles, a voluntary set of guidelines that recommend transparency and disclosure and promote integrity in the development of the green bond market for issuers and investors. Climate Bonds Initiative: A tool that allows investors and intermediaries to assess the environmental integrity of bonds claiming to address climate change mitigation and adaptation.
Insurance Standards (IAIS)	UK: The BoE Prudential Regulation Authority issued in 2015 a report on the impact of climate change on the insurance sector. The report was intended to fulfil the requirements of Adaptation Reporting and inform the UK Climate Change Risk Assessment due to be laid before the UK Parliament in 2017. The report is also intended to inform the Bank's future work on climate change issues.	A2ii: The A2ii is a global partnership with the mission to inspire and support supervisors to promote inclusive and responsible insurance, thereby reducing vulnerability. The Initiative is the implementation partner of the IAIS on access to insurance. The goal is to strengthen the capacity of policymakers, regulators, and supervisors seeking to advance inclusive insurance markets, particularly for low-income clients.
	NAIC: In 2013, the US National Association of Insurance Commissioners (NAIC) insurance standard and regulatory body revised its Financial Condition Examiners Handbook to include consideration of climate change risk in	Principles for Sustainable Insurance and ILO Facility Collaboration: The UNEP FI Principles for Sustainable Insurance and the International Labour Organization's Impact Insurance Facility[160] have forged a strategic

	the development of a diversified and stable investment portfolio. It has also provided guidance to examiners on questions to ask insurers about the potential impact of climate change on company solvency.	collaboration to drive insurance industry practices and solutions to promote sustainable development. The Facility will help to support the achievement of the SDGs through consideration of issues such as climate change, food security, and universal health coverage.
	California: In January 2016, California Insurance Commissioner Dave Jones asked all insurers doing business in California to voluntarily divest from their holdings in thermal coal. He is also requiring all insurers subject to his supervision to annually disclose their carbon-based investments, including those in oil, gas, coal, and electric power companies.	Roundtable for Disaster Resilience & Safer Communities: IAG, Australian Red Cross, Investa Property Group, Munich Re, Optus and Westpac collaborated to issue a White Paper in 2013 called 'Building our Nation's Resilience to Natural Disasters'. It recommended a national open platform be developed by the Australian Government to provide a single point of access to critical data.
Institutional investor Standards (IOPS)	France: Article 173 of the French Energy Transition Law came into effect on 1 January 2016. It strengthens mandatory carbon disclosure requirements for listed companies and introduced carbon reporting for French institutional investors on a comply or explain basis.	Fiduciary duty: In February 2016, the UNEP FI, the PRI, and the Generation Foundation announced a three year follow on project to engage asset owners, asset managers and policymakers across national and international jurisdictions to harmonize a global understanding of fiduciary duty which incorporates sustainability.
	OECD Guidelines for Multinational Enterprises: Recommendations for responsible business conduct in areas such as employment and industrial relations, human rights, environment, information disclosure, combating bribery, consumer interests, science and technology, competition, and taxation. Over 40 adhering governments encourage enterprises in their countries to observe the guidelines wherever they operate and they are increasingly being incorporated into investor's assessments of corporate activities.	Focusing Capital on the Long Term: A global initiative to encourage institutional investors to invest for the long-term. The group produced the "Long-Term Investing – Portfolio Guide", a global collaboration between BlackRock, Caisse de dépôt et placement du Québec, Canada Pension Plan Investment Board, Capital Group, GIC, New Zealand Superannuation Fund, Ontario Teachers' Pension Plan, PGGM, and Washington State Investment Board.
	G20/OECD High-Level Principles of Long-Term Investment: Designed to facilitate and promote long-term investment by institutional investors, particularly among pension funds, insurers and sovereign wealth funds that typically have long duration liabilities and consequently can consider investments over a long period provided these are prudent and capable of producing a reasonable risk-adjusted return.	Santiago Principles: 24 voluntary guidelines that assign "best practices" for the operations of Sovereign Wealth Funds. Principle 19 makes reference to the need for public disclosure of a SWFs decision to exclude certain investments for various reasons, including legally binding international sanctions and social, ethical, or religious reasons. More broadly, some SWFs may address social, environmental, or other factors in their investment policy.

