



Unlocking Public and Private
Finance for the Poor

Technical Paper 3.2

BigFintechs and international governance, policymaking and the United Nations Sustainable Development Goals: the SDGs in the international governance of finance

*Kuzi Charamba, Douglas Arner and Artem Sergeev
Asian Institute of International Financial Law University of Hong Kong*

The findings of the Dialogue on Global Digital Finance Governance are packaged into three thematic areas:

Theme 1

BigFintechs and their impacts on sustainable development

- Technical Paper 1.1 BigFintechs and their impacts on sustainable development
- Technical Paper 1.1B BigFintechs and their impacts on macroeconomic policies
- Technical Paper 1.2 Digital currencies and CBDC impacts on least developed countries

Theme 2

Corporate governance innovations

- Technical Paper 2.1 BigFintechs and the UN SDGs: the role of corporate governance innovations

Theme 3

BigFintechs and international governance, policymaking and the SDGs

- Technical Paper 3.1 Policymakers, BigFintechs and the United Nations Sustainable Development Goals
- Technical Paper 3.2 BigFintechs and international governance, policymaking and the UN Sustainable Development Goals: the SDGs in the international governance of finance
- Technical Paper 3.3 A principles-based approach to the governance of BigFintechs

Executive summary

BigFintechs (BFTs) have significant impacts, both positive and negative, on the path towards achieving the United Nations Sustainable Development Goals (SDGs). At present, however, there is no systematic or holistic international governance framework that manages potential negative impacts or effectively encourages positive impacts. As such, this Technical Paper provides an overview of the ways in which a select set of SDGs are reflected in international governance and their potential lessons and implications for the governance of BFTs. The paper begins by discussing the international human rights system—a well-established ‘hard law’ framework—as it touches on almost the full range of the SDGs. From this, we turn to several other SDGs where there has been significant focus and where well-developed international approaches have emerged. In particular, we consider the international frameworks addressing, in turn: decent work and economic growth (SDG 8); gender equality (SDG 5); climate change (SDGs 12, 13, 14 and 15); and peace, justice and strong institutions (SDG 16).

We begin with the international human rights law (IHRL) framework because of its unique complementarity to the SDGs. Analysis shows that more than 90 per cent of the SDG targets are intrinsically linked to specific provisions of international and regional human rights instruments and labour standards. However, while IHRL is typically associated with state-based actors, we discuss the important shift that is currently taking place as IHRL broadens its applicability to private actors as well, thus including BFTs. The growing movement and imminent applicability of mandatory corporate human rights due diligence is a significant shift for which many companies

The Dialogue on Global Digital Finance Governance was established by the UN Secretary General's Task Force on Digital Financing of the SDGs. During its investigations, the Task Force recognized that digitalization is not only reshaping the world of finance; it is also driving the emergence of a new generation of global, dominant digital finance platforms (BigFintechs) with increasing cross-border spillover effects on many areas of sustainable development across the world, particularly in developing economies.

The potential impacts of these platforms are both positive and negative, and one of the main challenges in addressing them is that existing policy approaches to BigFintechs have mostly focused on narrow, although important, financial stability, consumer protection and market integrity issues, and some aspects of data, Internet and competition regulation, but have remained largely disconnected from the broader SDG/ESG debate. Another issue is that the governing arrangements of such platforms have seldom involved developing economies, where their impacts are often strongest, and the potential for transformation is greatest.

The Dialogue was established to explore the nexus of BigFintechs and sustainable development. Its goal is to catalyse governance innovations that take greater account of the SDG impacts of BigFintechs and are more inclusive of the voices of developing nations. To this end, the Dialogue has produced a series of Technical Papers that bring new, complementary perspectives on these issues. The papers have been drafted by commanding experts in the field and have been peer-reviewed by leading institutions and academics.

The following paper is [Technical Paper 3.2](#) under Theme 3.

The Dialogue on Global Digital Finance Governance is hosted by the Swiss and Kenyan Governments and stewarded jointly by the United Nations Development Programme (UNDP) and United Nations Capital Development Fund (UNCDF).

are unprepared, and few understand. At present, most companies do not appreciate the true nature and extent of their human rights impacts. We discuss some of the implications that transplanting or subsuming notions of state obligation may have on current notions of corporate (social) responsibility and what this could mean for BFT corporate strategy in relation SDG impacts.

On the matter of decent work and economic growth (SDG 8), we discuss recent developments and issues of concern that are both internal and external to BFT operations. As BFTs hail from a wide expanse of sectors such as e-commerce, social media and ride hailing services, the challenges to labour and their working conditions are equally as complex and varied. Internally, pertinent labour issues can include the hazardous nature of workplace environments, such as warehouses and call centres; the contestation over the right to be considered a 'worker' rather than an independent contractor (in the 'gig economy'), and the ensuing labour protections that are associated with the former; and the application of artificial intelligence (AI) to supervise labour in sometimes discriminatory ways. To highlight, we discuss the UK Supreme Court's recent decision on Uber's driver policies and the labour union decision at Amazon. With regards to external challenges, we discuss the issues of modern slavery and supply chain due diligence, and how they arise in the context of BFTs. In all cases, we highlight the need for BFTs and regulators to strike a balance between protecting vulnerable workers while developing appropriate governance frameworks that can fulfil the tremendous potential of platform-based business models.

Our coverage of climate change (SDGs 12, 13, 14 and 15) complements Technical Paper 3.1. Whereas Technical Paper 3.1 presented some of the initiatives being pursued by prominent regulators, such as the European Commission, in this paper we broaden that scope to consider governance initiatives by the private sector as well. We situate BFTs within the sustainable finance context as either financiers or issuers and present relevant frameworks such as the Equator Principles (EPs) and the United Nations Principles for Responsible Investment (PRI). In so doing, we highlight how we are currently in a relatively nascent stage in the development of international governance 'green' and sustainable capital markets. This development will require considerable effort and alignment of purpose and initiative across both the public and private sectors.

Finally, we provide an overview of governance initiatives pertaining to SDG 16 (peace, justice and strong institutions). The primary international governance frameworks in this domain are those for anti-money-laundering (AML), countering the financing of terrorism (CFT) and anti-corruption/anti-bribery.

This discussion of how a range of existing approaches and their relationship to the SDGs are reflected in the international governance of BFTs demonstrates the significant impact that BFTs have in our drive towards achieving the SDGs. However, the discussion equally highlights that much work is still required if we are to effectively manage that impact. Given the potential of

BFTs' platform-based model to offer catalytic opportunities for economic development, particularly in developing countries, it is important for policymakers and regulators to develop appropriate governance frameworks that are infused with the right principles and values.

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Introduction

It is widely acknowledged, and now illustrated in this series of Technical Papers, that BigFintechs (BFTs) can and do have significant impacts on the path towards achieving the United Nations Sustainable Development Goals (SDGs). These impacts are both positive and negative.¹ At present, however, there is no systematic or holistic international governance framework that manages potential negative impacts or effectively encourages positive impacts. The SDGs, by their nature, draw on several facets that cut across regulatory and governance frameworks, particularly in relation to finance. Consequently, when considering how the SDGs are reflected in the international governance of finance, it quickly becomes apparent that there is a series of disconnected mechanisms and initiatives at various governance levels—the national, the international and the transnational.

This Technical Paper provides an overview of the ways in which a select set of SDGs are reflected in international governance and their potential lessons and implications for the governance of BFTs. Further, we consider these issues in light of the impact of the COVID-19 pandemic. As we note in Technical Paper 3.1, BFTs can include companies originating and/or operating in a range of areas, including but not limited to: payment platforms; e-commerce platforms and services; social media platforms; data and cloud services; mature Fintech platforms; Internet and information technology; hardware; telecommunications and other communications (TechFins); and a range of incumbent financial services businesses operating through platform models.²

In contrast to Technical Paper 3.1, this paper has both a broader and narrower scope. It is broader in the sense that the notion of governance considers actions and initiatives by both public and private actors, working either collectively or separately, to coordinate the activities within a particular context or environment. Such contexts and environments are not necessarily limited to territorial jurisdictions. Policymaking, on the other hand, typically relates to state-based regulators coordinating activity within jurisdictions. This paper is also narrower in scope because it will limit itself to governance at the international level, as is mandated by the Terms of Reference, whereas Technical Paper 3.1 touches on policymaking activity at national, regional, international and transnational levels.

The paper is structured in thematic subsections with each addressing how a number of well-established

approaches to certain SDGs or sets of SDGs may impact the international governance of finance, particularly in the context of BFTs. The paper begins by discussing the international human rights system—a well-established ‘hard law’ framework—as it touches on a substantial portion of the SDGs.

From this, we turn to a number of other SDGs where there has been significant focus and where well-developed international approaches have emerged. In particular, we consider the international frameworks addressing, in turn: decent work and economic growth (SDG 8); gender equality (SDG 5); climate change (SDGs 12, 13, 14 and 15); and peace, justice and strong institutions (SDG 16).

In looking at each of these specific areas of international focus, we consider how the international approach is structured and has evolved. Each of the areas covered has its own motivation and rationale; none is focused specifically on finance or technology. However, finance plays a pivotal role in each area in the journey towards achieving the SDGs. This could be approached from a variety of perspectives, often most significantly the role and need for financial resources to support other specific developmental objectives. In this Technical Paper we engage with finance and the financial industry more from the perspective of its impacts on the SDGs as opposed to the purely functional role of financing the initiatives that can help to achieve the SDGs.

The paper concludes by suggesting that the time is ripe for a principles-based approach towards the design of relevant and appropriate global governance frameworks to manage the SDG impacts of BFTs. This ‘principles-based approach’ is the focus of Technical Paper 3.3.

International human rights law and the SDGs

International human rights law (IHRL) and the SDGs are uniquely complementary. Indeed, analysis by the Danish Institute of Human Rights shows that more than 90 per cent of the SDG targets are intrinsically linked to specific provisions of international and regional human rights instruments and labour standards.³ Whereas the SDGs provide targets for states to support the betterment of individuals and their environments—natural, social, economic, cultural and otherwise—IHRL provides an international legal framework of prescriptions and proscriptions that require states to respect the rights and dignity of individuals and their environments within territorial jurisdictions. As such, IHRL is uniquely placed to

¹ See Technical Paper from Lot 1 by Katherine Foster and team.

² See Technical Paper from Lot 1 by Katherine Foster and team at 5; Financial Stability Board, ‘BigTech Firms in Finance in Emerging Market and Developing Economies’, 2020, at 2.

³ Feiring B, ‘Realizing human rights and the 2030 Agenda through comprehensive impact assessments: Lessons learned from addressing indigenous peoples’ rights in the energy sector’ in Nora Gotzmann, ed, Handbook on Human Rights Impact Assessment, Cheltenham: Edward Elgar, 2019.

ensure state adherence to and the fulfilment of the social, political, cultural and economic well-being of individuals internationally, and now bolstered by the performance targets of the SDGs.⁴

While both IHRL and the SDGs can be seen as hard law obligations, the former is explicitly treaty-based and well developed through interpreting jurisprudence while the SDGs are targets agreed and established by the United Nations General Assembly. As a field within public international law, IHRL is a set of state-based obligations that are unique to states.⁵ The legal obligations thus take effect through state action within their national jurisdictions. Private actors, traditionally not considered to be full subjects of international law, do not have these obligations imposed on them. Rather, private actors are saddled with 'responsibilities' to protect human rights—a much less consequential standard. This is relevant because it demonstrates how BFTs and most other financial service providers (FSPs), as private actors, have historically not had IHRL obligations imposed on them directly. It is significant because it highlights how international governance is thus largely dependent on state action to ensure that private financial actors, such as BFTs, do not violate human rights as a matter of national law. However, such a system is vulnerable in implementation because states can be either unwilling or unable to ensure adherence and thus the protection of human rights. This is particularly the case in developing countries where governance may be fragile, resources (including both public and private financial resources) limited and the rule of law weak. The shortcomings of this bifurcated system of state obligation and private actor responsibility are slowly being addressed, however, as 'soft' responsibilities crystallize into 'hard' obligations,⁶ aided in acceleration by the global COVID-19 build back effort.⁷

Beyond state IHRL obligations, global actors have

been trying for many years to reach an accord on the increasingly pressing matter of transnational business and human rights: to reach a consensus between state and non-state actors on the appropriate approach toward the regulation of transnational business.⁸ A brief discursive history of regulation within the area shows an oscillation between the use of "soft law" instruments to try to coax powerful transnational enterprises into becoming good corporate citizens, and then, once frustration took hold because of the evident futility, calls for harder, legally binding obligations. Examples of the early "soft" instruments include the ILO 'Tripartite Declaration on Multinational Enterprises and Social Policy',⁹ the OECD 'Guidelines for Multinational Corporations',¹⁰ and the later United Nations 'Global Compact'.¹¹ The instruments were received with much fanfare but were often derided by civil society groups that wanted to see more 'hard law' at work. Subsequently, the regulation oscillated back with the drafting of the UN's 'Norms on the Responsibilities of Transnational Corporations and Other Business Enterprises with Regards to Human Rights' (United Nations Norms).¹² There was much hope for the United Nations Norms, but the instrument's attempt at internationalizing and legalizing corporate social responsibility also proved to be futile. Corporations were to have "the obligation to promote, secure the fulfilment of, respect, ensure respect of and protect human rights recognized in international as well as national law"; the same obligations that states would assume.¹³ Such top-down imposition of legal obligations on corporations was not effective.

