Financing Sustainable Value Creation

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Chapter 8: Financing sustainable value creation

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1 Introduction

European financial markets provide the credit and financing required for businesses and the public sector in the EU/EEA and beyond. Addressing the contribution of EU financial markets to unsustainable business practices is therefore vital to realizing the EU's commitments on sustainability, as expressed for instance in the European Green Deal from December 2019[1] and the subsequent European Green Deal Investment Plan.[2] Additionally, the EU has committed to implementing the United Nations Sustainable Development Goals (SDGs), including the decarbonising of its economy completely by 2050.[3]

Realising these objectives requires rapid and meaningful policy interventions, including the introduction of heightened monitoring and regulation of financial markets and their contribution to environmental degradation – and channelling investments into sustainable projects. The World Economic Forum estimates that $44 trillion of economic value creation – over half of gross world product in 2020 – is moderately or highly dependent on nature.[4] The recent UK Dasgupta Review of the Economics of Biodiversity[5] has highlighted the need for a fundamental shift in course in relation to mitigating damage to natural resources from the activities of the financial system. The risks of unsustainable business therefore have significant macroeconomic and societal implications, a point noted by the EU's High-Level Expert Group on Sustainable Finance in 2018, when it argued that:

> Natural capital has typically not been included in the past in standard economic production functions, largely because it was widely thought that it could be taken for granted. This is no longer the case. Even though it is critical for virtually all kinds of production, and most of the SDGs are either directly concerned with or strongly dependent on natural capital, natural capital continues to be degraded…It is essential to halt the destruction of natural capital and instead manage it within boundaries that maintain the resilience and stability of natural

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[1] European Commission, Communication from the Commission to the European Parliament, the European Council, the Council, the European Economic and Social Committee and the Committee of the Regions: The European Green Deal, 11.12.2019, COM(2019) 640 final.
[2] European Commission, Communication from the Commission to the European Parliament, the European Council, the Council, the European Economic and Social Committee and the Committee of the Regions: Sustainable Europe Investment Plan, European Green Deal Investment Plan, 14.1.2020, COM(2020) 21 final, https://ec.europa.eu/commission/presscorner/api/files/attachment/860462/Commission%20Communication%20on%20the%20European%20Green%20Deal%20Investment%20Plan_EN.pdf.pdf.
[3] European Commission, Reflection Paper: Towards a Sustainable Europe by 2030, 30.1.2019, COM(2019) 22 final.
[4] World Economic Forum, Nature Risk Rising: Why the Crisis Engulfing Nature Matters for Business and the Economy, January 2020 p.88, http://www3.weforum.org/docs/WEF_New_Nature_Economy_Report_2020.pdf.
[5] The Economics of Biodiversity: the Dasgupta Review (February 2021), https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/962785/The_Economics_of_Biodiversity_The_Dasgupta_Review_Full_Report.pdf.
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/962785/The_Economics_of_Biodiversity_The_Dasgupta_Review_Full_Report.pdf.

ecosystems, and allow for resources to renew… The externalities generated by the misuse of natural capital are dangerously high…[6]

The Commission's programme relies in general upon private markets to deliver change and applies tried-and-trusted mechanisms in order to assist in the scaling-up of sustainable finance markets and secure financial stability. Such mechanisms are designed to provide higher levels of information, standardisation, and transparency to private actors. The thinking goes that increasing information flows to investors and allowing them to compare products and instruments on a case-by-case basis will spur investment in these asset classes, in particular by large institutional investors who have complained in the past that green financial product markets, such as those for green bonds, have been too opaque and prone to 'greenwashing'. To this end, the EU has been proactive in facilitating the introduction of new financial products with 'green' credentials, taking a lead in developing such markets.

On the surface, much progress appears to have been made. The January 2020 European Green Deal Investment Plan (EGDIP), also referred to as Sustainable Europe Investment Plan (SEIP), [7] is the investment pillar of the December 2019 European Green Deal[8] and is designed to contribute to the emergence of new, clean energy and circular economy industries. Moreover, the EU's Sustainable Finance Initiative (SFI), launched in 2018 with the Commission Action Plan, promised to 'connect finance with the specific needs of the European and global economy to the benefit of the planet and our society'. [9] The EU has made progress regarding its adoption in principle of SFI to prevent 'greenwashing' of financial products, so that in future their merits can be reliably ascertained. Further, the development of consultative processes and an expert group speaks of a genuine commitment to deliver, which may be realized in the present EU Parliament and the Commission. A Taxonomy of sustainable activities, developed by the Commission and the EU technical expert group on sustainable finance (TEG) has recently been adopted,[10] in addition to the introduction of mandatory disclosure requirements of sustainability risk management by institutional investors,[11] and rules on how indices used as the basis for sustainable investment products are benchmarked.[12]

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[6] EU's High-Level Expert Group on Sustainable Finance, Financing a Sustainable European Economy, Final Report 2018 (2018) p.88.

[7] European Commission, Communication from the Commission to the European Parliament, the European Council, the Council, the European Economic and Social Committee and the Committee of the Regions: Sustainable Europe Investment Plan, European Green Deal Investment Plan, 14.1.2020, COM(2020) 21 final.

[8] European Commission, Communication from the Commission to the European Parliament, the European Council, the Council, the European Economic and Social Committee and the Committee of the Regions: The European Green Deal, 11.12.2019, COM/2019/640 final.

[9] European Commission, Communication from the Commission to the European Parliament, the European Council, the Council, the European Economic and Social Committee and the Committee of the Regions: Action Plan: Financing Sustainable Growth, COM/2018/097 final p2.

[10] Regulation (EU) 2020/852 of the European Parliament and of the Council of 18 June 2020 on the establishment of a framework to facilitate sustainable investment, and amending Regulation (EU) 2019/2088, PE/20/2020/INIT, OJ L 198, 22.6.2020, p. 13–43.

[11] Regulation (EU) 2019/2088 of the European Parliament and of the Council of 27 November 2019 on sustainability-related disclosures in the financial services sector, PE/87/2019/REV/1, OJ L 317, 9.12.2019, p. 1–16.

