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ISSUES ON FINANCIAL MARKET REGULATION, BUSINESS DEVELOPMENT AND GOVERNMENT'S POLICIES ON GLOBALIZATION

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The "Law and Economics Yearly Review" is an academic journal to promote a legal and economic debate. It is published twice annually (Part I and Part II), by the Fondazione Gerardo Capriglione ETS (an organization aimed to promote and develop the research activity on financial regulation) in association with Queen Mary University of London. The journal faces questions about development issues and other several matters related to the international context, originated by globalization. Delays in political actions, limits of certain Government's policies, business development constraints and the "sovereign debt crisis" are some aims of our studies. The global financial and economic crisis is analysed in its controversial perspectives; the same approach qualifies the research of possible remedies to override this period of progressive capitalism's turbulences and to promote a sustainable retrieval.

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COMMERCIAL BANKING IN TRANSITION

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CRITICAL ISSUES AND CHALLENGES AHEAD

SPECIAL ISSUE OF LAW & ECONOMICS YEARLY REVIEW

EDITED BY

MARCO BODELLINI AND VALERIO LEMMA

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PRESENTATION OF THE SPECIAL ISSUE

Marco Bodellini * – Valerio Lemma **

We are very pleased to collect and present, in this special issue of Law and Economics Yearly Review, the papers – written by highly regarded experts and scholars – which were discussed at the conference '*Commercial Banking in Transition - Critical Issues and Challenges Ahead*' held, on 10 April 2024, at the Bank of England in London, during which the book '*Commercial Banking in Transition – A Cross-Country Analysis*' co-edited by Marco Bodellini, Gabriella Gimigliano and Dalvinder Singh was firstly launched.

In this regard we thank professor Francesco Capriglione for publishing this special issue in his journal, which represents an important venue to discuss law and economics-related subjects in Europe as it aims at involving scholars from different countries, by treasuring their expertise in order to achieve the goal of fostering the academic debate on the role of «law» in a global economic system.

Due to a number of exogenous factors, traditional commercial banking – which entails collecting deposits from the public and extending loans – is transitioning toward new business models while trying to adapt to a novel external environment where credit institutions are still expected to provide a meaningful contribution to economic growth and social development.

In dealing with these issues, the papers collected, relying upon law and economics analysis, look into concepts such as wealth maximisation, rational

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behaviour, and market equilibrium under perfect competition and evolving environment(s). Accordingly, they employ both the Chicago Law and Economics approach and the Posners' Economic Analysis of Law. Indeed, starting with the analysis of real world – instead of a desired standard model set forth by the policy maker – the papers take into account economic and, more specifically, market failures, building on fundamental considerations, such as how to regulate markets in which innovation is becoming a key force; the efficiency of regulation in case of disintermediation; and the role of public authorities in the promotion of innovation and efficiency.

As the role of banks is driven by their monetary power (manifesting itself by collecting deposits, multiplying their value and granting credit), the research conducted in the papers starts by looking at the effects of creating central bank digital currencies. Considering CBDCs as a form of "monetary devolution", the money creation power moves back, at least in part, from commercial banks to the state through the central bank. Hence, the need exists for considering a design of CBDCs that would preserve the current balance between private and public money, and then give a partially new role to commercial banks.

On the other hand, the creation of CBDCs along with other technological innovations impact on the corporate governance of commercial banks. Accordingly, the papers recognize the importance of exploring the effects of such innovations on the organizational structure of banks and the liability regime of directors and auditors. Exploring the developments resulting from the use of machine learning, big data computation, artificial intelligence, innovative products, and cryptocurrencies, the papers assess the adequacy of the current forms of public intervention in ensuring the sound and safe management of banking and financial institutions.

Relatedly, attention is paid also to the relationship between innovations and competition, as the EU legal framework governing commercial banks was not created to regulate credit institutions that leverage upon the use of outsourcing. In this respect, specific doubts concern the residual social function of commercial banks, as innovations can enhance their efficiency, but they can also change the methodological approach to the creditworthiness assessment and to the whole commercial banking business model, with outcomes that might be difficult to precisely predict.

All of the above interplays with a significant paradigm shift propelled by global sustainability objectives as set forth by the United Nations Sustainable Development Goals and other crucial international initiatives. As a stringent set of sustainability-related provisions is reshaping commercial banking, regulators could and should support credit institutions in facing these existential changes. Indeed, environmental sustainability and the fight against climate change are key challenges of the current century, requiring a structural paradigm shift concerning the way businesses do business. Banks, in turn, should be aware that for a paradigm change of that sort to take place, a huge amount of financial resources will be needed: while public money has been and will be mobilised, the big chunk of capital needs to be provided through private investments. This supports the consideration that commercial banks still have a key role to play, but they and their supervisors need to quickly adapt.

In this context, it is worth considering that international sanctions impact on both commercial banking and the configuration of the market for capital. This issue has come to the fore following Russia's invasion of Ukraine in February 2022, and they have already had the effect of disrupting cross-border financial links and networks. However, the impact of international sanctions does not stop at Russia's borders, as the active use of sanctions and other tools of political coercion and geo-economic decoupling pose significant risks for bankers.

It is also important to stress that a symbiotic relationship between commercial banking, central banking and policy making is emerging. Hence, the EU regulator is called to focus on the areas of convergence and divergence across jurisdictions and to mitigate the risk that innovation can alter the current proper functioning of the internal market for capital.

In conclusion, the contents of the papers and the deep knowledge of the authors in the explored areas have fostered a debate in which the interdisciplinary approach between economics and law has led to interesting results that push the research on banking and banking regulation a step ahead.

Considering the results, we believe that that the reference points set forth by the authors may raise the interest for going even further in the analysis of the new models of banking and finance, taking into account the possible evolution in the role of EU financial regulation and supervision from a global perspective.

COMMERCIAL BANKING IN TRANSITION:
A CROSS COUNTRY ANALYSIS

Rosa M. Lastra *

ABSTRACT: *The composite of central bank money and commercial bank money, which is also referred to as 'the singleness of money', is an essential feature of our current monetary system.*

The three pillars of our current monetary system: money, bank deposits and payments are based on symbiotic relationship between central banking and commercial banks. Banks are special because of their unique role in the process of money creation and the fact that only banks (and not other financial institutions) keep reserves at the Central bank. Bank specialty has many layers: the monetary nature of deposits, their role as credit providers, deposit takers and payment intermediaries; their unique role in the transmission of monetary policy. The specialty of banks thus justifies the special nature of banking supervision and regulation and of bank crisis management: lender of last resort (a function that links monetary policy with the banking system) deposit insurance and a lex specialis for resolution and bank insolvency).

The title of the book indicates that commercial banking is in transition from a past and present that we know to a future that we aim to forecast on the basis of current trends and developments. The book discusses and brings together an array

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of themes across the EU, UK, US, China and Korea.

I will focus my remarks on the symbiotic relationship between commercial banking and central banking, areas of convergence and divergence across jurisdictions and the potential for digitalization to alter the current design. I will also reflect briefly upon the climate change agenda in the context of central banking.

The composite of central bank money and commercial bank money, which is also referred to as 'the singleness of money', is an essential feature of our current monetary system. Fabio Panetta stated in a speech in 2022 quoting a BIS paper of 2003: "An important feature of this coexistence is that, in a given currency, central and commercial bank monies are convertible into each other at par. Conversion at par removes the very high transaction costs that could arise for users of a currency if there were multiple issuers whose monies were exchanged at different values. (…) One-to-one convertibility with central bank money is what makes the regulated forms of money convertible with each other and is why they are perceived as interchangeable when making payments".

The Bank of England and HMT have done significant work on digital money. Under the genus of digital currencies or 'virtual currencies' (VCs), there is a quartet of stablecoins, [unbacked] cryptocurrencies, tokenized deposits and central bank digital currencies (CBDCs). While the first two are issued and controlled by private developers and used and accepted among the members of a virtual community as a medium of exchange and unit of account, tokenized deposits is another version of commercial bank deposits (digital tokens that represent the value of bank deposit). But it is the advent of CBCDs – as a new digital form of public money – that can threaten the existing design. Bruno Salama and Leonidas Zelmanovitz consider that retail CBDCs represent yet another step towards the devolution of monetary powers from commercial banks to the states, thereby revising the trade-off between commercial bank money (private money) and central bank money. Of course, this will depend on the design features that a retail CBDC would eventually adopt.

Gabriella Gimigliano talks about FinTech and competition. The entry of Google, Microsoft, Amazon, Apple, Facebook, Ant and others into the financial arena is a manifestation of the reshaping of money and banking. Telecom operators and BigTech are populating the payment ecosystem and competing with banks. Large conglomerates that combine technological and financial prowess and partnerships such as between Amazon & JPMorgan Chase; Apple and Goldman Sachs are challenging the regulatory perimeter. Whether it is to facilitate financial inclusion (mobile payments like Kenya's M-Pesa or India's PayTM) or to improve the efficiency of our current system (the use of DLT, smart contracts, non-fungible tokens and decentralized finance) are we witnessing *the Spotify moment in money and finance*?[1]

The three pillars of our current monetary system: money, bank deposits and payments are based on symbiotic relationship between central banking and commercial banks. Banks are special because of their unique role in the process of money creation and the fact that only banks (and not other financial institutions) keep reserves at the Central bank. Bank specialty has many layers: the monetary nature of deposits, their role as credit providers, deposit takers and payment intermediaries; their unique role in the transmission of monetary policy. The specialty of banks thus justifies the special nature of banking supervision and regulation and of bank crisis management: lender of last resort (a function that links monetary policy with the banking system) deposit insurance and a *lex specialis* for resolution and bank insolvency). The failure of a bank of any size may have implications and contagion effects for the payment system, inter-bank market and

[1] See generally Rosa Lastra, Chapter 17 in *Comparative Financial Regulation* (co-edited by Edoardo David Martino, Alessio M. Pacces and Hossein Nabilou) to be published by Elgar in 2024 and the forthcoming third edition of Rosa Lastra, *Central Banking and Monetary Law* (to be published by OUP, 2025).

the financial system at large.[2]

I contend that the function of 'anchor of stability' that central banks and supervisors have remains valid in the digital age. Money is or becomes a public good. While CBDCs are a manifestation of the power of the State in money creation, private digital money (such as stablecoins, unbacked cryptocurrencies and tokenised deposits) and the payment systems associated with it require public regulation and supervision. Whether or not the central bank will continue to have such a close role with private digital money providers as it currently has with commercial banks will determine the future of our monetary system. Antonella Brozzetti suggests in her final remarks that banks have been remarkably adaptable throughout their history. The public authorities are the ultimate guarantors of money, payments and banking. Omarova and Hockett in the finance franchise discuss the implications and Peter Conti Brown and Sean Vanatta in their forthcoming book on the History of Bank Supervision in the USA[3] offer a different dimension on the public private partnership. The SVB (Silicon Valley Bank) crisis and subsequent saga of banking troubles in 2023 evidence that 'there are few libertarian in a financial foxhole' in the words of John Thornhill of the FT.[4] Gabriella Gimigliano quoted Angela Walsh's thesis on deconstructing decentralisation, in which she explores and exposes the pitfalls in the core claim of cryptoassets. Charles Goodhart explains in his book "The Evolution of Central Banks" (1988) how competing banks had a natural tendency to centralize reserves and how this

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[2] See Draft Legislative Guide on Bank Liquidation - Consultation - UNIDROIT to which Clare Merrifield of the Bank of England contributed as an observer and in which I was one of the Working Group expert members. See also Rosa Lastra "Armonización internacional de la liquidación bancaria: el proyecto UNIDROIT", *Revista de Derecho Bancario y Bursátil*, No. 171, September-December 2023, pp. 439-452.

[3] Peter Conti Brown and Sean Vanatta, *Private Finance – Public Power A History of Bank Supervision in America, 1789-1980* (Princeton University Press, forthcoming and cited with permission).

[4] See John Thornhill, "SVB shows there are few libertarians in a financial foxhole", Financial Times, 13 March 2023.

competition and centralization of reserves led to the emergence of a central bank as a non-competitive, non-profit maximizing institution which handles the reserves of other commercial banks and lends to competitors in times of distress. The role of a clearing house, which was at the origins of central banking, may play a role again in the fintech universe of private digital currencies. Arguably, we can already observe a gravitation towards the centre in the concept of stablecoins. Stablecoins gravitate around fiat currency and safe assets.

The law relating to the supervisory role of central banks diverges across jurisdictions and changes over time, with the pendulum shifting, bringing supervision in and out of the central bank depending on economic and political circumstances. Post GFC the pendulum has now shifted towards keeping supervision in, with the Bank of England as detailed being a significant example given the range and scope of its responsibilities in the areas of micro and macro prudential supervision, supervision of Financial Markets Infrastructures (FMIs) and resolution. In the case of the ECB, the activation of Article 127 (6) of the Treaty for the Functioning of the European Union (TFEU) transferred responsibility for the micro-prudential supervision of significant credit institutions from the national competent authorities to the ECB/Single Supervisory Mechanism (SSM) via the Single Supervisory Mechanism Regulation, which was adopted in 2013 and entered into force in November 2014.

Financial stability has always been a key central banking goal, often in the guise of other denominations: effective supervision of the banking system, sound banking, prevention of financial crises, smooth running of the payments system, etc. Notwithstanding the importance of financial stability post GFC, there is divergence in which this consideration has been adopted de iure in different jurisdictions. While the UK legislators got it right by placing financial stability on equal footing with price stability, as an overarching primary statutory goal for the Bank of England, in the EU it remains a contributory task according to Article 127

(5) of the Treaty for the Functioning of the European Union and in the case of the USA, it is in the penumbra of the mandate of the Federal Reserve System; The Dodd Frank Act 2010 gave the newly created Financial Stability Oversight Council a specific financial stability mandate.

Lucia Quagila points out in chapter 6 that we need European solutions for European problems and that the lack of an effective harmonization framework for ailing banks remains a major concern.

In line with Christos Hadjiemmanuil's comments on the imposition of financial sanctions and consequences thereof, Paola Subbachi and myself have argued that we need an international governance regime for sanctions and that a parallel monetary and payment system is already evolving.[5]

The extent to which green initiatives transcend the boundaries of what central banks should do in the area of climate change is the subject of intense debate, in particular with the return of inflation since 2021. Jack Parker and Anne Corrigan analyse the legal framework and climate related financial risks and how the work of the Bank of England fits into the overall efforts. With regard to climate change, in *Sustainable Central Banking*, Christina Skinner and myself[6] question what should be the best distribution of tasks between political authorities and independent central banks with narrower mandates and more limited tools and we conclude that it depends on the central bank function (we warn about the use of green QE and other tools of monetary policy, but we see the benefits of climate risk metrics and other instruments in the exercise of supervision) and that the answers

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[5] See https://www.project-syndicate.org/commentary/international-framework-governing-financial-sanctions-needed-by-paola-subacchi-and-rosa-m-lastra-2024-04 See also Rosa Lastra, "Weaponisation of Money and Payments" Chapter 4 in *International Sanctions: Monetary and Financial Law Perspectives* (co-edited by R. Bismuth, L. Thevenoz and C. Zilioli) to be published by Brill in 2024.

[6] See Rosa Lastra and Christina Skinner, "Sustainable Central Banking", *Virginia Journal of International Law*, Vol. 63 (3) 2023, pp. 397-446. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4287729

vary depending on the central bank mandates of Central Banks. While the US Federal Reserve System has been rather skeptical so far, with Fed Chair Jay Powell stating that it is not its role to be a climate fighter, the European Central Bank has embraced the green agenda. And so has the Bank of England following the Government's economic policy agenda in this regard, though the enthusiasm for the green agenda lost a bit of its sparkle when inflation returned in 2021. A broader central banking mandate brings the institution closer to the political agenda. Otmar Issing told the Economic Affairs Committee during the House of Lords QE 2021 inquiry that "Central Banks have come closer to political decisions during the financial crisis and now in the context of the pandemic".[7]

Commercial banking is indeed in transition. While we cannot predict the future, the book does a splendid job in identifying trends and developments.

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[7] House of Lords, Economic Affairs Committee, *Quantitative Easing: A Dangerous Addiction?* 2021, https://hansard.parliament.uk/lords/2021-11-15/debates/9124C980-531B-4688-BEA0-D439C5D04703/QuantitativeEasing(EconomicAffairsCommitteeReport)

FINTECH AND THE IMPACT ON THE CORPORATE GOVERNANCE OF COMMERCIAL BANKS

Valerio Lemma *

ABSTRACT: *This research delves into the influence of technological innovations on the corporate governance of commercial banks. It explores the effects on the organizational structure of banks and the accountability of directors and auditors. Considering the innovations resulting from the use of machine learning, big data computation, artificial intelligence, innovative products, and cryptocurrencies, the analysis assesses the adequacy of the current public intervention in ensuring the sound and safe management of banks.*

The main findings point to the need for a restatement of the current regulation by considering that new commercial banking will rely on a permeating information system that goes beyond the sphere of influence of the directors and the auditors' control capabilities. In addition, the same findings suggest that policymakers should take note of the perspectives of commercial banking, considering whether the success of open banking and the possibilities of a digital reform of the monetary policy could lead to a rethinking of the banks' business model.

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1. In an era marked by heightened awareness of computational capacity, environmental sustainability and social responsibility, the integration of new principles into banking corporate governance has emerged as a critical imperative.[1] Against the backdrop of rapid technological advancements, evolving consumer behaviours and global economic shifts, the imperative for robust public safeguards has never been more pronounced.[2]

From the new economy collapse to the effects of the pandemic lockdown, the waves of crises that have followed one another since the beginning of the 2000s have triggered a series of significant global reflections and changes. After the recent wartime events,[3] the idea that globalisation may come to a halt appears to be one of

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[1] See *ex multis* BASKERVILLE, CAPRIGLIONE, CASALINO, *Impacts, Challenges and trends of Digital Transformation in the Banking Sector*, in *Law and Economics Yearly Review*, 2020, p. 341 ff.

[2] All the above follows the conclusion reached in LEMMA, *Sviluppi della corporate governance bancariatra innovazione, efficienza e responsabilità*, in *Rivista Trimestrale di Diritto dell'Economia*, s. 1 n. 1, 2024. See also AMMANNATI, CANEPA, Presentazione a AA.VV., La finanza nell'età degli algoritmi, Torino, 2023, p. IX; nonché AMMANNATI - GRECO, Il credit scoring intelligente: esperienze, rischi e nuove regole, in AA.VV., La finanza nell'età degli algoritmi, Torino, 2023, p. 1 ff. wherein the AA. indicate the regulatory consequences arising from technological innovations that change the methods and possibilities of access as a result of the use of algorithms capable of processing increasing amounts of data, including so-called 'alternative' data with respect to traditional financial data. Indeed, it is based on the assumption that, as a result of such innovations, the assessment of creditworthiness has surpassed some of the traditional ones, through recourse to increasingly sophisticated techniques of analysis of a considerable and varied mass of data.

[3] See CHENG, The Ukraine Crisis: Causes, Conundrum and Consequences, in Journal of Social and Political Sciences, 2022, ove l'A. "takes the rivalry between the US, Europe and Russia in Ukraine as a starting point to examine the dilemma facing European security in the context of the great power game, the root causes behind the Ukraine crisis, its far-reaching consequences for geopolitics and global patterns and the implications for regional peace in other parts of the world"I believe that the challenges contained in the book are dedicated - as well as to his students, on whose behalf I renew my thanks - to "all those who had hoped for a different, more relevant continuation on the road marked out in Paris in 2015" (p. 1 - p. 40), in the absence of "experiencing the anguish of a bloody and death-bringing war" (p. 86) and "...(in)... a prompt restart of the 'recovery'" (p. 219). Moreover, 'hope does not disappoint, ... the humblest of virtues, but the most everyday, ... It is a gift to go on, to act, to tolerate, to suffer. ... Hope is everyday, you find it in the little corners of your life and there is hope that takes you forward,' as Pope Francis suggested; cf. Pope Francis: Hope does not disappoint, it takes you forward. Unpublished reflections of the Pontiff in "Conversation with Francis on Vices and Virtues - unabridged

the most significant newness in Western thinking,[4] with the effect that many Governments have begun to reconsider their dependencies and interconnections with other economies and supply chains linked to hostile, potentially hostile or autocratic Countries.

The search for a new balance for the common good is beginning to take the ecosystem into account and, in the agendas of global policy makers, has become an urgent priority. Not surprisingly, awareness of the impact of human activities on the environment and climate has prompted many policy makers to rethink their formulas and look for ways to preserve the environment, reduce pollution and safeguard natural resources in an intergenerational perspective.[5] Furthermore, the spirit of the wired society appears to be moving towards a greater focus on the importance of human relationships and solidarity in managing individual or systemic crises.