In 2005, therefore, Professor John Ruggie was appointed to the position of United Nations Special Representative of the Secretary-General to try to pave a way forward on the matter. After six years and two renewals of his position, Professor Ruggie produced the United Nations 'Guiding Principles on Business and Human Rights' (Guiding Principles) in 2011.¹⁴ The Guiding Principles were unanimously adopted by the United Nations Council for

4 See the Danish Institute of Human Rights 'The Human Rights Guide to the Sustainable Development Goals', a novel tool that connects the SDGs to full range of international human right legal provisions, <<https://sdg.humanrights.dk/en>>.

5 International law was constructed for states as the primary actors and subjects. See Oppenheim L, *International Law: A Treatise*, London: Longman's, Green & Co, 1905, p. 341, "Since the Law of Nations is a law between states only and exclusively, states only and exclusively are subjects of the Law of Nations"; Shaw M, *International Law*, 6th ed, New York: Cambridge University Press, 2008, p. 45, "States are the original and major subjects of international law. Their personality derives from the very nature and structure of the international system"; McCorquodale R, 'The Individual and the International Legal System' in Evans M, ed, *International Law*, 2d ed, Oxford: Oxford University Press, 2006, p. 308; and Cassese A, *International Law*, 2d ed, New York: Oxford University Press, 2005, p. 3.

6 The following two paragraphs are drawn from Charamba K, *Hired Guns and Human Rights: Global Governance and Access to Remedies in the Private Military and Security Industry*, Cheltenham: Edward Elgar, 2020, pp. 149–150.

7 See, for example, OHCHR, 'Human Rights at the Heart of the Recovery', December 2020, <www.ohchr.org/en/NewsEvents/Pages/human-rights-day-2020.aspx>; Okai A, 'Business and Human Rights, A Global Priority', UNDP, October 2020, <www.undp.org/content/undp/en/home/news-centre/speeches/2020/business-and-human-rights-a-global-priority.html>; and OHCHR, 'HC tells Business Leaders: Build Back Better by Focusing on the Vulnerable', June 2020, <www.ohchr.org/EN/NewsEvents/Pages/HC-tells-business-leaders-build-back-better-focusing-on-the-vulnerable.aspx>.

8 Ruggie JG, 'Global Governance and 'New Governance Theory': Lessons from Business and Human Rights', 2014, 20 *Global Governance* 5.

9 ILO, 'Tripartite Declaration of Principles concerning Multinational Enterprises and Social Policy', 16 November 1977, 17 *ILM* 422, 1978.

10 These were published in 1976 as an annex to the OECD 'Declaration on International Investment and Multinational Enterprises'.

11 UN 'Global Compact', <www.unglobalcompact.org/>. This is broad in its scope and applicability to multinational corporations. Its 10 principles, which are drawn from 'The Ten Principles of the United Nations Global Compact' are derived from the 'Universal Declaration of Human Rights', the International Labour Organization's 'Declaration on Fundamental Principles and Rights at Work', the Rio Declaration on 'Environment and Development', and the United Nations 'Convention Against Corruption', and touch on human rights, labour rights, the environment and anti-corruption.

12 Norms on the Responsibilities of Transnational Corporations and Other Business Enterprises with Regard to Human Rights', 26 August 2005, UN Doc E/CN.4/Sub.2/2003/12/Rev.2, 2003 [UN Norms].

13 Art. 1 UN Norms.

14 UNHRC, 'Protect, Respect and Remedy: a Framework for Business and Human Rights: Report of the Special Representative of the Secretary-General on the issue of human rights and transnational corporations and other business enterprises', UN Doc A/HRC/17/31, 2011, <www.business-humanrights.org/media/documents/ruggie/ruggie-guiding-principles-21-mar-2011.pdf> [Guiding Principles].

Human Rights and swiftly embraced by governments, standard-setting bodies, corporations and civil society organizations.¹⁵

The Guiding Principles are structured around the 'Protect, Respect, and Remedy' framework, which consists of three pillars:

1. the state duty to protect against human rights abuses by third parties, including business, through appropriate policies, regulation and adjudication
2. an independent corporate responsibility to respect human rights, which means to avoid infringing on the rights of others and to address adverse impacts with which companies are involved
3. the need for greater access by victims to effective remedy, both judicial and non-judicial.¹⁶

The pillars reflect the general consensus and desire among global actors to collaborate on the issue of business and human rights. Pillar One is a codification of existing international legal obligations on states; Pillar Two represents the moral responsibility of corporations to be good corporate citizens, as is expected of them; and Pillar Three is a call for both of those groups to provide access to remedies to victims of human rights violations.

The Guiding Principles serve as the blueprint on which public and private actors alike are developing strategies for corporations to better respect human rights. Indeed, they are the current pre-eminent global standard for the allocation of corporate human rights responsibilities. The global COVID-19 pandemic has accelerated their implementation. Whereas some states had already begun to institute elements of the Guiding Principles into national law, such as the UK, Australia and France with regards to modern slavery and human rights due diligence,¹⁷ the European Union is now taking this one step further. A wide-reaching study commissioned by the

15 For an up-to-date running tab of activities, see the website of the London-based Business and Human Rights Resource Centre, < www.business-humanrights.org/UNGuidingPrinciplesPortal/Home>. Prominent examples of their usage include the new provisions in the OECD 'Common Approaches for Export Credit Agencies' requiring assessments of social risks, which affect access to capital at the national level; the new 'International Finance Corporation Sustainability Principles and Performance Standards' as well as the associated 'Equator Principles'; and the 'ISO26000', a new social responsibility guidance adopted by the International Organization for Standardization (ISO). The Guiding Principles have also been endorsed by the European Commission, as well as the United States through Section 1502 of the Dodd-Frank Wall Street Reform Act, and will soon be endorsed by the Association of Southeast Asian Nations (ASEAN) as well as the African Union. See also Ruggie JG, 'Global Governance and 'New Governance Theory': Lessons from Business and Human Rights', 2014, 20 Global Governance 5, pp.11–12.

16 Para 6, UN Guiding Principles.

17 Business & Human Rights Resource Centre, 'Modern Slavery in Company Operations and Supply Chains: Mandatory Transparency, Mandatory Due Diligence and Public Procurement Due Diligence'. See also NortonRoseFulbright, 'Around the Globe: Business Human Rights Update, December 2020', 2020, for a snapshot of legal developments internationally, <www.nortonrosefulbright.com/en-au/knowledge/publications/0ed8097a/around-the-globe-business-human-rights-update>.

European Commission noted that the current regime of responsibilities and voluntary disclosures on human rights due diligence had very limited impact.¹⁸ Subsequently, on 29 April 2020, the European Commissioner for Justice, Didier Reynders, announced that the European Commission planned to develop a legislative proposal by 2021 requiring businesses to carry out due diligence in relation to the potential human rights and environmental impacts of their operations and supply chains.¹⁹ He further indicated that the draft law, once developed, would likely be cross-sectoral and provide for sanctions in the event of non-compliance. This will include and impact the financial services industry.

It is significant that this announcement from the European Commission came in the same month as a call by 101 institutional investors representing over US\$4 trillion in assets under management for governments to introduce mandatory human rights due diligence laws.²⁰

In support of this call, Alice Evans, Co-Head and Managing Director of Responsible Investment at BMO Global Asset Management stated:²¹

Human rights due diligence enables investors to adequately identify and assess salient human right risks across our investment portfolios. Importantly, it can help companies mitigate risks to employees, communities, and other stakeholders, manage potential financial and legal risks, and, ultimately, enhance shared value creation. It simply makes for better-run companies. And from a global perspective, mandatory human rights due diligence brings opportunities to improve economic productivity, reduce inequalities, and improve livelihoods—all integral to achieving the United Nations Sustainable Development Goals.

On 10 March 2021, the European Parliament voted overwhelmingly in favour of the Commission's legislative report on corporate human rights due diligence and corporate accountability.²² It is anticipated that a formally

18 British Institute of International and Comparative Law, 'Study on due diligence requirements through the supply chain: Final Report', February 2020, <<https://op.europa.eu/en/publication-detail/-/publication/8ba0a8fd-4c83-11ea-b8b7-01aa75ed71a1/language-en>>.

19 European Coalition for Corporate Justice, 'Commissioner Reynders announces EU corporate due diligence legislation', April 2020, <<https://corporatejustice.org/news/16806-commissioner-reynders-announces-eu-corporate-due-diligence-legislation>>. The due diligence that is performed will be of great utility to the closely associated ESG frameworks to which most companies are beginning to subscribe. The utility lies in their provision of greater transparency and accountability for data provided to investors, regulators and relevant financial intermediaries. Accurate data on company performance are sorely lacking within most existing data collection processes for ESG frameworks.

20 Investor Alliance for Human Rights, 'The Investor Case for Mandatory Human Rights Due Diligence', April 2020, <https://investorsforhumanrights.org/sites/default/files/attachments/2020-04/The%20Investor%20Case%20for%20mHRDD%20-%20FINAL_0.pdf>.

21 European Parliament Working Group on Responsible Business Conduct, 'Investors call on Mandatory Human Rights Due Diligence', April 2020.

22 European Union Parliament, resolution of 10 March 2021 with recommendations to the Commission on corporate due diligence and corporate accountability.

proposed directive will be released in the second half of 2021 and, much like the General Data Protection Regulation (GDPR), have a significant ripple effect within and across industries, including the financial industry, globally.²³ The legislation will have enhanced civil liability and fines—comparable in magnitude to fines currently provided for in European competition law and data protection law.²⁴ Further, talks are currently under way for the drafting of a binding international treaty on Business and Human Rights. With the second round of multilateral talks having taken place in October 2020, there is noticeable momentum and thus a fair probability that this treaty may also take effect within the near future.²⁵

It is significant that IHRL is coming to bear on corporate activity and helping to facilitate the achievement of the SDGs.²⁶ But while the SDGs are a powerful statement of global political resolve to enhance the well-being of people and planet in an integrated and symbiotic fashion, they lack the normative strength of traditional treaty-based international legal obligations. With Agenda 2030, states resolved “to end poverty and hunger everywhere; to combat inequalities within and among countries; to build peaceful, just and inclusive societies; to protect human rights and promote gender equality and the empowerment of women and girls; and to ensure the lasting protection of the planet and its natural resources.”²⁷ As a General Assembly Resolution, it is not legally binding on member states. It does not have a legal accountability mechanism to ensure compliance. Rather, international actors provide and encourage the use of monitoring and reporting mechanisms.²⁸

IHRL, on the other hand, brings to bear a framework for the protection and realization of rights through the imposition of both positive and negative obligations on duty holders. Indeed, the obligation to respect civil and political rights, as well as socio-economic rights, not only entails a restriction on state action, but also, at times, an obligation to take action to ensure those rights for right holders. This is most notably reflected within the ‘respect, protect, fulfil’ framework.²⁹ The obligation to respect

means that states must refrain from interfering with or curtailing the enjoyment of human rights. The obligation to protect requires states to protect individuals and groups against human rights abuses. And the obligation to fulfil means that states must take positive action to facilitate the enjoyment of basic human rights.³⁰ As such, the application of IHRL to the SDGs is beneficial not only for their end-goal alignment, but also because of the former’s accountability and enforcement frameworks.

While traditionally associated with state-based actors, IHRL is broadening its applicability to private actors as well, thus including BFTs. However, as is often the case with international legal obligations, the ability for states to fully implement and enforce those obligations remains a perennial challenge. This will be a similar challenge for private actors of varying sizes and capacities as they seek to implement and abide by IHRL obligations and practices.

Indeed, the recognition of a corporate responsibility to respect human rights must necessarily be followed by an enunciation of what that responsibility entails. Various instruments, including the Guiding Principles, state that this includes due diligence. The growing movement and imminent applicability of mandatory corporate human rights due diligence is a significant shift for which many are unprepared, and few understand. At present, most companies do not appreciate the true nature and extent of their impacts. Under the draft EU Directive that was discussed above, businesses are required to implement the proposed minimum requirements of the Directive, which include putting in place processes aimed at “identifying, ceasing, preventing, mitigating, monitoring, disclosing, accounting for, addressing, and remediating the risks posed to human rights, including social and labor rights, the environment, including through climate change, and to governance, both by its own operations and by those of its business relationships.”³¹ Specifically, under Article 4 of the draft Directive, businesses are required to “identify and assess,” on an ongoing basis and “by means of an appropriate monitoring methodology whether their

ity (2020/2129(INL)), <www.europarl.europa.eu/doceo/document/TA-9-2021-0073_EN.pdf>.

23 See European Parliament Committee on Legal Affairs, ‘Draft Report: with recommendations to the Commission on corporate due diligence and corporate accountability’, (2020/2129(INL)), 2020, <www.europarl.europa.eu/doceo/document/JURI-PR-657191_EN.pdf>.

24 Supra note 22.

25 For commentary on the multilateral meetings, see Business & Human Rights Resource Centre, ‘6th Session of the IGWG dedicated to negotiations on the proposed binding treaty on business and human rights’, <www.business-humanrights.org/>.