[12] Regulation (EU) 2016/1011 of the European Parliament and of the Council of 8 June 2016 on indices used as benchmarks in financial instruments and financial contracts or to measure the performance of investment funds and amending Directives 2008/48/EC and 2014/17/EU and Regulation (EU) No 596/2014, OJ L 171, 29.6.2016, p. 1–65, as amended by Regulation (EU) 2019/2089 of the European Parliament and of the Council of 27 November 2019 amending Regulation (EU) 2016/1011 as regards EU Climate Transition Benchmarks, EU

These are the three crucial pillars of the SFI, with a Commission planned EU Green Bond Standard and labels for green financial products.[13]

Moreover, in relation to the financing of unsustainable business activities, the EU has recognised the vital importance of integrating sustainable finance into the Capital markets union (CMU) framework.[14] Much regulatory attention in the sphere of finance has been captured by accelerating the contribution of capital markets to these developments. The post financial crisis environment has also provided fertile ground for challenging the model of central bankers as passive agents concerned only with price and financial stability. [15] If central banks are to assist in tackling the issue of sustainability, arguably there must be a more nuanced treatment of their role(s) and independence. Most notably, both the Bank of England,[16] De Nederlandsche Bank,[17] and the European Central Bank (ECB)[18] have argued recently that the role of central banks must be interpreted more broadly; specifically, to include climate and environmental risks into their respective financial system monitoring tools. Also, the UK government recently amended the Bank of England mandate to ensure its monetary policy operations are "environmentally sustainable and consistent with the transition to a net zero economy."[19]

Yet, patterns of investment in unsustainable projects – routinely funded by large EU banks – have not been addressed sufficiently by EU financial regulators, in spite of the introduction of the SFI. The SFI lacks a systematic integration of sustainability factors in the actions proposed, limiting focus on selected environmental issues, especially climate change. Research suggests that banks and other financial institutions continue to routinely fund unsustainable businesses and projects, in spite of commitments to act sustainably by financial institutions.[20] As an example of this, recent research

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Paris-aligned Benchmarks and sustainability-related disclosures for benchmarks, PE/90/2019/REV/1, OJ L 317, 9.12.2019, p. 17–27 and Regulation (EU) 2021/168 of the European Parliament and of the Council of 10 February 2021 amending Regulation (EU) 2016/1011 as regards the exemption of certain third-country spot foreign exchange benchmarks and the designation of replacements for certain benchmarks in cessation, and amending Regulation (EU) No 648/2012, OJ L 49, 12.2.2021, p. 6–17.

[13] European Commission, Ecofriendly investment - EU standard for 'green bonds', https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12447-EU-Standard-for-Green-Bond-.

[14] European Commission, Communication from the Commission to the European Parliament, the European Council, the Council, the European Economic and Social Committee and the Committee of the Regions: Sustainable Europe Investment Plan, European Green Deal Investment Plan, 14.1.2020, COM(2020) 21 final.

[14] European Commission, Communication from the Commission to the European Parliament, the European Council, the Council, the European Economic and Social Committee and the Committee of the Regions: A Capital Markets Union for people and businesses-new action plan, 24.9.2020, COM/2020/590 final.

[15] Ed Balls, James Howat and Anna Stansbury, 'Central Bank Independence Revisited: After the financial crisis, what should a model central bank look like?', Harvard-Kennedy School M-RCBG Associate Working Paper Series No. 67 (November 2016).

[16] Sarah Breeden, 'Avoiding the storm: Climate change and the financial system', Speech at the Official Monetary & Financial Institutions Forum, London, 15 April 2019.

[17] Frank Elderson, 'Climate crisis requires urgent action by financial sector and financial supervisors', Opening statement Frank Elderson at the Banco de España Climate Change Conference Madrid, 11 December 2019, De Nederlandsche Bank, https://www.dnb.nl/binaries/Cc_tcm46-386494.pdf.

[18] European Parliament, New ECB boss quizzed for the first time by Economic Affairs Committee, available at: https://www.europarl.europa.eu/news/en/press-room/20191202IPR67811/new-ecb-boss-quizzed-for-the-first-time-by-economic-affairs-committee.

[19] Bank of England, MPC Remit statement and letter and FPC Remit letter (London: Bank of England, 2021), https://www.bankofengland.co.uk/news/2021/march/mpc-remit-statement-and-letter-and-fpc-remit-letter

[20] Dirty Banking: Probing the Gap in Sustainable Finance Michael A. Urban * and Dariusz Wójcik Sustainability 2019, 11, 1745;

reveals that, despite the commitments made by nations in the 2015 Paris Climate Accord, since that deal the world's biggest 60 banks have provided $3.8tn of financing for fossil fuel companies.[21]

What we argue in this chapter therefore is for a fundamental recalibration of what is required of financial system participants in preventing the funding of activities which cause damage to the environment and thereby to necessary premises for securing a social foundation of humanity. Our focus in the analysis is at the EU level but the principles we discuss may be applied to almost any jurisdiction. Financial regulators and central banks must evaluate such potential for damage and assess the systemic extent of financial risks. The main weaknesses of current approaches are (i) a reliance on the existing incentive structures for private actors in financial markets which prioritise information disclosure as a regulatory technique; (ii) the reticence of the EU to reform its regulatory structures and policies with regard to financial markets; and (iii) a continued adherence to the principle of market neutrality in relation to both monetary policy and bank regulation. Further factors hindering development in this field are the EU's financial structure and budget rules, which prevent sustained deficit spending absent extraordinary circumstances, although discussion of this is beyond the scope of this chapter.[22] This makes it difficult for states to commit funds to financing the sustainable investments needed to address climate change and other challenges threatening planetary boundaries and the foundations for social order.

The chapter proceeds as follows. In the next section we discuss some of the legislative and regulatory initiatives to emerge at the EU level in the field of disclosure and sustainable finance, before discussion why such measures are likely to be limited in impact. In section 3, we consider ways in which policies can be introduced in the context of financial regulation; in particular to mobilise financial resources to reduce the potential for investment in unsustainable activities. Section 4 concludes. Throughout, we make recommendations for reform.

2 Information Disclosure in the context of sustainability

2.1 *The Disclosure Regulation and Taxonomy Regulation*

The Disclosure Regulation, which came into force in March 2021, requires manufacturers of financial products, financial market participants and financial advisers to make disclosures with regard to their approach to sustainable investment. They must also disclose whether they consider negative externalities on environment and social justice of their investment decisions or advice and, if so, how this is reflected at the product level.[23] In particular, fund managers must disclose the manner in which sustainability risks are integrated into investment decisions and the results of the assessment of the likely impacts of sustainability risks on the returns of the relevant funds, or if not deemed relevant, the reasons why. Where relevant, advisory processes and transparency as regards financial products which target sustainable investments, must also be disclosed. The expectation is that by requiring the disclosure of standardised information by market participants concerning

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[21] BankTrack, Banking on Climate Chaos: Fossil Fuel Finance Report Card 2021, https://www.banktrack.org/article/new_report_world_s_60_largest_banks_have_poured_3_8_trillion_into_fossil_fuels_since_paris_agreement_climate_groups_sound_alarm_as_financing_for_fossil_fuel_expansion_continues_to_rise.

[22] Cross-ref Johnston chapter

[23] Regulation (EU) 2019/2088 of the European Parliament and of the Council of 27 November 2019 on sustainability-related disclosures in the financial services sector (Text with EEA relevance), PE/87/2019/REV/1, OJ L 317, 9.12.2019, p. 1–16.

sustainability, investors will discriminate in favour of sustainable investments where appropriate, thereby increasing capital flows to more sustainable products.