These changes mark an opening to a new paradigm, particularly evident since the beginning of the 2020s. Therefore, in assessing transitions in commercial banking, it is important to recognise that the journey towards this new equilibrium has only just

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version", presented at the Archives of the Veneranda Fabbrica del Duomo and available on VatiVision.com. It is no coincidence that, after the conference, the theme of hope also appeared in the Bull of Indiction 'Spes non confundit' for the Ordinary Jubilee of the Year 2025, by Pope Francis, 9 May 2024.

[4] See CASSESE, *Il diritto globale*, Torino, 2009, according to which, along with the economy, states have bypassed their own borders, whose essential functions take place beyond state territory.

[5] As the "European Green Deal" stipulates that the EU will become climate-neutral by 2050, it is worth considering that this policy requires enormous investments in all major sectors including energy, mobility, industrial manufacturing, real estate and farming. Hence, several key regulatory initiatives are on going, such as the taxonomy regulation, the disclosure frameworks for both corporates and financial institutions and other aspects of financial market regulation that have already significantly improved the regulatory framework for sustainable finance; see BRÜHL, *Green Finance in Europe – Strategy, Regulation and Instruments*, in *Center for Financial Studies Working Paper No. 657*, 2021
See also BROZZETTI, *La transizione verde europea e lo sviluppo sostenibile: rinnovate coordinate di fondo per sistema finanziario e imprese*, in *Diritto della banca e del mercato finanziario*, 2022, 1, p. 411 ff.; BRESCIA MORRA, *Chi salverà il pianeta? Lo Stato o le grandi "corporation"? Esg: una formula ambigua e inutile*, in *Rivista Trimestrale di Diritto dell'Economia*, 4s/2022, 1, p. 78 ff.

begun and will last for the time of this ‘age of recovery’ in the (short or long) twenty-first century.[6]

Accordingly, the European Union has adopted (i) institutional initiatives such as the European System of Financial Supervision (ESFS) and the European Banking Union (EBU) as a step towards a more integrated EU and EMU, as well as (ii) regulatory responses that aim at regulating the Environmental, Social and Governance (ESG) Standards, the Digital Resilience (DORA) and the use of the Artificial Intelligence, seeking to move the economy towards greater sustainability and social responsibility. Furthermore, the National Recovery and Resilience Plans (NRRPs) adopted by EU Member States reflect the need to address economic, digital, social and environmental challenges simultaneously, seeking to promote prosperity in an effective, sustainable and resilient manner.[7]

It is worth considering also the judgment of the EU Court (First Chamber), on 7 December 2023, in Case C-634/21, on the need for protection related to ‘decision’ that

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[6] Cfr. BRITTON-PURDY - GREWAL - KAPCZYNSKI - RAHMAN, *Building a Law-and-Political-Economy Framework: Beyond the Twentieth-Century Synthesis*, in *Yale Law Journal*, 2020, where it moves from the most recent crises of economic inequality and the erosion of democracy to propose solutions that go beyond the legal orientations that favour efficiency, neutrality and apolitical governance, suggesting solutions that instead highlight the realities of power, aspire to equality and strive for democracy. See also SARTORI, *Il diritto dell’economia nell’epoca neoliberale tra scienza e metodo*, in *Rivista di diritto bancario*, 2022, p. 309 ff. where the issue of the functionalisation of the contract to general interest objectives is addressed, where the latter is understood as an instrument of intervention in the market that is capable of conveying systemic preferences.

[7] On closer inspection, the reflection formulated in the text is reflected in a plurality of legal studies, converging on the issue of the relationship between progress and sustainability; see BROZZETTI, *La transizione verde europea e lo sviluppo sostenibile: rinnovate coordinate di fondo per sistema finanziario e imprese*, in *Diritto della banca e del mercato finanziario*, 2022, 1, p. 411 ff.; BRESCIA MORRA, *Chi salverà il pianeta? Lo Stato o le grandi “corporation”? Esg: una formula ambigua e inutile*, in *Rivista Trimestrale di Diritto dell’Economia*, 4s/2022, 1, p. 78 ff.; BERTARINI, *Il finanziamento pubblico e privato dell’”European Green Deal”: la tassonomia delle attività economicamente ecosostenibili e la proposta di regolamento europeo sugli “European Green Bonds”*, in *ambientediritto.it*, 1/2022, p. 529 ff.; GAGGERO, *Significanti del diritto dell’economia e interpretazione*, in *Contratto e impresa*, 4/2023, p. 1034 ff.

must be ‘based solely on automated processing, including profiling’ and that must produce ‘legal effects concerning [the interested party]’ or ‘similarly significantly [affect] him or her’, provided that the concept of ‘decision’ refers not only to acts which produce legal effects concerning the person at issue but also to acts which similarly significantly affect him or her.[8] In this regard, it is important to note that the Advocate General (in point 31 of his Opinion) and the Court (in point 42 of its judgement) have pointed that Article 22(1) of the GDPR confers to the natural person “the ‘right’ not to be the subject of a decision solely based on automated processing, including profiling”, and then the Court stated that this provision lays down a prohibition in principle, because the natural persons shall be protected against the particular risks to their rights and freedoms represented by the automated processing of personal data, including profiling.[9]

All the above recalls some of the foundation of a transition that is pushing the commercial banking towards a new set up, aimed at satisfying an emerging demand for new services related to the circulation of wealth.

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[8] Hence, that concept is broad enough to encompass the result of calculating a person’s creditworthiness in the form of a probability value concerning that person’s ability to meet payment commitments in the future.

[9] See RABITTI, *La Corte di giustizia tra scelte di mercato e interessi protetti*, in *Persona e Mercato*, 4/2018, as those particular risks are, under the recital no. 71 of the GDPR, likely to weigh on the legitimate interests and rights of the data subject, in particular taking account of discriminatory effects on natural persons on the basis of racial or ethnic origin, political opinion, religion or beliefs, trade union membership, genetic or health status or sexual orientation. It is therefore important, still according to that recital, to provide suitable safeguards and to ensure fair and transparent processing in respect of the data subject, in particular through the use of appropriate mathematical or statistical procedures for the profiling and the implementation of technical and organisational measures appropriate to ensure that the risk of errors is minimised. In this respect, it comes into consideration the *tension* between the need for protection, the opportunity of solidarity and the interest for stability; see. PELLEGRINI, *Rileggere la solidarietà in epoca contemporanea: riflessioni intorno a “solidarietà, un principio normativo” (G. Alpa, 2022) nel prisma della “corporate governance”*, in *Rivista Trimestrale di Diritto dell’Economia*, 1s/2023, p. 42 ff.

2. The introductory chapter of the book 'Commercial banking in transition' describes the analytical path designed by the editors and brings together the authors' findings in common reference to a co-existence and cross fertilization of conventional and non-conventional risks in commercial banking,[10] which can have consequences that need to be understood and captured.[11]

However, the path of this book does not lead to a safe harbour, but is interrupted by three inclement underlying questions: (i) should the regulator be concerned about the interference between central banking and commercial banking? (ii) should prudential supervision extend to cover open-banking and the whole shadow banking system? (iii) should the recent changes to the legislative framework be only the beginning of the regulatory evolution?

As this transition is offering a period to reflect on opportunities, threats and needs, the changes in the ongoing banking business model comes into consideration because of the massive use of technology, the tendence to promote sustainability and the pressure due to active monetary policies and other public measures that take advantage of the role of commercial banks in economic and social reality.[12]

It is not yet the time to draw closing remarks; however, most of the current analysis converges on the need to govern the transition. Therefore, sharing this starting point, the development of banking corporate governance in the 'age of recovery' can be addressed as the recipient of technological upgrades that can produce radical transformations in the administration and control of a bank in its

[10] See PANETTA, *Il futuro dell'economia europea tra rischi geopolitici e frammentazione globale*, Lectio magistralis at the Università degli Studi di Roma Tre, 23 April 2024, where he concludes with an indication of a solution that could strengthen the European economy, rebalancing its growth model and enhancing the single market.

[11] This paper refers to the debate raised by the reading of VV.AA., Commercial banking in transition, Cham, 2024 and its presentation held at the Bank of England on April, 10 2024.

[12] See SEPE, *La solidarietà tra diritti e doveri*, in *Rivista Trimestrale di Diritto dell'Economia*, 1s/2023, p. 57 ff.

capacity of a firm that that collects savings, disburses credit, and carries out its other activities within the scope of prudential supervision.

Fintech related innovations, monetary policy and the sustainability goals are the sources of pressure on bank directors.[13] As we will see, the digitalization of the business model and the aggressive attitude of open banking rise competition concerns for regulators, as the maintaining of a professional monopoly is not an easy task and it seems to require some adjustments[14]. Moreover, the strategy for a 'digital monetary devolution' can lead to a regime of 100% reserve requirement, and then commercial banks run the risk of not being able to lend (to private borrowers) *free* money coming from the floating of deposits and their multiplicator. In addition, the introduction of sustainability as an element of performance evaluation requires the possibility of accounting for the relevant results, in order to measure the effectiveness of the corporate governance and to assess the bank's performance.[15]

Is the transition an endogenous shock?

This question calls for an assessment of the aforesaid developments affecting corporate governance in banking, as well as the regulatory actions taken so far (as the

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[13] See. LENER - LUCANTONI, *Sostenibilità "ESG" e attività bancaria*, in Banca borsa e titoli di credito, 2023, 1, p. 6 ff.; BANI - SIGNORINI, *Come governare la transizione del e nel mercato*, in *Rivista Trimestrale di Diritto dell'Economia*, 4s/2022, 3, p. 458 ff.; DE POLI, *La "governance" dei mercati finanziari*, in *Rivista Trimestrale di Diritto dell'Economia*, 4s/2022, 1, p. 12 ff.; FALCE, *Rapporti asimmetrici tra im, prese e soluzioni pro-concorrenziali*, in *Rivista di diritto industriale*, 2021, 1, p. 189 ff.

[14] See VV.AA., Commercial banking in transition, Cham, 2024, p. 38

[15] See LASTRA - SKINNER, *Sustainable Central Banking*, in *Virginia Journal of International Law*, Vol. 61, 2023, on the evidence that, in the past several years, central banks globally have begun to consider whether, and to what extent, questions of climate change and sustainability intersect with their legislative mandates. Hence, an important questions refers to the legitimacy of the central banks' climate change and sustainability goals and a set of principles for central banks to consider when addressing these climate policy governance questions, in particular with regard to the limits and legitimacy of sustainable central banking.

relevant rules and regulations has addressed specific aspects of the innovations but did not dwell on assessing the effects of this transition on the role of commercial banks in the broader market economy).[16]

It should be borne in mind that the end of the last century has been marked by the research for an adequate organisational formula for the management of banks. This research has, for some time now, led to a structure headed by a top management composed of corporate bodies with strategic, management and control tasks, followed by a clear separation between executive and audit functions. Although there is no uniformity in the application of the models developed by the industry, over time credit institutions have designed their organisational chart by making ample recourse to private autonomy,[17] without prejudice to the obligation to achieve an organisational structure capable of ensuring safe and sound management, having regard also to the effectiveness of controls, within the framework of a corporate governance project designed to distribute the powers necessary to manage the company in the best possible way and, therefore, to carry out banking activities in such a way as to achieve the expected results within the limits marked by the need to safeguard the savings collected.

In this context, the rules of corporate governance and the typology of public controls referable to banks were adopted on the assumption of a dialectic between shareholders and corporate officers; and this dialectic that was due to the relationship existing between the shareholders' meeting and the corporate bodies, subject to the provision of a sort of hierarchy of corporate resources, at the top of which was usually

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[16] See VV.AA., Commercial banking in transition, Cham, 2024, p. 439

[17] Cfr. TUCCI, *Strumenti amministrativi e mezzi di tutela civilistica: verso un superamento della contrapposizione?*, in *Rivista di diritto bancario*, 1s/2020, p. 75 ff. with particular reference to the issue of enforcement in the context of so-called private regulatory law

a general manager and other executives with decision-making powers.[18] Alongside this dialectic there has always been a natural behavior that exceeded resolutions and reporting, giving the bank's organization an ability to adapt its features to the environment in which it operated, in such a way as to correspond to the sudden accelerations characterizing the dynamics of the financial market.

There is no doubt that, until now, the main actors of banking corporate governance have been the shareholders, directors, auditors and managers, as well as its regulators and supervisors. All these actors are natural persons who, with different roles, have interacted within the corporate structure to ensure that the exercise of banking activities enabled the pursuit of the corporate purpose indicated in the articles of association and, more generally, that the orderly composition of the relevant interests complied with the requirements of the banking regulations.[19] At the same time, a role of secondary importance has so far been played by external consultants or other supplier that have a relationship with the bank on a contractual basis, given the regulatory option that recognizes the possibility of external providers to support the exercise of banking activities, without emptying the bank of its essential contents.

In order to ensure an effective and competent composition of the corporate bodies, the regulator has adopted mandatory and binding rules regarding the qualification of the persons called upon to assume the relevant offices. These rules are

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[18] See LEMMA, *Amministratori di banca tra rischio d'impresa e responsabilità individuali, nota ad ordinanza della Corte di Cassazione del 20 settembre 2023, n. 26867* in *Rivista Trimestrale di Diritto dell'Economia*, 2023, II, p. 61 ff.; and FERRETTI, *Note in tema di responsabilità degli amministratori non esecutivi delle banche*, in *Giurisprudenza commerciale* 1/2020, 2, p. 90 where the provisions of Article 2381, paragraph 6, of the Italian Civil Code and the Provisions of the Bank of Italy set forth in Circular No. 285 of 17 December 2013 are compared.

[19] See SACCO GINEVRI, *Il problema dell'interesse sociale nelle banche*, in *La Nuova Giurisprudenza Civile Commentata*, 11/2017, p. 1550 ff. for a framing of the issues related to the notion of 'social interest' in the modern joint-stock company with reference to the relative weighting and conflict of interests between managers, shareholders and stakeholders.

designed to ensure a balanced composition in terms of skills and competence, and the relevant structuring activity pursues the objective of performing administration and control tasks with a high technical content, to ensure full awareness in the exercise of banking activities, in compliance with the rules laid down to protect savings and control the exercise of credit.[20]

However, there is a widespread fear that a generalized application of outsourcing policies may also entail new risks, which today are difficult to foresee given the speed of technological change. Hence, a new type of difficulty in the governance of a bank, whose sound and prudent management may also depend on the functionality of the systems made by third party suppliers. Therefore, it seems necessary to consider that the rules that govern the organisational structure of a credit institution, while constituting an appreciable aid for the optimal configuration of the internal resources, do not fully contemplate the effects of the technological innovation that the bank can acquire on the market.

3. The focus goes on the commercial banks that intend to enrich their corporate organisation with systems that contemplate the current technological capacity (of analyzing and processing data) and utilize tools that are capable of representing *output* in a manner similar to those that usually characterize the human intellect, as is the case with the mechanisms usually summarily described as ‘artificial intelligence’.[21]

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[20] See BANCA D’ITALIA, Financial intermediation and new technology: theoretical and regulatory implications of digital financial markets, edited by LANOTTE e TRAPANESE, in Questioni di Economia e Finanza, aprile 2023, n. 758, Introduzione, p. 5 where it is concluded that the regulatory perimeters could be expanded to guard against the risks associated with the activities remitted to new suppliers.

[21] Let us starting with the conclusions of BARBAGALLO, “FinTech: Ruolo dell’Autorità di Vigilanza in un mercato che cambia”, Napoli, 8 February 2019; LEMMA, Intelligenza Artificiale e sistemi di controllo: quali prospettive regolamentari?, in Rivista Trimestrale di Diritto dell’Economia, 2021, II

Indeed, the use of artificial intelligence systems in corporate governance stems from the consideration that new technologies contribute to the improvement of the operating conditions of the professional who uses it, while it broadens the set of subjects on which the decisions underlying the banking business depend, since this set will not only be composed of the human resources within the perimeter of the banking company, but also those who cooperate in the design and the development of artificial intelligence systems. [22]

However, it must also be borne in mind that the natural persons employed in the banks do not act in mere obedience to their own science and conscience, but also based on the results of the algorithmic elaborations produced by the artificial intelligence.[23] Hence the new and difficult task of trying to prevent the role of corporate bodies from being reduced to a mere control of the results produced by artificial intelligence itself.[24]

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supp. n. 3, pp. 321 ff. and CONSOB, AI e abusi di mercato: le leggi della robotica si applicano alle operazioni finanziarie?, in Quaderni giuridici, n. 29, May 2023, p. 9 ff.

[22] See RABITTI, *Intelligenza Artificiale e finanza. La responsabilità civile tra rischio e colpa*, in *Rivista Trimestrale di Diritto dell'Economia*, 2021, supp. n. 2 al n. 3, p. 308 ff. where consideration is also given to software provided with autonomous augmentative capacities with respect to the programming carried out by the latter.

[23] See PASQUALE, The Black Box Society. The secret Algorithms That Control Money and Information, Harvard University Press, Cambridge, 2015; AGGARWAL, The Norms of Algorithmic Credit Scoring, in Cambridge Law Journal, 2021; FILIPPELLI, La collusione algoritmica, in Orizz. dir. comm. (orizzontideldirittocommerciale.it), special issue, 2021, p. 375 ff.

[24] See BANK OF ENGLAND, DP5/22 – Artificial Intelligence and Machine Learning, in part. punto 2 – Supervisory authorities' objectives and remits, and in particular the consideration that "AI may bring important benefits to consumers, financial services firms, financial markets, and the wider economy. The promise of this technology is to make financial services and markets more cost-effective, efficient, accessible, and tailored to consumer needs. However, AI can pose novel challenges, as well as create new risks or amplify existing ones. Therefore, the supervisory authorities have a close interest in the safe and responsible adoption of AI in UK financial services. In line with their statutory objectives and to support the safe and responsible adoption of AI technologies in UK financial services, the supervisory authorities may need to intervene further to manage and mitigate the potential risks and harms related to AI applications."

This is a first clue of the risk that a physical person will fall back on the machine's suggestions, rather than taking responsibility for refuting its results. This risk puts in new terms the issues that have long been at the attention of regulators on the relationship between ownership and control in credit institutions. Indeed, the scope of the relevant relations goes beyond the bilateral sphere (of the relations between shareholders and directors) to consider the multilateral market environment in which the exchanges necessary to acquire the artificial intelligence systems used in corporate governance (and, to that effect, the contracts with the relevant manufacturers, as well as the conduct of the latter) are carried out.

In other words, the possibility of a varied use of technological innovations in support of corporate bodies may automate their functions or, with less invasiveness, simplify the exercise of their powers.

This evolutionary perspective raises both traditional and new issues. First, it requires specifying the criteria for attributing liability to individual directors and, therefore, defining the content of the performance required of the latter in the context of the relevant board. Secondly, it raises the need to constantly link the use of artificial mechanisms and natural professionalism within the processes pertaining to creditworthiness assessment and customer relationship management.[25]

However, the difficulty in regulating the transition of commercial banking stems from the organisational context in which these processes take place, as they are fragmented into phases attributed to the competence of a plurality of offices, engaged

[25] See also A. FUSTER, P. GOLDSMITH-PINKHAM, T. RAMADORAI, A. WALTHER, Predictably Unequal? The Effects of Machine Learning on Credit Markets, in The Journal of Finance, February 2022, p. 9 ff. with regard to the conclusion that «the machine learning model is predicted to provide a slightly larger number of borrowers access to credit and to marginally reduce disparity in acceptance rates (i.e., the extensive margin) across race and ethnic groups in the borrower population … that is, Black and Hispanic borrowers receive very different rates (within group) under the machine learning technology».

in a sequence of evaluations (ranging from the acquisition of information from the customer, in the pre-contractual phase, to monitoring and performance analysis, after the conclusion of the financing contract[26]). And the automation of such a fragmented process could lead to the substantial devolution of the evaluation tasks to the natural persons that set the parameters underlying the software itself (i.e. the programmers), which are not subject to the power of the authorities in charge of the prudential supervision.[27] Both the fragmentation and the automatization increase the difficulties in assessing the actual responsibilities, and then there is the risk for a over-simplistic accountability of directors during this transition phase for any error in the process of granting credit.

Now consider what would be likely to happen if rule-makers aimed at discovering the possibility of working together in a different way, increasing efficiency of the organization and the quality of commercial banking. Indeed, this is not the end of public intervention,[28] but its beginning. What technological development makes clear is that there are now two ways to regulate the use of technology in the commercial banking: one committed and one neutral. And taking a neutral position between technology and market is a vain attempt to deny the preference for a solution that maximize the social welfare,[29] the financial stability and the sustainable results.

4. According to the above, the digitalization of the business model of credit

[26] See HONDIUS, *The Protection of the Weak Party in a Harmonised European Contract Law: A Synthesis*, in *Journal of Consumer Policy*, 2004, p. 245 ff.