	EU Institutions for Occupational Retirement Provision (IORPS II) Directive: The Directive states that Member States should require IORPs to explicitly disclose the relevance and materiality of ESG factors to a scheme's investments and how they are taken into account, including an assessment of new or emerging risks related to climate change, use of resources and the environment, social risks and risks related to the depreciation of assets due to regulatory change. It also notes within the 'prudent person' rule, Member States shall allow IORPs to take into account the potential long-term impact of investment decisions on ESG factors.	Global Investor Coalition on Climate Change: A joint initiative of four regional climate change investor groups: IIGCC (Europe), INCR (North America), IGCC (Australia and New Zealand) and AIGCC (Asia). The coalition has come together to provide a global platform for dialogue between and among investors and governments on international policy and investment practice related to climate change.
Accounting and Auditing Standards (IFRS/GAAP)	Norwegian Act on Annual Accounting: Annual reporting on business integration of corporate social responsibility, including human rights, workers' rights and social issues, the environment and measures against corruption. The report must contain information on policies, principles, procedures and company standards. The company's auditor must assess the accuracy and consistency of the reporting.	Sustainability Accounting Standards Board: A US-based organization that is focused on establishing industry-based sustainability standards for the recognition and disclosure of material environmental, social and governance impacts by companies traded on US exchanges. SASB has requested that the US SEC acknowledge the SASB standards as an acceptable disclosure framework for use by companies preparing their SEC filings.
	EU Non-Financial Reporting Directive: Legislation requiring disclosure of a range of ESG-related information by listed companies and other designated entities with 500+ employees. Due to come into effect in Jan 2017.	Global Reporting Initiative Sustainability Reporting Standards: An international independent organization, with a network-based structure and a Collaborating Centre of UN Environment. Of the world's largest 250 corporations, 92% report on their sustainability performance and 74% use GRI's Standards. The G4 guidelines transitioned to the GRI Sustainability Reporting Standards in July 2016.
	Japan: Practical Guidelines for the Assurance of Sustainability Information (2007), issued by the Japanese Association of Assurance Organizations for Sustainability. The guidelines set out specific steps and procedures to be followed in assurance engagements of sustainability information. They have helped narrow the gap between accounting firms' assurance procedures and those of certification bodies.	The International Integrated Reporting Council: A global coalition of regulators, investors, companies, standard-setters, the accounting profession and NGOs. The coalition promotes communication about value creation as the next step in the evolution of corporate reporting. In 2014, the IIRC published an international Integrated Reporting <IR> Framework. It offers guiding principles and content elements that govern the content of an integrated report.
	International Standard on Assurance Engagements: ISAE 3000, Assurance	Climate Disclosure Standards Board: Launched in September 2010, the reporting framework

	Engagements other than Audits or Reviews of Historical Financial Information was developed by the International Auditing and Assurance Standards Board (IAASB) of the International Federation of Accountants (IFAC). ISAE 3000 came into force in December 2003 and is used by accounting firms to guide their assurance engagements on sustainability reports.	adopts and relies on relevant provisions of existing standards and practices, including the GHG protocol and international financial reporting standards as well as reflecting regulatory and voluntary reporting and carbon trading rules. The Framework is a standards-ready tool for companies to disclose climate change-related information in mainstream financial reports.

Source: Compiled by the authors drawing from the Inquiry database and publicly available information