Working in tandem with the Disclosure Regulation, the EU Taxonomy, based on the Taxonomy Regulation,[24] is a tool to help investors and companies identify environmentally friendly, and in future, socially friendly economic activities. Article 1 of the Taxonomy Regulation establishes the criteria for determining the degree of environmental sustainability of an investment. To this end, the Commission will review the so called Non-financial Reporting Directive, Article 19a of the Accounting Directive[25] to determine how companies ought to report their compliance with the provisions of the Taxonomy Regulation. As the first step for a new European corporate sustainability reporting regime, the European Financial Reporting Advisory Group (EFRAG) has prepared in March 2021 a roadmap for the development of a comprehensive set of EU sustainability reporting standards, necessary to meet the political ambition and urgent timetable of the European Green Deal. They are also necessary to ensure consistency of reporting rules in Disclosure Regulation, Accounting Directive and Taxonomy Regulation.[26] A comprehensive reporting framework is also necessary for the requirements of the in Spring 2021 forthcoming legislation on sustainable corporate governance and due diligence.[27] Additionally, to ensure appropriate management of environmental risks and mitigation opportunities, and reduce related transaction costs, the Commission will also support businesses and other stakeholders in 'developing standardised natural capital accounting practices within the EU and internationally'.[28]

The Taxonomy Regulation was originally designed to expand climate change mitigating economic activities and to improve the environmental performance of securities and bond issuers. The scope shall however be enlarged by the end of 2021. [29] The Commission will also explore how the Taxonomy can be used in the context of the European Green Deal by the public sector. [30]

For an action to meet the definition of an 'environmentally sustainable economic activity' (Article 2) and thus be considered Taxonomy-eligible, it must:

1. Contribute substantially to one or more of the environmental objectives;

[24] Regulation (EU) 2020/852 of the European Parliament and of the Council of 18 June 2020 on the establishment of a framework to facilitate sustainable investment, and amending Regulation (EU) 2019/2088 OJ L 198, 22.6.2020, p. 13–43.

[25] Directive 2013/34/EU of the European Parliament and of the Council of 26 June 2013 on the annual financial statements, consolidated financial statements and related reports of certain types of undertakings, amending Directive 2006/43/EC of the European Parliament and of the Council and repealing Council Directives 78/660/EEC and 83/349/EEC, as amended by Directive 2014/95/EU of the European Parliament and of the Council of 22 October 2014 amending Directive 2013/34/EU as regards disclosure of non-financial and diversity information by certain large undertakings and groups, OJ L 330, 15.11.2014, p. 1–9.

[26] European Commission, Reports on development of EU sustainability reporting standards, https://ec.europa.eu/info/publications/210308-efrag-reports_en.

[27] European Commission, Sustainable corporate governance, https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12548-Sustainable-corporate-governance.

[28] European Commission, Communication from the Commission to the European Parliament, the European Council, the Council, the European Economic and Social Committee and the Committee of the Regions: The European Green Deal, Brussels, 11.12.2019 COM(2019) 640 p.17.

[29] See EU Technical Expert Group on Sustainable Finance: Final Report of the Technical Expert Group on Sustainable Finance, March 2020 (TEG), p.51.

[30] European Commission, The European Green Deal Investment Plan and Just Transition Mechanism explained, 14 January 2020, https://ec.europa.eu/info/publications/200114-european-green-deal-investment-plan_en.

2. Do no significant harm to any other environmental objective (DNSH);
3. Comply with minimum social safeguards (under the draft regulation, these are defined as ILO core labour conventions[31]); and
4. Comply with the technical screening criteria being developed.

The technical criteria for these additional activities are being developed by the EU Technical Expert Group on Sustainable Finance (TEG).[32] According to the Regulation the criteria should take into account the life cycle of the products and services provided by that economic activity, including evidence from existing life cycle assessments, notably by considering their production, use and end-of-life, in addition to the environmental impacts of the economic activity itself.[33]

In their analysis, the TEG focused mainly on bond and equity markets but investments in private equity, real estate funds and private-securitised loans could also be subject to the regulation if the resulting funds are marketed as 'green'. Under the Taxonomy Regulation, financial market participants, when offering financial products as environmentally sustainable investments, or as investments having similar characteristics, will be required to disclose how the product in question meets certain sustainability criteria.[34] The Taxonomy will also form as said the basis of a European green bond standard being developed in Spring 2021.[35] According to the present plans, to qualify as a green bond, 100% of the bond will need to be Taxonomy-aligned. This is designed to provide more granular information to would-be investors and to limit the potential for 'greenwashing' of particular investment products.

2.2 *Disclosure of Environmental and Social Risks by financial institutions*

At present, sustainability assessments are often routinely conducted by banks and other financial institutions where any potential issues are identified during the due diligence stages of granting loans or engaging in project finance. Such internal due diligence processes are designed to evaluate the financial risks and opportunities of the investment; the compliance risk of the investment; and the reputational risk of the investment. [36] Moreover, in the EU there are requirements under prudential supervision which require banks to assess risks in their credit decision-making processes. In tandem, there are industry-generated guidelines for financial institutions to consider in their financing programmes. We now briefly consider them.

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[31] See https://www.ilo.org/global/standards/lang--en/index.htm
[32] HLEG, Final Report.
[33] Preamble 11 of Taxonomy Regulation.
[34] Article 4(2) of Taxonomy Regulation.
[35] European Commission, Communication from the Commission to the European Parliament, the European Council, the Council, the European Economic and Social Committee and the Committee of the Regions: Sustainable Europe Investment Plan, European Green Deal Investment Plan, 14.1.2020, COM(2020) p.21; European Commission, Ecofriendly investment - EU standard for 'green bonds', https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12447-EU-Standard-for-Green-Bond-.
[36] W. Warmerdam and J.W. van Gelder, 'EU-regulatory reform concerning EU investments in non-EU agribusiness', Report produced by Profundo for FERN, Friends of the Earth Europe and Global Witness, November 2017.