26 Fora such as the UN Global Compact’s ‘SDG Ambition’ have been helpful in assisting companies to set challenging goals and strategies for integrating the SDGs into their core business management. See UN Global Compact, ‘SDG Ambition’, <www.unglobalcompact.org/take-action/sdg-ambition>.

27 UN General Assembly, ‘Transforming our world: the 2030 Agenda for Sustainable Development’, UN Doc. A/RES/70/1, October 2015, para 3.

28 See, for example, the Sustainable Development Report and the SDG Index, <www.sdgindex.org/about/>.

29 UN Human Rights Committee, ‘General Comment No. 31: The Nature of the General Legal Obligation Imposed on States Parties to the Covenant’ at para 8:

“the positive obligations on States Parties to ensure Covenant rights will only be fully discharged if individuals are protected by the State, not just against violations of Covenant rights by its agents, but also against acts committed by private persons or entities that would impair the enjoyment of Covenant rights in so far as they are amenable to application between private persons or entities. There may be circumstances in which a failure to ensure Covenant rights as required by article 2 would give rise to violations by States Parties of those rights, as a result of States Parties’ permitting or failing to take appropriate measures or to exercise due diligence to prevent, punish, investigate or redress the harm caused by such acts by private persons or entities. States are reminded of the interrelationship between the positive obligations imposed under article 2 and the need to provide effective remedies in the event of breach under article 2, paragraph 3. The Covenant itself envisages in some articles certain areas where there are positive obligations on States Parties to address the activities of private persons or entities.”

30 UN Office of the High Commissioner on Human rights, ‘International Human Rights Law’, <www.ohchr.org/en/professionalinterest/pages/internationallaw.aspx>.

31 See European Parliament Committee on Legal Affairs, ‘Draft Report: with recommendations to the Commission on corporate due diligence and corporate accountability’, (2020/2129(INL)), 2020, <www.europarl.europa.eu/doceo/document/JURI-PR-657191_EN.pdf>.

operations and business relationships cause or contribute to any human rights, environmental or governance risks". If the business concludes that it does not cause or contribute to these risks, it must publish a statement to that effect, along with its risk assessment, which must be reviewed if new risks emerge or if the business enters new business relationships that can pose risks. If the business identifies risks, it must establish a due diligence strategy that:

- specifies the risks that are likely present and their level of severity and urgency
- publicly discloses "detailed, relevant and meaningful information" about its value chain, "including names, locations and other relevant information concerning subsidiaries, suppliers and business partners"
- indicates the policies and measures the business intends to adopt to try to cease, prevent or mitigate the identified risks
- develops an approach to prioritization if all of the risks cannot be addressed at once
- states the methodology being followed in creating the strategy, including the stakeholders consulted.

In addition, businesses must publicly describe how their due diligence strategy relates to their business strategy, use contract clauses and codes of conduct to ensure that the human rights, environmental and governance policies of their business partners are aligned with their own due diligence strategy, and "regularly verify" that suppliers and subcontractors comply with their relevant obligations. The strategy must be made public and communicated to workers and business relationships,³² and the effectiveness of the due diligence strategy should be reviewed once per year.³³

As practice evolves, it will be interesting to note how much more of practice engendered within the concept of state obligation will be transplanted or subsumed into the corporate responsibility. This may include, for example, the extent to which the 'respect, protect, fulfil' framework could begin to apply to private actor responsibility. At present, a small but growing number of prominent tech firms have been conducting human rights impact assessments as part of their due diligence to assess their unintended impacts. These include firms such as Facebook,³⁴ Google, Yahoo and Microsoft. Further, in 2020 JustPeace Labs published a report on conflict sensitivity for the tech industry, identifying risks including the weaponization of social media, facial recognition and state

surveillance, and AI-driven warfare.³⁵ Cognizance of a conflict-based approach to human rights will be important for other tech firms to consider as they engage with developing countries that may be prone to violent conflict in some geographies.

These developments are noteworthy not only because of their acknowledgement and actualization of a corporate responsibility to human rights by large tech companies, but also because of the unique opportunity for private actors to have a greater role in the design of international governance frameworks in ways that have previously been closed to them, particularly in IHRL and public international law. Indeed, their participation may constitute their fair bargain and contractual consideration.

Decent work and economic growth (SDG 8)

Outside of the IHRL context, SDG 8, addressing decent work and economic growth, has been the area which has received historically the most attention. In fact, labour rights (relating to decent work) were one of the few areas relating to economic activities and human rights covered in the League of Nations Covenant and reflected in the establishment of the International Labour Organization (ILO) as one of the world's first treaty-based international organizations. From the standpoint of economic growth (as a key to wider economic development), this is a core focus of the post-war liberal international economic order, embodied in the Bretton Woods institutions as well as the United Nations and the ITO proposal.

In short, there is a vast amount of work relating to the role of finance in economic growth and employment: finance plays a significant role in both driving and facilitating SDG 8, which encapsulates decent work and sustainable economic growth. Examples abound: reports demonstrate how, for example, financial service providers (FSPs) are providing opportunities for decent jobs and driving economic growth by better facilitating payment platforms and infrastructure for SMEs,³⁶ enabling microloans and payments to expand financial inclusion,³⁷ and providing gig workers with the opportunity to become entrepreneurs.³⁸ These positive impacts are facilitated within various international governance frameworks that are applicable to finance. The most important of these are those of the major established international financial organizations: the International Monetary Fund (IMF), the World Bank and

32 Ibid., art. 6.

33 Ibid., art. 8.

34 'An update on Facebook's human rights work in Asia and around the world', Facebook, May 2020, <<https://about.fb.com/news/2020/05/human-rights-work-in-asia/>>.

35 'Technology in Conflict: Conflict Sensitivity for the Tech Industry', JustPeace Labs, 2020, <https://mcusercontent.com/718c5744a15d50373feda469c/files/78d1bafc-ffc5-4166-8c8a-bef74535f212/JustPeace_Labs_Conflict_Sensitivity_for_Tech_Industry_0720.pdf>.

36 See UN Taskforce on Digital Financing of the Sustainable Development Goals, 'People's Money: Harnessing Digitalization to Finance a Sustainable Future', August 2020.

37 Ibid.

38 Ibid.

the Bank for International Settlements (BIS). This is also probably the area where the most attention specifically on BFTs is being addressed: their potential for economic benefits—particularly in the context of financial inclusion and economic growth.³⁹ A recent joint report from the World Bank and the Financial Stability Board (FSB) to the G20 provides a good example of this.⁴⁰

While there is less focus on the role of finance in the context of decent work, FSPs, including BFTs, are implicated within this SDG both internally and externally. That is, as corporate actors themselves, financial services firms will be subject to international governance frameworks applicable to their treatment of labour within their own internal operations. The external element pertains to their associated supply chains, and the extent to which they ensure respect for labour rights, for example, in where they source their materials. This is particularly relevant for financial services firms or BFTs that manufacture hardware, such as Samsung and Apple, and are prone to sourcing conflict minerals and materials for their production.⁴¹

Labour rights challenges within the corporation

The breadth of economic actors entering the financial services space through platforms and other technological means presents a swathe of labour concerns that impede the realization of ‘decent work’ as envisaged under SDG 8. With actors coming from sectors such as e-commerce, social media and ride hailing services, pertinent labour issues can include the hazardous nature of workplace environments, such as warehouses and call centres; the contestation over the right to be considered a ‘worker’ rather than an independent contractor (in the ‘gig economy’), and the ensuing labour protections that are associated with the former; and the application of AI to supervise labour in sometimes discriminatory ways. We address the nature of some of these concerns below before outlining some of the relevant international governance frameworks.

As large e-commerce actors such as Amazon begin to offer more financial services, concerns over their treatment of labour in warehouses, for example, become relevant to this conversation of regulating BFTs. Their warehouse workers, spread across the world, are in a precarious position and this has only been accentuated

by the COVID-19 pandemic. On one hand, there is the risk that more of their positions may be replaced through automation; and on the other, workers are under increasing pressure to work longer and harder to meet the growing demand of online sales. This translates into more hazards and risks to health and safety in the workplace,⁴² all while Jeff Bezos, Amazon’s CEO, is reported to have increased his personal wealth during the pandemic by approximately US\$70 billion.⁴³ The concern over injuries and a reported fatality led to several US Senators writing to Bezos to address this issue directly, imploring him not to put profit before worker safety.⁴⁴ Workers at the Amazon warehouse in Bessemer, Alabama held a vote in February 2021 on whether they would form a labour union.⁴⁵ While the results did not lead to the formation of a new union, the persistence of the underlying work conditions could yield further labour action.

Relatedly, Amazon and other large tech firms are increasingly employing artificial intelligence (AI) to manage and supervise their employees. Jeremias Adams-Prassl refers to this as the rise of the “algorithmic boss”: a scenario whereby the relationship between management and worker is increasingly intermediated by an algorithm which provides workers with their targets, their work schedules and their appraisals.⁴⁶ As Adams-Prassl elaborates, “[t]he labor market challenges inherent in a world of platform-based labor intermediation are considerable, from worker classification and collective rights protection through to health and safety, tax, and social security provisions.”⁴⁷ In the pursuit of greater efficiencies, algorithms provide employers a means through which they can exert greater control over worker output without having to navigate the challenges that are inherent to human interactions. For example, algorithms have been used to screen applicants in the recruitment process, to make offers and to determine appropriate salary levels. On the other end of the spectrum, AI can also be used to fire workers if the system determines that they have not met set targets. Documents obtained by *The Verge* show how Amazon’s system, “tracks the rates of each individual associate’s productivity ... and automatically generates any warnings or terminations regarding quality or productivity without input from supervisors.”⁴⁸ This can, however, have a nefarious impact on workers.

39 For an overview of the role of Fintech in inclusion and the specific supporting technologies, see Committee on Payments and Market Infrastructures (CPMI) and World Bank Group, ‘Payment aspects of financial inclusion in the fintech era’, CPMI Paper no 191, April 2020.

40 ‘BigTech Firms in Finance in Emerging Market and Developing Economies: Market developments and potential financial stability implications’, Financial Stability Board, 2020, <www.fsb.org/wp-content/uploads/P121020-1.pdf>.

41 See, for example, ‘Apple suspends iPhone assembler in China after labor abuses’, *Financial Times*, 9 November 2020, <www.ft.com/>.

42 See, for example, Evans W, ‘Ruthless Quotas at Amazon are Maiming Employees’, *The Atlantic*, 25 November 2019.

43 Ingraham C, ‘World’s richest men added billions to their fortunes last year as others struggled’, *The Washington Post*, 1 January 2021, <www.washingtonpost.com/business/2021/01/01/bezos-musk-wealth-pandemic/>.

44 United States Senate Letter to Jeff Bezos, 7 February 2020, <<https://assets.documentcloud.org/documents/6772867/AmazonWorkerSafetyLetterFeb72020.pdf>>.

45 Lee D, Rogers TN, ‘The Ultimate David and Goliath Story: The Fight to Open a Union at Amazon’, *Financial Times*, 29 March 2021.

46 Adams-Prassl J, ‘What if your boss was an algorithm? Economic Incentives, Legal Challenges, and the Rise of Artificial Intelligence at Work’, *Comparative Labor Law & Policy Journal*, 41(1), 123, 2019.

47 *Ibid.*, p. 123.

48 Lecher C, ‘How Amazon automatically tracks and fires warehouse workers for “productivity”’, *The Verge*, 25 April 2019.

Some employees are reported to avoid bathroom breaks to ensure that they meet their expectations. This raises several issues of worker health and safety. But more pertinently, the use of an algorithm to manage workers entails many of the known deficiencies inherent to AI in social relations. For example, Amazon was forced to stop using its recruitment tool after it was discovered that it was systematically rejecting female candidates for engineering roles.⁴⁹ Algorithmic bias is also prevalent in relation to race, sexual orientation, and disabilities.⁵⁰

Finally, there are several concerning issues raised within the rising and associated 'gig economy'. The gig economy describes "a labor market characterized by the prevalence of short-term contracts or freelance work as opposed to permanent jobs."⁵¹ It draws its name from the practice within the music industry of artists participating in an engagement (a 'gig') for pay. True to these origins, the market has proliferated because of the flexibility and opportunities that it offers individuals to work when and where they want to using a tech-based platform. However, it is precisely this design that inheres two significant challenges for laborers: the matter of whether they can be classified as workers as opposed to independent contractors, and the transnational business model employed by tech companies.

The matter of whether gig workers can be considered to be employees or workers is a highly contentious and litigated matter internationally.⁵² The matter features prominently within the ride hailing and delivery industries, thus implicating companies such as Uber, Lyft and Deliveroo. Presented simply, the issue revolves around whether the network of service providers on these platforms can be considered to be employees of the companies, as this has several consequential implications. First, for example, if an individual is classified as a worker or an employee, they may be entitled to social welfare benefits from their employer, such as sick pay, vacation pay and pension contributions. Second, as gig workers are

classified as self-employed, they do not have easy access to labour unions and their power of collective bargaining in the same way that workers or employees do. Third, as gig workers work 'from gig to gig' and thus do not have a predictable and steady stream of income, it can be harder for them to secure mortgages and other financing, thus impeding them from planning for the future. Finally, and perhaps most pertinently for this discussion, is the challenge of gig work being managed over a tech platform, which may obscure the fact that gig workers may be working for employers in another country through the company's transnational business model.