[27] Let it be noted the types of data used in the traditional credit assessment system and in the system based on algorithmic decision-making, see. WORLD BANK, Credit Scoring Approaches Guidelines, 2019, pp. 9-10

[28] See PASSALACQUA, *"Numquam nega, raro adfirma": il rinnovato "intervento" dello Stato nell'economia*, in *Mercato concorrenza regole*, 1/2021, p. 55 ff.

[29] See DRAGHI, *Intervento alla Conferenza di alto livello sul pilastro europeo dei diritti sociali*, 16 April 2024.

institutions suggests reflecting on the regulation of bank corporate governance. It appears possible to start from the assumption that the rules in force were not designed to supervise those credit institutions that apply artificial intelligence.[30] This is because banks' recourse to such mechanisms could introduce efficiencies into commercial banking, on the one hand, and heteronomous decision-making processes with respect to corporate governance actors, on the other.

At the same time, internet, fintech services and trustless systems are supporting the circumvention of the intermediated market model.[31] Somehow, the interconnection has permitted exchanges between market participants making direct contacts (such as in the first experience of online crowdfunding), and from this point of view, the new computational capabilities are now permitting to see a bank account in its basic functions of deposit account, credit account and payment account. Thus, the possibility to allow a different approach that expands the services provided by non-banking intermediaries and reducing the market power of banks.

While some scholars foreshadow the end of mandatory intermediaries (due to a trustless system that avoids any agent), I wonder if commercial banks are necessary and more so than commercial banking itself.[32] However, the answer to this question lies in the role that supervised credit institutions play in favor of the circulation of wealth, the functioning of the real economy and in the maximization of social welfare,

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[30] See SCIARRONE ALIBRANDI - RABITTI - SCHNEIDER, *The European AI Act's Impact on Financial Markets: From Governance to Co-Regulation*, in *European Banking Institute Working Paper Series no. 138*, 2023, with regard to the regulatory challenges arising from the need to mediate between a horizontal approach to AI regulation and the sectoral dimensions of financial markets, with reference to the traditional objectives of special regulation.
[31] See VV.AA., Commercial banking in transition, Cham, 2024, p. 23.
[32] Indeed, there remains a need to reconcile policy objectives between supporting innovation (which involves risk-taking) and stability (which is risk-adverse).

which will be investigated in the next paragraphs.[33]

In any case, maintaining a public supervision on the services related to the circulation of wealth is not an easy task,[34] and it requires specific regulatory actions either by strengthening the monopoly of commercial banks or by weakening it.

After that, price and non-price competition will make the story.

5. In the current debate on the transition of commercial banking, doubts have repeatedly arisen and several scholars have been concerned about the status of sustainable commercial banking. Should these doubts be considered as a specification of the concerns on to the peaceful coexistence in the fragile environment of our small planet. Even more important is the concern that policy makers do not have a clear vision on the way to change the current unsustainable model of society, economy, market and banking.[35]

To date, the current regulatory framework has not come any closer to resolving this dilemma, but tends to regulate a period of interregnum: one of those moments in history when the ancient ways of acting no longer work, the rules of the past are no longer appropriate to the current conditions of the market, but more appropriate rules still have not been designed, written and implemented in order to ensure civil coexistence.

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[33] The former also involves the current role of banking in creating money, in including people in financial benefits and in satisfying borrowers with different profiles, considering that the digitalization may jeopardize the accessibility of banking and financial services for older people.

[34] Significant in this regard is the recent analysis by KIRCHHERR - REIKE - HEKKERT, Conceptualising the Circular Economy: An Analysis of 114 Definitions, SSRN Working Paper no. 3037579, 2017 where they find that the concept of circular economy can have different meanings for different people, having collected 114 definitions of circular economy, codified on 17 dimensions. Thus, they concluded that the circular economy is most often represented as a combination of reduction, reuse and recycling activities, and rarely as systemic change.

[35] See DI TARANTO, L'Europa Tradita, Roma, 2017

Focusing on the European Union, the current digital finance strategy sets out general lines on supporting the digital transformation of finance in the coming years, while addressing the challenges and risks with digital transformation, including enhancing the digital operational resilience of the financial system.[36] And this started by considering new products made by the use of cryptography, referring to its capacity to qualify for a market value, by regulating the market infrastructure based on DLT technology (i.e. Regulation EU 2022/858) and the market for crypto-assets (i.e. Regulation EU 2023/1114).[37] Indeed, it is following the regulation of commercial banking that are heavily reliant on the use of digital technologies in their daily business (i.e. Directive (EU) 2022/2556).[38]

However, it is clear that banks are affected by direct and indirect effects of the ecofriendly transition. Indeed, banking corporate governance is called to consider the externalities of both the internal organization of the bank and the ones of its lending activity, rather than the development of a new business line. Hence, commercial banking is called to consider both the possibility to deliver commercial banking reducing the carbon footprint, general waste and other damages to the environment, and to allow clients who meet ESG criteria to benefit from financing. Hence, bank corporate governance is evolving to consider the prudential implications of ESG risks.

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[36] See SABBATELLI, *Solidarietà necessaria e "common safety, common benefit"*, in *Rivista Trimestrale di Diritto dell'Economia*, 1s/2023, p. 101 ff. where the author moves from the book "Solidarity. A Normative Principle" by Guido Alpa to identify possible new forms in which cooperation can be declined in order to ensure solidarity, stability and inclusiveness.

[37] In this regard, it seems useful to bear in mind that public intervention must relate to the technical characteristics of the products and thus the rights and obligations therein. This also means that the regulation of crypto-asset risks refers both to the use of cryptography (and decentralised networks to circulate it) and to the rights a consumer obtains by investing in crypto-assets; see Ammannati, *Regolare o non regolare, ovvero l'economia digitale tra 'Scilla e Cariddi*, in AA.VV., *I servizi pubblici. Vecchi problemi e nuove regole*, Torino, 2018, p. 101 ff.

[38] In defense of the regulator, however, it should be noted that even businessmen are struggling in this middle ground of the digital evolution of the market for collecting savings and granting credit.

It is worth considering that the CRD VI acknowledges that credit institutions put in place and periodically review governance and risk management strategies, policies, and processes to identify, oversee, manage, report, and mitigate ESG physical and transition risks. In particular, commercial banks are required to have adequate governance structures, strategies, and processes to take ESG risks into account while assessing internal capital needs, as well as to strengthen market disclosure. In addition, the EBA is called to issue guidelines on the inclusion of ESG risks in the SREP and the content of transition plans, which must be aligned with EU climate targets, over a horizon of at least 10 years. Hence, the new regulations require fundamental steps for all the actors involved: authorities, commercial banks, and clients.[39]

In addition, there is the risk that commercial banking can be taken to court in climate lawsuit for direct and indirect contribution to climate change that is not compatible with the international climate actions to improve the ecological conditions of wealth. Indeed, there is the risk that the current activities of granting credit to creditworthy enterprise that substantially contributes to lawful climate damages. And this particular risk requires directors to consider the relevant exposures of the bank vis-à-vis certain industries, as the relevant loans have a long duration.[40]

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[39] The ECB conducted an initial review of the status of work on ESG issues at significant banks; it was found that compliance with the Guidelines published in late 2020 is still largely incomplete. Assessments of this progress will gradually be incorporated into the SREP. In the coming weeks, similar initiatives will be launched by the Bank of Italy on LSIs and other Italian non-banking intermediaries according to a proportionality criterion, in order to raise awareness of the importance of adequately monitoring environmental risks, assessing the approaches used to measure and manage ESG risks and promoting the collection of information in this area; see ANGELINI, *La recente proposta della Commissione europea di modifica delle regole prudenziali per le banche: un quadro d'insieme e una prima valutazione. Intervento del Vice Direttore Generale della Banca d'Italia al Comitato Esecutivo dell'Associazione bancaria Italiana*, Roma, 19 gennaio 2022. See also ROTONDO, *L'applicazione dei principi di proporzionalità e ragionevolezza nella regolamentazione italiana dei mercati finanziari*, in *Diritto del mercato assicurativo e finanziario*, 1/2017, p. 81 ff.

[40] Let us recall the debate held at the conference '*Le frontiere del contenzioso climatico: un confronto a più voci*' at the Bank of Italy on 29 February 2024

All the above seems to introduce incentives to drive commercial banking towards sustainability-related financing and hinder the other attempts to access credit made to support business that are not ecofriendly nor eco-sustainable.[41]

Now, this continuous evolution of commercial banking means that, in pursuing the safeguard of the environment, relationships can not normally maintain their own contractual structure. Certainly, many of the effects of lending are still too far off to predict,[42] and the directors of a bank cannot predict the future of the relevant facilities (even if they should not repeat the mistake of wishful thinking for an eco-sustainable use of that facilities nor taking excessively conservative approaches in analyzing the borrowers' demands for credit). [43]

All the above is leading to a proactive 'climate transition finance', which requires a change in the perimeter of the target market of commercial banks. In this context, banking corporate governance is going to face two main challenges: the on-boarding of the internal resources (for the success of the relevant green strategies)

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[41] See CAPRIGLIONE, *Clima Energia Finanza*, Milano, 2023, where the A. notes that only the European Union has taken up this challenge, where the Green Deal adopted by the Commission set out to transform the EU into an efficient modern economy by aiming to achieve zero climate impact by 2050 and setting as an intermediate target a reduction in emissions of at least 55% by 2030 compared to 1990 levels. As much as this action is appreciated, we do not see in it the essential characteristics of the public intervention mentioned in the introduction, an intervention capable of decisively affecting the problems of a 'consumer capitalism'.
In this regard, it seems appropriate to recall the investigations that addressed the issue at hand during the recent pandemic, see ANTONUCCI, *Covid e tutela assicurativa del bene salute*, in *La Nuova Giurisprudenza Civile Commentata*, 2023, p. 150 ff.; BANI - DI PORTO, *COVID-19: politiche in materia di aiuti di stato e diritto della concorrenza*, in *Concorrenza e mercato*, 2019-2020, 1, p. 3 ff.; LANDINI- RIZZUTI - DI AMATO - MUGELLI, Covid-19 e assicurazione, in *Diritto del mercato assicurativo e finanziario*, 1/2020, p. 99 ff.; MAGGIOLINO, *Appunti sul ruolo delle banche ai tempi del Covid-19*, in *Rivista delle società*, 2020, p. 527 ff.; NATOLI, *Una visione poliprospettica sull'emergenza da coronavirus nei rapporti tra privati": Note introduttive*, in *Rivista di diritto bancario*, 1s/2021, p. 1 ff.
[42] See VV.AA., Commercial banking in transition, Cham, 2024, p. 202
[43] See Alexander - Lastra, International Banking Regulation and Climate Change, Available at SSRN no. 4290785.

and the accountability of the relevant activities (in order to understand the achievement of ESG goals). Strategy and goals - today, more so than in the past - are two terms of a regulatory problem concerning the idea that the limitation of freedom to protect the environment is not an opponent but an effect of the same freedom: the democratic character of the sustainable growth able to ensure an inclusive effect.

Therefore, policymakers are called to understand the nature of this transition and to adopt a new approach when considering the regulatory intervention on the complex interrelationships between banking and the environment. Hence, in this context, the transition towards a sustainable commercial banking - considered the end of a long-lasting tendency - requires an exogenous process of regulation to support the 'green management' of the credit institutions.

If there is anything that makes it possible to distinguish the free market from the regulated market (and to order these in sequence), it is precisely the purpose of public intervention. Thus, there is a specific need for key performance indicators able to efficiently identify the targets; and the satisfaction of this need requires data capturing, collecting, collating and the significance of the aggregate reporting. Hence, if in the recent past the heart of management resided in the capacity of identifying and controlling actions and their future outcome, in the current transition, the main concern should be not to prejudice safe and sound development of the commercial banking.[44]

6. In western societies, money has been supplied by central banking and commercial banking in form of coins, commodity money and money with legal tender, on the one side, and redeemable banknotes, payable bank credit and other 'money

[44] See VISCO, *Un futuro per l'Europa: demografia, tecnologia, mercato*, Istitutional conference at the Accademia nazionale dei Lincei, Roma, 15 December 2023

substitutes'.[45]

In this respect, it is remarkable that the monetary power is both in the hands of the Government and the ones of the banking industry (or rather the participants of the capital market).[46] Hence the banking corporate governance is called to consider the problem of financing considering both the monetary approach and the credit approach. In other words, bankers can refer to the supply of liquidity by central banks that finance the financial system as a whole or to the collection of deposit in the wholesale or retail market. In this respect, the transition towards a more competitive and political driven form of commercial banking can benefit of the vesting of central banks with credit functions (in the form of ordinary liquidity facilities), because this form of credit can be linked to the provision of credit under specific constraints, such as impact of the money on the sustainability of the borrower (in a sort of new targeted refinancing operations).[47]

All the above should lead to a wider discussion on the effectiveness of financing tool for supporting commercial banking, as the current legal framework provides the

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[45] See VV.AA., Commercial banking in transition, Cham, 2024, p. 229, and thanking once again prof. Bodellini for is invitation, I must apologize for restating the title of his chapter 7 into 'the problem of financing banks'. The reason for this restating this title arises from the wider scope of this analysis, that stands on the same foundations of the study published by professor Zelmanovits and prof. Meyerhof Salama in chapter 11.
It is worth recalling LASTRA, *The Evolution of the European Central Bank*, in *Fordham International Law Journal*, Spring 2012, whereby the A. points out that the ECB a unique institution amongst central banks, as the ECB is a central bank whose array of functions and jurisdictional domain are determined by a Treaty instrument, the Maastricht Treaty, and now, following the adoption of the Lisbon Treaty, the treaty governing the ECB is now the Treaty for the Functioning of the European Union (TFEU).
[46] See MERSCH, Y., *Money and private currencies: Reflections on Libra. Speech by Member of the Executive Board of the ECB*, ESCB Legal Conference, Frankfurt am Main, 2 Settembre 2019.
[47] See SAVONA, *The economics of cryptocurrency*, *lectio magistralis* at University of Cagliari, 30 September 2021 and SAVONA, *Finanza dei derivati*, in Enciclopedia Treccani del Novecento, III, 2004; Savona, *Prefazione*, in Oldani, *I derivati finanziari*, Milano, 2010, p. 8; MASERA, *Elementi per una rilettura dell'articolo di Paolo Sylos Labini: "Inflazione, disoccupazione e banca centrale: temi per una riconsiderazione critica"*, in *Moneta e Credito*, March 2016, p. 121 ff.

ECB with a large toolkit,[48] allowing it to pick the most effective instrument after a case-by-case assessment, under technical discretionary choices and a certain degree of accountability.

However, it is worth focusing on the cost of the own funds that a bank has to collect for facing the transition and the additional capital requirements related to the risks arising from the implementation of technological innovations, the dependance from monetary policies and the perspective of a more climate-related and sensible lending activity.[49] In additions, it seems that the need for such own funds is more than proportional, as it rises because of two drivers: the increase of activity due to the efficiencies made by innovations and the increase of coverage required by the relevant risks. And the costs of these additional own funds depend on the market trends and the price for the overall risk of the bank, considered as an issuer. This is a specific reason to promote the completion of the EU capital markets union, as a part of the Economic and Monetary Union that aims at offering opportunities for economic stability, higher growth and more employment, as direct benefits to EU citizens.

7. Considering the commercial banking in relation to the scope for prudential regulation policy, it is worth considering the impact of the 'digitally generated assets' that are able to support the circulation of wealth on the business of credit institutions. Indeed, there are potential line of business for banks (and mainstream of revenues) in

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[48] See ECB, *Report on a digital Euro*, October 2020 and Board of Governors of The Federal Reserve System, *Money and Payments: The U.S. Dollar in the Age of Digital Transformation*, January 2022, as the ECB hypothesized that the introduction of the digital Euro could affect the transmission of monetary policy and have a negative impact on financial stability, e.g. by challenging the banks' intermediation capacity and influencing risk-free interest rates. The same applies to its possible use as a form of investment and, thus, to the possible transformation of deposits (at commercial banks) into liabilities (of the central bank).

[49] See LEMMA, *Innovazione digitale e moneta*, in AA.VV., *Corso di diritto pubblico dell'economia*, Padova, 2023, p. 375 ff.

the provision of services related to crypto-finance, as well as opportunities in managing the volatility and the risks of a direct investment in crypto-assets. First, banks may expand into crypto-based secured lending, whether in the form of loans or capital-market credit products.[50] Second, banks may consider offering custodial and payment services intermediation for crypto-assets. Third, banks may offer dealing services in crypto-assets, similar to market-making for foreign exchange or reception and transmission of orders.

Nowadays, the prudential recommendations and the accounting standards bring disincentives for commercial banks to deal with crypto-finance.[51] Indeed, it is clear that banks that secures lending with crypto-assets expose the value of their guarantees to market volatility, hence the potential profits from such new market may be off-set by the provisions for related risks.[52]

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[50] It is useful to recall that, in general, the operation in cryptocurrencies (or rather the acquisition of specific rights to such assets) may also be attached to powers, obligations or faculties, the exercise of which affects the legal-patrimonial sphere of the relevant transferees (or of the original minting party), so that in addition to the computer data, it is also necessary to take into account the agreements that accompany the relevant transfer (and which sometimes give content to the cryptographic registration); see MERSCH, Y., *Money and private currencies: Reflections on Libra. Speech by Member of the Executive Board of the ECB*, ESCB Legal Conference, Frankfurt am Main, 2 Settembre 2019

[51] Appare possibile ipotizzare che gli utenti del metaverso abbiano una propensione specifica per il ricorso alle criptovalute. in effetti, l'economista americano Mançur Lloyd Olson Jr. – cfr. Olson M., *Logic of Collective Action: Public Goods and the Theory of Groups*, Harvard (UK), 1974 – ha teorizzato che i membri di grandi gruppi non agiscono in base a un interesse comune se non motivati da un guadagno personale (economico, sociale, ecc.). Ne consegue che solo un beneficio strettamente riservato ai membri del gruppo motiverà qualcuno a partecipare e contribuire al gruppo, e quindi gli individui agiranno collettivamente per generare beni privati (o piuttosto plusvalenze e relativi profitti), ma non per fornire beni pubblici – come è stato considerato talora il sistema che supporta la circolazione del denaro, cfr. Rossi G., *Denaro e finanza, un bene pubblico*, in www.ilsole24ore.com, 18/11/2012 – con la conseguenza di influenzare le attuali tendenze normative volte a fornire incentivi per allineare le azioni private e l'aumento del benessere sociale; cfr. Ascarelli, *La moneta*, Padova, 1928; Savona, *La sovranità monetaria*, Roma, 1974; Stammati, *Moneta*, in *Enc. Dir.*, vol. XXVI, Milano, 1976; Capriglione, *Moneta*, in *Enc. dir.*, Milano, 1999, p. 747 ff.

[52] See CAPRIGLIONE, *Le cripto attività tra innovazione tecnologica ed esigenze regolamentari*, in *Rivista Trimestrale di Diritto dell'Economia*, 2022, I, p. 225 ff.

In this context, the issuing by the competent monetary authority of new means of wealth circulation referable to a digital, cryptographic and telematic representation of information (so-called Central Bank Digital Currency or CBDC and, as far as the EU context is concerned, Digital Euro) raises numerous challenges to the commercial banks.[53] First of all, the directors must consider the consequences of reshaping the central bank's supply of sovereign money.[54] After all, in many types of telematic transactions, CBDC would also represent an alternative to scriptural money (created through bank deposits) and electronic money (issued by authorised private institutions), and - in the plans formulated so far - such a crypto-currency would correspond to a central bank liability.[55]

And both of these features raise a form of competition between commercial banks and central banks for (i) providing payment services and (ii) collecting savings.

That said, in focusing on the legal perspective regarding the application of technological innovations to the market for sovereign money, both its rules of circulation and the other rules governing the use of money between individuals must be considered with reference to the rule of fungibility and the transfer of ownership.[56]

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[53] See CAPRIGLIONE - LEMMA, *The Adoption of Digital Euro: Problems and Perspectives*, in VV.AA., *Monetary Policy Normalization*, p. 123 ff.

[54] It is useful to recall the classic studies of SAVONA, *Sovranità monetaria. Lira schiava o padrona*, Roma, 1974; ID., *Alla ricerca della sovranità monetaria*, Milano, 2007.

[55] See ECB, *Report on a Digital* Euro, cit., Section 3

[56] All the above stands on the hypothesis that citizens may perceive the digital Euro as a substitute for bank deposits, with obvious competitive effects between the ECB's activity and the collection of savings by commercial banks. Therefore, it is possible that the effects of this innovation would not remain limited to the money market but would represent a new form of financial disintermediation in the banking industry. As this raises doubts as to the nature of this choice and its compatibility with the text of the European Treaties, specific questions will refer to the effects of the competition with respect to a possible reduction in the amount of money created by inter-banking intermediation. It is worth recalling an interdisciplinary study that identifies the paths to ensure that the adoption of the digital Euro complies with the current regulatory framework, considering both it is safety with respect to the stability of the capital market and, ultimately, to the functioning of the real economy; see LEMMA, Digital euro: is it a further way to financial disintermediation?, in *Law and Economics Yearly Review*, 2022, p. 186 ff.