2.2.1 The Capital Requirements Regulation

The third pillar (Disclosure and Market Discipline) under the Capital Requirements Regulation (CRR)[37], which regulates EU banks' capital and liquidity positions, has arguably received most recent attention in the literature on financial markets concerning environmentally-related systemic risks. Pillar 3 concerns the development of a set of disclosure requirements which allow investors and other market participants to view and assess relevant information about bank's balance sheets and business models, including information on investments, capital and forward-looking risks, particularly those of a systemic character. In the EU, the European Banking Authority (EBA) has been mandated by the recent reform to the CRR to require large financial institutions with publicly listed issuances to disclose information on environmental, social and governance (ESG) risks, physical risks and transition risks as defined in the report referred to in Article 98 of the CRD.[38] In this context, Article 434a of the CRR includes a mandate to the EBA according to which the EBA shall develop a technical standard implementing the disclosure requirements on ESG risks.[39]

2.2.2 The FSB Taskforce on Climate-Related Disclosures

In this vein, banks and securities firms (as well as insurers) are also encouraged to develop and use a comprehensive sustainability disclosure framework developed by the Financial Stability Board (FSB) created under the auspices of the FSB Task Force on Climate-related Disclosures (TFCD).[40] This framework 'develop[s] voluntary, consistent climate-related financial disclosures that would be useful to investors, lenders, and insurance underwriters in understanding material risks.'[41] The TCFD framework addresses two key categories of risk stemming from climate change and environmental damage: (i) transition risk; and (ii) physical impacts of climate change. This is founded on the recognition that climate impacts will exert stress on both the income streams and balance sheets companies, as losses mount and assets are revalued.

The TCFD recommends that all organisations with public debt or equity implement its recommendations and report in their annual filings on compliance, in order that investors, creditors and the public are as informed as possible regarding the climate risks involved in each business.[42] Importantly, the TCFD also contains specific recommendations for disclosure by banks and other financial institutions, to supplement the guidance proposed for all sectors. The FSB notes that financial sector disclosures would assist investors and regulators in at least two key ways:

(i) 'foster an early assessment of [climate-related] risks [to] facilitate market discipline'; and

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[37] Regulation (EU) No 575/2013 of the European Parliament and of the Council of 26 June 2013 on prudential requirements for credit institutions and investment firms and amending Regulation (EU) No 648/2012: [2013] OJ L176/1 (CRD).
[38] CRD ref
[39] European Banking Authority, Draft Implementing Standards on prudential disclosures on ESG risks in accordance with Article 449a CRR, Consultation Paper EBA/CP/2021/06.
[40] Task Force on Climate-Related Disclosures, Final Report: Recommendations of the Task Force on Climate-related Financial Disclosures, June 2017 (TCFD).
[41] See TCFD, p.iii.
[42] TCFD p.17

(ii) 'provide a source of data that can be analyzed at a systemic level, to facilitate authorities' assessments of the materiality of any risks posed by climate change to the financial sector, and the channels through which this is most likely to be transmitted.'[43]

Because banks are exposed to climate-related ESG risk and opportunities via their lending activities and own operations, the FSB recognises the importance of these institutions to dampening the financing of high-ESG-risk projects. In particular, exposures to large fossil-fuel producers, or carbon-intensive manufacturers, might 'present risks that merit disclosure or discussion in a bank's financial filings.'[44] Banks should also provide the amount and percentage of carbon-related assets relative to total assets as well as the amount of lending and other financing connected with climate-related opportunities.' The TCFD has also recently updated its scenario analysis to account for potential stressors on the financial system in the event of climate-related losses.[45]

The TCFD disclosure requirements are certainly consistent with the disclosure and market discipline considerations espoused under Pillar 3 of the CRR. The requirements under the FSB Disclosure Framework in Pillar 3 would provide a lever to enhance disclosure in these areas to support enhanced information collection and disclosure.[46] The risks disclosed by these institutions could thereby be evaluated by investors and regulators to determine the banking system's contribution to financing of high-ESG-risk activities.

2.2.3 Other Guidelines on Sustainable Banking

In addition to the limited sustainability criteria included in Pillar 2 and Pillar 3 and the TCFD, there are other guidelines for banks and financial institutions to follow in relation to sustainable investment. These guidelines include:

a. the Equator Principles (the IFC's Performance Standards on Environmental and Social Sustainability) (EPs), arguably the globally recognized good practice in dealing with environmental and social risk management;[47]
b. Guidelines issued by the United Nations Principles for Responsible Banking.[48] This is an initiative of the United Nations Environment Program Finance Initiative (UNEP FI) in collaboration with the banking sector; and
c. The OECD Guidelines for Multinational Enterprises, together with compliance guidance aimed specifically at financial institutions.[49]

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[43] Id.
[44] Task Force on Climate-Related Disclosures, Implementing the Recommendations of the Task Force on Climate-related Financial Disclosures, June 2017, Annex, 23.
[45] Climate Financial Risk Forum, Climate Financial Risk Forum Guide 2020: Scenario Analysis Chapter, June 2020.
[46] In some countries such as France, all potential ESG risk exposures as they relate to financial performance and soundness must be publicly disclosed by listed companies and financial institutions. See Conseil d'Etat Decree, Regulation, Article 225.
[47] See https://equator-principles.com.
[48] See https://www.unepfi.org/banking/bankingprinciples/. The Principles aim to ensure the banking industry is aligned with the UN Sustainable Development Goals (SDGs) and the Paris Climate Agreement.
[49] See https://www.oecd.org/corporate/mne/.

The principles espoused by the various groups overlap considerably and place considerable emphasis on similar considerations.

The European Disclosure Regulation requires the integration of sustainability risks in financial market participants' investment decision-making processes, many of those requirements remain non-binding in relation to ensuring that the sustainability credentials of investments and compliance with sustainability principles are assured. Specific requirements include pre-contractual disclosures, disclosures on websites, and disclosures in periodic reports in relation to financial products.[50] The Regulation suggests that financial market participants and financial advisers should consider the due diligence guidance for responsible business conduct developed by the Organisation for Economic Co-operation and Development (OECD)[51] and/or the United Nations-supported Principles for Responsible Investment (PRI).[52] For reasons of space, in the brief analysis that follows we concentrate only on the OECD Guidelines, which are are designed to work explicitly to promote the SDGs.[53]

The OECD's Guidelines for Multinational Enterprises, together with compliance guidance aimed specifically at financial institutions,[54] outline the recommended steps in the due diligence process and may be summarised as:

(i) Embed Responsible Business Conduct (RBC) into policies and management systems;
(ii) Identify actual and potential adverse RBC impacts;
(iii) The cessation, prevention, and mitigation of such impacts;
(iv) Track implementation and results;
(v) Communicate how impacts are addressed; and
(vi) Provide for or cooperate in remediation when appropriate.

The Guidelines are comprehensive and extend to the entire lifecycle of projects, including recommendations on post-completion due diligence. At present, banks will be under an obligation under EU law to incorporate due diligence guidelines into their risk management frameworks, following the passage of the Disclosure Regulation in 2019. The Regulation imposes transparency rules for financial institutions on the integration of sustainability risks and impacts in their processes and financial products, including reporting on adherence to internationally recognised standards for due diligence. It seeks to harmonise existing provisions on disclosures to investors in relation to sustainability-related disclosures by imposing requirements on so-called financial market participants (for example AIFMs and UCIT management companies and investment firms carrying out portfolio management) and financial advisers (firms authorised under MiFID to give investment advice and credit institutions) in relation to financial products (for example AIFs, UCITS).