An example of this is provided in the case of *Uber v Aslam*, where the appellant, Uber BV (UBV), was a Dutch company which held the UK copyright in the Uber app and thus provided the licence for its use to Uber London Limited (ULL), a UK registered company.⁵³ The practical translation of this arrangement was that the operational workings of Uber in the UK were determined outside of the UK, and that the drivers who signed contracts over the app's platform were in privity with UBV and not ULL. Further, as passengers made payments through the app to UBV, it was UBV and not ULL that paid the drivers their weekly sums depending on the rides that they had driven. This arrangement complicates matters for drivers in the UK as UBV and ULL argued that Dutch law is applicable to their relationship. This put the UK drivers in a precarious position as they could not easily avail themselves of any protections within UK law, including the possibility of challenging their employer for any unlawful deduction of wages or entitlements if they deem that to be the case. And to complicate matters further, Uber drivers are subject to the same sort of "algorithmic boss" as was described for Amazon workers, through the monitoring of the trips that they take, those that they decline, and their ratings, for example.

When the case reached the UK Supreme Court, the court found in favour of the drivers, declaring them to be workers for Uber and not independent contractors. From their analysis, there are two relevant and important points for our discussion of BFT and Bigtech governance in relation to labour rights and welfare: control and legislative protections.⁵⁴ On the matter of control, the court determined that Uber exercised a degree of control over the drivers that could only imply that they were workers working for Uber. The court found that the control was exercised in myriad ways through the app and in how drivers were to conduct themselves with passengers such that they had no real autonomy.⁵⁵ The second key base of the court's ruling pertained to legislative protections. The court determined that one cannot draft a contract in a way that would deny individuals of labour

49 Oppenheim M, 'Amazon scraps "sexist AI" recruitment tool', *The Independent*, 11 October 2018. The challenge of discriminatory algorithms can be particularly challenging to overcome. In a related study, Anja Lambrecht and Catherine Tucker found that an ad campaign for STEM careers was inadvertently discriminatory against women. This happened because younger women are a prized demographic and are more expensive to show ads to. An algorithm that simply optimizes cost-effectiveness in ad delivery will deliver ads that were intended to be gender-neutral in an apparently discriminatory way, because of crowding out. The authors show that this empirical regularity extends to other major digital platforms. See Lambrecht A, Tucker C, 'Algorithmic Bias? An Empirical Study into Apparent Gender-Based Discrimination in the Display of STEM Career Ads, 2018, <https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2852260>.

50 Reeve Givens A, 'How Algorithmic Bias Hurts People with Disabilities', *Slate*, 6 February 2020; The issue of hiring bias was recently highlighted by the Black Lives Matter movement and the calls to ensure that AI-facilitated hiring does not discriminate based on race, gender and sexual orientation. In particular, the BLM movement stressed the importance of racial equality and representation in both tech and non-tech hiring. See, for example, High P, 'Technology's Role In Driving Progress In Black Lives Matter', *Forbes*, 30 July 2020, <www.forbes.com/sites/peterhigh/2020/07/30/technologys-role-in-driving-progress-in-black-lives-matter/?sh=2a485b1b687e>.

51 Definition sourced from *Oxford Languages*, an online dictionary.

52 See relevant case law including *Uber v Aslam* [2018] EWCA Civ 2748; *Pimlico Plumbers Ltd v Smith* [2018] UKSC 29; *California v. Uber Technologies Inc. and Lyft Inc.*, Court Case No. CGC-20-584402.

53 *Uber v Aslam* [2018] EWCA Civ 2748.

54 *Uber BV v Aslam* [2021] UKSC 5.

55 *Ibid.*, paras 93 to 101.

protections provided through legislation. In this case, Uber had inserted contractual clauses in its agreements with drivers that had the drivers forego any protections or benefits they may be entitled to, such as through the Nation Minimum Wage Act 1998.⁵⁶ Through these two bases, the court was able to determine that the drivers were 'workers', as defined under relevant legislation, and that they were entitled to the relevant benefits and protections that are associated with such classification.

The *Uber v Aslam* case is relevant within the context of this paper as BFTs expand into developing countries and may seek to deploy this business model. The gig worker model is attractive because of the flexibility that it affords individuals to earn an income. However, the propensity for them to be abused by tech companies that develop and offer the platforms on which they would work is high. Further, effective access to labour protections in developing countries would be contingent on there being relevant legislation to protect worker welfare as well as the ability for workers to vindicate their rights. Such labour protections, legal frameworks and resources are not always available, thus making gig workers in developing countries particularly vulnerable. This vulnerability may be further accentuated if tech companies are able to dictate the use of international arbitration and a contract governing law that is not favourable to local gig workers. As such, this is a matter for regulators and policymakers in developing countries to consider seriously. High formal unemployment in local markets and economies will make gig work appealing to many, but appropriate protections need to be put in place.

As corporate actors, BFTs and financial services firms more broadly will be subject to many of the human rights instruments that were touched on earlier in the paper, but also the principles more specifically drawn from the ILO 'Declaration on Fundamental Principles and Rights at Work'. Adopted in 1998, the Declaration commits member states to respect and promote principles and rights in four categories, whether or not they have ratified the relevant Conventions.⁵⁷ These categories are:

- freedom of association and the effective recognition of the right to collective bargaining
- the elimination of forced or compulsory labour
- the abolition of child labour
- the elimination of discrimination in respect of employment and occupation

The principles engendered within the Declaration, much like many of those within the 'Universal Declaration of Human Rights', have the status of customary international

law and thus binding upon states broadly.⁵⁸ This makes the principles applicable within most national legal systems and actionable against financial services firms subject to those jurisdictions.

As can be seen from the challenges raised above, however, this may not necessarily be sufficient protection for labourers, and particularly those that are increasingly a part of the tech-enabled gig economy. Much work will need to be done to enhance labour protections in this new kind of economy and labour market. One solution of note that appears to have some potential is the development of workers' self-regulation and organization at the transnational level. This is an idea envisaged by Prassl, who ideates that, "In future, unions or workers' collectives might even set up their own platforms—or develop international certification standards for gig-economy operators who agree to design their business models in line with appropriate employment standards".⁵⁹ An example of where this is beginning to be actualized is through a collaboration of European and North American labour organizations which produced the 'Frankfurt Paper on Platform-Based Work'.⁶⁰ The initiative seems to hold promise through its call for "transnational multi-stakeholder cooperation to ensure fair working conditions in digital labor platforms".

Respect for labour rights beyond the corporation: modern slavery in manufacturing hardware for FSP infrastructure

While the internal governance and respect for labour rights within an organization is important, greater scrutiny is given to the external aspects of a corporation's activities, such as its supply chains. Issues of modern slavery and supply chain due diligence have become focal points with regards to, first, how some financial services firms and BFTs create the physical products that enable Fintech to flourish and, second, how that technology may then be used inadvertently to facilitate modern slavery and human trafficking more broadly as well as how it is being used increasingly to combat these activities.

Fintech services are facilitated by physical infrastructure. This infrastructure includes smartphones and computers, as well as servers for data centres and networks of fibre optic cabling. Creating this infrastructure, however, requires the mining and sourcing of metals and minerals

⁵⁸ Some, such as the prohibition of child labour, are presented by some scholars as being a peremptory norm (*jus cogens*), and thus an international legal norm from which no derogation is permitted.

⁵⁹ Prassl J, *Humans as a Service*, Oxford: Oxford University Press, 2018, p. 114.

⁶⁰ 'Frankfurt Paper on Platform-Based Work Proposals for platform operators, clients, policy makers, workers, and worker organizations', December 2016, <http://crowdwork-igmetall.de/Frankfurt_Paper_on_Platform_Based_Work_EN.pdf>.

⁵⁶ *Ibid.*, para 82.

⁵⁷ See International Labour Organization, 'ILO Declaration on Fundamental Principles and Rights at Work', <www.ilo.org/declaration/lang-en/index.htm>.

which often come from geographies that are impacted by conflict, weak governance and diminished rule of law. Such environments are prone to human rights violations, which is what SDG 8.7 seeks to address.⁶¹

One prominent example of this is the mining of cobalt. Cobalt is a core component used in the production of lithium batteries for portable electronic devices such as mobile phones and laptop computers. More than half of the world's cobalt comes from the Democratic Republic of the Congo (DRC) and, according to the DRC government's own estimates, approximately 20 per cent of the cobalt exported from the country is sourced from artisanal miners in the south of the country.⁶² Once sourced, the cobalt is traded and then sent overseas for refinement, often to China. The refined cobalt then makes its way to Asian component producers and electronics manufacturers for assembly before finally being sold in Europe, the United States and across Asia.⁶³ As ride hailing and food delivery companies move towards deploying fleets of electric and driverless vehicles, or the likes of Apple seek to increase the functionality of smart wearables for financial transactions, there will be a greater demand for extracted minerals such as cobalt.⁶⁴

This is relevant as Apple, Google, and Microsoft were among a list of large tech companies named as defendants in a lawsuit filed in Washington, DC by human rights firm International Rights Advocates on behalf of 14 parents and children from the DRC.⁶⁵ The lawsuit accuses the companies of aiding and abetting in the death and serious injury of children who they claim were working in cobalt mines in their supply chain.

Investigations conducted by Amnesty International in 2015 reveal that there were approximately 40,000 children working in these mines for long periods of time and under harsh conditions.⁶⁶ The children indicated that they earned between 1,000 and 2,000 Congolese Francs per day (US\$1–2) for shifts that could last up to 12 hours.⁶⁷ Needless to say, this is a major concern as it constitutes a violation of child labour rights.

In response to issues such as these, several countries, such as the US,⁶⁸ the UK,⁶⁹ France,⁷⁰ Australia⁷¹ and The Netherlands,⁷² have introduced variants of modern slavery and supply chain due diligence legislation which requires large companies to be transparent about where they are sourcing materials from and to ensure that

Flow chart of generic supply chain

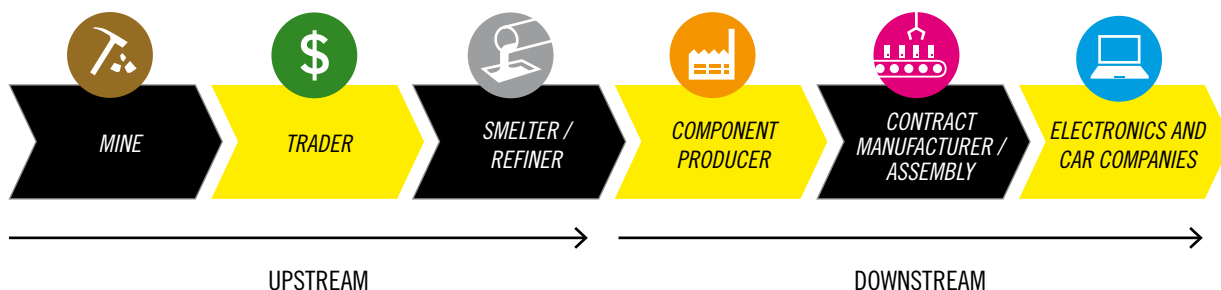


Figure 1. The supply chain of cobalt (sourced from Amnesty International)

61 SDG 8.7: "Take immediate and effective measures to eradicate forced labor, end modern slavery and human trafficking and secure the prohibition and elimination of the worst forms of child labor, including recruitment and use of child soldiers, and by 2025 end child labor in all its forms."

62 Amnesty International, "'This is what we die for': Human Rights Abuses in the Democratic Republic of the Congo Power the Global Trade in Cobalt", 2016.

63 Council on Foreign Relations, 'Modern Slavery: An Exploration of its Root Causes and the Human Toll', A CFR InfoGuide, <www.cfr.org/interactives/modern-slavery/#/!section1/item-1>.

64 Increased demand can also lead to mineral and tech product shortages as illustrated by the current silicon chip shortage caused by the COVID-19 pandemic and the US–China trade war. Such shortages can have a disruptive effect on the flow of the global economy and prices for digital and non-digital goods. See Sweney M, 'Global Shortage in Computer Chips 'Reaches Crisis Point'', *The Guardian*, 21 March 2021, <www.theguardian.com/business/2021/mar/21/global-shortage-in-computer-chips-reaches-crisis-point>.

65 Submission by International Rights Advocate, filed on 15 December 2019, <<http://iradvocates.org/sites/iradvocates.org/files/stamped%20-Complaint.pdf>>. See also Kelly A, 'Apple and Google named in US lawsuit over Congolese child cobalt mining deaths', *The Guardian*, 16 December 2019, <www.theguardian.com/global-development/2019/dec/16/apple-and-google-named-in-us-lawsuit-over-congolese-child-cobalt-mining-deaths>.

66 Amnesty International, "'This is what we die for': Human Rights Abuses in the Democratic Republic of the Congo Power the Global Trade in Cobalt", 2016.

67 Ibid.

68 Section 1502 Dodd Frank Act for conflict minerals and the California Transparency in Supply Chains Act 2010 for transparency disclosures.