In addition, it shall be considered the juridical effects of the deposits of CBDC into commercial banks, as it must be regulated if it transfers the full ownership of the asset to the bank and raises a correspondent liability in the balance sheets of the bank, so that - after a deposit - the client owns a credit rather than a digital asset.

Therefore, design and content of CBDCs are the elements on which the applicative results of technological innovation are embedded, with the effect that the actual rules applicable to this digital currency are crucial for activating the process innovations (about the circulation of money and other means of payment) and the product ones (with regard to cryptos and digital sovereign money).

Indeed, if we consider it carefully, these innovations can be regulated in a way that can influence the circulation of money, the creation of monetary base by banks and, therefore, the commercial banking industry. Accordingly, it must be taken into account that the project for a CBDC introduces elements of competition between the central banks and commercial banks, since the holding of the CBDC is an alternative 'store of value' function to that performed by bank deposits. This alternative can cause a substitution effect between the CBDC and bank deposits in customers' portfolios, and in case of an increase in the propensity of customers to remain owners of the sovereign currency by holding the CBDC, there will be a possible difficulty in banking collection of saving.[57]

In addition, the deposit of the individual clients' CBCD at a commercial bank can be regulated as a contract that does not transfer the property of the money from the client to the bank. In this case, the bank cannot lend (to private borrowers) *free* money coming from the floating of the deposits and their multiplicator. In this scenario, there would be a growth in the rates charged for the granting of loans (because of the

[57] See FIGUERA, *Moltiplicatore dei depositi e offerta di moneta: elementi per una riflessione critica*, in *Storia del pensiero economico*, 2005, p. 39 ff.

reduction of the quantity of loans that produces the revenues able to cover the cost of funding) and, in the second case, a reduction in the supply of credit (due to the reduction in the collection and in the possibility to multiplicate the monetary assets collected from the clients).

All the above leads us also to expect the possibility of a new commercial banking credit crunch, that is not desirable with the current difficult conditions of the real economy.[58]

After all, it appears necessary for commercial banks to be able to retain the ability to use the deposit multiplier mechanism to support their lending activities, as the current banking set up is based on the possibility to spread the costs over a relevant volume of credit (that is larger than the one of direct deposits).

Hence, the perspective of a CBDC is clouded by the perplexities of a systematic critical impact on the commercial banking.[59] These are shareable because, in the end, what is still uniting the commercial banking market seems to be the utilitarian sacrifice made to keep the circulation of capital together under the accountability of reliable credit institutions, where the absence of such union has the downside of exposing everyone to the full risk of others.

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[58] See HEIDER – LEONELLO, *Monetary Policy in a Low Interest Rate Environment: Reversal Rate and Risk-Taking*, in *ECB Working Paper No. 2021/2593*, 2021, p. 16 who writes that "this implies that banks with different equity multipliers may provide different lending volumes, despite having the same level of equity

[59] See BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM, Money and Payments: The U.S. Dollar in the Age of Digital Transformation, Gennaio 2022, p. 21 ff.

MONETARY DEVOLUTION AND THE POLITICAL ECONOMY OF CENTRAL BANK DIGITAL CURRENCIES

Leonidas Zelmanovitz * – Bruno Meyerhof Salama **

ABSTRACT: *Creating central bank digital currencies, or CBDCs, can be considered a form of "monetary devolution." The devolution lies in the power to create money shifted, at least in part, from commercial banks to the state. This is particularly clear if the CBDCs have cash properties and are made available to the public. We discuss the institutional incentives of digital currencies in general and monetary devolution in the United States in particular. Next, we outline an alternative that incorporates the technological edge provided by CBDCs. This alternative would be the creation of wholesale CBDCs to serve as the monetary base for settling retail payments with stablecoins. Designed as such, CBDCs could preserve the current balance between private and public money. Nonetheless, this approach faces significant obstacles due to the prevalence of fiscal considerations.*

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The agenda of monetary devolution. – 6.1. Sovereign money and the fragility of private money. – 6.2. Devolution of monetary powers as a response. – 6.3. The mechanics. – 6.4. Fiscal Mandates Undermine Central Bank Independence. – 7. The choice at hand. – 8. Conclusion.

1. The political economy of digital currencies is a dynamic field profoundly influenced by the emergence of cryptocurrencies such as Bitcoin and proposals for creating stablecoins like Libra/Diem. Such digital currencies challenge traditional state-controlled monetary systems by offering alternative means of transactions that can bypass governmental oversight and control. The proposed shift toward decentralization and reduced state monetary power has significant implications, the most relevant of which was to prompt a reaction from governments and financial authorities worldwide.

Central Bank Digital Currencies (CBDCs) are pivotal in this ongoing monetary counter-revolution. Positioned at the intersection of innovation and regulation, CBDCs are proposed by states as a means to reassert control over the monetary systems. This response is not merely about introducing new technology but is a strategic endeavor to reclaim the authority that the widespread adoption of private digital currencies could dilute. By incorporating retail and wholesale digital instruments that mimic the properties of cash and are accessible to the general public, CBDCs aim to balance the technological advancements seen in the private sector with the regulatory and fiscal responsibilities of the state.

Our exploration begins with an in-depth look at how cryptocurrencies like Bitcoin have reshaped perceptions of monetary sovereignty and continue to influence the design and function of digital currencies. We then extend our discussion to the broader spectrum of digital currencies, delving into security, volatility, and the economic costs associated with their use.

The subsequent sections are structured as follows: Section 2 evaluates Bitcoin’s role in diminishing state monetary power, and Section 3 examines Libra’s challenges and potential in the evolving financial landscape. Section 4 addresses broader cryptocurrency concerns, while Section 5 discusses the motivations behind and the critical examination of CBDCs. Section 6 presents our argument that CBDCs are a case of monetary devolution. Finally, Section 7 contemplates the future of banking and monetary policy in light of potential CBDC implementation, assessing implications for financial stability, sovereignty, and innovation.

2. Before delving into the intricacies of Central Bank Digital Currencies (CBDCs), it is crucial to understand the broader context of digital currencies, starting with Bitcoin. As the first and most well-known cryptocurrency, Bitcoin introduces several pivotal economic and political dynamics that mirror the challenges and opportunities posed by CBDCs. This section evaluates Bitcoin's impact on monetary sovereignty, its role as an alternative to traditional currency systems, and its implications for state-controlled monetary systems. These discussions lay the groundwork for appreciating the transformative potential of CBDCs, both in terms of technology and policy.

As a starting point, we can ask: *Is Bitcoin a good or a bad thing?* The answer depends on how we view the role and control of currency by the state versus the individual. Bitcoin's utility is providing an alternative to sovereign money, enabling users to evade government controls. This can be seen as either a positive or a negative, depending on one's perspective on monetary sovereignty. On the one hand, Bitcoin can be viewed positively if the weakening of state control over money is considered beneficial, especially in regions where the rule of law is inconsistently applied, or monetary policy is detrimental to economic stability. On the other hand, Bitcoin's ability to facilitate illegal activities, such as evading sanctions or funding criminal enterprises, undoubtedly undermines the rule of law. Additionally, the issue of purchasing power stability comes into play; Bitcoin might offer a more stable alternative in jurisdictions where the local currency performs poorly. This dichotomy presents a complex picture of Bitcoin's role in local and global economies.

2.1. But is Bitcoin able to deliver such protection? Paraphrasing Satoshi Nakamoto, "the network provides a distributed ledger to certify the first transaction done with the private key." That is the strength and the weakness of bitcoin since it requires the network to exist. How about if the set of incentives are no longer sufficient to keep the network operating? The moment you stop "mining" Bitcoin (the moment that recording the transactions ceases to be profitable), the network ceases to exist if the price that users are willing to pay to have a transaction certified may become uncompetitive. What about mining done under jurisdictions in which the government may be interested in forcing the miners to do not process some blockchains? 49% of mining is currently done in the US, a jurisdiction that has not been shy in using the monetary infrastructure for political purposes.

2.2. Furthermore, the stability of prices is the most important feature of a monetary system, given its function. If it is conceded that Bitcoin cannot provide that, then Bitcoin is subpar money. In order to keep price stability, you need a supply of money that increases as production increases. A fixed supply of money or one that increases at a lower rate than production is a recipe for deflation, not for stability. The cost of the base money creates an incentive for its substitution. Interesting to question why claims on bitcoin have not developed yet. A possible explanation is that the use of wallets managed by intermediary exchanges (that is, to accept claims on Bitcoins instead of clearing transactions directly on the blockchains) defeats the purpose of getting privacy by the use of bitcoin. Given the most important function money performs, the most important feature money must have it is stability of price value. That is better achieve with flexible endogenous money. Bitcoin is the opposite of that (not flexible and not endogenous).

2.3. Using Bitcoin as a medium of exchange entails significant consumption of real resources, particularly energy, compared to fiat money which is less resource-intensive. The economic implications of Bitcoin's high energy cost raise concerns about its efficiency as a currency. Users' preference for Bitcoin, despite its higher resource costs, is often driven by the benefits of privacy and decentralization it offers. However, objectively, if there are viable monetary alternatives that fulfill similar functions without the high resource costs, it becomes difficult to justify the extensive use of energy that Bitcoin requires. Therefore, from an economic and environmental standpoint, it is crucial to evaluate and consider more sustainable monetary systems that balance utility with resource efficiency.

2.4. While sovereign states exist, they will not easily relinquish their monetary prerogatives, although these may be constrained during peacetime. Bitcoin's expansion is tolerated only under favorable conditions, revealing the limits of its impact on state-controlled monetary systems.

The real trade-off involves evaluating whether the presence of Bitcoin, potentially weakening the U.S. government's military and political strength, results in a better or worse outcome for society. If stability in price and quantity were the sole concerns, Bitcoin could potentially serve as "base money," with competing commercial banks issuing money substitutes denominated in Bitcoin. However, this scenario is unrealized because the primary appeal of Bitcoin is its ability to offer anonymity, a feature not compatible with the transparency required in traditional banking systems.

Moreover, Bitcoin's role in evading political sanctions is clear and significant. It challenges the strength of sovereign currencies that underpin the economies of Western democracies. Consequently, the widespread adoption of Bitcoin might actually impede human flourishing by undermining the financial systems that support stable, democratic societies."

2.5. The fiscal dominance hypothesis posits that fiscal policy can often override monetary policy, particularly when government fiscal stability is threatened. This framework helps explain why a Bitcoin-based monetary system is unlikely to be implemented by governments. Central banks use monetary policy tools such as currency issuance and interest rate adjustments to manage economic cycles and stabilize markets—capabilities that are incompatible with Bitcoin's fixed supply and decentralized nature.

Moreover, Bitcoin challenges traditional revenue mechanisms like seigniorage—the profit made from issuing currency—which is crucial for many governments. Additionally, Bitcoin's ability to circumvent capital controls can exacerbate financial crises, increasing capital flight and undermining national economic stabilization efforts. The global and borderless nature of Bitcoin also introduces complexities beyond any single government's control, posing significant challenges to traditional fiscal and monetary governance. As such, governments are likely to remain cautious about integrating Bitcoin or similar cryptocurrencies into their monetary systems, prioritizing fiscal stability over the decentralization benefits of digital currencies.

2.6. As we explore the evolving landscape of digital currencies and their implications for monetary sovereignty, it becomes essential to understand the underlying principles that govern their value. The "Regression Theorem," an application of the subjective theory of value, suggests that the value of a monetary medium stems from the utility it provides. This principle is crucial in analyzing digital currencies like Bitcoin, which lack physical backing yet gain widespread acceptance and utility, such as being used to pay taxes. The absence of a need for physical commodity backing, like gold, highlights the modern shift in how value is perceived and established.

In the specific context of Bitcoin, this utility extends to the ease of circumventing capital controls and conducting transactions with a level of anonymity unparalleled by traditional currencies. This aspect of Bitcoin's utility has led to a unique valuation by its holders, underscoring the Regression Theorem. Bitcoin's value arises not just from its potential as an investment but also from its functional use in providing financial autonomy and privacy. This demonstrates a key transition in the perception of money within our discussion on monetary devolution, where digital currencies challenge traditional state-controlled monetary systems by offering alternative means of transactions that can operate outside conventional regulatory frameworks.

3. Following the analysis of Bitcoin, it is essential to examine other forms of digital currencies, such as Libra, proposed by private entities like Facebook. This section explores the potential responses from national treasuries and central banks to private digital currencies, which challenge traditional monetary mechanisms. Understanding the “Treasury view” helps illustrate the complexities and regulatory hurdles digital currencies face, providing a clearer perspective on the institutional resistance to integrating such technologies into the existing financial systems. This analysis is key to assessing the feasibility and implications of CBDCs as they interact with private digital currencies in a competitive monetary landscape.

In a White Paper released on June 2019 by Facebook and its associates describes the Libra, a new cryptocurrency they were planning to launch some time in 2020. Judging from the white paper, they hoped to have designed a mechanism that, by overcoming the problems facing all previous forms of cryptocurrency, could become a generally accepted medium of exchange on the Internet worldwide. The intent with the Libra was to create a privately issued currency that would be backed by a basket of hard currencies issued by major central banks. What the plan really does is make one wonder how much thought they gave to: 1) the nature of money, and 2) how their creation fits within existing constraints. Not enough—or so it seems at first glance.

3.1. As a way to indicate skepticism about the capacity of Facebook and company to achieve these goals, in a piece posted on Law & Liberty in July 2019, one of us contrasted them with "the Treasury view," that is, the responses to Libra that are likely from the civil servants and politicians in charge of exercising the monetary prerogatives of the U.S. government. The "Treasury view" entails recognizing that, in order for the state to protect the life and property of its citizens, it must be able to use force— either externally, through the armed forces, or domestically, through the police.

3.2. Monetary prerogatives give the state the capacity to procure stocks of goods beyond the limits of its taxing base at any given time, either by borrowing or, in extremis, by inflating the currency.

Notwithstanding the fact that the monetary prerogatives (issuing money and regulating finances) have been applied to uses other than war-finance, that is the original reason for the national state to monopolize them, and that reason to hold those prerogatives still remains.

3.3. Before addressing Libra's relation to these existing arrangements, let us talk about one of the derivative applications of the government's monetary prerogatives: the management of capital flows.

First, let us assume the validity of the "impossible trinity" as proposed by the Mundell-Fleming Trilemma, which is that a country cannot simultaneously have a fixed exchange rate, monetary discretion, and free international flows of capital.

Next, let us agree with Facebook and its partners that “global, open, instant, and low-cost movement of money will create immense economic opportunity and more commerce across the world.” However, something needs to give.

It is not realistic to assume that you will be able to create a “global currency” that will allow “open, instant, and low-cost movement of money” around the world when this would infringe with impunity on the monetary prerogatives of those countries who wish to control their own money supply and at the same time keep their foreign exchange rate fixed.

Another relevant activity performed by a central bank, as mainly responsible for the exercise of the sovereign’s monetary prerogatives, is its provision of liquidity (as lender of last resort) to financial institutions issuing claims denominated in the currency the central bank issues.

3.4. The fact that no single Libra would be minted without the backing of a corresponding reserve in hard currency (as happens with a currency board) does not eliminate the problem that claims denominated in Libras may be issued. Were Facebook and its partners prepared to forbid the nodes in their network, such as the managers of digital wallets, from opening credit in Libras to their customers?

3.5. Alternatively, would Facebook and its partners accept being regulated as financial institutions by the U.S. government in order to benefit from its umbrella? If so, from where will come the cost reductions they are hoping to realize in comparison with regulated banks? The main impediment, though, remains the question of the state’s monetary prerogatives as an instrument for financing defense. Anything that would reduce the capacity of the U.S. government to float its debt is a security risk. I do not think that reducing the floating of U.S. dollars, and lessening the dollar’s role as the reserve currency of the world—which the creation of a system like the Libra would do—would be acceptable to those holding "the Treasury view."

4. For investors, what can go wrong with cryptocurrencies? In regular times, not much. First, the brokerage of crypto-assets is something new, and neither a body of self-regulating norms nor regulation have evolved yet. In short, investors can be defrauded, harmed, hacked or swindled.

Second, crypto-assets price can float abruptly. Investors may lose (but also gain) fortunes. In theory, stablecoins minimize this risk. But what if normality doesn't hold? To answer that, first we should consider that there is a sharp difference between what crypto-assets are today, and what they may become. In the US, there are online sales shops that accept payment in bitcoin. Cryptocurrencies are also used for some daily operations in countries undergoing monetary instability. But even in these places, ordinary payments with cryptocurrencies are still uncommon.

This is very different from what cryptocurrencies enthusiasts consider "success". Theirs is a vision where e-wallets, cryptos and other forms of digital money have been completely normalized. The banking model as we know it today may or may not change drastically, because entrants in the payment arena may operate similarly to banks. One of the characteristics of this futuristic world dreamed by crypto-enthusiasts is that governments would have a hard time stimulating the economy with monetary policy.

Nowadays, to face low activity cycles, governments issue money and buy bonds. This causes a fall in bond yields, driving down interests, stimulating consumption and investment. It can only work if savings are kept in the national, fiat currency. If savings are kept in crypto-assets, the monetary impulse given by the government does not do the trick, because it does not change relative prices in the economy. To be sure, hindering government from doing monetary interventions has its advantages; just do not expect central bankers to see things that way.

So, under severe pressure, what could governments do? History helps us here. In 1933, during the "abnormal" times of the Great Depression, president Roosevelt forbade people from keeping gold.[1] The decree determined that all gold should be sold to the government at a predetermined price. Roosevelt's strategy was to push aggregate demand, punish savers and force people to spend so as to inflate prices and stop the deflation cycle. It was an extreme measure, of debatable efficacy and employed during a severe crisis. This historical example illustrates well the kind of problem that can happen outside of economic normalcy. Fast forward and place yourself in the future where cryptocurrencies have "succeeded," savings are kept in cryptos, especially in Bitcoins, the "synthetic gold," and prices are not denominated in fiat currency. Suppose there is an economic depression for whatever reason. Could a government put in place a measure similar to that of the Great Depression?

A good question is whether digital confiscation is even possible. For instance, in the case of Bitcoin, all that is needed to trade is a digital wallet and internet access. If transactions are forbidden in one country, a simple VPN will allow international operations. So killing Bitcoin may be impossible, but that does not mean that a Bitcoin prohibition would be inconsequential. If crypto operations became less attractive, their value could plummet. Would people then migrate back to fiat? This is a little tricky. Moneys are not all created equal, and neither are the governments that create them. If a crypto prohibition were tried by the government of a developing country, odds are it would not work. Developing countries governments tend to be overall weaker and to lack popular support.

The story is very different in developed countries. In the latter, governments are stronger and their actions can be more effective. Recent initiatives by the Chinese government to close bitcoin brokerages and prohibit ICOs (Initial Coin Offerings) at

[1] See Sebastián Edwards' *American Default*.

least demonstrate the ability of government to change the rules of the game when needed. Of course, not every cryptocurrency is the same. If a cryptocurrency is run by a centralized system, such as in the case of Libra, the government stands to have a much greater chance to effectively regulate, control or ban the crypto. To illustrate, Congress sent Facebook a letter requiring the suspension of the Libra project. If Congress had instead wanted to suspend Bitcoin, there would simply be no one to even address the letter.

Another relevant aspect that conditions government efficacy would be the extent of private adoption of cryptos. A company such as Uber offers a relevant benchmark. In some places, Uber services have become so ingrained that makes it impossible for governments to reinstate the rules that had once favored taxi drivers. The lesson is that beyond a certain point, a cryptocurrency can become too big to ban.

5. Calls for the Federal Reserve (Fed) to adopt a Central Bank Digital Currency (CBDC) that the public can use at large – or "retail" CBDCs – have become common in the United States. The idea first gained political attention in 2019 after the release of a white paper by Facebook proposing the creation of a stablecoin called *Libra* (subsequently rebranded as *Diem* before the project was discontinued). Later, in the context of the response to the COVID crisis, several proposals were introduced in the U.S. Congress for creating "Digital Dollars" and "FedAccounts." In parallel, the Federal Reserve Bank of Boston partnered with the *Digital Currency Initiative* at the Massachusetts Institute of Technology to gain a hands-on understanding of a CBDC's technical challenges and opportunities. Despite occasional pushback from the commercial banking industry[2] and even from within the Fed,[3] CBDCs increasingly look

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[2] See e.g. G. Baer, Central Bank Digital Currencies: Costs, Benefits and Major Implications for the U.S. Economic System, Bank Policy Institute, Staff Working Paper.
[3] R. K. Quarles, Parachute Pants and Central Bank Money, June 28, 2021, Speech delivered at the 113th Annual Utah Bankers Association Convention, Sun Valley, Idaho.

like a question of “when,” not of “if.”[4]

And yet, create a CBDC with what purpose?