Appendix B: Consultation with Experts

The following individuals kindly offered their time and shared their expertise in relation to the role of financial standards in supporting sustainable development. Some of the correspondence was in writing, via teleconference or in-person workshops facilitated by the UN Environment Inquiry team. We are grateful for their invaluable insights and contributions: Aditi Maheshwari (International Finance Corporation), Alex Barkawi (Council on Economic Policies), Alyssa Heath (Principles for Responsible Investment), Andrew Sheng (Institute for New Economic Thinking), Barbara Buchner (Climate Policy Initiative), Bill Murphy (KPMG), Bob Eccles (International Integrated Reporting Council), Butch Bacani (UN Principles for Sustainable Insurance), Calvin Quek (Greenpeace China), Chris Barrett (European Climate Foundation), Curtis Ravenel (Bloomberg/TCFD), Danielle Cheseborough (UN Global Compact), David Delmaso (Forum for Sustainable Finance), Graeme Maxton (Club of Rome), Hideki Takada (OECD), Jakob Thomä (2 Degree Investing Initiative), John Swannick (Delphi Framework), Mark Halle (International Institute for Sustainable Development), Megan Macinnes (Global Witness), Michael Sheren (Bank of England), Neeraj Sahai (Former President Standard & Poor's), Oliver Greenfield (Green Economy Coalition), Peer Stein (International Monetary Fund), Professor Anat Admati (Stanford University), Professor Wang Yao (Institute of Finance and Economics), Pru Bennett (Blackrock), Raj Thamotheram (Preventable Surprises), Rhys Gordon-Jones (HM Treasury), Richard Barker (Oxford University), Richard Pancost (University of Bristol), Rob Lake (Rob Lake Advisors), Siobhan Cleary (World Federation of Exchanges), Steve Waygood (Aviva).

Notes

[1] https://sustainabledevelopment.un.org/?menu=1300.
[2] UN Environment Inquiry (2015). The Financial System We Need: Aligning the Financial System with Sustainable Development. http://unepinquiry.org/publication/inquiry-global-report-the-financial-system-we-need/
[3] http://gpfi.org/sites/default/files/documents/2014_g20_financial_inclusion_action_plan.pdf
[4] Social Impact Investment Taskforce (2014), Established under the UK's presidency of the G8. http://www.socialimpactinvestment.org/reports/International%20Development%20WG%20paper%20FINAL.pdf
[5] OECD (2015). Social Impact Investment: Building the Evidence Base, http://www.oecd.org/sti/ind/social-impact-investment.pdf
[6] Principle of Proportionality – the aim is to reduce the regulatory burden and unintended consequences of standards that could stifle innovation (that could, in turn, undermine financial inclusion). The proportionality principle reflects the need to balance the goals of inclusion, integrity and stability. "Global standards that do not allow sufficient room for innovation, or which do not allow for proportionate application, can have unintended consequences with an adverse impact for financial inclusion. A further challenge can be over compliance, where national regulators and/or the private sector may adopt overly conservative approaches due to lack of understanding of how practically to apply the proportionality permitted by the global standards." http://www.afi-global.org/policy-areas/balancing-inclusion-integrity-and-stability.
[7] https://www.fsb-tcfd.org
[8] https://sustainabledevelopment.un.org/?menu=1300.
[9] UN Environment Inquiry (2015). The Financial System we Need: Aligning the Financial System with Sustainable Development. http://unepinquiry.org/publication/inquiry-global-report-the-financial-system-we-need/
[10] http://www.oecd.org/finance/private-pensions/Infrastructure-Financing-Instruments-and-Incentives.pdf, https://www.oecd.org/g20/topics/development/Report-on-Risk-and-Return-Characteristics-of-Infrastructure-Investment-in-Low-Income-Countries.pdf
[11] www.g20.utoronto.ca/2015/Joint-Action-Plan-on-SME-Financing.pdf, http://fsi.gov.au/publications/interim-report/03-funding/small-med-enterprises/
[12] https://www.scu.edu/ethics/focus-areas/business-ethics/resources/ethical-issues-in-the-financial-services-industry/
[13] http://www.mercer.com.au/insights/focus/invest-in-climate-change.html
[14] Shiller, R. J. (1990). Market Volatility. Cambridge, MA: MIT Press, 1990
[15] http://www.mercer.com/content/dam/mercer/attachments/global/investments/responsible-investment/Behaving-Like-an-Owner.pdf
[16] http://www2.ohchr.org/english/issues/food/docs/Briefing_Note_02_September_2010_EN.pdf
[17] http://www.druckerinstitute.com/link/were-in-it-for-the-long-term/
[18] http://www.iucn.org/content/valuing-natural-capital-key-tackling-climate-change-–-says-iucn
[19] Denk, O. and B. Cournède (2015). Finance and Income Inequality in OECD Countries. OECD Economics Department Working Papers, No. 1224, OECD Publishing, Paris. http://oecdinsights.org/2016/03/29/finance-growth-and-inequality/.
[20] http://www.un.org/sustainabledevelopment/development-agenda/
[21] The goals and targets are available at http://www.un.org/sustainabledevelopment/sustainable–development–goals/.
[22] https://www.unpri.org/about/what-is-responsible-investment
[23] http://www.worldbank.org/en/topic/socialdevelopment/brief/social-inclusion
[24] Piketty, T. (2013). Capital in the Twenty First Century; Stiglitz J. (2012). The Price of Inequality; Wilkinson, R.G and Pickett, K. (2010). The Spirit Level: Why More Equal Societies almost Always Do Better; Norris et al. (2015). Causes and Consequences of Global Inequality. IMF Staff Discussion Note. https://www.imf.org/external/pubs/ft/sdn/2015/sdn1513.pdf
[25] Sahay, R. et al. (2015). Financial Inclusion: Can it Meet Multiple Macroeconomic Goals? IMF Discussion Note. https://www.imf.org/external/pubs/ft/sdn/2015/sdn1517.pdf
[26] The Global Partnership for Financial Inclusion (GPFI) is an inclusive platform for all G20 countries, interested non-G20 countries and relevant stakeholders to carry forward work on financial inclusion, including implementation of the G20 Financial Inclusion Action Plan, endorsed at the G20 Summit in Seoul on 10 December 2010 in Seoul.
[27] http://gpfi.org/sites/default/files/documents/2014_g20_financial_inclusion_action_plan.pdf
[28] GPFI (2016): "The application of proportionality to the regulation and supervision of financial institutions helps regulators and supervisors both to accommodate a diverse range of financial systems and providers of financial services, including those with potential to reach financially excluded and underserved customers, and to pursue financial inclusion alongside financial stability and the linked objectives of financial integrity and consumer protection."
[29] Global Partnership for Financial Inclusion (2016). Global Standard-Setting Bodies and Financial Inclusion: The Evolving Landscape. A report prepared on behalf of the G20's Global Partnership for Financial Inclusion.
[30] Principle of Proportionality – the aim is to reduce the regulatory burden and unintended consequences of standards that could stifle innovation (that could, in turn, undermine financial inclusion). The proportionality principle reflects the need to balance the goals of inclusion, integrity and stability. "Global standards that do not allow sufficient room for innovation, or which do not allow for proportionate application, can have unintended consequences with an adverse impact for financial inclusion. A further challenge can be over compliance, where national regulators and/or the private sector may adopt overly conservative approaches due to lack of understanding of how practically to apply the proportionality permitted by the global standards." http://www.afi-global.org/policy-areas/balancing-inclusion-integrity-and-stability