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[50] Add Reference

[51] Organisation for Economic Co-operation and Development, OECD Due Diligence Guidance for Responsible Business Conduct (OECD 2018).

[52] See https://www.unpri.org/

[53] Organisation for Economic Co-operation and Development, Responsible Business Conduct and the Sustainable Development Goals, https://mneguidelines.oecd.org/RBC-and-the-sustainable-development-goals.pdf.

[54] Organisation for Economic Co-operation and Development, Due Diligence for Responsible Corporate Lending and Securities Underwriting: Key considerations for banks implementing the OECD Guidelines for Multinational Enterprises (OECD 2019).

2.3 *Mandatory due diligence for Sustainability Risks*

All these initiatives are not only more or less voluntary but also limited to climate change, ignoring a comprehensive approach to financial risks rising from environmental and social unsustainable activities. Instead, regulation should be more comprehensive and science-based[55].

Although laudable for contributing to awareness-raising of the significance of climate change for business and finance, OECD and other sustainability-based guidelines have short-comings when analysed from a holistic sustainability perspective. Such guidelines suffer from several major limitations limited their efficiency in risk management, the most serious of which are:

(i) the guidelines are not mandatory, with a system of self-assessment and reporting acting as the principal mechanisms for compliance assessment. There is therefore usually no recourse in law for aggrieved parties unless local legal provisions have been breached specifically by the institution concerned;
(ii) the guidelines that are used vary considerably between institutions, in both coverage and depth and the resulting patchwork of guidelines reduces comparability and standardization; and
(iii) the due diligence guidelines on sustainability are often proprietary and not disclosed to external parties. Moreover, even where sustainability risk management exists, it does not penetrate core internal processes.[56]

Instead, we contend that by making compliance with sustainability principles mandatory, some of the potential damage which arises from transgression of certain planetary boundaries and risk(s) to social stability would be internalised.

As the recommendations contained in these guidelines are not legally enforceable, any punishment or sanction for failure to comply with the relevant guidelines currently comes from the market. Yet, past experience demonstrates that market pressure is insufficient in multiple dimensions to alleviate financial institutions' proclivity to funding unsustainable activities. The lack of an effective enforcement mechanism, coupled with difficulties in litigating against large, complex multinational enterprises, mean that many financial institutions and other corporations do not incorporate sustainability risks into their strategic decision-making.[57]

As noted earlier, despite the commitments made by nations in the 2015 Paris Climate Accord, recent research reveals that since that deal the world's biggest 60 banks have provided $3.8tn of financing for fossil fuel companies.[58] Research suggests that financial institution behaviour is largely

[55] Beate Sjåfjell, 'The Financial Risks of Unsustainability: A Research Agenda' (June 29, 2020). University of Oslo Faculty of Law Research Paper No. 2020-18, Nordic & European Company Law Working Paper No. 21-05, available at SSRN: https://ssrn.com/abstract=3637969.

[56] Theodosios Anagnostopoulos, Antonis Skouloudis, Nadeem Khan and Konstantinos Evangelinos, 'Incorporating Sustainability Considerations into Lending Decisions and the Management of Bad Loans: Evidence from Greece' (2018) 10(12) *Sustainability*, 4728.

[57] Beate Sjåfjell, Jukka Mähönen, Tonia Novitz, Clair Gammage, Hannah Ahlstrom, Securing the Future of European Business: SMART Reform Proposals (March 2020), University of Oslo Faculty of Law Research Paper No. 2020-11, Nordic & European Company Law Working Paper No. 20-08, available at SSRN: https://ssrn.com/abstract=3595048.

[58] BankTrack, Banking on Climate Chaos: Fossil Fuel Finance Report Card 2021.

unchanged by compliance with relevant sustainability guidelines.[59] For example, in the case of the Equator Principles, research suggests that they are mainly adopted because of reputational benefits and risk management and that they do not create significant changes in project financing institutions.[60]

Financial institutions would be under a positive compliance obligation to demonstrate, where required, how they have mitigated or prevented particular ESG and sustainability risks from materialising in particular projects. A proper sustainability assessment is in the interest of the financial institution itself: if it could be determined that a financial institution, after having conducted a sustainability assessment, funded or continued to fund activities with high-ESG risks, this would provide a much greater degree of certainty in legal proceedings concerning the relevant standard for compliance and attendant liability. If a sustainability due diligence has not been carried out in accordance with the proposed EU law and harm has occurred, there should be a presumption of liability for the undertaking and its board members. This ought to apply to any commercial loans, commercial credit facilities (other than overdrafts), syndicated loans, or project finance agreements worth are subject to a mandatory due diligence assessment before they are agreed.[61] There ought to be a presumption that these requirements are applicable to all such loans, credit facilities or project finance agreement(s); however, the financial institution may rebut this presumption for certain categories of project; namely, those projects deemed as projects covered by the existing Taxonomy. The relevant financial institution's credit committee should be required to make a recommendation to the board of directors based upon the due diligence assessment.

Conversely, if due diligence has been carried out and assured by external experts as proposed as a duty, this may serve as a defence for the undertaking and its board. This will increase the legal certainty for European business, while providing better access to justice for affected workers and communities. The introduction of a mandatory sustainability due diligence process would allow investors and other interested parties to apply specific standards to the lending and credit decisions of financial institutions. Such a standard would also provide a benchmark for any litigation relating to the role of a financial institution, or group of financial institutions, in financing activities which are damaging from ESG perspectives. Such litigation actions are, at present, often based upon voluntary filings made by corporations relating to their ESG practices.[62]

3 Mobilising the Financial System to Secure Sustainability

3.1 *Capital Market Finance and the Banking System*

[59] Steven Heim, 'Why banks need to plug gaps in the Equator Principles to prevent community conflict', *Reuters Events*, 10 September 2019 at http://www.ethicalcorp.com/why-banks-need-plug-gaps-equator-principles-prevent-community-conflict .

[60] UNEP Inquiry and Centre for International Governance Innovation, The Equator Principles: Do They Make Banks More Sustainable? February 2016; Claudia Volk, 'ESG Trends in the Banking Sector', PRI & SSF Networking Lunch on Sustainable Investment, Zurich, 25 November 2014 (Sustainalytics 2014).