69 Modern Slavery Act 2015.

70 Corporate Duty of Vigilance Law 2017.

71 Modern Slavery Act 2018.

72 Child Labor Due Diligence Act 2019.

they are not associated with issues such as child labour violations. And while the European Union's 'Conflict Minerals Regulation' took effect in January 2021,⁷³ it is anticipated that there will be much further and broader legislation of this kind through the European Union's directive on mandatory human rights due diligence, as was discussed in the previous section.

Further responsive action is taking place at the international level through Alliance 8.7, a global partnership committed to assisting United Nations member states to achieve SDG 8.7. With the ILO serving as its secretariat, the Alliance provides its partners with a platform for exchange, access to data, information, innovation and good practice, support for political commitment, and assists in leveraging resources. Key international instruments that provide a framework for its operations include the ILO protocol to the 'Forced Labour Convention of 1930 (No.29)',⁷⁴ the ILO 'Forced Labour (Supplementary Measures) Recommendation 2014 (No. 203)',⁷⁵ and the ILO 'Tripartite Declaration of Principles concerning Multinational Enterprises and Social Policy'.⁷⁶ The ILO has also launched several initiatives that are aimed specifically at the business sector to help it tackle modern slavery. Examples of such initiatives include the 'Corporate Responsibility in Eliminating Slavery and Trafficking' (CREST), which provides guidance on ethical recruitment and due diligence assessments in supply chains.⁷⁷ Similarly, the International Organization for Migration (IOM) published a guide in 2018 for companies detailing their obligation to support and pay compensation to victims of human trafficking in the mining sector—the 'Remediation Guidelines for Victims of Human Trafficking in Mineral Supply Chains'.⁷⁸ Finally, other notable private, multistakeholder initiatives of note include the 'Global Battery Alliance'⁷⁹ and the 'Fair Cobalt Alliance'.⁸⁰

In addressing these issues of modern slavery, it will be important for states and international actors to strike

73 It should also be noted that the Conflict Minerals Regulation will only be applicable to four minerals: tin, tantalum, tungsten and gold.

74 The protocol offers governments specific guidance on measures to be taken against human trafficking for the purposes of forced or compulsory labour. Ratifying the Protocol will bind states under international law to consult with employers and workers to develop national laws or regulations to prevent and eliminate forced labour, provide victims with protection and access to appropriate and effective remedies and sanction perpetrators.

75 As a supplement to the ILO Protocol, this instrument encourages states to ensure that companies address the risk of forced labour being used in their operations or in operations to which they are directly linked (for example, by their suppliers).

76 Similar to the ILO Protocol, the Declaration states governments should develop national policies and plans of action to prevent and eliminate forced and child labour in consultation with employers' and workers' organizations, and is also aimed at both multinationals and national companies.

77 See ILO Global Business Network on Forced Labor, <<https://flbusiness.network/>>.

78 IOM, 'Remediation Guidelines for Victims of Human Trafficking in Mineral Supply Chains', 2018, <https://publications.iom.int/system/files/pdf/remediation_guidelines.pdf>.

79 World Economic Forum, 'Global Battery Alliance', <www.weforum.org/global-battery-alliance/home>.

80 'Fair Cobalt Alliance', <www.theimpactfacility.com/commodities/cobalt/fair-cobalt-alliance/>.

a balance between protecting vulnerable workers and ensuring that new legal frameworks do not hurt the livelihoods of legally unrecognized workers.⁸¹ As the United Nations has already noted, indiscriminate sanctions against mining operations in the DRC can impact negatively the livelihoods of up to 2 million artisanal miners and their families who are not formally recognized under the DRC's laws.⁸² This is reminiscent of past tensions surrounding the development of a "social clause" as world powers were attempting to construct an international trade architecture to accommodate globalization during the period of decolonization.⁸³ During that period, recently decolonized states that were looking for opportunities to grow economically and express their new found sovereignty resisted calls for the implementation of a social clause in international trade regimes as this would limit one of their principal comparative advantages against developed states—cheap labour. Cheap labour, however, can be a harbinger for an array of labour abuses. A balance, therefore, needed to be found among employers, trade unions and states. The ensuing negotiations and compromises led to the ILO 'Declaration on Fundamental Principles and Rights at Work'. Hence, if there is to be a well-reasoned and fair resolution to this issue, international frameworks concerning modern slavery should be applied in a context-sensitive manner with due deliberation across sectors and stakeholder groups to avoid unintended humanitarian consequences and possible inaction on an important issue of broad concern.

The role of financial services firms in broader modern slavery

Financial services firms can be unwitting facilitators of modern slavery to the extent that they may facilitate illicit transactions between criminal actors and organizations. Robust market integrity frameworks, in particular relating to money-laundering and terrorist financing (AML/CFT) are critical for minimizing this risk. Such risks are acute in developing countries where the protocols are not easily implemented for a multitude of reasons such as a lack of technology or underdeveloped customer identification systems. Consequently, this is an area of concern for the financial services industry, including BFTs, that seek to

81 See, for example, Enough Project, 'A Comprehensive Approach to Congo's Conflict Minerals', p. 6, <<https://enoughproject.org/files/Comprehensive-Approach.pdf>>.

82 Ibid.; United Nations Security Council, 'Report of the Secretary-General pursuant to paragraph 8 of resolution 1698 (2006) concerning the Democratic Republic of the Congo', S/2007/68, February 2007.

83 See Tapiola K, 'The Teeth of the ILO: The Impact of the 1998 ILO Declaration on Fundamental Principles and Rights at Work', Geneva: International Labour Organization, 2018. As Tapiola explains, p. 20, "[v]irtually all developing countries wanted to keep the issue of labor standards out of the new trade regime. Even mentioning them had the smell of conditioning free trade on the respect for labor standards. Globalization was finally going to give the emerging countries some long-sought returns. Any social clause could call into question the comparative advantage arising out of lower wages and labor costs. They felt that the goalposts were being moved. Topmost was the fear of trade sanctions'.

provide greater services to unbanked populations. A notable forum of international governance that arose to address this concern is the Financial Sector Commission on Modern Slavery and Human Trafficking. The Commission is a public-private partnership that was convened in September 2018 by the Foreign Ministers of Lichtenstein, Australia and The Netherlands, a consortium of private sector institutions, and the UNU-CPR acting as secretariat. Its final report, 'Unlocking Potential: A Blueprint for Mobilizing Finance Against Slavery and Trafficking', was released in September 2019 at the United Nations General Assembly in New York.⁸⁴

The report outlines five goals to bolster the industry's response to modern slavery and human trafficking. Each goal is based on a set of proposed actions. These include:

- increasing resources for financial investigations of modern slavery and human trafficking
- developing better indicators of trafficking-related money-laundering and terrorist financing risks
- promoting collaboration across the sector on human rights due diligence and social risk mapping
- developing detailed leverage guidance
- investing in digital and social finance, including microfinance, to serve the most vulnerable

The report includes an Implementation Toolkit that will help the full range of financial sector institutions—from commercial and retail banks to Fintech start-ups—to take action to end modern slavery and human trafficking.⁸⁵ A key project for the consortium of FSPs involved will be the Survivor Inclusion Initiative. Survivors of human trafficking often find that traffickers have hijacked their financial identity or banking products for money-laundering or other criminal purposes, thus destroying their creditworthiness and increasing their risk of re-victimization. In response, this initiative, which will see leading banks⁸⁶ collaborate with survivors of human trafficking, will aim to provide a common approach for the safe extension of basic financial services to survivors and be scaled up across multiple countries.

In addition to the above, it is worth emphasizing the role that BFTs in particular can play in this area through the collection and sharing of data for the continual development of money-laundering typologies to identify illicit financial flows, and thus indicators and cases of possible human trafficking. This must be a collective and

concerted effort across the private, public, civil society and academic sectors. As a recent report from the international AML/CFT standards setter, the Financial Action Taskforce (FATF), stated, no one indicator alone is likely to confirm money-laundering from modern slavery and human trafficking.⁸⁷ Consequently, wider contextual information sourced from multiple official and unofficial quarters (e.g. passport information, utility information (or lack of it), and non-traditional indicators such as financial data, social media activity, biometric information) may be the key to identifying both victims and perpetrators, as well as how they are connected through financial transactions.⁸⁸ Innovative means of meeting customer due diligence requirements could also provide wider benefits for detection of modern slavery in this regard.⁸⁹ As we also discuss above, modern day slavery can thrive when companies fail to perform due diligence on their supplier relationships. It is helpful to remember that greater innovation in supplier due diligence which covers environmental, social and financial information is also required.

Gender equality (SDG 5)

Fintech can have a significant positive impact in advancing gender equality and the empowerment of women and girls. This can be manifested in both macroeconomic and microeconomic gains. On the macroeconomic front, access to and use of financial services increases women's productive assets, productivity and participation in the labour market. This also contributes to women's agency (within the household as well as within the community) and control of assets. Moreover, it is broadly recognized that promoting small- and medium-sized enterprise (SME) development can boost economic growth and per capita income gains. Yet it is estimated that over 70 per cent of women-led SMEs are either financially unserved or underserved globally.⁹⁰ In terms of microeconomics, women's financial inclusion allows women to borrow, invest and save, and to insure their lives and businesses. Women are effective investors in their homes, as well as in the nutrition and health of their children and communities.⁹¹ To unlock this potential, however, digital financing solutions need to be grounded in the challenges that women face.⁹² Fintech may not yet be succeeding in

87 FATF, 'Financial Flows from Human Trafficking', 2018.

88 Fintrail, 'Fintech and the New Frontier in the Fight Against Modern Slavery', 18 October 2019, <www.fintrail.co.uk/news/2019/10/17/fintech-and-the-new-frontier-in-the-fight-against-modern-slavery>.

89 Ibid.

90 Toronto Centre, 'Advancing Women's Digital Financial Inclusion', 2018, p. 4.

91 Ibid, p.5. And as the World Bank states in its gender policy, "[n]o society can develop sustainably without transforming the distribution of opportunities, resources, and choices for males and females so that both have equal power to shape their own lives and contribute to their families, communities, and countries." See World Bank Group, 'Gender Equality, Poverty, Reduction, and Inclusive Growth: Gender Strategy', 2015, p. 11.

92 See, for example, 'UN Women, Leveraging Digital Finance for Gender Equality and Women's Empowerment', 2019; In addition to the above-mentioned challenges, the #MeToo movement illustrated that technology could play an

84 Lichtenstein Initiative's Financial Sector Commission on Modern Slavery and Human Trafficking, 'Unlocking Potential: A Blueprint for Mobilizing Finance Against Slavery and Trafficking', 2019.

85 Ibid.

86 These include Bank of America, Bank of the West, Barclays, BB&T, BMO Financial Group, Citi, Erste Bank, HSBC, LCNB National Bank, Scotiabank, US Bank and Wells Fargo.

this light; across 28 advanced and emerging economies, one recent study found that women use Fintech products and services by 8 percentage points less than men.⁹³ Many of the underlying challenges are elementary as they relate to issues such as access to, ownership of, and use of mobile phones and the digital world. Reports show that across low- and middle-income countries (LMIC), women are still 8 per cent less likely than men to own a mobile phone, and 20 per cent less likely to use the Internet on a mobile. In absolute numbers, that translates to approximately 300 million fewer women than men using the mobile Internet in LMIC.⁹⁴ Further, some reports show that women may be less likely to use Fintech services than men because they are more worried about their security when dealing with companies online.⁹⁵ This is something important for policymakers to consider as it does not relate directly to the regulation of financial (technology) services, but more so to privacy regulations. Consequently, while there is considerable work being done in the development of international governance in this space, governance and regulatory solutions will first need to address these preliminary yet fundamental barriers pertaining to the gender gap.

In a recent report, the Global System for Mobile Communications Association (GSMA) provided four key recommendations for all stakeholders to take to close the mobile gender gap.⁹⁶

1. Work to understand women's needs and barriers to mobile ownership and use in your market, and design targeted interventions to address these barriers. Consider the effect of social norms on women in the design and implementation of policies, products and services.
2. Improve the quality and availability of gender-disaggregated data to set targets, create strategies and track progress.
3. Ensure considerations of women and gender equality are integrated in strategies and plans, including setting specific gender-equity targets for reaching women and tracking their progress.

important role in promoting social aspects of gender equality, such as sexual harassment prevention. Technology can be used to expose sexual harassment and provide a platform for victims to address potential injustices. Interestingly, many Bigtech companies also came under fire from the #MeToo movement because of inadequate workplace policies in relation to sexual harassment. Hence, while technology is essential for promoting gender equality, tech platforms and service providers can fail individually in implementing robust gender equality policies. In this context, it is important to facilitate the use of technology for achieving gender equality and to ensure that tech platforms adhere to adequate gender equality policies. See, for example, Carson E, 'Even After #MeToo, Women In Tech Say They're Still Getting Harassed', CNET, 16 September 2020, <www.cnet.com/news/even-after-metoo-women-in-tech-say-theyre-still-getting-harassed/>.

93 Chen S, et al., 'The fintech gender gap', 2021, BIS Working Paper 931.

94 GSMA, 'Connected Women: The Mobile Gender Gap Report 2020', 2020, p. 4.

95 Supra note 93.

96 GSMA, 'Connected Women: The Mobile Gender Gap Report 2020', 2020, p. 39.

4. Consult and involve women users in product, service and policy design and implementation, including testing and piloting with women, and proactively tailoring marketing and distribution approaches to women.