[31] GPFI (2016:xv): "Financial and non-financial institutions are rapidly developing new ways of partnering to provide financial services digitally to excluded and underserved customers. Digital innovations are enabling financial institutions to reach customers in remote, hard-to-reach areas, including women (who globally figure disproportionately among those financially excluded and underserved), and are also reducing costs, making services both more sustainable to providers and affordable to consumers."

[32] *http://www.un.org/sustainabledevelopment/wp-content/uploads/2015/08/FAQs_Sustainable_Development_Summit.pdf*

[33] See for example: *http://www.mercer.com/our-thinking/investing-in-a-time-of-climate-change.html*; *http://www.cisl.cam.ac.uk/publications/publication-pdfs/unhedgeable-risk.pdf*; and *http://www.cepii.fr/PDF_PUB/wp/2016/wp2016-10.pdf*; *http://www.climateinstitute.org.au/verve/_resources/TCI_Australias_Financial_System_and_Climate_Risk_FINAL.pdf*

[34] Serafeim, G. and Eccles, R.G. (2014). Aligning Sustainability with Corporate Performance. Harvard Business School Working paper

[35] See for example: *http://www.carbontracker.org/report/stranded-assets-danger-zone*; *https://www.oecd.org/sd-roundtable/papersandpublications/Divestment%20and%20Stranded%20Assets%20in%20the%20Low-carbon%20Economy%2032nd%20OECD%20RTSD.pdf*; and *http://www.iigcc.org/files/publication-files/Climate-Change-Investment-Solutions-Guide_IIGCC_2015.pdf*