The question is daunting, and there is no shortage of voices saying that CBDCs are *a solution looking to a problem*. Not that there aren’t justifications: a Fed-issued digital currency is said to be necessary to secure American financial dominance, particularly in light of the impending coming about of China’s digital renminbi; to improve monetary policy, particularly in the implementation of stimulative measures; to promote financial inclusion or to address longstanding economic inequalities; to help spur innovation in ways that the current system cannot; and to avoid fragmenting liquidity or to allow the United States to compete with private-sector money substitutes, specially stablecoins.

Some of these contentions rest on feebler grounds than others. For example, the idea that a CBDC is needed to increase financial inclusion begs the question of why not using instead more straightforward solutions that rely on basic commercial accounts, like the FedNow or the “Bank On” accounts initiative promoted by the Fed, or other solutions that have a proven track record, such as those involving telecommunication companies in Africa or payment platforms such as Brazil’s PIX.[5] Similarly, the idea that a CBDC is needed to preserve the international status of the US Dollar seems to elevate form over substance and to heavily discount both the strengths of the US Dollar – the size of the US economy, the depth of its financial markets, the absence of foreign exchange controls in the US, the country’s international military presence, inertia, and so on – as well as the US Dollars vulnerabilities – the US fiscal imbalances and internal political divisions, the damage caused by the use of the Dollar to sanction nations in political disfavor, and, of course, the ascent of China.

[4] Financial Times, June 23, 2021. CBDCs now seem a matter of when not if.
[5] A. Duarte et al., Central Banks, the Monetary System and Public Payment Infrastructures: Lessons from Brazil’s Pix, BIS BULLETIN NO. 52 (Mar. 23, 2022).

Moreover, it is not inconceivable that condoning (instead of opposing) the technological innovation housed within a CBDC could, help spur innovation in ways that are not entirely foreseeable. In any case, inefficiencies of commercial banking as it stands today should not be ignored. Even in the best case, of course, adopting CBDCs is not risk-free. Damage to privacy is a concern that is often remembered (since retail CBDCs can be a tool for the government to track people's monetary outlays directly). Moreover, cyber-security and (especially in the case of retail FedAccounts) administrability figure prominently.

Discussing CBDCs from the perspective of tradeoffs, that is, of pros and cons, is, however, an incomplete enterprise. The risk is that of concealing the political economy that underpins the enterprise of money creation and money regulation. Once we turn to the political economy of money – or perhaps, to the *Law and Macroeconomics* of money –[6], a more fundamental interpretation of the creation of CBDCs can be formulated, one that finds a unified meaning in the myriad of policy goals and rationales that are enlisted to support their creation: retail CBDCs represent yet another step towards the devolution of monetary powers from commercial banks to the state. They are, to put it bluntly, a fiscal and monetary tool and not simply a strategy to reduce transaction costs.

We find the agenda of monetary devolution in that retail CBDCs displace fractional reserve commercial banking and private money in favor of sovereign money. At the same time, as we explain, there is an alternative to use the technological edge provided by CBDCs without going down the road of monetary devolution. To visualize it, we must let go of the idea of adopting retail CBDCs and focus instead on a CBDC available only to intermediaries. This wholesale CBDC, sometimes called wCBDC, could ground the transition to a crypto-based monetary system where stablecoin issuers

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[6] L. Zelmanovitz and B. Meyerhof Salama, LawMacro and the Schism in Law and Economics. Law and Liberty, 2020, available at https://lawliberty.org/how-money-could-revive-law-and-economics/.

would adapt money creation to market needs, complementing and perhaps eventually replacing on-demand deposits. CBDCs would then be used as base money to settle transactions between the stablecoin issuers. The result could be one where the United States improves the technological footing of its banking and financial system without running into the problems of capital misallocation that inevitably come about when endogenous money cedes room to sovereign money.

The fiscal implications of CBDCs, however, mean that the push for monetary devolution – that is, the push for the creation of retail CBDCs and FedAccounts – does not come mainly from the attraction of the new technologies underlying CBDCs. Its root cause lies elsewhere, especially in the structural deficits of the United States Treasury. These structural deficits place the Treasury in a position where it is constantly seeking additional buyers of government debt – preferably at negative real rates. Retail CBDCs are then appealing precisely because they increase the ability of the government both to create inflation (engineering the negative interest rates needed to reduce the public debt) and to use such CBDCs to make up for the decreased demand for Treasuries that can come when real interests are negative.

6. When we first wrote about the prospects for the adoption of retail CBDCs in the United States, we found that the devolution of monetary powers to the state was CBDCs' "hidden agenda".[7] This agenda is now increasingly visible.

The motivations behind the push for sovereign money are many. To refer to only some of them, ESG represents a call for the government to step in to finance the shift to a green economy; international geopolitical competition with China and the outburst of the COVID pandemic have led to calls for industrial policy; political

[7] See e.g. Morgan Ricks' testimony before the United States House of Representatives Committee on Financial Services Task Force on Financial Technology June 11, 2020. Available online at: https://www.congress.gov/116/meeting/house/110778/witnesses/HHRG-116-BA00-Wstate-RicksM-20200611.pdf

grievances animate calls for the incorporation of state-owned banks; and, last but not least, the deterioration of the United States fiscal situation generates pressure for greater financial repression to facilitate placement of public debt. These and other considerations explain why the base case for the adoption of retail CBDCs in the United States continues to be one of devolution of monetary powers to the state to enable greater financial repression – that is, political allocation of money and credit – and monetary financing of the Treasury.

To see why, the starting point is to understand that CBDCs are a form of sovereign money. At its core, a CBDC is a digital payment instrument that is a direct liability of the Fed. Like currency and reserve balances, it would be part of the monetary base. Moreover, if available to the public, CBDCs would have the same legal tender privileges granted to cash and be part of the money supply. But unlike currency, a CBDC can only exist in electronic form. The specific electronic form would depend on whether the CBDC is created as a "token" or as an "account." Electronic tokens are designed to mimic paper money. They are like electronic pre-paid debit cards or gift cards in that they are not connected to an account relationship between the depository bank and the token holder. Depending on the institutional design that may be chosen, this depository entity could be the Fed or any other digital wallet provider.

Account-based CBDCs can be thought of as universal central bank accounts. They are designed to give retail customers access to online bank accounts directly with the Fed. Like electronic tokens – but unlike bank deposits or e-money stored in prepaid cards – these accounts are central bank liabilities. They are reserve balances held at the Fed, except that they would be available to everyone and not only to the 5,000 or so depository institutions that maintain accounts at the Fed. Currently, the Fed provides those accounts to banks and governmental entities only. Extending them to individuals would require the enactment of new legislation.

The BIS (Bank of International Settlements), which is involved in developing international standards, has advised countries to prefer account-based instead of toked-based CBDCs.[8] It also recommends including a privacy layer to curb fears of government surveillance, since they would be identity-linked.[9]

The critical point, however, is that whether in the form of a token or bank account, a CBDC will be a form of money created by the US Federal Government through its monetary authority. This is why we refer to it as "sovereign money." It follows that the proposals to create CBDCs should be accounted in practice for what they are in theory: an attempt to crowd out privately created money – and, therefore, an invitation for a greater degree of government-directed credit, money creation, and financial repression (or political allocation of money) than what we already have today.

6.1. To make sense of the distinction between private and sovereign money, we must go back in history. For the last three hundred years, in Western societies, money has been supplied partly by the state and the market. The state portion of the money supply has taken the form of coins and commodity money and, later, fiat money with legal tender. Commercial banks have provided the other part of the money supply: first in the form of banknotes redeemable in government-issued coins and later in the form of bank credit payable in government-issued paper money –which is why these money-claims issued by banks are also referred to as money "substitutes."

The supply of money by the government first depended on the availability of precious metals. The sovereign was forced to use real resources to invest in the mining of silver and gold or to purchase bullion from which it could mint coins. It was only much later that sovereign money was made possible solely on the government's will (fiat money). In any case, the amount of money the government supplies is said to be determined "outside" the market.

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[8] BIS Annual Economic Report 2021, III. CBDCs- an opportunity for the monetary system, p. 82.
[9] *Id*, p. 74.

Banks, on the other hand, give credit by creating banknotes or credit bank account balances for their borrowers. The crucial point is that credit is created only when borrowers develop investment propositions that are likely to allow for a profit. Because the amount of money substitutes created by banks depends on profitable opportunities for lending in the market, that part of the money supply is called “inside money.” The beauty of this system is the supply of money adjusts “naturally” to the ever-changing demand for money.

This is the essence of what is now known as “modern finances,” that is, fractional reserve banking. This system came about in 1694 with the creation of the Bank of England. Instead of using metal as a medium of exchange, people started to use the Bank’s promise to pay gold and silver for their private exchanges. This promise was represented on the Bank of England’s balance sheet and took the form of banknotes.

The English commercial banks rapidly started to create more money substitutes than the counterpart of the amount of money initially borrowed by the UK Crown or the amount of reserves they kept. The banks started to finance credit to commerce and, later, farming and industry. These arrangements with “fractional” reserves financed the Industrial Revolution. They usually worked well when prudently managed under the rules of their creation – especially that the bank could not fund the government with the issuance of banknotes.

However, in situations of emergency, usually because of the need to finance armed conflicts, said arrangements would end up being abused. At that point, inflationary war finance would come about and lay bare the fragility of built-in fractional reserve banking. Everywhere (and until today), banks are organized under a legal framework that allows the sovereign to exercise its monetary prerogatives to force them to lend to the government in emergency cases.

Focusing on this fragility should not obfuscate an under-appreciated benefit of this system: it is geared towards directing funding to the most promising investment opportunities. This improves overall economic efficiency both directly and indirectly: directly because capital is allocated productively and indirectly by aligning the interests of bankers and depositors, since the search for profit by the former signals to the latter that their savings will be parked in a solvent institution.

This trust-based system can be broken in three situations: first, when the sovereign thinks that it is politically expedient to force the banks to lend money to the state (primarily to finance war, as explained); second, when, in the absence of adverse clearing, the banks are perceived to have overextended themselves by creating more money substitutes than the amount of money people want to hold (leading to bank runs); and third, when bank lending is politically driven or poorly managed and systematically forgoes the most profitable opportunities. The ensuing evils include bank failures, inflation, and capital misallocation.

6.2. It is because these evils have plagued Western societies for centuries that some politicians, policymakers, and academics have considered abolishing inside money altogether. A well-known example was the monetary reform proposal known as the Chicago Plan, which, in the 1930s, proposed a strict form of monetary devolution called "full reserve" or "narrow banking," where the government would take back the money monopoly. The idea was to separate the credit and monetary functions of the banking system by forcing commercial banks to operate under a 100% reserve requirement where deposits and other short-term liabilities would be backstopped with sovereign money on a 1:1 basis. Thus, at the cost of worsening capital allocation, this system would eliminate the risk that taxpayers would have to shoulder the costs of bank runs.

Most CBDC proponents partake in the Chicago Plan authors' concern with bank runs, and perhaps more importantly, they also dispute the ability of the banking system to efficiency allocate capital, whether due to shortsightedness or inability to factor broader societal goals into their decisions to price and extent credit. Hence, their optimism towards CBDCs expected reduction of the role of inside money.

So far, the Chicago Plan represents the road not taken. In fact, despite private money's fragility, the government actively promotes its creation. For instance, governments worldwide offer or promote "deposit insurance" and "lender of last resort" facilities to entice people to surrender money in exchange for deposits, propping up bank-issued money claims. These and other measures approximate bank deposits to the risk-free, sovereign money produced by the government.

There is, however, a flipside: banks may be forced to help finance the government directly (by having to buy Treasuries) or indirectly (by lending to protected segments). Beyond that, banks will have to lend themselves to extensive regulation. However, compared to regulation, retail CBDCs offer a more radical solution to the problem of fractional "fragility": curbing the ability of banks to create money or further regulating its quantity, depending on the particularities of each CBDC scheme.

But to return to our starting point – to return monetary powers to the government with what purpose? On the one hand, we could say with the coming about of CBDCs; the government will target the fragility of private money head-on by eliminating it. From this viewpoint, CBDCs are a tech-based variant of previous attacks on inside money, such as the "Chicago Plan" or other proposals for full reserve banking. But instead of being simply a tool to deal with the risk of bank runs, retail CBDCs would represent more of the same since, in the end, what they would do is make it possible for the government to increase its ability to do something that it already does today – that is, to gain access to real goods without imposing greater taxation in the present. From this viewpoint, retail CBDCs would be nothing but one more stance in which it is advocated that the liquid funds of the community should be politically allocated.

To see why, consider that retail CBDCs will stand in direct competition with bank deposits. CBDCs and demand deposits develop the same function and have similar features: they are both digital, they are assets that can be redeemed on-demand at face value, and they are used to make ordinary payments. But while demand deposits are a bank promise to repay the asset in sovereign money, CBDCs are sovereign money itself. From the user's perspective, all else equal, CBDCs are therefore superior in quality to demand deposits. As a result, the issuance of CBDCs tends to displace demand deposits, especially in times of financial stress. Expectedly, therefore, some deposits will be exchanged for CBDCs, a phenomenon often referred to as "disintermediation."

The expected result would be those that traditionally fall under the rubric of *financial repression*. For one, credit would be allocated to the sorts of projects that the political process deems more worthy of receiving the funds (for example, the United Nations *sustainable development goals*, or SDGs) to a greater extent than today. Moreover, the crowding out of private by sovereign money would, at least, assist the government in accelerating debt monetization. The increase in non-bank lending would be another expected, even if unwanted, result.[10]

6.3. Let us see how any of that can be accomplished. As a first approximation, we can use the Chicago Plan model to illustrate the mechanics of FedAccounts. Suppose the Fed creates a ledger for all bank accounts in the country directly in its balance sheet. The Fed then announces that depositors can choose between opening new accounts directly with the Fed or keeping their deposit accounts with their current commercial banks – but in the latter case, under the caveat that each commercial bank must transfer one hundred percent of deposits in real time to corresponding accounts held with the Fed by their customers.

[10] It is worth noting that, like it or not, a CBDC is a form of high-powered money. Therefore, it should come as no surprise that it will be leveraged, either formally, if paths for that are open, or, otherwise, informally.

Under such arrangements, the commercial banks will, in practice, be put in a regime of 100% reserve requirement and will not have money to lend to private borrowers from the floating of the deposits. In turn, the Fed will have as base money (bank reserves with the Fed) the entire liquidity of the country, including the other component of base money, paper currency. Thus, all the demand for “cash” (paper money and bank deposits) becomes “Fed-accounts.” The money supply becomes a Fed liability, all of it. The counterpart of those liabilities on the asset side of the Fed’s balance sheet are Treasuries and other bonds that are determined based on the Fed credit policies.

Now, under this regime of “full reserve” banking, if the banks wish to lend money, they first need to borrow from the Fed or borrow in the capital markets like any other business. Then, of course, the function of commercial banks changes quite radically. Instead of creating inside money, banks focus on screening consumers, on-boarding, servicing, and off-boarding them, and watching over and updating the technology platforms. To maintain the level of money supply, the government steps in. It could seem like a regulators’ utopia but the practical outcome can differ. The problem is that the repression of financial intermediation by commercial banks expectedly creates market incentives for other nonbank agents to step in and develop new forms of shadow banking.

6.4. The devolution of monetary powers to the state that comes up with the creation of retail CBDCs also helps undo the operational independence of central banks and the formal separation between monetary and fiscal policy. Early framers of the Fed intended this separation. It was reinforced in 1933 with the creation of the Federal Open Market Committee (FOMC) and in 1935 with a statutory limitation on monetary financing. Of course, this is not to deny that the separation has always worked best during peaceful times, since in times of war debt monetization tends to become the norm rather than the exception.[11] Thus, during World War II, Congress amended the Federal Reserve Act to authorize the Fed to purchase securities directly from the Treasury – which it always did at low-interest rates.[12] After the War, inflationary pressures pushed for the reinstatement of a prohibition against monetary financing – first, in a 1951 one-paragraph "Accord" between the Fed and the Treasury, and later with an amendment to the Federal Reserve Act that allowed the Fed to buy and sell Treasury securities only in the secondary market.[13]

The point to be noted is now a strong movement exists to undo this framework of separation of fiscal and monetary policy in times of peace. To be sure, any realistic assessment must acknowledge that the line between fiscal and monetary policy is already very much blurred. To respond to the 2008 financial debacle, the Fed set to purchase unprecedented quantities of government debt under its "quantitative easing" programs. This trait was sometimes perceived as the Fed backstopping public debt.[14]

Besides that, the Cares Act enacted in response to the COVID-19 pandemic further expanded the Fed's lending capabilities to non-bank entities by authorizing it to provide "liquidity to the financial system that supports lending to eligible business,

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[11] Although in the United States little money was created to fund the war efforts of World War I. See Richard Sutch, Liberty Bonds, RESERVE HISTORY, FED. RESERVE BANK ST. LOUIS, https://www.federalreservehistory.org/essays/liberty-bonds ("the [United States] federal government relied on a mix of one-third new taxes and two-thirds borrowing from the general population […] The borrowing effort was called the "Liberty Loan" and was made operational through the sale of Liberty Bonds. These securities were issued by the Treasury, but the Federal Reserve and its member banks conducted the bond sales.").

[12] G. Richardson, The Federal Reserve's Role During WWII FED. RESERVE HISTORY, FED. RESERVE BANK ST. LOUIS, https://www.federalreservehistory.org/essays/feds-role-during-wwii.

[13] Federal Reserve Act § 14(2)(b), 12 U.S.C. § 355 (2018). For a summary of the evolution of the statutory limitations to monetary financing in the United States, *see* Marcelo Prates, Money in the Twenty-First Century: From Rusty Coins to Digital Currencies, 15 Ohio State Business Law Journal 164, 197-199 (2021).

[14] J. B. Bolzani, Independent Central Banks and Independent Agencies: is the Fed super independent?, 2022, 22 Bus. L. Journal 195, 228.

States, or municipalities."[15] In particular, the Cares Act authorized the Secretary of the Treasury to use almost half a trillion dollars in programs with funds appropriated to a fund that belongs to the Treasury.[16] Given the Fed's limited discretion in allocation, some scholars sustained the Fed was acting as a "conduit" for fiscal policy implementation through the financial system.[17] But this, in any case, is far from a rigid separation between monetary and fiscal authority.

For instance, calls for central banks in general and the Fed in particular to "help" with climate change is an evident attempt to bypass the political process, where the merits and demerits of funding the desired initiatives must be evaluated. To attribute a "third," environmental, mandate to the Fed is obviously a political decision. To fund environmental policies by monetary, extra-budgetary means is more than "blurring" the lines between monetary and fiscal policies, it is to eliminate those lines. No central bank may expect to keep its independence if it accepts responsibilities used before only in emergencies.[18]

As such, the adoption of CBDCs along the lines described herein (representing a devolution of monetary powers to the state) can be framed simply as normalizing a situation previously treated as exceptional. Theoretically, the Fed typically holds operational autonomy vis-à-vis the Treasury and the executive power. Base money is created to facilitate monetary policy to keep inflation at bay and to permit the Fed to ease economic fluctuation within the business cycle. In practice, expanding the Fed mandate to backstop an ever-increasing number of non-bank agents creating money-

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[15] Cares Act, Section 4003(b).

[16] *Id*.

[17] See J. B. Bolzani, Has the Cares Act Expanded the Fed's Legal Mandate? The FinReg Blog, October 26, 2020, at https://sites.law.duke.edu/thefinregblog/2020/10/26/has-the-cares-act-expanded-the-feds-legal-mandate/#_ftnref5.

[18] The risks associated with that have been clearly stated by Mr. Jerome Powell, the Fed Chairman (https://www.federalreserve.gov/newsevents/speech/powell20230110a.htm), and further developed by Mr. Michael Gibson, Director of Supervision and Regulation (https://www.federalreserve.gov/newsevents/testimony/gibson20230718a.htm).

claims within the shadow banking system has rendered the Fed's independence less relevant, and debt monetization has blurred the frontier between the Fed and the Treasury.

The coming about of retail CBDCs would accordingly be the coronation of this process, where commercial banks are forced to renounce their ability to produce money in response to profitable opportunities, and the accommodation of the economy's needs for liquidity is shifted to the government.

7. Foes of private money may aspire for direct retail accounts with the Fed, a "postal bank" associated with the Fed, and lending done directly by the Federal government and some of its agencies. In this scenario, the entire financial sector is nationalized in one way or another. Leveraging and deleveraging the private sector has become increasingly a political matter, and the incentives for efficient capital allocation are severely hurt. The market-driven allocation of capital is undone, and the efficiency of wealth creation in society is reduced.[19] All of that justify caution in CBDCs.