With this in mind, we can now proceed to a brief overview of relevant international governance initiatives that are currently in operation.

At present, the most prominent international governance regime in place to address the challenges faced within SDG 5 is the international human rights law framework. More specifically, the 1979 'Convention on the Elimination of all Forms of Discrimination Against Women' (CEDAW), the 1954 'Convention on the Political Rights of Women', and the 1958 ILO 'Discrimination (Employment and Occupation) Convention' all speak directly to the protection of women's rights. Of these, CEDAW, often described as the international bill of rights for women, has been ratified by 189 states and is the most significant international legal instrument for women's rights.

The IHRL regime, as previously discussed, is a robust framework, but it may not always be specific to the particularities of the digital finance space, particularly from a gender perspective. The work needed to better engage women in the use of digital financial services is matched by that needed to enhance its governance from a gendered perspective. For example, a broad survey of legislation and policy conducted by the Alliance for Financial Inclusion (AFI) found the following:⁹⁷

- Financial inclusion, as a component, is missing from the National Gender Policies of most countries.
- Although specific objectives for women's financial inclusion are found in some National Financial Inclusion Strategies (NFIS), gender in most cases occurs only as a 'good to have' component or a cross-cutting pillar across the themes, or often as a special mention alongside a main theme. The gender aspect becomes diluted and the main theme receives the focused attention.
- Furthermore, there were no examples of NFIS in which linkages between digital financial services and better financial inclusion of women had been discussed.
- While regulators are increasingly adopting the use of gender-disaggregated data and analytics, there is mixed evidence on how regulators are using or planning to use such data and analytics.
- None of the policies promote gender impact assessments; yet gender impact assessments may allow regulators and policymakers to identify opportunities and maximize the impact of any initiative on women.

97 Alliance for Financial Inclusion, 'Lessons on Enhancing Women's Financial Inclusion using Digital Financial Services', 2020, p. 20.

- There is mixed evidence on how financial regulators have been able to converge with other regulators, or ministries, on the mandate to advance women's financial inclusion.

As such, beyond the existing IHRL legal instruments, much work is needed to promote simultaneously both greater use of and access to digital financial services for women as well as the relevant and appropriate governance to match. To that end, there are a few notable existing public-private partnerships within the financial sphere that have made considerable progress towards addressing SDG 5 targets. For example, and already noted within the United Nations Task Force on Digital Finance's report,⁹⁸ the Alliance for Financial Inclusion has developed a 'Policy Framework for Women's Financial Inclusion using Digital Financial Services'. This includes guidance on policy, regulation, infrastructure, and demand side capabilities and consumer protection.⁹⁹ Further, the United Nations Secretary-General's Special Advocate (UNSGSA) for Inclusive Finance for Development, Queen Máxima of The Netherlands, is collaborating with Melinda Gates and the French Minister of Finance to promote a major G7 Partnership for Women's Digital Financial Inclusion in Africa.¹⁰⁰ And finally, there are significant efforts to improve sex-disaggregated statistics by the UNSGSA, United Nations Women, Data2X, World Bank, AFI and the IMF.¹⁰¹ This final point on sex-disaggregated data is particularly important because proposed developmental solutions and interventions often fail to improve the situation for women. As has been noted in a recent report by United Nations Women, "[p]ast experiences in regulating traditional financial services have shown that seemingly gender-neutral regulations could operate differentially with regards to men and women. Without policies requiring the collection of gender-disaggregated data by not only financial authorities but also by non-banking institutions developing digital financial services, there is little understanding on the barriers and risks faced by women."¹⁰²

Given the potential that digital finance has towards improving conditions for women and girls, it is imperative that we find more ways to integrate directly and effectively the principles engendered within international legal instruments, such as CEDAW, into the international governance of finance. To that end, the recommendation by the Toronto Centre to consider regulatory sandboxes

98 UN Taskforce on Digital Financing of the Sustainable Development Goals, 'People's Money: Harnessing Digitalization to Finance a Sustainable Future', August 2020.

99 Alliance for Financial Inclusion, 'Policy Framework for Women's Financial Inclusion Using Digital Financial Services', 2019, <www.afi-global.org/sites/default/files/publications/2019-09/AFI_DFS_Women%20FI_AW_25.09.19_digital.pdf>.

100 Bill & Melinda Gates Foundation/G7 France, 'A G7 Partnership for Women's Digital Financial Inclusion in Africa', July 2019, <https://docs.gatesfoundation.org/Documents/WomensDigitalFinancialInclusioninAfrica_English.pdf>.

101 World Bank, 'Gender Data Portal: Filling Data Gaps', <<http://datatopics.worldbank.org/gender/fillingdatagaps>>.

102 UN Women, 'Leveraging Digital Finance for Gender Equality and Women's Empowerment, 2019', p. 16.

with a gender dimension is worthy of consideration by international policymakers. This could allow for experimentation of the following products and services which would be of interest to women in developing countries:¹⁰³

- basic or low-fee accounts with simplified requirements (tiered document requirements to open small accounts, use of a digital financial ID system, limitations on how money can be accessed)
- digitization of social transfers and government payments (accounts into which government payments to citizens can be made through digital means, with women attentive to the use of such financial resources for family needs)
- acceptance of digital payments for routine government services (such as utilities)
- use of mobile money for international remittances sent to families, remittance-linked savings (so that remittances contribute to building savings)
- savings schemes for education, long-term contractual (micro) savings and digital credit
- bundling to integrate a suite of savings, credit and other valued added products and services for cross-selling and deeper financial inclusion

Climate change: SDGs 12, 13, 14 and 15

Climate change is a broad and important category in which finance plays a critical role. Concerted international attention to climate change most recently in the context of the Paris Climate Agreement provides a central international framework, reflected and reinforced in the context of the SDGs, in particular SDGs 12, 13, 14 and 15. In the context of finance, both the Paris Agreement and the SDGs seek to focus concerted actions to address climate change including through the direction of capital to address the risk of climate change.

The magnitude of the challenge, and opportunity, presented in achieving climate and environment-related objectives is driving considerable action across both the public and private sectors. Interestingly for the financial industry, financial services firms can find themselves on both sides of the proverbial coin: either as investors assessing the environmental and social risks associated with a project that they seek to invest in ('buy side'), or alternatively as issuers of financial products that they claim meet a particular sustainability or environmental grade ('sell side'). In Technical Paper

103 Toronto Centre, 'Advancing Women's Digital Financial Inclusion', 2018, p. 12.

3.1, we discussed some of the work that is being done by prominent regulators in this space, such as the European Commission. In this section, we will provide a brief overview of instruments and initiatives emanating not solely from the public regulatory sector. In so doing, we will highlight how although there are governance frameworks in place, we are still at a relatively nascent stage in the development of a holistic approach to governance of capital markets for climate finance. This development will require considerable effort and alignment of purpose and initiative across both the public and private sectors.

Of the various ways that climate change could impact a project, product, asset or service, there are two categories of risk that form umbrellas under which other risks could be classified—physical and transition risk.¹⁰⁴

• **Physical risk** refers to the financial impact of a changing climate, including more frequent extreme weather events and gradual changes in climate, and of environmental degradation, such as air, water and land pollution, water stress, biodiversity loss and deforestation.¹⁰⁵ Physical risk is therefore categorized

as ‘acute’ when it arises from extreme events, such as droughts, floods and storms, and ‘chronic’ when it arises from progressive shifts, such as increasing temperatures, sea level rises, water stress, biodiversity loss, land use change, habitat destruction and resource scarcity.¹⁰⁶ This can directly result in, for example, damage to property or reduced productivity, or indirectly lead to subsequent events, such as the disruption of supply chains.

• **Transition risk** refers to an institution’s financial loss that can result, directly or indirectly, from the process of adjustment towards a lower-carbon and more environmentally sustainable economy. This could be triggered, for example, by a relatively abrupt adoption of climate and environmental policies, technological progress or changes in market sentiment and preferences.

These two risk categories can be drivers of other forms of existing risk that are relevant to FSPs, such as credit, market and operational risk. These are reflected in the table below.¹⁰⁷

Risks affected	Physical		Transition	
	Climate-related	Environmental	Climate-related	Environmental
	<ul style="list-style-type: none"> • Extreme weather events • Chronic weather patterns 	<ul style="list-style-type: none"> • Water stress • Resource scarcity • Biodiversity loss • Pollution • Other 	<ul style="list-style-type: none"> • Policy and regulation • Technology • Market sentiment 	<ul style="list-style-type: none"> • Policy and regulation • Technology • Market sentiment
Credit	The probabilities of default (PD) and loss given default (LGD) of exposures within sectors or geographies vulnerable to physical risk may be impacted, for example, through lower collateral valuations in real estate portfolios as a result of increased flood risk.		Energy efficiency standards may trigger substantial adaptation costs and lower corporate profitability, which may lead to a higher PD as well as lower collateral values.	
Market	Severe physical events may lead to shifts in market expectations and could result in sudden repricing, higher volatility and losses in asset values on some markets.		Transition risk drivers may generate an abrupt repricing of securities and derivatives, for example for products associated with industries affected by asset stranding.	
Operational	The bank’s operations may be disrupted due to physical damage to its property, branches and data centres as a result of extreme weather events.		Changing consumer sentiment regarding climate issues can lead to reputation and liability risks for the bank as a result of scandals caused by the financing of environmentally controversial activities.	
Other risk types (liquidity, business model)	Liquidity risk may be affected in the event of clients withdrawing money from their accounts in order to finance damage repairs.		Transition risk drivers may affect the viability of some business lines and lead to strategic risk for specific business models if the necessary adaptation or diversification is not implemented. An abrupt repricing of securities may reduce the value of banks’ high quality liquid assets, thereby affecting liquidity buffers.	

104 These categorizations and definitions are drawn from the European Central Bank, ‘Guide on Climate-related and Environmental Risks: Supervisory Expectations relating to Risk Management and Disclosure’, 2020, p. 10.

105 See Network for Greening the Financial System, ‘Guide for Supervisors: Integrating climate-related and environmental risks in prudential supervision’, 2020.

106 See DeNederlandscheBank, ‘Values at risk? Sustainability risks and goals in the Dutch financial sector’, 2019; DeNederlandscheBank, ‘Indebted to nature: Exploring biodiversity risks for the Dutch financial sector’, 2020; NGFS, ‘Guide for Supervisors: Integrating climate-related and environmental risks in prudential supervision’ 2020).

107 European Central Bank, ‘Guide on Climate-related and Environmental Risks: Supervisory Expectations relating to Risk Management and Disclosure’, 2020, p. 12.



The role of the finance industry as financiers of investment projects

As financiers, the financial industry has considerable leverage to determine the terms on which financing can be delivered for any potential transaction in which they would be involved. While much goes into the determination of those terms, climate change was not previously one of the considerations. Climate change was seen as a multifaceted environmental and societal risk, but not a financial one. Things changed, however, as the effects of natural disasters such as hurricanes, wildfires and droughts began to impact the financial returns on various project investments, and insurance companies became liable for large payouts.¹⁰⁸ There was a growing realization that investment project valuations could often be overinflated because of their underappreciation of the risks that climate change poses to the project.¹⁰⁹ Between 2000 and 2016, annual weather-related disasters worldwide rose by 46 per cent and between 2007 and 2016, economic losses from extreme weather worldwide rose by 86 per cent (EUR 117 billion in 2016).¹¹⁰ This is a worrying trend, as close to 50 per cent of the exposure of Euro area banks to risk is directly or indirectly linked to risks stemming from climate change.¹¹¹

Two prominent frameworks that have emerged to address these concerns, in part, are the Equator Principles (EPs) and the United Nations Principles for Responsible Investment (PRI). The EPs are a risk management framework of 10 principles adopted by financial institutions to determine, assess and manage the environmental and social risks associated with project finance. Formally launched in 2003 in Washington, DC, they have now been adopted by 111 financial institutions in 37 countries around the world. In the updated version from July 2020, the EP financial institutions made a commitment to:

- respect human rights in line with the United Nations Guiding Principles on Business and Human Rights (UNGPs) by carrying out human rights due diligence
- support the objectives of the 2015 Paris Agreement and recognize that they have a role to play in improving the availability of climate-related information, such as the Recommendations of the Task Force on Climate-

¹⁰⁸ See, for example, Worthington A, Valadkhani A, 'Measuring the impact of natural disasters on capital markets: An empirical application using intervention analysis', 2004, *Applied Economics* 36(19), 2177; Benson C, Clay E, 'Economic and Financial Impacts of Natural Disasters: an Assessment of Their Effects and Options for Mitigation', Overseas Development Institute, 2003; and Sadasivam N, 'Holding the Bill', *Grist*, 4 March 2020, online: <<https://grist.org/climate/insurance-companies-and-lenders-are-responding-to-climate-change-by-shifting-risk-to-taxpayers/>>.

¹⁰⁹ International Monetary Fund, 'Global Financial Stability Report: Markets in the Time of COVID-19', April 2020, 85 ff, <www.imf.org/en/Publications/GFSR>.

¹¹⁰ Ostry J, et al., 'Redistribution, Inequality, and Growth', International Monetary Fund, April 2014, <www.imf.org/external/pubs/ft/sdn/2014/sdn1402.pdf>.