[61] Reference SMART paper

[62] David Woodcock, Amisha S. Kotte and Jonathan D. Guynn, 'Managing Legal Risks from ESG Disclosures', Harvard Law School Forum on Corporate Governance, 12 August 2019, https://corpgov.law.harvard.edu/2019/08/12/managing-legal-risks-from-esg-disclosures/

A fundamental factor underpinning the EU's Capital markets union (CMU) project is facilitating growth to 'strengthen Europe's economy and stimulate investment to create jobs'.[63] making the EU economy more competitive. Whilst other jurisdictions such as the United States, China, and Japan have developed deep capital markets, investment beyond the banking system within the EU—with the exception of France—remains relatively underdeveloped.[64] The EU, for example in relation to the United States, lags behind in terms of financial development and financial depth; in spite of the EU economy being similar in size to the US economy, its equity markets are only half the size, and its debt markets less than a third of the size, of equivalent US markets.

In turn, any reforms to EU capital markets and the launch of market-based finance initiatives to promote sustainable finance—for example, via the CMU—are likely to be more limited in impact. Indicatively, domestic bank credit in the euro area in 2012 amounted to 255 percent of GDP, compared to around 90 percent in the US.[65] Because banks are by far the largest source of financial capital in the EU, the effects of their lending policies are magnified. Special lessons therefore apply to the EU because of its financial structure.

3.2 Central bank policies

Central bank policy stances and the regulation of banking systems can influence the costs of financing for all manner of projects, notwithstanding the primary source of credit. So, for example, central bank policies will exert pressure on yields and interest rates across multiple financial product lines, no matter whether such credit originates from the banking system or not. For this reason, we argue that focusing on central bank policies and bank regulation – rather than on private capital markets – is likely to be much more effective in realizing a future in which sustainable activities may access funding more easily, and unsustainable activities are less profitable.

With regard to the ECB, in common with most central banks in the world, it is primarily charged with maintaining price stability (ie. inflation targeting)[66] consistent with Article 3(3) of the Treaty on the Functioning of the European Union (TFEU), which aims for 'the *sustainable development of Europe based on balanced economic growth … and a high level of protection and improvement of the quality of the environment.*' Moreover, Article 11 TFEU provides that ' *[e]nvironmental protection requirements must be integrated into the definition and implementation of the Union's policies and activities, in particular with a view to promoting sustainable development.*'[67]

Sustainability considerations are material factors in determining both economic growth and improving the social market economy and the quality of the environment. As noted by Dirk Schoenmaker, this leaves room for 'the greening' of monetary policy.[68] In other words, the ECB may

[63] European Commission, Questions and Answers on the Mid-Term Review of the Capital Markets Union Action Plan, Brussels, 8 June 2017, http://europa.eu/rapid/press-release_MEMO-17-1528_en.htm.
[64] Miguel Ferreira, Diogo Mendes and Joana C. Pereira 'Non-Bank Financing of European Non-Financial Firms' (European Federation of Financial Analysts Societies, July 2016).
[65] See European Central Bank, *Report on Financial Structures* (ECB, October 2013).
[66] Article 127 TFEU.
[67] Article 127 TFEU.
[68] Dirk Schoenmaker, Greening EU Monetary Policy, Bruegel Working Paper, Issue 2, 19 February 2019, https://www.bruegel.org/wp-content/uploads/2019/02/Greening-monetary-policy.pdf

use its mandate to support the financing of sustainable investments, where this does not conflict with its primary objective of maintaining price stability.

3.3 *Amending the ECB collateral framework to reflect sustainability risks*

Supporting the financing of sustainable investments could be operationalised by the ECB through incorporating risks to sustainability into its strategy and operations via the use of monetary policy, which is one of the central bank's most potent tools. The ECB is empowered under the ECB Statute[69] to provide funding for commercial banks where required. In doing so, it requires the borrowing bank to post collateral – marketable securities – in exchange for central bank reserves. There are two channels through which tilting the ECB's monetary policy portfolio could operate: through collateral asset eligibility, and via the margins charged on collateral when accepted in exchange for reserves.

3.3.1 Collateral eligibility

The collateral framework determines the eligibility of financial assets for these facilities, making them extremely potent tools in determining liquidity and portfolio selection at commercial banks. The ECB currently includes corporate bonds with high credit ratings in its monetary policy programmes.[70] Assets which are eligible for central bank refinancing operations become more attractive for the commercial banking system to hold, which increases demand for them; there is evidence of a disproportionate jump in the price of eligible assets after the introduction of these corporate bond purchase programmes.[71] This has two main consequences: first, the assets become more liquid because financial institutions and investors are more likely to purchase them; and second, it reduces the cost of financing, lowering the yield that originators must offer to fund those assets. In turn, eligible assets become more attractive to investors. Accepting assets as collateral which are sustainable will be a central part of this process. Importantly, the effects of such a reform would be reflexive, in that this will not only make it cheaper to finance sustainable projects, but presumably sustainable assets will also grow as a proportion of the financial asset universe. These reforms would also be justifiable also on the basis that at present, research indicates that the ECB's collateral portfolio held via monetary policy and other programmes, is tilted away from sustainable investment. The ECB's collateral framework is supposed to reflect – to the extent it is possible – the market portfolio, yet conventional asset purchase operations have tended to favour high-carbon assets for investment purposes.[72]

The design and implementation of this would naturally require detailed analysis of the potential size of the market for the purchase of such bonds, as well as an assessment of what constitutes a sustainable asset. Transparency concerning the composition of such purchases would be needed,

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[69] See Article 18 of Protocol (No 4) on the Statute of the European System of Central Banks and of the ECB, OJ C 326, 26.10.2012, p.230.

[70] This is known as the Corporate Sector Purchase Programme (CSPP).

[71] Roberto A. De Santis, André Geis, Aiste and Lia Vaz Cruz, 'The impact of the corporate sector purchase programme on corporate bond markets and the financing of euro area non-financial corporations', *ECB Economic Bulletin*, Issue 3 / 2018.

[72] Jay Cullen, '"Economically inefficient and legally untenable": constitutional limitations on the introduction of central bank digital currencies in the EU', *Journal of Banking Regulation*, (forthcoming 2021).

but there are strong motivations for expanding the current collateral framework to encompass certain ESG-friendly assets, which would allow central banks to revise their purchasing strategy to account for sustainability risks and financial stability implications. Such a reform would therefore dovetail with the Taxonomy, which would provide high-level guidance for the inclusion of certain collateral assets in the collateral framework on more favourable terms than they currently enjoy.