A steadfast opposition to CBDCs is a different story. It is a dangerous path because it can accommodate several errors, especially self-deception, in assuming that the current system, despite all its advantages, presents the endpoint of monetary history. Besides that, opposing CBDCs as a matter of principle can amount, perhaps, even to a form of neo-Luddism, this time represented by oblivion to CBDCs' technological advantages and possibilities. More concretely, one should recognize that current commercial bank systems are expensive and that CBDCs can offer means to streamline payments, making them cheaper and faster, particularly in international payments.

[19] Of course, not all proposals for the creation of CBDCs are that extreme. Some of the proposals for the creation of digital "token dollars", for instance, will only marginally (although no one can know for sure by how much) reduce private banking intermediation by inducing a greater portion of the liquid holdings to be kept in cash – now, in its digital form.

An additional point is that, with or without CBDCs, the role of commercial banks is changing. Traditional commercial banks are now in competition not only among themselves but also with non-banking institutions that, thanks to new technologies, found niches in financial markets and became fintechs. Given the quick expansion of cryptocurrency markets, it impossible to envision a payment system where CBDCs become the basis for financial intermediation.[20]

Among the different types of digital money currently being created, stablecoins hold the most potential for broader adoption. Stablecoins are, in the words of the Financial Stability Board, "crypto-assets that aim to maintain a stable value".[21]. Stablecoins can be pegged to commodities, gold, or other cryptocurrencies. More daringly, stablecoins can be backed by an algorithm that tries to keep the peg with a national currency (this was famously the case of Terra USD, which collapsed in May of 2022). Stablecoins can also be tied to a currency basket (as intended by the Libra project).

Our interest here, however, lies in stablecoins which become a claim on a single currency. Under this model, stablecoins contain private liabilities that can be redeemable in base money, just like bank deposits.[22] That is as much as a traditional form of financial intermediation done through fintechs as it is possible to conceive, except that they are offered by, so far, non-financial institutions.

Importantly, stablecoins are a form of credit money, that is, a currency that is redeemable in something else. Here, the contrast with Bitcoin is striking because stablecoins are an "I owe you something" form of money, whereas Bitcoin is an "I owe you nothing" form. Because stablecoins are a form of credit money, they can be leveraged by issuing more debt than they will hold in liquid reserves. As such, they can

[20] See M. K. Brunnermeier, H. James, and J.-P. Landau, The Digitalization of Money, Working paper, available online at: https://scholar.princeton.edu/markus/publications/digitalization-money
[21] Fin. Stability Bd., Addressing the Regulatory, Supervisory and Oversight Challenges Raised by "Global Stablecoin" Arrangements 4, 2020, https://www.fsb.org/wp-content/uploads/P140420-1.pdf
[22] For a good description of stablecoins, see Larry White's "Should we fear stablecoins?" (White, 2021).

become a source of risk of financial instability, as the recent run on Terra USD has shown.[23]

Here is no place to discuss whether prudent management of individual issuers of money substitutes would suffice to keep the financial system stable. What should be clear is that in the presence of governmental regulation, if it is for stablecoins to be incorporated into the financial system, most likely, the issuers of stablecoins will eventually be put under the umbrella of liquidity facilities provided by the central bank, becoming "Payment Interface Processors" (PIPs) in the terminology adopted by the Bank of England, or "Currency Connectors" (CCs) as some have suggested.[24] Stablecoins would, therefore, create money in response to profitable business opportunities in much the same way that commercial banks and trustees of mutual funds typically do.

If we endorse the entry of stablecoins into the financial system, wouldn't we replicate the same fragility held by commercial banks, but now with new players and unchartered technological waters? To allow for more stringent regulation, one possibility would be to require these stablecoin issuers to obtain a bank charter.[25]

But to even consider extending bank charters to stablecoin issuers, we must first understand what the issuers of stablecoins bring to the table.

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[23] See "Digital Currency and the Next Financial Crisis," posted by P. H. Kupiec on the Law & Liberty website on August 30, 2021. Available online at: https://lawliberty.org/digital-currency-and-the-next-financial-crisis. On the collapse of TerraUSD, see Stablecoins: The Collapse of TerraUSD and the Road Ahead for the "Less-Risky" Form of Cryptocurrency, from May 19, 2022 available online at: https://www.mayerbrown.com/en/perspectives-events/publications/2022/05/stablecoins-the-collapse-of-terrausd-and-the-road-ahead-for-the-less-risky-form-of-cryptocurrency?utm_source=Mondaq&utm_medium=syndication&utm_campaign=LinkedIn-integration.

[24] See D. G.W. Birch "When The CBDC Revolution Comes, It won't be on the Blockchain," posted on August 3, 2022, at Forbes.com and available at https://www.forbes.com/sites/davidbirch/2022/08/03/when-the-cbdc-revolution-comes-it-wont-be-on-the-blockchain/?sh=7649877483af

[25] For a detailed articulation of this proposal, see M. Ricks, The Money Problem: Rethinking Financial Regulation, 2016.

Today, in the United States, dollar wholesale payments are cleared and settled through the Fedwire, Real-Time Payments systems (RTP), and the Clearing House Interbank Payment System (or CHIPS, used for cross-border payments). Consumer and commercial payments occur through the Automated Clearing House System or ACH.

The clearing of payments has, over time, been burdened by an increasing number of regulations that attach political goals to that of settling monetary obligations. Chiefly among them are Anti-Money Laundering/Combating the Financing of Terrorism (AML/CFT) and the economic sanctions by the Financial Crimes Enforcement Network (FinCEN). Taken together, these measures have led to a sharp decrease in correspondent banking networks and thwarted efforts to streamline cross-border payment systems.

But just like the printing press and the evolution of communication technologies eventually led to the demise of settlement in coins, the coming about of distributed ledger may also lead to changes in the architectures for settlement of transactions. Here, stablecoins, such as USDC powered by the Ethereum blockchain, represent a new form of money substitute that may force regulators and existing financial intermediaries to rethink their political priorities.[26]

It is at this point that CBDCs may play a role by offering the money base to settle payments between stablecoin. To be clear, the CBDCs here would be wholesale, not retail, since they would not be available to the public. With a wholesale CBDC, the Fed would provide an Application Programming Interface (API) for all the issuers of stablecoins and their correspondent digital wallets to be cleared in this digital form of sovereign money. Wholesale CBDCs would bypass the need for correspondent banking. This would be particularly efficient in cross-border payments.

Wholesale CBDCs could also be employed at the domestic level. The roadmap

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[26] See "Visa Becomes First Major Payments Network to Settle Transactions in USD Coin (USDC)" available online at: https://usa.visa.com/about-visa/newsroom/press-releases.releaseld.17821.html

we envisage here would be one where the Fed would eventually allow the issuers of stablecoins to access its ordinary clearing mechanisms. A first step in that direction was taken by the Office of the Comptroller of the Currency with the enactment of Interpretive Letters allowing national banks to use Dollar-based stablecoins as a settlement infrastructure in the US payment system. The Interpretive Letter issued in October of 2020 authorized national banks to hold stablecoin reserves as a type of service to their clients.[27] Another Interpretive Letter, issued in January of 2021, authorized national banks as independent nodes to validate transactions performed on stablecoin DLT ledgers.[28]

After the change of administration, the OCC enacted a new Interpretive Letter confirming that national banks can engage with Dollar-based stablecoins but will need a supervisor's letter of non-objection before they can start offering the services.[29] The topic is still uncertain, but a fruitful path has been established to create a channel between fintechs' private currency and the Fed.

It is difficult to imagine that new digital monies, public or private, could achieve simultaneously both goals of becoming instruments for more efficient payments (like stablecoins premised by wholesale CBDCs, as outlined above) and instruments for financial repression (as most proposals for retail CBDCs suggest). CBDCs could probably assist in the implementation of either of these agendas but hardly in the implementation of both at the same time. The choice is, therefore essentially political.

Which way will politics point to? National indebtedness alongside other pressures for public expenditure have been forcing US monetary authorities to accommodate the increased demand for borrowed funds by national governments – including, of course, the US government. As the process continues and fiscal deficits grow, we can expect that the Fed may be tempted to increase the crowding out of

[27] Interpretative letter # 1172, October 2020.
[28] Interpretative letter # 1174, January 2021.
[29] Interpretative letter # 1179, November 2021.

private productive investment by increasing financial repression not only in favor of the political allocation of credit to favored sectors but, above all to attend the direct fiscal needs of the Treasury.

The alternative path is worth contemplating: CBDCs could be used to disintermediate commercial banks and to re-intermediate credit with stablecoins. Stablecoins would be privately issued but settled with wholesale CBDCs. The issuer of the stablecoins would extend credit in stablecoins, in the same way that commercial banks have continuously operated with fractional reserves.

8. In the old days, there were gold and silver coins issued by governments, bank notes issued by banks redeemable in coins and account credits to be honored with the notes issued by the banks themselves. We contemplate a similar architecture with digital technology where wholesale CBDCs or tokens play a role partly identical to that of gold and silver coins.

ENVIRONMENTAL SUSTAINABILITY, BUSINESS AND BANKING: MAKING THE CASE FOR SENSIBLE REGULATION

Marco Bodellini [*]

ABSTRACT: *Environmental sustainability and the fight against climate change are key challenges of the current century. Both are deemed to be needed in order for life to continue on the Earth. Yet, they request a radical revision of the way businesses do business.*

For a paradigm change of this sort to take place, a huge amount of financial resources will be needed. While public money has been and will be mobilised, the big chunk of capital needs to be provided through private investments.

Moreover, as climate and environmental issues are global in nature, only internationally coordinated actions can be successful. While the legal framework in force in several jurisdictions looks utterly inadequate to support the transition to climate neutrality and environmental sustainability, the European Union regime might act as a point of reference.

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1. Environmental sustainability has at least two main dimensions which are relevant for businesses and banks: 1) an outside-in dimension (inward dimension), also known as the risk dimension[1], and, 2) an inside-out dimension (outward dimension)[2].

The outside-in dimension relates to the impact of external environmental sustainability-related factors on firms, for example through environmental sustainability risks negatively affecting their value and future growth prospects. With regard to banks, this dimension mostly pertains to risks impacting their counterparties – particularly borrowers – which in turn might become material for them as lenders. Environmental risks feed into the traditional prudential risk categories embedded in the Basel capital framework, thereby negatively impacting on banks which have extended loans to firms exposed to such risks.

The inside-out dimension relates, by contrast, to the impact – either positive or negative – of the firm's activity on sustainability factors, for example the environment. For banks this primarily concerns the impact of their borrowers' activities on the environment.

This dichotomy is sometime referred to as double materiality[3]. Double materiality has been integrated in the European Union legal framework on sustainability and sustainable finance, making it one of the most ambitious regimes around the world. This is based on the consideration that both dimensions are, to a certain extent, intertwined and together are instrumental to ensuring that firms – and banks as well – provide a meaningful contribution in the fight against climate change and in the achievement of key environmental objectives.

Relatedly, while currently there is no political willingness to introduce restrictions to the performance of economic activities that are not in line with

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[1] See Schoenmaker – Schramade, *Principles of sustainable finance*, Oxford, 2019, *passim*.

[2] See Zetzsche – Bodellini – Consiglio, *The EU Sustainable Finance Framework in Light of International Standards*, in *Journal of International Economic Law*, 2022, 25, 659.

[3] See LoPucki, *Corporate Greenhouse Gas Disclosures*, in *UC Davis Law Review*, 2022, 56, *passim*.

achieving the Paris Agreement's goals, sustainable finance taxonomies can become useful tools to support the transition to climate neutrality and environmental sustainability thanks to their signalling effect.

Furthermore, an interesting debate, which is also relevant for environmental sustainability, is ongoing on the corporate purpose(s) and directors' duties holding that the latter could be expanded so as to take into consideration environmental-related interests as well.

Also, a contribution to further the transition might be provided by litigation since recent rulings have established the existence of obligations for both sovereigns and corporates to make efforts to reach climate neutrality.

In discussing the relationships between environmental sustainability, business and banking, this paper proceeds as follows. Paragraph 2 looks at the two dimensions of environmental sustainability, while paragraph 3 analyses the main legal issues that law makers face when developing a regulatory framework that supports environmental sustainability and the transition to climate neutrality. Paragraph 4 discusses the double materiality principle featuring the EU regime and, on that basis, paragraph 5 deals with sustainable finance taxonomies. The corporate purpose(s) and directors' duties are discussed *vis-à-vis* sustainability-related issues in paragraph 6, whereas some key recent developments in the area of climate litigation are explored in paragraph 7. Paragraph 8 concludes advancing some policy remarks.

2. The two dimensions of environmental sustainability that are relevant for both firms and banks are the outside-in dimension and the inside-out dimension.

The outside-in dimension relates to environmental risks which can be material and therefore negatively affect firms and banks[4]. This dimension is relatively

[4] See European Central Bank, *Guide on climate-related and environmental risks. Supervisory expectations relating to risk management and disclosure*, November 2020, 10, where climate-related and environmental risks are said to comprise two main risk drivers: 1) physical risk, which refers to the

straightforward to embed in the framework, particularly for banks, as they and their supervisors are already accustomed to deal with risks, and a number of initiatives at the international level have been adopted mainly by the Basel Committee on Banking Supervision (BCSB)[5] and the Financial Stability Board (FSB)[6]. Accordingly, regulatory action has been taken in several jurisdictions[7]. On these grounds, environmental risks are treated as drivers of traditional prudential risk categories[8].

On the other hand, the inside-out dimension is way more complex to fully understand and even more difficult to embed in the regulatory framework. The inside-

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financial impact of a changing climate, including more frequent extreme weather events and gradual changes in climate, as well as of environmental degradation, such as air, water and land pollution, water stress, biodiversity loss and deforestation; 2) transition risk, which 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; see also Basel Committee on Banking Supervision, Climate-related Risk Drivers and Their Transmission Channels, Basel, 2021, 6–7; Federation of European Risk Management Associations, *People, Planet & Performance: The Contribution of Enterprise Risk Management to Sustainability*, Brussels, 2021, 7, https://www.ferma.eu/app/uploads/2021/03/Ferma-sustainability_2021_final.pdf.

[5] See Basel Committee on Banking Supervision, *Principles for the Effective Management and Supervision of Climate-related Financial Risks*, June 2022, *passim*; these principles provide banks and supervisors with guidance on how to manage and supervise climate-related financial risks. They cover governance, risk management, and disclosure practices.

[6] See Financial Stability Board, *Supervisory and Regulatory Approaches to Climate-related Risks*, Interim Report, 29 April 2022, *passim*.

[7] See Bodellini – Singh, *Sustainability and finance: utopian oxymoron or achievable companionship?*, in *Law and Economics Yearly Review*, 2021, 10, 163, pointing out that at European Union level a number of legislative acts have been adopted with a view to favouring the transition towards a sustainable economy and a sustainable society.

[8] See in this regard European Banking Authority, *The role of environmental risks in the prudential framework*, Discussion Paper, EBA/DP/2022/02, 2 May 2022, *passim*; on the link between climate risks and credit risks see 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, 3–4, https://www.cepweb.org/wp-content/uploads/2019/02/CEP-DN-Integrating-climate-risks-into-credit-risk-analysis.pdf

out dimension relates to the externalities created by a firm in doing business which can either positively or negatively impact on the environment[9].

This dimension might find a different regulatory treatment on the basis of the level of ambition of a given jurisdiction. The following are some of the different available regulatory options: a) no legal treatment at all; b) firms might simply be requested to consider the negative impact of their activities on climate change and the environment with no further obligation to act; c) firms might be requested not only to consider the negative impact of their activities on climate change and the environment but also to review their business model so as to reduce and possibly eliminate such a negative impact; and, d) in addition, firms might be requested to take a more proactive approach doing business with a view to contributing to the transition to net zero and to the achievement of other environmental objectives[10].

Yet, while there is no question about the need to consider sustainability-risks and to properly manage them, for the ambitious goals of the 2030 UN Agenda and the Paris Agreement to be achieved, much more than just risk management is needed. This means that firms and banks certainly must consider and manage environmental risks, which is already happening, despite implementation and practical issues. Yet, they need to go further than that. They should consider the negative impact of their activities (for banks mainly lending) on climate change and the environment and they should review their business model so as to reduce such a negative impact. But, more importantly, while doing business, firms should contribute to the achievement of environmental objectives and banks should channel financial flows toward activities and businesses that can contribute to the net zero transition and to the achievement

[9] See Iglesias-Rodriguez, *Sustainable commercial banking in European Union law: a renewed mandate for commercial banks?*, in Bodellini – Gimigliano – Singh (eds.), *Commercial banking in transition – A cross-country analysis*, New York, 2024, 174.

[10] This is sometime referred to as the opportunity dimension; these points have been lately reiterated by the European Commission; see European Commission, Recommendation (EU) 2023/1425 of 27 June 2023 on facilitating finance for the transition to a sustainable economy.

of crucial environmental objectives[11]. This arises from the consideration that the transition to net zero and the achievement of important environmental objectives – considered crucial for the health of the planet – can occur only with a massive paradigm change in doing business and such a change in turn requires huge investments. Bank lending and financial investments are thus of paramount importance.

3. If today there seems to be consensus on the need to adopt rules that are able to support the transition to environmental sustainability and climate neutrality[12], it is not at all certain whether the legal framework created so far in the most developed jurisdictions around the world is fit for that purpose[13]. From the perspective of banks, the legal framework should facilitate - and possibly incentivise – the channelling of financial flows toward sustainable economic activities[14].

At the international level, clear and precise obligations resulting from countries signing the Paris Agreement have been introduced; the objectives to reach net zero GHG emissions by 2050 and to hold the temperature increase have been set in that Agreement. These obligations should be discharged by the countries that have entered into the Agreement, most likely through legislation and regulation pushing market actors to do business in a way that is aligned with the achievement of those objectives by the deadline agreed upon.

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[11] See Bernick, *Can Sustainable Companies Get a Lower Cost of Capital?*, in *GreenBiz*, 4 March 2019, https://www.greenbiz.com/article/can-sustainable-compan ies-get-lower-cost-capital.

[12] See *ex multis* Dernbach – Mintz, *Environmental Laws and Sustainability: An Introduction*, in *Sustainability*, 2011, 3, 531.

[13] See Bodellini – Singh, *Sustainability and finance: utopian oxymoron or achievable companionship?*, in *Law and Economics Yearly Review*, 2021, 10, 163, expressing some doubts about the achievability of environmental objectives in the current legal framework.

[14] This is one of the declared objectives of the European Commission; see European Commission, Communication from the Commission to the European Parliament, the European Council, the Council, the European Central Bank, the European Economic and Social Committee and the Committee of the Regions, Action Plan: Financing Sustainable Growth, Brussels, 8 March 2018, COM(2018) 97 final.

Fulfilling those obligations can take place in different ways.

Countries might simply ban those economic activities that are not deemed to be in line with achieving the Agreement's goals. Yet, obviously no country has taken that approach by prohibiting, for example, fossil fuel-related business activities, as a radical paradigm change of this sort should take place gradually to avoid the creation of transition risks that can undermine the stability of the economic system and thus the society. Banning overnight fossil fuel-related activities would give rise in the first place to an energy crisis with a massive number of knock-on effects, as no country is currently able to only rely upon renewable and clean energy production to satisfy its needs.

Moreover, policy choices in this realm cannot be made in isolation for two main reasons. The first reason is that climate-related and environmental issues have a global nature and therefore can be successfully addressed only through globally coordinated actions. Country-led or regional initiatives, most likely, would fall short in terms of their effectiveness. In other words, substantially lowering GHG emissions in Europe without similar efforts in America, Asia, Africa and Oceania would be rather meaningless. Global coordination and alignment are thus crucial. The second reason is that there is a massive free-riding issue, as some countries might try to take economic benefit of other jurisdictions embracing a more proactive policy approach. As the revision of the legal framework governing the way in which businesses do business with a view to effectively fighting climate change and achieving environmental objectives might translate into higher compliance costs, firms located in jurisdictions which prefer to 'wait and see' would benefit as their costs of production would not increase. This in turn would give them a commercial competitive advantage *vis-à-vis* firms located in jurisdictions which are seriously trying to solve climate-related and environmental issues. Such a situation in turn would provide firms with incentives to engage in regulatory arbitrage, relocating in jurisdictions with legal frameworks which are less demanding in environmental terms.

As an alternative, a system of tax incentives for economic activities considered to be aligned with climate and environmental standards and tax burdens for economic activities considered not to be aligned with such standards could also be designed. In principle, tax provisions might be effective in shaping the economic system in a way that is in line with policy goals selected at political level[15]. But for tax rules (particularly the ones introducing new taxes) to be effective, global coordination is needed, otherwise businesses will implement regulatory arbitrage strategies circumventing those provisions by relocating in jurisdictions where such rules have not been enacted.