¹¹¹ Battiston S, et al., 'A Climate Stress-Test of the Financial System', *Nature Climate Change*, 7(4), 283, 2017.

related Financial Disclosures (TCFD) when assessing the potential transition and physical risks of projects financed under the Equator Principles

- support conservation including the aim of enhancing the evidence base for research and decisions relating to biodiversity.

The United Nations PRI is a voluntary and aspirational set of six investment principles that offer a menu of possible actions for incorporating ESG issues into investment practice. This has a much broader base of signatories than the EPs as it is not limited solely to financial institutions; it includes large institutional investors as well. Further, the investment class is not limited to project finance, but a much broader class of investments. First launched in 2006, the PRI now has over 3000 signatories.¹¹²

Issuance of sustainable financial products

While some financiers may be concerned about the financial risk posed by climate change, a broader class of investors are concerned by the actual environmental degradation and social harm caused by some economic activity. As such, they seek to invest in enterprises that are sustainable and socially responsible, hoping for positive impact as opposed to protecting solely against negative financial consequence. In Technical Paper 3.1 we discussed some of the regulatory initiatives by policymakers to address these issues around the world, most notably in the EU.¹¹³ In this sub-section, we provide a brief overview of the non-financial disclosure frameworks that have been developed by the private sector.

There are currently several ESG/sustainability-related disclosure frameworks that have been developed by the private sector. These include standards developed by the CDP,¹¹⁴ the Climate Disclosure Standards Board,¹¹⁵ the Global Reporting Initiative (GRI),¹¹⁶ the

¹¹² Principles for Responsible Investment, 'About the PRI', <www.unpri.org/pri/about-the-pri>.

¹¹³ We detail, among other initiatives, the EU Action Plan on Sustainable Finance. For reference, it is helpful to note the three aims of the Action Plan, which are to:

1. reorient capital flows towards sustainable investment in order to achieve sustainable and inclusive growth
2. manage financial risks stemming from climate change, resource depletion, environmental degradation and social issues
3. foster transparency and long-termism in financial and economic activity.

¹¹⁴ CDP is a not-for-profit charity that runs the global disclosure system for investors, companies, cities, states and regions to manage their environmental impacts. Founded in 2000, CDP offers a platform that seeks to link environmental integrity and fiduciary duty. See CDP, 'What We Do', <www.cdp.net/en/info/about-us/what-we-do>.

¹¹⁵ "CDSB is an international consortium of business and environmental NGOs. We are committed to advancing and aligning the global mainstream corporate reporting model to equate natural capital with financial capital. We do this by offering companies a framework for reporting environmental information with the same rigour as financial information. In turn this helps them to provide investors with decision-useful environmental information via the mainstream corporate report, enhancing the efficient allocation of capital. Regulators also benefit from compliance-ready materials." See Climate Disclosure Standards Board, 'Our Story', <www.cdsb.net/our-story>.

¹¹⁶ The Global Reporting Initiative (known as GRI) is an international independent



International Integrated Reporting Council (IIRC),¹¹⁷ and the Sustainability Accounting Standards Board (SASB).¹¹⁸ Many of these standards cover a swathe of ESG elements, ranging from social issues such as diversity reporting, wage gaps, and health and safety, to environmental metrics such as greenhouse gas emissions, land protection and water use.

While the standards are mostly voluntary, disclosure frameworks are meant to bring greater transparency, accountability and risk management in addressing the risks to climate change and the environment. In many ways, this is a positive development as it places a growing spotlight on the ways in which economic activity continues to fuel climate change, and thus how actors can begin to identify, address and manage the associated risks and drivers. However, there are still two crucial shortcomings to address if there is to be a truly efficient and effective system of managing climate- and environment-related impacts that are accentuated by FSPs.

The first is the proliferation of standards. In a short period of time, this has been the cause of much confusion, incongruity and, in some cases, fraudulent misrepresentation of 'green' credentials (or 'greenwashing'). Further, these frameworks operate in parallel to the standards promulgated by some governments and may or may not operate within the same jurisdictions, such as the EU Taxonomy¹¹⁹ that works in conjunction with the Non-Financial Reporting Directive.¹²⁰ The risks posed by this proliferation and fragmentation of standards, some voluntary and some mandatory, are not lost on industry participants. A recent report from the International Organization of Securities Commissions (IOSCO) captures this well.¹²¹

standards organization that helps businesses, governments and other organizations understand and communicate their impacts on issues such as climate change, human rights and corruption. See Global Reporting Initiative, <www.globalreporting.org/>.

117 The International Integrated Reporting Council (IIRC) is a global coalition of regulators, investors, companies, standard setters, the accounting profession, academia and NGOs. The coalition promotes communication about value creation as the next step in the evolution of corporate reporting. See IIRC, 'The IIRC', <<https://integratedreporting.org/the-iirc-2/>>.

118 The Sustainability Accounting Standards Board (SASB) is a non-profit organization, founded in 2011 by Jean Rogers to develop sustainability accounting standards. Investors, lenders, insurance underwriters and other providers of financial capital are increasingly attuned to the impact of environmental, social and governance (ESG) factors on the financial performance of companies, driving the need for standardized reporting of ESG data. See SASB, <www.sasb.org/>.

119 The EU has adopted the Taxonomy Regulation 2020/852 of 18 June 2020 that will allow for an EU-wide classification system for environmentally sustainable economic activities. Relevant actors will be expected to comply with the regulation from December 2021. Interestingly from a human rights perspective, to qualify as "environmentally sustainable," economic activities need to comply with the minimum standards of the OECD 'Guidelines for Multinational Enterprises' and the UN 'Guiding Principles on Business and Human Rights', including the principles and rights set out in the eight fundamental conventions identified in the ILO's 'Declaration on Fundamental Principles and Rights at Work' and the International Bill of Human Rights. See Art. 3(c) and 18 of the Taxonomy Regulation.

120 EU Directive 2014/95/EU.

121 International Organization of Securities Commissions, 'Sustainable Finance and the Role of Securities Regulators and IOSCO', April 2020, p. 4, <www.iosco.org/library/pubdocs/pdf/IOSCOPD652.pdf>.

The role of third-party sustainability reporting frameworks is distinct from the role of regulatory-required disclosures that focus on the materiality of climate and ESG-related factors on a specific issuer's business. The multitude of voluntary reporting standards and the fact that these can have different target users and scope, as well as using different formats and metrics can make it difficult for investors to compare such information across the different voluntary frameworks. Issuers also may face challenges with the multitude of options and differing approaches. Some of this variation is at the firm level, but there are also disparities between regions and jurisdictions that could hinder cross-border financial activity and free capital flows, which are salient features of modern economies. These challenges could result in both suboptimal capital allocation, since cross-border activity offers diversification and investment opportunities to investors and enables firms to raise capital and conduct business in multiple countries, and present investor protection concerns.

This realization has led actors within the industry to call for a single, universal set of standards that can be implemented internationally.¹²² This would be a welcome progression in the international governance of finance in the aid of addressing climate change and the SDGs. However, there now appear to be different coalitions of actors working towards this endeavour, which may yet defeat the initial and overall purpose of the exercise. Two notable organizations that are working on a universal standard include the IFRS Foundation¹²³ and the World Economic Forum.¹²⁴ Government regulators are also engaging in this endeavour. The Financial Stability Board, for example, recently announced that it will be coordinating and exploring ways to promote globally comparable, high-quality, auditable standards of disclosure based on the TCFD recommendations, and then report their findings to the G20 Finance Ministers and Central Bank Governors meeting in July 2021.¹²⁵ Meanwhile, researchers at the BIS have called for a system to rate corporate issuers on their carbon intensity.¹²⁶

122 See, for example, Mooney A, 'Blackrock pushes for global ESG standards', *Financial Times*, 29 October 2020, <www.ft.com>.

123 IFRS Foundation, 'Consultation Paper on Sustainability Reporting', September 2020, <<https://cdn.ifrs.org/-/media/project/sustainability-reporting/consultation-paper-on-sustainability-reporting.pdf?la=en>>.

124 World Economic Forum, 'Toward Common Metrics and Consistent Reporting of Sustainable Value Creation', January 2020, <www3.weforum.org/docs/WEF_IBC_ESG_Metrics_Discussion_Paper.pdf>. Since then, Bank of America CEO, Brian Moynihan, and WEF founder, Klaus Schwab, have detailed their plan to mobilize CEOs' support for the Sustainability Standards Board, which the international accounting standards setters at the IFRS Foundation are developing. See Eltobgy M, Guillot J, 'Yes, ESG is complicated. Together, we can simplify it', World Economic Forum, 26 March 2021, <www.weforum.org/agenda/2021/03/yes-esg-is-complicated-together-we-can-simplify-it/>.

125 'FSB response to the IFRS Foundation's Consultation Paper on Sustainability Reporting', 22 December 2020.

126 Ehlers T, Mojon B, Packer F, 'Green bonds and carbon emissions: exploring the case for a rating system at the firm level', 2020, BIS Quarterly Review, p. 39: "A firm-level green rating system should have three high-level objectives. For one, it should provide additional incentives for the rated companies to contribute to



Consequently, as we strive towards a universal disclosure framework, it is evident that there needs to be a much more probing discussion not only about who should draft these standards, but why them, how they should draft it, and what should be addressed. This will be critical for garnering the requisite legitimacy for such a global standard. The Network of Central Banks and Supervisors for Greening the Financial System (NGFS) is one promising forum in which such a discussion can be had, particularly with the Federal Reserve Board of the United States having recently joined its ranks on 15 December 2020.¹²⁷

The second shortcoming of the current disclosure standards, which is related to the first, is the opacity surrounding how the data are collected at the asset or project level, and thus veracity around the true risks that may exist. Reports show that there are multiple ways in which data are collected and collated.¹²⁸ Moreover, there is little external oversight in the collection or verification of the data that are submitted, as most data are self-reported.¹²⁹ We do not know the extent to which companies are actually living up to their often overinflated reports. This can be a significant risk and thus concern to all stakeholders, from the employees who may be injured as a result of inadequate protection from natural disasters, to the investor who may lose considerable capital because of the damage incurred at the asset or project level, and ultimately for the environment through further degradation.¹³⁰

Improving the governance of capital markets for climate- and environment-related SDGs

FSPs, including BFTs, have a central and pivotal role to play in work towards achieving climate- and environment-related SDGs, both in providing the necessary financing to achieve the goals and in ensuring that capital is directed in the right direction. At present, there are a considerable number of regulatory and governance initiatives in this space. As noted in the discussion both here and in Technical Paper 3.1, however, many of these are disparate and incongruent. To enable effective governance of climate change by the potential raised from BFTs entering the market and providing a greater range of products and services, particularly in light of Paris Agreement targets, there will need to be much more rapid development of the regulatory and governance frameworks to accommodate appropriate taxonomies, reporting standards, etc. The frameworks will need to target the internal governance of actors as well as the various levels at which they may operate—the national, the international and the transnational.

In terms of regulatory development at the market level, a recent report by the Boston Consulting Group and the Global Financial Markets Association provides a thought-provoking road map of what may be required to produce an appropriate governance model (see below).¹³¹

the attainment of climate goals such as those of the Paris Accord. Secondly, it should help investors in their decision-making processes – in particular, investors without the resources to do their own ‘green’ due diligence. Finally, the system should allow investors and other stakeholders (e.g. auditors, regulators and policymakers) to check firms’ improvements and verify that the desired climate mitigation effects are achieved”.

127 Network of Central Banks and Supervisors for Greening the Financial System, <www.ngfs.net/en>. See also Federal Reserve Board, ‘Federal Reserve Board announces it has formally joined the Network of Central Banks and Supervisors for Greening the Financial System, or NGFS, as a member’, 15 December 2020, <www.federalreserve.gov/newsevents/pressreleases/bcreg20201215a.htm#:~:text=The%20Federal%20Reserve%20Board%20announced,or%20NGFS%2C%20as%20a%20member.&text=The%20Board%20began%20participating%20in,more%20than%20a%20year%20ago>.