[36] Lagarde, C. (2015) Ethics and Finance – Aligning Financial Incentives with Societal Objectives, *https://www.imf.org/external/np/speeches/2015/050615.htm*; Dudley, W.C. (2014) Enhancing Financial Stability by Improving Culture in the Financial Services Industry, *https://www.newyorkfed.org/newsevents/speeches/2014/dud141020a.html*

[37] *http://www.pwc.com/gx/en/services/advisory/consulting/risk/resilience/publications/balancing-economic-environmental-resilience.html*

[38] *https://www.uts.edu.au/sites/default/files/Catalyst.pdf*

[39] *http://www.cepii.fr/PDF_PUB/wp/2016/wp2016-10.pdf*

[40] *http://corporatereportingdialogue.com*

[41] *https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/253454/bis-12-917-kay-review-of-equity-markets-final-report.pdf*

[42] *http://www.un.org/millenniumgoals/pdf/Think%20Pieces/2_culture.pdf*

[43] *http://www.fsb.org/wp-content/uploads/140407.pdf*

[44] *http://www.fsb.org/wp-content/uploads/r_0904b.pdf*

[45] *http://www.fsb.org/2016/07/fsb-round-table-on-compensation-tools-to-address-misconduct-in-banks/*

[46] *http://www.fsb.org/2016/08/fsb-launches-peer-review-of-the-g20oecd-principles-of-corporate-governance-and-invites-feedback-from-stakeholders/*

[47] The FSB membership includes senior policymakers from ministries of finance, central banks, and supervisory and regulatory authorities for the G20 countries, plus four other key financial centres – Hong Kong, Singapore, Spain and Switzerland. In addition, it includes international bodies, including standard-setters and regional bodies like the European Central Bank and European Commission, International Finance Institutions such as the BIS, OECS, IMF and World Bank as well as a number of international standard-setting bodies and agencies.

[48] FSB Key Standards: *http://www.fsb.org/what-we-do/about-the-compendium-of-standards/key_standards/*

[49] FSB Compendium of Standards: *http://www.fsb.org/what-we-do/about-the-compendium-of-standards/browse/*

[50] *http://www.fsb.org/about/*

[51] *http://www.fsb.org/wp-content/uploads/140407.pdf*

[52] *http://www.fsb.org/wp-content/uploads/r_0904b.pdf*

[53] See for example: Jensen, M. (2009). Integrity: Without it Nothing Works; Jensen, M. (2012). Beyond Agency Theory: The Hidden and Heretofore Inaccessible Power of Integrity; Lagarde, C. (2015). Ethics and Finance – Aligning Financial Incentives with Societal Objectives. *https://www.imf.org/external/np/speeches/2015/050615.htm*; Dudley, W.C. (2014). Enhancing Financial Stability by Improving Culture in the Financial Services Industry. *https://www.newyorkfed.org/newsevents/speeches/2014/dud141020a.html*

[54] See for example: Piketty, T. (2013). Capital in the Twenty First Century; Stiglitz J. (2012). The Price of Inequality; Wilkinson, R.G and Pickett, K. (2010). The Spirit Level: Why More Equal Societies almost Always Do Better;" Norris et al. (2015). Causes and Consequences of Global Inequality. IMF Staff Discussion Note. *https://www.imf.org/external/pubs/ft/sdn/2015/sdn1513.pdf*

[55] *http://www.fsb.org/wp-content/uploads/Breaking-the-Tragedy-of-the-Horizon-–-climate-change-and-financial-stability.pdf*

[56] Canfin-Grandjean Commission (2015) discusses the merits of an indicative price corridor with a maximum and minimum price that can be increased over time. *www.elysee.fr/assets/Report-Commission-Canfin-Grandjean-ENG.pdf*

[57] IMF (2014). Review of the Financial Sector Assessment Program: Further Adaptation to the Post Crisis Era. *http://www.imf.org/external/np/pp/eng/2014/081814.pdf*

[58] Sahay, R. et al. (2015). Financial Inclusion: Can it Meet Multiple Macroeconomic Goals? IMF Discussion Note. *https://www.imf.org/external/pubs/ft/sdn/2015/sdn1517.pdf*