There have been parallel initiatives developed by other central banks, most notably the People's Bank of China (PBoC), which includes 'green' bonds in its collateral frameworks and gives lending priority to banks holding 'green' bonds. The PBoC accepts lower-rated 'green' bonds for its Medium-Term Lending Facility, through which banks are able to exchange collateral assets for central bank liquidity.[73]

3.3.2 Collateral haircuts

Moreover, the collateral posted in these liquidity operations has a higher market value than the reserves it is being used to secure; the difference in value is known as the 'haircut'. For example, where. A financial institution pledges collateral with a market value of one million euro, and the haircut assigned to the asset is 20%, the financial institution will receive 800,000 euro in cash. The function of this overcollateralization is to guard against sudden falls in asset values if the repo counterparty has to liquidate its position. These haircuts are applied to collateral on a differential basis: the riskier the asset pledged as collateral, the larger the haircut demanded. There is strong evidence that the parameters applied to assets in collateral frameworks reduce bond yields, reduce interest rates on loans underpinning the relevant assets, and increase credit availability in the asset class concerned.[74]

The Eurozone collateral framework is governed generally by the ECB Treaty but there are specific guidelines in place on the haircuts applied to eligible collateral.[75] The haircuts applied are then a function of the assets' features. Currently, the ECB's framework does not discriminate between collateral assets, irrespective of the environmental impact of the activities that the relevant assets are financing. This provides no disincentives for lending for unsustainable purposes, and the ECB risks capital allocation contributing to activities which damage the environment, contribute to climate change and other sustainability related problems. Collateral policy, in turn, will influence the asset portfolio choices of private commercial banks, and other central bank counterparties. Banks prefer to hold assets which are more favourably treated for liquidity and refinancing purposes, which will itself encourage more bank-financed loans and green bond issuance by the private sector.[76]

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[73] Sustainable Banking Network (SBN), 'Creating Green Bond Markets – Insights, Innovations, and Tools from Emerging Markets', October 2018.

[74] C. Cahn, A. Duquerroy and W. Mullins, W.,'Unconventional monetary policy and bank lending relationships', Banque de France Working Paper 659; Jean-Stéphane Mésonnier, Charles O'Donnell and Olivier Toutain, 'The interest of being eligible', Banque de France Working Paper 636.

[75] European Central Bank, Guideline (EU) 2016/65 of the European Central Bank of 18 November 2015 on the valuation haircuts applied in the implementation of the Eurosystem monetary policy framework (ECB/2015/35).

[76] See Barbara Kuepper, Tim Steinweg and Gabriel Thoumi, 'Sustainable Banking Initiatives: Regulators' Role in Halting Deforestation', *Chain Reaction Research*, July 2017, 3.

The effectiveness of the programme increases relative to the responsiveness of sustainable investment to changes in bond yields.[77] This suggests that if a central bank credibly commits to supporting sustainable lending, the benefits of such programmes are much amplified. The effectiveness of the programme is higher the higher is the responsiveness of sustainable investment to changes in bond yields. In Schoenmaker's model, investment volumes in non-sustainable covered bonds fall by up to 4 percent, and up to 10 percent in non-sustainable asset-backed securities, with credit spreads increasing for these asset classes by 1.75bp and 3.5bp respectively.[78]

Such unsustainable assets could have haircuts applied which are punitive or be excluded altogether from the ECB's eligible collateral for monetary policy. At present, the ECB's collateral framework and haircut regime are supportive of unsustainable sectors,[79] a practice that needs to discontinue over the upcoming years by disincentivising measures. The ECB's collateral framework criteria are based on current credit rating agency analytics, but there are alternative credit scoring approaches which incorporate risks attached to unsustainable assets; for example, the metrics used by Carbon Analytics which incorporate transition risk found that eight issuers would fall out of the ECB's investment grade criteria and hence no longer be eligible for its monetary policy programmes, representing almost 5% of the issuers analysed.[80]

Enlargement of the Taxonomy to other assets as planned by the TEG would assist central banks in this matter, allowing the ECB to either exclude assets from particular bank refinancing programmes, or to adjust haircuts on unsustainable assets upwards where appropriate, and depending upon their sustainability characteristics. Any adjustment of the haircuts must be dynamic and allow the ECB some time period to identify any potential externalities and minimise transition risk.

3.4 Bank Regulation

In the absence of a shift away from a 'business-as-usual' approach, there are policy levers available to European regulators which could be used to influence the flow of credit to ventures which qualify as unsustainable. A proportionate principles-based response to such lending, in line with the parameters set out by the Commission, would be to reprice the funding of such activities to reflect externalities created.[81] In particular these levers coalesce around the capital requirements relevant to specific asset classes, which may be used to modulate the costs of credit provision, dependent on the requirement applied.

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[77] Yannis Dafermos, Maria Nikolaidi and Giorgos Galanis, 'Climate change, financial stability and monetary policy' Post Keynesian Economics Study Group Working Paper 1712 (PKSG, September 2017) http://www.postkeynesian.net/downloads/working-papers/PKWP1712.pdf.

[78] Schoenmaker, Greening EU Monetary Policy, p.17.

[79] Yannis Dafermos, Daniela Gabor, Maria Nikolaidi, Adam Pawloff and Frank van Lerven, 'Greening The Eurosystem Collateral Framework: How To Decarbonise ECB's Monetary Policy', New Economics Foundation (March 2021)

[80] Pierre Monnin, 'Integrating climate risks into credit risk assessment – Current methodologies and the case of central banks corporate bond purchases', Council on Economic Policies, Discussion Note 2018/4 (2018b).

[81] Jay Cullen, 'After HLEG: EU Banks, Climate Change Abatement and the Precautionary Principle' (2018) 20 *Cambridge Yearbook of European Legal Studies*, 61-87.

Such capital requirements are already set for all EU credit institutions at the European level under the CRR.[82] The EU recently signalled that approaches to mitigating climate risk under the CRD may be considered. Preparatory work in this field is being undertaken into the feasibility of lowering capital requirements against certain 'green assets',[83] which, it is claimed, are excessively high under the current asset risk-weighting regime.[84]

On this basis, the new CRR (CRR2) includes a new mandate which requires the EBA to assess whether to introduce a dedicated prudential treatment of exposures in the case of assets or activities substantially associated with environmental and/or social objectives.[85]

There is a precedent for the principle underpinning such reforms to risk-weighted capital requirements: lending to EU small and medium sized enterprises (SMEs) is currently accorded preferential capital treatment under SME Supporting Factor (SME SF) introduced in 2014 under the CRR. Similar preferential treatment for infrastructure projects is found in EU insurance company regulation.[86] Indeed, the Commission has explicitly stated that capital requirements may be subject to 'targeted adjustments in order to reflect EU specificities and broader policy considerations'.[87] The levels of any reductions under such a supporting scheme for sustainable assets would be modelled on the discounts for small SME investments under Article 501 of CRR1, currently comprising a capital reduction of 23.81 percent for banks' exposures to small firms for investments below €1.5 million.

3.5 *Introducing a Harmful Activity Factor (HAF) to reflect sustainability risks*

Although the Commission and EBA have indicated they may pursue a sustainability supporting factor, there are at important objections to this approach. The first is that sustainable investments, whilst perhaps more desirable from a public policy standpoint than unsustainable investments, are no more creditworthy than unsustainable assets.[88] Anything 'green' can include financial risks as technical risks and managements risks and general uncertainty risks. It is much easier to add the disincentivising factors for unsustainable investments and increase capital requirements accordingly.