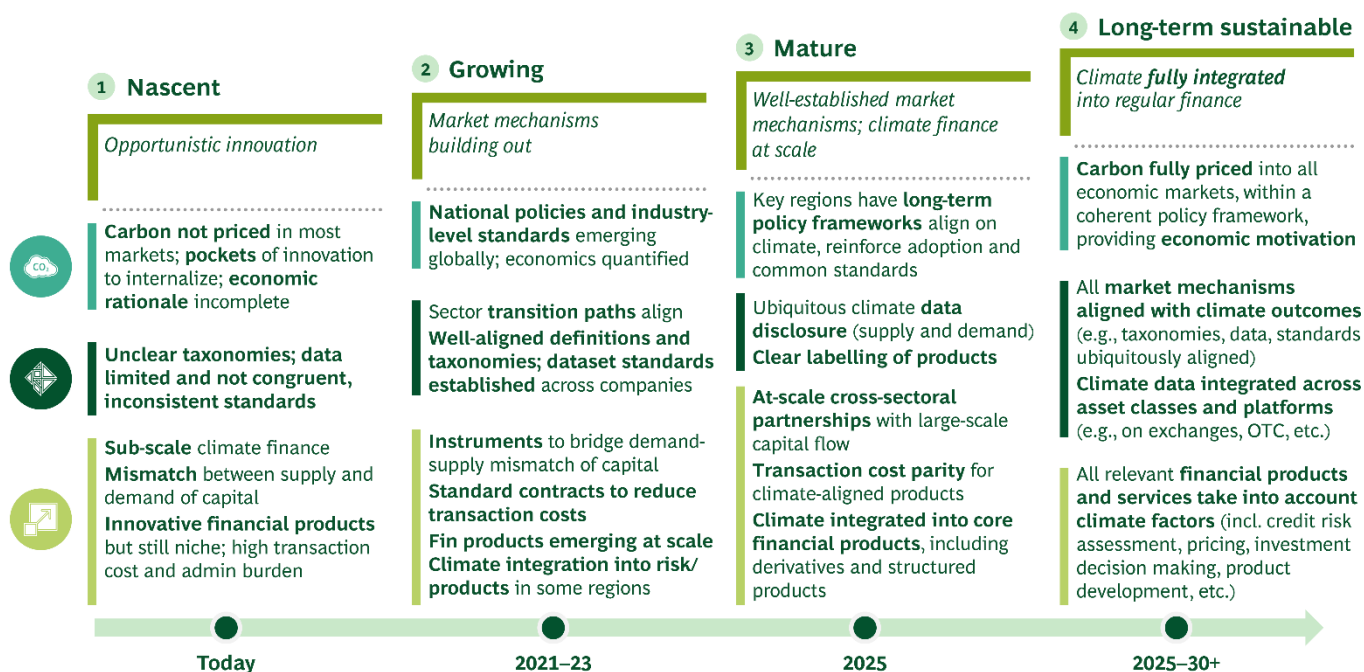
128 See, for example, Kotsantonis S, Serafeim G, ‘Four Things No One Will Tell You About ESG Data’, *Journal of Applied Corporate Finance* 31(2), 50, 2019; Brand FS, et al., ‘Overcoming current practical challenges in sustainability and integrated reporting: insights from a Swiss field study’, *Sustainability Management Forum* 26, 35, 2018.

129 See, for example, Steiner G, et al., ‘Living sustainability, or merely pretending? From explicit self-report measures to implicit cognition’, *Sustainability Science* 1001, 13, 2018; Richmond R, Ellman K, ‘CSRHub’s CEO: Dark data in sustainability reporting’, *GreenBiz*, 21 October 2016, <www.greenbiz.com/article/csrhubs-ceo-dark-data-sustainability-reporting>.

130 Discussions are under way on the use of geospatial data to enhance information and more broadly move beyond disclosure. Many frameworks also have yet to take into consideration natural capital, which is now a focus of the Task Force of Nature Related Financial Disclosures.

131 Boston Consulting Group, et al., ‘Climate Finance Markets and the Real Economy: Sizing the Global Need and Defining the Market Structure to Mobilize Capital’, 2020, p. 10.

Capital Markets Vision: Evolution of Climate Finance Market Structure (CFMS)



In developing this regulatory model, the authors of the report stress the importance of not relying solely or too heavily on the development of financial regulation, or of considering financial market participants as apart from the broader real economy and economic policy frameworks. Rather, policymakers will need to take a holistic approach that considers economy-wide actions to mobilize actors and capital towards a meaningful transition.¹³²

In addition to the governance model, the European Central Bank recently released a list of 13 supervisory expectations of significant financial institutions for the safe and prudent management of climate-related and environment. These are appended to the end of this paper as Annex 1.

Peace, justice and strong institutions (SDG 16)

Like most SDGs, SDG 16 is broad and significant in its ambition to address the strength and foundation of the institutions that govern our societies. Finance has a unique and significant role as either a driver or impediment towards the achievement of this goal. International governance frameworks can work to ensure that capital moves in the right directions. The primary international governance frameworks in this domain are those for anti-money-laundering (AML), countering the financing of terrorism (CFT) and anti-corruption/anti-bribery.

¹³² Ibid., p. 11; For example, climate-related regulations will need to account for new challenges related to technology such as the growing energy consumption of data centres. Hence, regulators will need to strike a balance between promoting digital technology for the SDGs and mitigating new forms of tech-related risk. See, for example, Mylton D, 'Hiding Greenhouse Gas Emissions in the Cloud', *Nature Climate Change* 10, 701, 2020.



AML/CFT

Money-laundering and terrorism financing can be considered as two connected criminal activities with a subtle yet important difference. Money-laundering involves taking criminal proceeds and disguising their illegal sources to use the funds to perform legal or illegal activities. In the case of terrorism financing, however, while the funds are used for illegal political purposes, they are not necessarily derived from illicit or illegal sources. Both activities can be cross-border and both have the potential to generate nefarious societal consequences. Consequently, they are meant to be strongly regulated on a global basis. The principal international body governing this area is the Financial Action Task Force (FATF).

Formed in 1989 by the Group of Seven (G7) nations, the FATF's stated objectives are to "set standards and promote effective implementation of legal, regulatory and operational measures for combating money-laundering, terrorist financing and other related threats to the integrity of the international financial system. Starting with its own members, the FATF monitors countries' progress in implementing the FATF Recommendations; reviews money-laundering and terrorist financing techniques and counter-measures; and promotes the adoption and implementation of the FATF Recommendations globally."¹³³ The FATF achieves these objectives in three main ways:

Spreading the AML message worldwide by promoting establishment of a global AML and anti-terrorist financing network based on expansion of its

membership, the development of regional AML bodies in various parts of the world and cooperation with other international organizations. Bodies of note include the Egmont Group of Financial Intelligence Units and the Wolfsberg Group.¹³⁴

Monitoring implementation of the FATF recommendations among its members. This is achieved in collaboration with FATF-style regional bodies, the IMF, the World Bank and the Egmont Group of Financial Intelligence Units.

Reviewing money-laundering trends and countermeasures.

A key element of the FATF's efforts is its detailed list of appropriate standards for countries to implement. These standards and measures are referred to as the 40 Recommendations, and they were most recently updated in October 2020.¹³⁵ The Recommendations provide a complete set of countermeasures against money-laundering and terrorist financing, covering:¹³⁶

- identification of risks and development of appropriate policies
- the criminal justice system and law enforcement
- the financial system and its regulation
- the transparency of legal persons and arrangements
- international cooperation

The table below outlines how the Recommendations are grouped and presented.¹³⁷

Group	Topic	Recommendations
I	AML/CFT policies and coordination <ul style="list-style-type: none"> • Assessing risks and applying a risk-based approach • National cooperation and coordination 	1–2
II	Money-laundering and confiscation <ul style="list-style-type: none"> • Money-laundering offences • Confiscation and provisional measures 	3–4

¹³⁴ The Wolfsberg Group is an association of 13 global banks that aims to develop financial services industry standards and guidance related to know your customer anti-money-laundering and counter-terrorist financing policies.

¹³⁵ Financial Action Task Force, 'The FATF Recommendations', <www.fatf-gafi.org/>.

¹³⁶ Association of Certified Anti-Money Laundering Specialists, *Study Guide*, 6th ed, 2019, p. 91.

¹³⁷ *Ibid.*, p. 92.

¹³³ Financial Action Task Force, 'What We Do', <www.fatf-gafi.org/>.



III	<p>Terrorist financing and financing of proliferation</p> <ul style="list-style-type: none"> • Terrorist financing offences • Targeted financial sanctions related to terrorism and terrorist financing • Targeted financial sanctions related to proliferation • Non-profit organizations 	5–8
IV	<p>Financial and non-financial institution preventative measures</p> <ul style="list-style-type: none"> • Financial institution secrecy laws • Customer due diligence and record-keeping • Additional measures for specific customers and activities • Reliance, controls and financial groups • Reporting of suspicious transactions • Designated non-financial businesses and professions 	9–23
V	<p>Transparency and beneficial ownership of legal persons and arrangements</p> <ul style="list-style-type: none"> • Transparency and beneficial ownership of legal persons • Transparency and beneficial ownership of legal arrangements 	24–25
VI	<p>Powers and responsibilities of competent authorities and other institutional measures</p> <ul style="list-style-type: none"> • Regulation and supervision • Operational and law enforcement • General requirements • Sanctions 	26–35
VII	<p>International cooperation</p> <ul style="list-style-type: none"> • International instruments • Mutual legal assistance • Mutual legal assistance regarding freezing and confiscation • Extradition • Other forms of international cooperation 	36–40

Anti-corruption and anti-bribery

Closely associated with AML/CFT efforts are those related to anti-corruption and anti-bribery. Anti-corruption and anti-bribery frameworks are facilitated by a series of both national and international legal instruments. Notable national instruments include the US Foreign Corrupt Practices Act and the UK’s Bribery Act, while at the international level the principal instrument is the United Nations Convention against Corruption (UNCAC). The UNCAC has been ratified by 186 states and calls for the participation of civil society and non-governmental organizations to assist in the promulgation of accountability processes. The UNCAC is complemented on a smaller scale by the OECD Convention on Combating Bribery of Foreign Public Officials in International Business Transactions.

Conclusion

This Technical Paper has presented an overview of the ways in which certain SDGs are reflected in other significant international governance processes, focusing on those of greatest prominence and attention: IHRL, economic growth and labour standards, gender, climate change, and peace, justice and strong institutions. In addition to being the most prominent, the SDGs covered in this paper are those in which BFTs have the most potential impact and where the evolution of BFTs is most relevant. The broad nature of the SDGs makes it conceivable for BFTs to be implicated in all of them in some form, but their impact is likely to be much more consequential on some goals more than others, such as SDG 14, Life below water. Similarly, given the cross-cutting nature of the SDGs, it is not surprising that there is no holistic or systemic governance framework that

captures them. The growing impact of BFTs and their ability to drive attainment of the SDGs, however, provides us with an opportunity to create appropriate governance frameworks that are infused with the right principles and values to ensure broad-based economic growth and development. Moreover, the delivery of services by a platform-based model and through user-interfaces on mobile technology is a unique prism through which to conceptualize appropriate approaches to regulation and governance.

As we consider how best to proceed with the development of appropriate international governance for financial actors and markets in the context of BFTs, it is worth noting that there is already considerable momentum in challenging existing orthodoxies as to who should be a regulator, how regulation should be developed and to whom it should be applicable. Consequently, there is room and an opportunity for international actors to begin with the outcomes that they would like to see, grounded in the SDGs, and then work backwards on how best to achieve those outcomes with the necessary governance frameworks. In so doing, less regard should be paid to formal (legal) status and more should be given to capacity and capability of actors to assist in creating and operating those frameworks. BFTs have the potential to contribute significant positive impact in the drive towards achieving the SDGs. Their ability to do so, however, is highly dependent on the establishment of appropriate governance frameworks that manage risks accordingly.

Annex 1:

Overview of ECB supervisory expectations for climate-related and environmental risks¹³⁸

1. Institutions are expected to understand the impact of climate-related and environmental risks on the business environment in which they operate, in the short, medium and long term, to be able to make informed strategic and business decisions.
2. When determining and implementing their business strategy, institutions are expected to integrate climate-related and environmental risks that impact their business environment in the short, medium or long term.
3. The management body is expected to consider climate-related and environmental risks when developing the institution's overall business strategy, business objectives and risk management framework, and to exercise effective oversight of climate-related and environmental risks.
4. Institutions are expected to explicitly include climate-related and environmental risks in their risk appetite framework.
5. Institutions are expected to assign responsibility for the management of climate-related and environmental risks within the organizational structure in accordance with the three lines of defence model.
6. For the purposes of internal reporting, institutions are expected to report aggregated risk data that reflect their exposures to climate-related and environmental risks with a view to enabling the management body and relevant subcommittees to make informed decisions.
7. Institutions are expected to incorporate climate-related and environmental risks as drivers of existing risk categories into their existing risk management framework, with a view to managing, monitoring and mitigating these over a sufficiently long-term horizon, and to review their arrangements on a regular basis. Institutions are expected to identify and quantify these risks within their overall process of ensuring capital adequacy.
8. In their credit risk management, institutions are expected to consider climate-related and environmental risks at all relevant stages of the credit-granting process and to monitor the risks in their portfolios.
9. Institutions are expected to consider how climate-related and environmental events could have an adverse impact on business continuity and the extent to which the nature of their activities could increase reputational and/or liability risks.
10. Institutions are expected to monitor, on an ongoing basis, the effect of climate-related and environmental factors on their current market risk positions and future investments, and to develop stress tests that incorporate climate-related and environmental risks.
11. Institutions with material climate-related and environmental risks are expected to evaluate the appropriateness of their stress testing with a view to incorporating them into their baseline and adverse scenarios.
12. Institutions are expected to assess whether material climate-related and environmental risks could cause net cash outflows or depletion of liquidity buffers and, if so, incorporate these factors into their liquidity risk management and liquidity buffer calibration.
13. For the purposes of their regulatory disclosures, institutions are expected, to publish meaningful information and key metrics on climate-related and environmental risks that they deem to be material, with due regard to the European Commission's Guidelines on non-financial reporting: Supplement on reporting climate-related information.

¹³⁸ European Central Bank, 'Guide on Climate-related and Environmental Risks: Supervisory Expectations relating to Risk Management and Disclosure', 2020, p. 4.

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About the UN Capital Development Fund

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