[59] More specifically, the development assessment focuses on medium- to long-term needs for the deepening and strengthening of the financial sector for low-income and developing countries, including assessments of: (1) financial sector infrastructure development needs; (2) financial sector oversight; (3) public policies affecting financial sector activity; (4) the impact of an underdeveloped financial sector on financial stability; and (5) long-term financial sector reforms. Source: *https://www.imf.org/external/np/fsap/fsap.aspx*

[60] See for example: Stern Review (2006); The New Climate Economy (2014; 2105) *http://newclimateeconomy.report/*; Mercer Climate Change and Asset Allocation (2011; 2015)

[61] The financial sector assessment includes factors related to the resilience of the banking and other non-bank financial sectors; conduct stress tests and analyse systemic risks including linkages among banks and nonbanks and domestic and cross-border spillovers; examine microprudential and macroprudential frameworks; review the quality of bank, and non-bank supervision, and financial market infrastructure oversight against accepted international standards; and evaluate the ability of central banks, regulators and supervisors, policymakers, and backstops and financial safety nets to respond effectively in case of systemic stress. While FSAPs do not evaluate the health of individual financial institutions and cannot predict or prevent financial crises, they identify the main vulnerabilities that could trigger one. Source: IMF

[62] To assess the development aspects of the financial sector, FSAPs examine the development needs in terms of institutions, markets, infrastructure, and inclusiveness; quality of the legal framework and of payments and settlements system; identify obstacles to the competitiveness and efficiency of the sector; topics relating to financial inclusion and retail payments; and examine its contribution to economic growth and development. Issues related to development of domestic capital markets are particularly important in developing and low-income countries. While focusing on development issues, FSAPs also keep in view financial stability dimensions. Source: *http://www.imf.org/external/np/exr/facts/fsap.htm*

[63] IMF Survey (2016). Financial Leviathans Under Review in 2016. IMF Survey Magazine. *http://www.imf.org/external/pubs/ft/survey/so/2016/POL011416A.htm*

[64] IMF (2014). Review of the Financial Sector Assessment Program: Further Adaptation to the Post Crisis Era. *http://www.imf.org/external/np/pp/eng/2014/081814.pdf*

[65] Sahay, R. et al. (2015). Financial Inclusion: Can it Meet Multiple Macroeconomic Goals? IMF Discussion Note. *https://www.imf.org/external/pubs/ft/sdn/2015/sdn1517.pdf*

[66] See for example: UNEP/IFC/PRI/GIC (2014). Finance Sector Taking Action on Climate Change.

[67] The G20/OECD Principles of Good Corporate Governance were updated and launched at the meeting of G20 Finance Ministers and Central Bank Governors in Ankara on 4-5 September 2015. They were subsequently endorsed at the G20 Leaders Summit in Antalya on 15-16 November 2015. "Good corporate governance is not an end in itself. It is a means to support economic efficiency, sustainable growth and financial stability. It facilitates companies' access to capital for long-term investment and helps ensure that shareholders and other stakeholders who contribute to the success of the corporation are treated fairly." Available here: *http://www.oecd.org/corporate/principles-corporate-governance.htm*

[68] *http://www.imf.org/external/standards/scnew.htm* and *https://www.imf.org/external/NP/rosc/rosc.aspx*

[69] The G20/OECD Principles of Good Corporate Governance were updated and launched at the meeting of G20 Finance Ministers and Central Bank Governors in Ankara on 4-5 September 2015. They were subsequently endorsed at the G20 Leaders Summit in Antalya on 15-16 November 2015. "Good corporate governance is not an end in itself. It is a means to support economic efficiency, sustainable growth and financial stability. It facilitates companies' access to capital for long-term investment and helps ensure that shareholders and other stakeholders who contribute to the success of the corporation are treated fairly." Available here: *http://www.oecd.org/corporate/principles-corporate-governance.htm*

[70] See *http://web.unep.org/inquiry/publications* for overview and country level reports for evidence of the growing trend towards building sustainability into the core economic and financial system, particularly in developing and emerging markets.

[71] Basel III Capital requirement implementation started in 2013; Liquidity Coverage Ratio implementation started on 1 January 2015; and Net Stable Funding Ratio is due to start on 1 January 2018.