The second is that research indicates that incentivising loan origination in this way would produce marginal results; banks will simply price loans less aggressively in the event that capital

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[82] Directive 2013/36/EU of the European Parliament and of the Council of 26 June 2013 on access to the activity of credit institutions and the prudential supervision of credit institutions and investment firms, amending Directive 2002/87/EC and repealing Directives 2006/48/EC and 2006/49/EC: [2013] OJ L176/338.

[83] Jim Brunsden, 'Brussels Looks at Easing Bank Capital Rules to Spur Green Investment', *Financial Times*, 10 January 2018.

[84] HLEG, Final Report p.32.

[85] Article 501c of CRR.

[86] Commission Delegated Regulation (EU) 2017/1542 of 8 June 2017 amending Delegated Regulation (EU) 2015/35 concerning the calculation of regulatory capital requirements for certain categories of assets held by insurance and reinsurance undertakings (infrastructure corporates): [2017] OJ L236/14.

[87] Regulation of the European Parliament and of the Council amending Regulation (EU) No 575/2013 as regards the leverage ratio, the net stable funding ratio, requirements for own funds and eligible liabilities, counterparty credit risk, market risk, exposures to central counterparties, exposures to collective investment undertakings, large exposures, reporting and disclosure requirements, and amending Regulation (EU) No 648/2012, COM (2016) 850, p 3.

[88] Sini Matikainen, 'Green Doesn't Mean Risk-Free: Why We Should Be Cautious About a Green Supporting Factor in the EU', Grantham Research Institute on Climate Change and the Environment, 18 December 2017, http://www.lse.ac.uk/GranthamInstitute/news/eu-green-supporting-factor-bank-risk.

requirements are lowered. According to researchers at the University of Cambridge, regulatory capital requirements as currently set forth in Basel III's Pillar 1 approach play 'at most a marginal role in influencing a bank's decision to provide specialised lending on project finance for environmentally sustainable economic activities such as renewable energy infrastructure projects',[89] with other factors including political and economic riskiness playing much more prominent roles. In line with this, there is little evidence that the SME SF has been effective in either lowering borrowing costs or increasing access to finance for SMEs.[90] In contrast, what the introduction of the SME SF *did* lead to was a reduction in aggregate EU bank capital of over €12 billion, undermining financial stability.[91] Equally undesirable consequences in relation to a sustainability supporting factor cannot be discounted.

The plans to propose an incentive-generative 'green supporting factor' (GSF) are therefore inadequate. Instead a comprehensive harmful activities (HAF) should be introduced. A HAF was mooted already by the HLEG in its Interim Report, where it argued that a "'brown-penalising' factor, raising capital requirements towards sectors with strong sustainability risks, would yield a constellation in which risk and policy considerations go in the same direction [as rewarding green projects]."[92]

It is unclear why the original HLEG initiative was abandoned. As noted, the evidence suggests that altering capital requirements downward (for example, under a sustainability supporting factor) would likely have a negligible effect on banks' decisions on whether to make specific loans. Indeed, research indicates that the estimated effect is a reduction in capital requirements associated with a GSF of around €2-8 billion. In absolute terms and even under an expanded application, the total 'capital savings' related to the introduction of a GSF would likely be significantly lower than those identified in response to the SME SF, estimated by the EBA in 2016 at about €12 billion.

In contrast, higher HAF risk-weighted capital requirements are known to disincentivise lending, including when targeted at particular asset classes.[93] Powers to amend lending in this way are already afforded to bank regulators under the CRR; such an option provides regulators with a flexible, targeted tool with which to funnel credit away from particular sectors, and thus decrease financial flows to such projects by up to 8%.[94]

By raising the capital requirements on certain unsustainable assets, banks would have to fund such assets with a greater proportion of capital (shareholder funds), thereby raising banks' cost of funding. Such a regulatory change is likely to mean banks will charge higher rates for particular asset forms. It also would avoid the potential avenue for banks to use the mooted sustainability supporting factor to subsidise funding for unsustainable assets. In the absence of any portfolio restrictions operating in tandem with such a sustainability supporting factor, there is substantial moral hazard embedded in any preferential prudential treatment for sustainable assets, as such assets may be used to cross-subsidise the origination of credit for GHG-intensive purposes and other unsustainable activities. Assuming a similar capital adjustment than for the GSF (15-25%), the

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[89] University of Cambridge Institute for Sustainability Leadership and UNEP Finance Initiative, Stability and Sustainability in Banking Reform: Are Environmental Risks Missing in Basel III? (CISL & UNEP FI, 2014).
[90] European Banking Authority, Report on SMEs and SME Supporting Factor, EBA/Op/2016/04 (23 March 2016).
[91] Ibid.
[92] HLEG, Final Report p.31.
[93] Henri Fraisse, Mathias Lé and David Thesmar, The Real Effects of Bank Capital Requirements, European Systemic Risk Board Working Paper Series No 47 (ESRB, June 2017).
[94] Jakob Thomä and Kyra Gibhardt, 'Quantifying the potential impact of a green supporting factor or brown penalty on European banks and lending' (2019) 27(3) *Journal of Financial Regulation and Compliance*, 380-394.

simulated effects are in the ranges of €8-13 billion additional capital requirements for a limited application and €14-22 billion for an expanded application. Even stronger adjustments, such as 50% could lead to a €27-44 billion penalty. The main reason behind the stronger effect is the larger universe of high carbon assets compared to sustainable assets on which such a penalty would be applied.[95] This will produce two socially desirable outcomes: increased (rather than lower) loss absorbing capacity at financial institutions; and the internalisation of at least some of the costs of environmental degradation.

4 Conclusion

In this chapter we have called for a fundamental recalibration of the role and duties of financial system participants to prevent funding of unsustainable activities causing damage to the ecosystem and to the social foundation of humanity. We have suggested that European financial regulators and central banks must focus their regulation and supervision in evaluating the financial risks of unsustainability. According to our analysis the main weaknesses of current sustainable finance approaches have been threefold: (i) a reliance on traditional incentive structures for private actors in financial markets which prioritise information disclosure as a regulatory technique, (ii) the reticence of the EU to reform its regulatory structures and policies with regard to financial markets, and (iii) a continued adherence to the principle of market neutrality in relation to both monetary policy and bank regulation.

Our proposals for reform are based on a holistic approach to financial risks of unsustainability, ranging from requirements set on central bank policies and bank regulation on funding decisions and capital requirements to more comprehensive reporting requirements, and strict duties of due diligence set to financial institutions, requiring a a positive compliance obligation to assess and demonstrate how they have mitigated or prevented sustainability risks from materializing.

[95] Ibid.