Building also on such considerations, most countries have so far preferred to create disclosure-based frameworks, where both financial and non-financial firms are (or will be) requested to provide information about their environmental footprint and performance. Disclosing information by non-financial firms should in turn allow financial intermediaries to identify projects/activities/assets which are in line with the goal of transitioning to net zero and to distinguish them from the ones that, on the contrary, are not in line. The hope is that once identified, financial flows will be channelled toward those projects/activities/assets which, being aligned with the transition scenario, meet more demanding environmental performance standards. Yet, no rule currently obliges firms to comply with very high environmental standards and similarly no provision requests banks and financial intermediaries to prioritise lending to and investing in those projects/activities/assets. So, if lending to and investments in those projects/activities/assets will progressively increase, will very much depend on market appetite and investors’ reaction.

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[15] See Avgouleas, *Resolving the sustainable finance conundrum: activist policies and financial technology*, University of Edinburgh – School of Law, Research Paper Series n. 2021/02, *passim*.

Actually, the reality shows that a significant and still growing amount of financial resources keeps on being granted to businesses operating in sectors such as oil and gas and coal which are responsible for a relevant part of GHG emissions[16]. This might lead to argue that the lack of binding and intrusive provisions – as the ones previously mentioned – makes less effective the contribution provided by both the industrial and the banking and financial sectors to the transition, which in turn can jeopardise the achievement of those objectives altogether.

4. The EU legal framework on sustainability and sustainable finance is currently one of the most advanced and ambitious around the globe also because it is based, *inter alia*, on the double materiality principle, according to which both dimensions of sustainability are to be taken into consideration by firms, including banks. Double materiality requires that economic players do not only focus on the impact of outside factors on their business, but also engage in a careful analysis of how their own activities impact on the external world[17]. Building on this analysis, additional and more intrusive requirements might be embedded in the legal framework. The latter can be: a) disclosure obligations to show to stakeholders the firms' environmental footprint[18]; b) obligations to revise firms' operations with a view to ending the impacts of their

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[16] See Rainforest Action Network, *Banking on climate chaos – Fossil fuel finance report*, 2023, https://www.ran.org/wp-content/uploads/2023/04/BOCC_2023_vF.pdf, where it is pointed out that 'Fossil fuel financing from the world's 60 largest banks has reached USD $5.5 trillion in the seven years since the adoption of the Paris Agreement, with $669 billion in fossil fuel financing in 2022 alone'; importantly, see also International Monetary Fund, *Fossil Fuel Subsidies Surged to Record $7 Trillion*, 24 August 2023, https://www.imf.org/en/Blogs/Articles/2023/08/24/fossil-fuel-subsidies-surged-to-record-7-trillion, pointing that the amount of public subsides given to fossil fuel related sectors keeps on increasing.

[17] See Zetzsche – Bodellini – Consiglio, *The EU Sustainable Finance Framework in Light of International Standards*, in *Journal of International Economic Law*, 2022, 25, 659.

[18] See Christensen – Hail – Leuz, *Mandatory CSR and Sustainability Reporting: Economic Analysis and Literature Review*, in *Rev. Acct. Stud.*, 2011, 26, 1176 - 1178, underlining that the double materiality approach requires disclosures on both the impacts of sustainability on the firm (inward dimension) and the impacts of the firm's operations on sustainability (outward dimension).

activities which are detrimental to the environment[19]; c) obligations to prepare and implement a transition plan on the basis of which the business must adapt to a net-zero compliant external scenario[20]. Provisions of this kind have been introduced in the EU framework to ensure that the double materiality principle is properly applied although their scope of application is currently limited to big market players. Accordingly, disclosure obligations concerning firms' environmental footprint have been embedded in the Corporate Sustainability Reporting Directive (CSRD)[21], the Sustainable Finance Disclosure Regulation (SFDR)[22] and the Commission Delegated Regulation on Disclosures under the Taxonomy[23]. Also, obligations to revise firms'

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[19] Recital l4 of the CSDDD states that 'This Directive aims to ensure that companies active in the internal market contribute to sustainable development and the sustainability transition of economies and societies through the identification, and where necessary, prioritisation, prevention and mitigation, bringing to an end, minimisation and remediation of potential or actual adverse human rights and environmental impacts connected with companies' own operations, operations of their subsidiaries and their business partners in the companies' chains of activities, and ensuring that those affected by a failure to respect this duty have access to justice and legal remedies'.

[20] Recital 50 of the CSDDD states that 'In order to ensure that this Directive effectively contributes to combating climate change, companies should adopt and put into effect a transition plan for climate change mitigation which aims to ensure, through best efforts, that the business model and strategy of the company are compatible with the transition to a sustainable economy and with the limiting of global warming to 1.5 °C in line with the Paris Agreement and the objective of achieving climate neutrality as established in Regulation (EU) 2021/1119, including its intermediate and 2050 climate neutrality targets. The plan should address, where relevant, the exposure of the undertaking to coal-, oil- and gas-related activities. Such requirements should be understood as an obligation of means and not of results. Being an obligation of means, due account should be given to the progress companies make, and the complexity and evolving nature of climate transitioning'.

[21] Directive (EU) 2022/2464 of the European Parliament and of the Council of 14 December 2022 amending Regulation (EU) No 537/2014, Directive 2004/109/EC, Directive 2006/43/EC and Directive 2013/34/EU, as regards corporate sustainability reporting.

[22] 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; on this see Busch, *Sustainability Disclosure in the EU Financial Sector*, European Banking Institute Working Paper Series 2020 n. 70, *passim*.

[23] Commission Delegated Regulation (EU) 2021/2178 of 6 July 2021 supplementing Regulation (EU) 2020/852 of the European Parliament and of the Council by specifying the content and presentation of information to be disclosed by undertakings subject to Articles 19a or 29a of Directive 2013/34/EU concerning environmentally sustainable economic activities, and specifying the methodology to comply with that disclosure obligation.

operations with a view to ending the impacts of activities which are detrimental to the environment and to prepare and implement a transition plan on the basis of which the business must adapt to a net-zero compliant external scenario have been introduced in the Corporate Sustainability Disclosure Directive (CSDDD)[24]. Furthermore, through the taxonomy framework (*i.e.* Taxonomy Regulation[25] and the related Commission Delegated Regulations), firms can now align their business operations to the highest environmental standards, thereby substantially contributing to the achievement of an environmental objective while not significantly harming the other environmental objectives[26]. On these grounds, it has been posited that double materiality might prompt true change, since, relying upon detailed criteria concerning sustainability risks and impacts on the environment, it can potentially enable the transition to net zero as well as the achievement of other environmental objectives[27].

The very concept of double materiality builds upon and adds to the one of financial materiality, which, in accounting, is also referred to as materiality of financial information. Financial materiality concerns those facts which are deemed material as they can influence the investment decisions of an average prudent investor. In the U.S., the SEC defines financial materiality as 'the significance of an item to users of a registrant's financial statements'[28]. Therefore, a matter is deemed to be material 'if there is a substantial likelihood that a reasonable person would consider it

[24] European Parliament legislative resolution of 24 April 2024 on the proposal for a directive of the European Parliament and of the Council on Corporate Sustainability Due Diligence and amending Directive (EU) 2019/1937 (COM(2022)0071 – C9-0050/2022 – 2022/0051(COD)).
[25] 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; on this see Gortsos, *The Taxonomy Regulation: More Important Than Just as an Element of the Capital Markets Union*, European Banking Institute Working Paper Series 2020 n. 80, *passim*.
[26] Art. 3 of the Taxonomy Regulation.
[27] See Zetzsche – Bodellini – Consiglio, *The EU Sustainable Finance Framework in Light of International Standards*, in *Journal of International Economic Law*, 2022, 25, 659.
[28] Securities and Exchange Commission, SEC Staff Accounting Bulletin: No. 99 – Materiality, 17 CFR Part 211, 12 August 1999, available at https://www.sec.gov/interps/account/sab99.htm#foot4.

important'[29]. Based on this, the U.S. Supreme Court held that a fact is material insofar as 'there is – a substantial likelihood that the . . . fact would have been viewed by the reasonable investor as having significantly altered the total mix of information made available'[30]. Yet, despite the existence of judicial precedents, materiality in practice remains a vague and somehow subjective concept, thus difficult to apply[31].

Looking at sustainability-related factors from a financial materiality perspective, it has been observed that the latter could be material if they would be taken into account by a reasonable investor when making investment decisions[32]. Yet, whereas there is now consensus on seeing sustainability-related risks as capable to affect firms (bringing down their economic value), thereby being potentially material, opinions are still conflicting with regard to the financial materiality of a firm's impact on sustainability factors[33]. This is not, however, the position of the European Commission, that more than five years ago pointed out that financial materiality and environmental and social materiality already overlap in some cases and will increasingly do so in the future. As markets and public policies evolve in response to climate change and environmental degradation, the positive and/or negative impacts of a company on environmental factors will translate into business opportunities and/or risks that are financially material[34].

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[29] Id.

[30] TSC Industries v. Northway, Inc., 426 U.S. 438, 449 (1976).

[31] See Bodellini, *Tra principi generali e standards internazionali di soft law: la disciplina europea sulla finanza sostenibile e l'inizio di una nuova stagione per il 'Brussels effect'?*, in *Rivista Trimestrale di Diritto dell'Economia*, 2023, 3, 338.

[32] See Zetzsche – Bodellini – Consiglio, *The EU Sustainable Finance Framework in Light of International Standards*, in *Journal of International Economic Law*, 2022, 25, 659.

[33] See Peirce, *We are Not the Securities and Environment Commission - At Least Not Yet*, Statement 21 March 2022.

[34] European Commission, Guidelines on Non-financial Reporting: Supplement on Reporting Climate-related Information, June 2019, available at https://ec.europa.eu/finance/docs/policy/190618-climate-related-information-reporting-guidelines_en.pdf.

Importantly, the inward dimension and the outward dimension are treated by the framework as interrelated in that one can affect the other[35]. Accordingly, the firm's impacts on the environment cannot be disregarded on the simple assumption that they are not financially material, since any unsustainable activity can give rise to financial risks, through legal liabilities or negative effects on reputation[36]. Furthermore, reasonable investors might base their decisions to invest (or not to invest) upon those factors[37]. This final point, however, remains contentious because historically poor environmental and social practices have oftentimes resulted in higher returns[38].

Additionally, advocates of double materiality argue that by firstly focusing on externalities (and subsequently on sustainability risks), a firm can align its vision with that of its stakeholders, broadly understood, shifting from a short-term to a long-term horizon[39]. This shift could be particularly significant not only for stakeholders but also for the firm itself, as some financiers may be interested in the firm's ability to create long-term value for both themselves and society[40]. Conversely, prioritizing short-term

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[35] On this see De Villiers - La Torre - Molinari, *The Global Reporting Initiative's (GRI) Past, Present and Future: Critical reflections and a research agenda on sustainability reporting (standard-setting)*, in *Pacific Accounting Review*, 2022, *passim*.

[36] See Adams et al., *The double-materiality concept. Application and issues*, Global Reporting Initiative, May 2021.

[37] See Täger, *'Double materiality': what is it and why does it matter?*, London School of Economics and Political Science and Grantham Research Institute on climate change and the environment, Commentary 21 April 2021, available at https://www.lse.ac.uk/granthaminstitute/news/double-materiality-what-is-it-and-why-does-it-matter/.

[38] See Chiu, *The EU Sustainable Finance Agenda: Developing Governance for Double Materiality in Sustainability Metrics*, in *European Business Organization Law Review*, 2022, *passim*.

[39] See Adams et al., *The double-materiality concept. Application and issues*, Global Reporting Initiative, May 2021.

[40] See Adams - Druckman - Picot, *Sustainable Development Goal Disclosure (SDGD) Recommendations*, Association of Chartered Certified Accountants, Chartered Accountants Australia New Zealand, Institute of Chartered Accountants Scotland, International Federation of Accountants, International Integrated Reporting Council and World Benchmarking Alliance, London, 2020.

profits could harm both the firm's long-term performance and sustainable development[41].

Yet, there are practical challenges associated with implementing the double materiality principle in environmental sustainability[42]. First, assessing the negative impacts of investment decisions on sustainability factors, as required by the SFDR, can be quite difficult for financial institutions due to a lack of data and universally accepted models[43]. Second, adopting the double materiality principle does not completely eliminate the risk that environmental materiality will be used solely to prioritize the firm's financial value, as firms might continue to give precedence to their financial performance over social and environmental sustainability, thereby limiting the broad accountability potential of double materiality[44]. Third, there are still uncertainties about what is considered to be material and therefore needs to be reported in relation to the external aspects of double materiality[45].

While embedding the double materiality principle in the legal framework is certainly a remarkable step forward, it is to be underlined also that jurisdictions other than the EU have taken critical positions in this regard[46]. Also, for the reasons

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[41] See Adams et al., *The double-materiality concept. Application and issues*, Global Reporting Initiative, May 2021.

[42] See Zetzsche – Bodellini – Consiglio, *The EU Sustainable Finance Framework in Light of International Standards*, in *Journal of International Economic Law*, 2022, 25, 659.

[43] See Zetzsche - Bodellini, *A Sustainability Crisis Makes Bad Laws - Towards Sandbox Thinking in EU Sustainable Finance Law and Regulation*, Working Paper, 2022, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4147295.

[44] See La Torre – Sabelfeld - Blomkvist - Dumay, *Rebuilding trust: sustainability and non-financial reporting and the European Union regulation*, Meditari Accountancy Research, 2020, Vol. 28 No. 5, 715.

[45] See Bossut – Jürgens – Pioch – Schiemann - Spandel - Tietmeyer, *What information is relevant for sustainability reporting? The concept of materiality and the EU Corporate Sustainability Reporting Directive*, Sustainable Finance Research Platform - Policy Brief – 7/2021, 11, urging the European Commission to provide a definition of double materiality and to precisely indicate what to report and who should report.

[46] See Peirce, *We are Not the Securities and Environment Commission - At Least Not Yet*, Statement 21 March 2022.

previously discussed, the mindset shift potentially prompted by double materiality will deliver tangible outcomes only if such a principle will be integrated in the legal framework of the other major jurisdictions around the world.

5. It is important to note that building on disclosure obligations a number of other regulatory mechanisms have been implemented to indirectly push banks and financial intermediaries to increase the amount of financial resources provided to sustainable activities. The most important ones are sustainability classification systems, that are commonly referred to as taxonomies (or sustainable taxonomies, or sustainable finance taxonomies, or green taxonomies), and which complement disclosure requirements by giving them intrinsic substance.

Also, policy-makers and bank regulators have been considering pros and cons resulting from the introduction of new rules concerning the so-called green supporting factor and brown penalising factor[47]. Such factors should determine that the browner is the assets' portfolio of a bank the more capital should be set aside and vice versa.

5.1. Taxonomies serve as crucial instruments in sustainable finance regulation, enabling the identification of sustainable activities without relying on case-by-case decisions, which often yield uncertain and inconsistent outcomes[48]. Taxonomies can be seen as 'a set of criteria which can form the basis for an evaluation of whether and to what extent a financial asset can support given sustainability goals'[49]. Taxonomies are thus instrumental to identifying 'activities, assets, and/or project categories that deliver on key climate, green, social or sustainable objectives with reference to

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[47] See Brühl, *Green Finance in Europe – Strategy, Regulation and Instruments*, Center for Financial Studies Working Paper series, 2021, no. 657, *passim.*

[48] European Commission, Action Plan: Financing Sustainable Growth, 3 March 2018, COM/2018/097 final.

[49] See Ehlers – Gao – Packer, *A taxonomy of sustainable finance taxonomies*, Bank for International Settlements, BIS Papers No 118, October 2021, iii.

identified thresholds and/or targets'[50]. Investments supporting these activities and projects are subsequently designated as 'green' or 'environmentally sustainable', depending on the selected terminology [51]. It follows that taxonomies do not force a paradigm change in doing business, rather they show how such a paradigm change can be implemented.

Taxonomies are significant because they provide a market signal that can potentially influence behaviour. Specifically, companies whose activities align with the stringent environmental standards set by their jurisdiction's taxonomy can send a credible message to the market regarding their environmental commitment. This is known as the signalling argument, which is particularly valuable since market participants, especially investors, often lack easy access to precise information about the environmental footprint of the companies they invest in[52]. In other words, there are information asymmetries between companies and investors regarding the activities and characteristics of the former[53]. Taxonomies can help mitigate these information gaps, benefiting companies as well. Importantly, such a credible signal that companies can send to the market by aligning to the taxonomy is difficult for other firms to replicate[54]. Consequently, the implementation of a taxonomy within a jurisdiction allows for the differentiation of companies based on the environmental performance of their economic activities, as defined by the taxonomy's criteria[55]. This

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[50] International Capital Market Association, *Sustainable Finance - High-level definitions*, Zurich, May 2020, 5.

[51] See Bernstein - Cashore, *Can non-state global governance be legitimate? An analytical framework*, in *Regulation & Governance*, 2007, 1, 4, 347-371; Maxwell – Lyon - Hackett, *Self-regulation and social welfare: The political economy of corporate environmentalism*, in *The Journal of Law and Economics*, 2000, 43, 583-618.

[52] See Lyon - Maxwell, *Greenwash: corporate environmental disclosure under threat of audit*, in *J. Econ. Manag. Strat.*, 2011, 20, 3–41; Lyon – Montgomery, *The means and end of greenwash*, in *Organ. Environ.*, 2015, 28, 223–249.

[53] See Akerlof, *The market for "lemons": quality uncertainty and the market mechanism*, in *Q. J. Econ.*, 1970, 84, 488–500; Williamson, *The Economic Institutions of Capitalism*, New York, 1985, *passim*.

[54] See Riley, *Informational equilibrium*, in *Econometrica*, 1979, 47, 331–359; Spence, *Job market signaling*, in *Q. J. Econ.*, 1973, 87, 355–374.

[55] See Flammer, *Corporate green bonds*, in *Journal of Financial Economics*, 2021, 142, 499-516.

signal is inherently credible, as compliance with the taxonomy is costly for firms to reach. This argument is further strengthened in the EU by the fact that, under the new CSRD and the Commission Delegated Regulation on Taxonomy-related Disclosures, key figures (such as revenues, OpEx, and CapEx) related to compliance with the taxonomy's requirements must be audited by independent professional third parties[56]. By involving auditors as gatekeepers, the regime aims to address potential agency issues between entities disclosing sustainability-related information and stakeholders interested in evaluating that information[57].

Moreover, in other areas – such as green bonds – the signalling argument brings about several additional positive implications that could also emerge in the context of taxonomy compliance. Specifically, in that context it has been observed that both shareholders[58] and stock markets respond positively to companies' environmental commitments[59].

5.2. Taxonomies promote investments in long-term and sustainable activities for three primary reasons. First, economic activities meeting the taxonomy's standards are qualified as sustainable (environmentally sustainable economic activities in EU *parlance*). On these grounds, the assignment of a green or sustainability-related label

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56 See Zetzsche - Bodellini, *Addressing the "Winner-Takes-All" Character of Sustainability Taxonomies: Towards a Scorecard Approach*, in *Green and Low-Carbon Economy*, 2024, 1, 3.

57 On the role of auditors as gatekeepers see Coffee Jr., *The Acquiescent Gatekeeper: Reputational Intermediaries, Auditor Independence and the Governance of Accounting*, in *Columbia Law & Economics Working Paper*, 2001, No. 191, https://scholarship.law.columbia.edu/faculty_scholarship/1249; see also Kraakman – Armour – Davies – Enriques – Hansmann – Hertig – Hopt – Kanda – Rock, *The Anatomy of Corporate Law: A Comparative and Functional Approach*, Oxford, 2009, 38–40.

58 See Flammer, *Corporate social responsibility and shareholder reaction: the environmental awareness of investors*, in *Acad. Manag. J.*, 2013, 56, 758–781; Klassen - McLaughlin, *The impact of environmental management on firm performance*, in *Manag. Sci.*, 1996, 42, 1199–1214; Krueger, *Corporate goodness and shareholder wealth*, in *J. Financ. Econ.*, 2015, 115, 304–329.

59 See Flammer, *Does corporate social responsibility lead to superior financial performance? A regression discontinuity approach*, in *Manag. Sci.*, 2015 61, 2549–2568.

by regulators serves as a powerful marketing tool that can attract investor interest (signalling argument). Second, taxonomies embedded in binding legislation foster fairer treatment within a finance industry which is notoriously prone to 'greenwashing' practices[60]. Specifically, they limit the excessive flexibility granted by broad, initially undefined terms (such as 'sustainable' or 'green'), thereby enhancing investor confidence in market-based financing of sustainable activities. Third, from an investor's perspective, taxonomies reduce transaction costs. Financial institutions do not need to develop expertise in environmental science or scrutinize the environmental footprint of a given activity (such as a construction project); they can simply rely on the taxonomy to select investment opportunities based on their environmental ambitions[61].