[72] Severinson, C. and Yermo, J. (2012). The effect of solvency regulations and accounting standards on long-term investing: implications for insurers and pension funds. OECD Working Papers on Finance, Insurance and Private Pensions, No. 30, OECD Publishing, Paris; Bloomberg New Energy Finance (2013). Clean Energy – White Paper; World Economic Forum (2013). Financial Regulation – Biased against Clean Energy and Green Infrastructure?; Campiglioa, E. (2014). Beyond Carbon Pricing: The Role of Banking and Monetary Policy in financing the transition to a low carbon economy, Grantham Research Institute, LSE, UK.

[73] *http://www.bis.org/bcbs/basel3.htm?m=3%7C14%7C572*

[74] Basel III was agreed upon by 27 countries on 12 September 2010. Among the highlights is the increasing of Tier 1 capital from 2% to 4.5% and the addition of a conservation buffer of 2.5% plus a 2.5% capital, a tighter definition of Tier 1 capital to include mainly ordinary common shares and retained earnings, and up to an additional 2.5% countercyclical capital ratio that will be adjusted across the economic cycle. An additional capital charge of up to 2.5% regulatory capital will be required for large and interconnected systemically important financial institutions. The full implementation of the Accord is not due until 2023.

[75] A more detailed discussion of Basel III as it relates to sustainability issues in the banking sector is discussed in Alexander, A. (2014). Stability and Sustainability in Banking Reform: Are Environmental Risks Missing in Basel III? University of Cambridge Institute for Sustainability Leadership and UNEP FI.

[76] Alexander, A. (2014:15).

[77] Severinson, C. and Yermo, J. (2012). The effect of solvency regulations and accounting standards on long-term investing: implications for insurers and pension funds. OECD Working Papers on Finance, Insurance and Private Pensions, No. 30, OECD Publishing, Paris; Bloomberg New Energy Finance (2013). Clean Energy –White Paper; World Economic Forum (2013). Financial Regulation – Biased against Clean Energy and Green Infrastructure?; Campiglioa, E. (2014). Beyond Carbon Pricing: The Role of Banking and Monetary Policy in financing the transition to a low carbon economy, Grantham Research Institute, LSE, UK.

[78] Basel III Capital requirement implementation started in 2013; Liquidity Coverage Ratio implementation started on 1 January 2015; and Net Stable Funding Ratio is due to start on 1 January 2018.

[79] The off-balance sheet exposures of banks were found to be one of the major causes of instability that impacted on the credit crisis. Hence the focus on improving the strength of the balance sheet is intended to reduce the likelihood that disruptions to a

bank's regular sources of funding will erode its liquidity position in a way that could increase the risk of its failure and potentially lead to broader systemic stress

[80] Alexander, A. (2014).

[81] Banerjee, R. and Mio, H. (2014). The Impact of Liquidity Regulation on Banks. Bank for International Settlements (BIS) Working Paper No. 470

[82] Banerjee, R. and Mio, H. (2014:2) noted that the UK FSA liquidity regulation was followed by a similar measure by Basel in 2013. The regulation aims to make the banking system more resilient to liquidity shocks by requiring banks to hold a minimum quantity of high quality liquid assets (cash, central bank reserves and government bonds) to cover net outflows of liabilities under two specific stress scenarios lasting two weeks and three months. Consequently, while the results of the Banerjee study are only specific to the UK banking sector behaviour, their effect does provide some insight into how banks in other markets are likely to have responded to the new rules.

[83] Thakor, A. (2015). Corporate Culture in Banking. ECGI and Washington University in St. Louis. *http://apps.olin.wustl.edu/faculty/thakor/Website%20Papers/Corporate%20Culture%20in%20Banking%202015-01-20.pdf*

[84] *http://www.bis.org/bcbs/publ/d328.pdf*

[85] Thakor, A. (2015). Corporate Culture in Banking. ECGI and Washington University in St. Louis. *http://apps.olin.wustl.edu/faculty/thakor/Website%20Papers/Corporate%20Culture%20in%20Banking%202015-01-20.pdf*

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Inquiry: Design of a Sustainable Financial System
International Environment House
Chemin des Anémones 11-13
Geneva
Switzerland
Tel.: +41 (0) 229178995

Email: inquiry@unep.org - Twitter: @FinInquiry

Websites: *www.unepinquiry.org*; www.unep.org/inquiry/