From a policy perspective, the establishment of a taxonomy should be based on two main considerations: (i) the role it is expected to play in achieving environmental objectives, and (ii) its usability and implementation factors, such as geographical scope, data availability, verification, and proportionality[62]. Once developed, a taxonomy may find a broader scope of application, for instance as a precondition for preferential tax treatment, sustainability-oriented public lending and investment programs (like the European Investment Bank's Green Gateway Programme), risk management, and financial institutions' prudential (*i.e.* capital) requirements. Accordingly, financial institutions in Malaysia use the taxonomy to classify their asset

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[60] See Delmas - Cuerel Burbano, *The Drivers of Greenwashing*, in *California Management Review*, 2011, 30, *passim*; Bodellini, *Greenwashing and the misapplication of articles 8 and 9 of the Sustainable Finance Disclosure Regulation*, in *ERA Forum*, 2023, 1, *passim*; Baadj – Cooke - Le Peuvedic - Mangot – Kock, *2° Investing Initiative (2DII), Fighting greenwashing … what do we really need?, A review of the legislative and regulatory framework applicable to environmental impact claims of financial products and concrete propositions to fight greenwashing more efficiently*, 2021, *passim*.

[61] See Zetzsche - Bodellini, *Addressing the "Winner-Takes-All" Character of Sustainability Taxonomies: Towards a Scorecard Approach*, in *Green and Low-Carbon Economy*, 2024, 1, 3.

[62] Organization for Economic Cooperation and Development, *Developing Sustainable Finance Definitions and Taxonomies*, October 2020, *passim*.

portfolios, measure climate-related risks, and report to the central bank for risk management purposes[63].

Although taxonomies have become central to sustainable finance regulation[64], scholarly work on classifying economic activities on these grounds is still at the early stages[65]. Sustainability-related taxonomies, often modelled after the EU green taxonomy, have been established in most jurisdictions to define criteria for identifying economic activities that meet stringent environmental requirements, thus being labelled as environmentally sustainable. It is crucial to note that these rigorous environmental criteria are established by scientists, based on the premise that the transition to net zero can only take place if a substantial number of economic activities are reconfigured to meet these environmental standards. In other words, over time, compliance with these criteria in business operations should become the new normal[66].

The successful application of a taxonomy relies on proper reporting and disclosure obligations being discharged by both non-financial and financial firms. First, non-financial firms must disclose information about their environmental footprint, including the degree of alignment of their economic activities with the taxonomy

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[63] International Capital Market Association, *Overview and Recommendations for Sustainable Finance Taxonomies*, Zurich, May 2021, 12.

[64] See Busch, *The future of EU financial law*, in *Capital Markets Law Journal*, 2022, 17, 52-94; Colaert, *The Changing Nature of Financial Regulation: Sustainable Finance as a New EU Policy Objective*, in *Common Market Law Review*, 2022, 59, 1669-1710.

[65] See Zetzsche – Bodellini – Consiglio, *The EU Sustainable Finance Framework in Light of International Standards*, in *Journal of International Economic Law*, 2022, 25, 659; Bodellini – Singh, *Sustainability and finance: utopian oxymoron or achievable companionship?*, in *Law and Economics Yearly Review*, 2021, 167; Gortsos, *The Taxonomy Regulation: More Important Than Just as an Element of the Capital Markets Union*, European Banking Institute Working Paper Series 2020 n. 80, *passim*; Gortsos – Kyriazis, *The Taxonomy Regulation and its Implementation*, EBI Working Paper Series, 2023 – no. 136, 8 March 2023, *passim*.

[66] See Zetzsche - Bodellini, *Addressing the "Winner-Takes-All" Character of Sustainability Taxonomies: Towards a Scorecard Approach*, in *Green and Low-Carbon Economy*, 2024, 1, 3.

requirements. Second, financial firms will fulfil their reporting obligations based on the information disclosed by the non-financial firms they finance.

Financial firms demonstrating that most of their lending and investment activities support non-financial firms that comply with the taxonomy's stringent environmental requirements can signal their sensitivity to environmental matters (the so-called signalling argument). This, in turn, could attract the interest of investors (both retail and institutional) seeking sustainable investments. In the EU, this effect is further enhanced by the introduction of rules on the so-called green asset ratio and the so-called green investment ratio, which allow banks, asset managers and investment firms to be compared among each other and then ranked based on the proportion of their exposures to sustainable activities/assets relative to total exposures[67].

5.3. If these mechanisms, which could be labelled as nudging mechanisms, are enough for the transition to net zero to happen is still to be seen. This uncertainty is one of the reasons why other mechanisms are also under consideration in the policy-making and academic debate. Key among them is the discussion about the so-called green supporting factor and brown penalising factor, through which green investments should be considered less risky and therefore absorb less capital, whereas brown assets should be considered riskier and therefore they should cause banks to set aside more capital[68].

Consensus among bank regulators is emerged on the inappropriateness of a green supporting factor, since green assets, despite being less risky from the

[67] See Iglesias-Rodriguez, *Sustainable commercial banking in European Union law: a renewed mandate for commercial banks?*, in Bodellini – Gimigliano – Singh (eds.), *Commercial banking in transition – A cross-country analysis*, New York, 2024, 183.

[68] See Alexander – Lastra, *International Banking Regulation and Climate Change*, in *Oxford Business Law Blog*, 9 January 2023, *passim*.

environmental perspective, might still be subject to the other traditional prudential risks[69]. By contrast, different views exist on whether a brown penalising factor would be appropriate[70]. In general, it should be noted that the bank capital requirements framework aims at keeping financial stability and therefore might be ill-suited for other purposes. On top of that, doubts exist on whether green supporting and brown penalising factors would be capable to re-orient massive flows of financial means toward sustainable activities.

6. On the assumption that times are not mature yet for laws to be enacted that ban polluting activities and restrict the provision of capital to firms performing such activities, the legal framework on the corporate purpose and directors' duties then becomes central. In this regard, an interesting academic and policy-driven debate, which is relevant also for environmental sustainability, is ongoing about the corporate purpose and its shift from pure shareholderism or shareholders' value approach to some form of stakeholderism or stakeholders' value approach[71]. Particularly, the latter would be a model in which corporate directors (including banks' directors) should expand their horizon from acting to only satisfy shareholders' interests – as in the shareholders' value approach – to acting with a view to including also the pursuit of

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[69] See Restoy, *The role of prudential policy in addressing climate change*, Speech given at the conference Sustainability: green-washing or emerging issues for deposit insurers?, Organised by IADI–ERC in cooperation with EFDI, 8 October 2021, arguing that 'Applying a green-supporting factor (GSF), to alleviate prudential requirements for green exposures so as to facilitate the transition, is unlikely to mitigate frictions across policy objectives. By reducing capital requirements for green assets, the unexpected losses that could arise from those exposures would, by definition, be insufficiently covered by own resources. Moreover, such an approach would also encourage the overvaluation of green assets. These two factors would increase the risks for financial stability and also the scope for friction between the financial stability mandate of regulators and general policies aimed at favouring the transition to a more climate-friendly economy'.

[70] See Ramos Muñoz – Cabrales – Sanchez, *Central Banks and Climate Change. Fit, Opportunity and Suitability in the Law and Beyond*, EBI Working Paper Series, 2022 – no. 119, 10 March 2022, *passim*.

[71] On this subject see Bebchuk – Tallarita, *The Illusory Promise of Stakeholder Governance*, in *Cornell Law Review*, 2020, 164; Hart – Zingales, *Companies Should Maximize Shareholder Welfare Not Market Value*, ECGI - Finance Working Paper 521/2017, 1.

additional interests, namely the ones related to the protection of the environment and society[72]. There might also be intermediate approaches between the two mentioned extremes, for example the so-called enlightened shareholders' value approach that posits that directors must pursue the interests of the company for the benefit of shareholders, while also considering the interests of other stakeholders[73].

This debate is important in that it affects directors' duties and can actually lead to law reforms potentially forcing that paradigm change that is needed for the transition to occur. If directors' duties were to be redesigned in such a way as to requesting them to also take care of interests other than the shareholders' interest to value maximisation, then the goals of achieving net zero, holding the temperature increase and protecting the environment could become central and inform the decisions made by every company, thereby achieving that paradigm shift that political powers are currently unable to prompt through direct bans and prohibitions.

Yet, for such a radical revision of directors' duties to find widespread application, a solid legal basis in statutory law seems to be needed. In the lack of such a clear legal basis, directors' acts pursuing other stakeholders' interests potentially contrasting with the shareholders' interest to value maximisation might place them in an uncomfortable position, potentially also exposing them to liability. A clear legal basis through primary law provisions governing the relationship and potential trade-off between the different interests which directors should care about would then be a key component of the new legal framework. Without denying the profit-driven nature of corporates and the legitimate interest of shareholders to value maximisation and dividend distribution, through a Paris Agreement-aligned interpretation of directors' duties it should be provided that these interests are to be pursued while contributing

[72] On these issues see Keay, *The Corporate Objective*, Cheltenham, 2011, 40–113.
[73] See Millon, *Enlightened Shareholder Value, Social Responsibility and the Redefinition of Corporate Purpose Without Law*, in Vasudev – Watson (eds.), *Corporate enlightened shareholder value approach governance after the Financial Crisis*, Cheltenham, 2012, 68–100.

to achieving net zero as well as the other crucial environmental objectives. It would then be a matter of striking a reasonable balance between two interests that in the short term might be conflicting with each other but in the long term might be reconciled[74].

In balancing these two interests, company's directors would be requested to be creative in a way that, to some extent, recalls the efforts made by some central bankers to include the fight against climate change in their mandate[75]. Just a few years ago, within the European Central Bank (ECB), a strong argument against the monetary authority playing a role in the fight against climate change was supported by price stability purists on the grounds of such an objective falling outside its legal mandate[76]. Then, the counterargument that climate change can affect price stability and financial stability has prevailed opening up the way for the ECB to play a role in fighting climate change on the assumption that this is needed to achieve its primary (and secondary) objective(s)[77].

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[74] On this issue see Porter - Kramer, *Creating shared value*, in *Harvard Business Review*, 2011, 62.
[75] See Cullen, *Central Banks and Climate Change: Mission Impossible?*, in *Journal of Financial Regulation*, 2023, 9, 174–209.
[76] See Weidmann, *Central banks cannot solve climate change on their own*, 23 November 2020, https://www.bundesbank.de/en/press/contributions/central-banks-cannot-solve-climate-change-on-their-own--851320.
[77] See Lastra – Alexander, *The ECB Mandate: Perspectives on Sustainability and Solidarity*, In-depth Analysis Requested by the ECON Committee Monetary Dialogue Papers, June 2020, *passim*; in the UK, on the contrary, the Bank of England has taken a more proactive role in this area since the very beginning, see Bailey, *Tackling climate for real: The role of central banks*, Reuters Events Responsible Business, 2021, https://www.bankofengland.co.uk/speech/2021/june/and rew-bailey-reuters-events-global-responsible-business-2021; Bailey, *Tackling climate for real: Progress and next steps*, BIS-BDF-IMF-NGFS Green Swan 2021 Global Conference, https://www.bankofengland.co.uk/spe ech/2021/june/andrew-bailey-bis-bank-of-france-imf-ngfs-green-swan-conference; see Parker – Corrigan, *The Impact of Climate Change on the Economy and Financial System: Legal Aspects of the Bank of England's Response*, in Bodellini – Gimigliano – Singh (eds.), *Commercial banking in transition – A cross-country analysis*, New York, 2024, 308, also pointing that climate change is central to the Bank of England's prudential, financial stability and monetary policy objectives and the way it runs its own operations.

The objection to requesting this balancing effort to corporate directors is that they would end up 'serving two masters'; namely, directors would be requested to take care of different interests potentially conflicting with each other, with the ensuing risk of failing to achieve all of them[78]. An example of how conflicting interests might unfold with regard to banks relates to lending to oil extracting enterprises, which is remunerative and hence beneficial from the shareholders' value maximisation perspective – at least in the short term – but clearly it is not aligned with the Paris Agreement's goals and therefore might result being prejudicial to other stakeholders. Oil-related activities are not prohibited, nor does lending to those companies suffer any limitation. Indeed, the amount of loans granted to the oil sector globally has reached a new pick in 2022[79]. Yet, clearly the further expansion of this sector contrasts with the goals that countries have committed to achieve through the Paris Agreement.

In the absence of binding provisions which limit the performance of those activities and financing those activities, a different way to go in the direction of the Paris Agreement is then to switch the corporate purpose from short term value maximisation to long term value maximisation. It could be argued that long term value maximisation, which is still a form of shareholderism, might be achieved only if environmental degradation is reduced. After all, a degraded environment would end up affecting every firm in that the society at large would be impacted in ways which are difficult to precisely predict. The argument then would go that for long term value maximisation to be achieved to the benefit of every shareholder each firm should act in a way which contributes to the preservation of the environment. Yet, irrespective

[78] See on this issue Sacco Ginevri, *Divagazioni su corporate governance e sostenibilità*, in Rossano (a cura di), *La supervisione finanziaria dopo due crisi – quali prospettive*, Milano, 2023, 319; see also Riganti, *Sostenibilità non finanziaria, "sana e prudente gestione" e governo societario delle banche. Arlecchino nel c.d.a.? (Note a margine di un convegno sull'Isola di Capri)*, in Rossano (a cura di), *La supervisione finanziaria dopo due crisi – quali prospettive*, Milano, 2023, 400.

[79] See Rainforest Action Network, *Banking on climate chaos – Fossil fuel finance report*, 2023, https://www.ran.org/wp-content/uploads/2023/04/BOCC_2023_vF.pdf.

of the unlikeliness of this interpretation finding widespread support, a free-riding issue in the lack of binding provisions would remain, with many firms trying to postpone as long as possible the necessary paradigm shift thereby benefitting from the responsible behaviour of other market players.

Against this background, an example exists of provisions on directors' duties which would fall under the enlightened shareholders' value model previously discussed[80]. That is section 172 of the UK Companies Act 2006 which states that 'A director of a company must act in the way he considers, in good faith, would be most likely to promote the success of the company for the benefit of its members as a whole, and in doing so have regard (amongst other matters) to: (a) the likely consequences of any decision in the long term, (b) the interests of the company's employees, (c) the need to foster the company's business relationships with suppliers, customers and others, (d) the impact of the company's operations on the community and the environment, (e) the desirability of the company maintaining a reputation for high standards of business conduct, and (f) the need to act fairly as between members of the company'.

Still, despite being a step in the right direction, research posits that in the absence of clear rules on how and to what extent other interests should be considered by directors, this approach might have limited effects in fostering directors' advancement of sustainability[81]. Accordingly, doubts exist as to whether this kind of provisions would be effective in practice in ensuring that corporate directors take properly care of environmental interests when making business decisions. If that is the

[80] See Iglesias-Rodriguez, *Sustainable commercial banking in European Union law: a renewed mandate for commercial banks?*, in Bodellini – Gimigliano – Singh (eds.), *Commercial banking in transition – A cross-country analysis*, New York, 2024, 183.
[81] See Keay - Iqbal, *The Impact of Enlightened Shareholder Value*, in *Journal of Business Law*, 2019, 4, 304–327.

case, then more demanding provisions on directors' duties *vis-à-vis* environmental sustainability might turn out to be needed.

7. Importantly, recent developments in climate litigation require to pay careful attention to the role that the judiciary is playing in the fight against climate change. Due to the lack of strong commitments and decisive action at the political level in addressing climate change and environmental issues, both individuals and organizations have increasingly turned to litigation. They seek not only legal remedies but also aim to drive social and policy-related transformations. This trend has been termed as the rise of judicial governance of climate change[82]. It is important to note that climate litigation aims not just to resolve conflicts through the interpretation and application of the law but also to proactively influence the strategies and visions of governments, public bodies, and private corporations[83]. This proactive approach is one of the declared strategies of climate activists, who, by bringing climate-related claims before law courts, seek to sensitize the public and raise awareness, regardless of the outcome of the case[84].

Two main avenues have been so far primarily taken to bring environmental legal claims before the judiciary. On one side, the legal basis has been found in international public law and as a consequence, the claim has been brought against sovereigns. On the other side, tort law-related provisions have been used to sue corporations with regard to damages caused by their negative environmental footprint.

Both litigation strategies are discussed in the following paragraphs.

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[82] See Giabardo, *Climate Change Litigation, State Responsibility and the Role of Courts in the Global Regime: Towards a "Judicial Governance" of Climate Change?*, in Pozzo - Jacometti (eds.), *Environmental Loss and Damage in a Comparative Law Perspective*, Cambridge, 2021, 393 – 403.

[83] See Giabardo, *Climate Change Litigation & Corporate Responsibility. A Comment on "Milieudefensie and Others vs. Shell" (2021)*, available at http://www.glawcal.org.uk/stories/climate-change-litigation-corporate-responsibility-a-comment-on-milieudefensie-and-others-vs-shell-2021.

[84] See Ganguly – Setzer – Heyvaert, *If at First You Don't Succeed: Suing Corporations for Climate Change*, in *Oxford Journal of Legal Studies*, 2018, 38, 841–868.

7.1. With respect to the international public law nature of countries' obligations resulting from supranational agreements, recent developments in the area of climate litigation are worth mentioning as they can actually lead to that paradigm change which is needed and that legislators and regulators have not been able so far to successfully support through the adoption of effective rules.

In a lawsuit brought before the European Court of Human Rights by a Swiss association, the Court held in its judgement that Switzerland violated article 8 (right to respect for private and family life) of the European Convention on Human Rights in that local authorities did not take sufficient action, despite their duties under the Convention, to mitigate the effects of climate change[85]. Crucially, the Court found that Article 8 of the Convention encompasses a right to effective protection by the State authorities from the serious adverse effects of climate change on lives, health, well-being and quality of life[86]. The Court affirms as incontrovertible the presence of compelling evidence indicating the existence of anthropogenic climate change, which poses serious current and future threats to the enjoyment of human rights enshrined within the Convention. Conscious of this reality, states possess both the knowledge and capacity to enact meaningful measures in response. Interestingly, the Court emphasizes that relevant risks would be lower if the rise in temperature were limited to 1.5 degrees Celsius above pre-industrial levels and if action were taken urgently. Looking at the Swiss framework, the Court noted that current global mitigation efforts

[85] European Court of Human Rights, Verein KlimaSeniorinnen Schweiz and Others v. Switzerland (application no. 53600/20).

[86] In particular, the Court found that the Swiss Confederation had failed to comply with its duties (positive obligations) under the Convention concerning climate change, since there had been critical gaps in the process of putting in place the relevant domestic regulatory framework, including a failure by the Swiss authorities to quantify, through a carbon budget or otherwise, national greenhouse gas (GHG) emissions limitations. In the view of the Court, Switzerland had also failed to meet its past GHG emission reduction targets. While recognising that national authorities enjoy wide discretion in relation to implementation of legislation and measures, the Court held that the Swiss authorities had not acted timely and in an appropriate way to devise, develop and implement relevant legislation and measures.

are not sufficient to meet that target. It also found that, while the legal obligations arising for States under the Convention extend to those individuals currently alive, future generations are likely to bear the most relevant consequences of present failures and omissions to combat climate change.

On these grounds, and considering that a breach of the Convention has been found, the Court pointed out that Switzerland has a legal obligation to select, subject to supervision by the Committee of Ministers, the general and/or, if appropriate, individual measures to be adopted in its domestic legal framework in order to put an end to the violation of the Convention and to redress the situation. Given the complexity and gravity of the matters at hand, the Court, mindful of the nuanced terrain, deemed it imprudent to prescribe exhaustive directives for compliance with the judgment. Recognizing the sovereign prerogative of the States in this domain, the Court entrusted the task of devising pertinent measures to the Swiss Confederation, aided by the Committee of Ministers, acknowledging their superior position to evaluate the requisite actions[87].

7.2. Another very important climate-related judgement is the one concerning the case of Milieudefensie and Others versus Royal Dutch Shell (RDS), which was decided by the District Court of The Hague in May 2021[88]. Particularly, with an immediately enforceable ruling, the Court ordered Royal Dutch Shell to reduce the total emissions of CO2 of the entire group by 45% relative to the levels of 2019, which is way more than what had been planned by the defendant. Importantly, the Court held that even if RDS' current amount of emissions is not in breach of any existing provisions and thus is not unlawful *per se*, its policy and future climate targets violate

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[87] European Court of Human Rights, Verein KlimaSeniorinnen Schweiz and Others v. Switzerland (application no. 53600/20).

[88] The Hague District Court, Vereniging Milieudefensie and Others v. Royal Dutch Shell PLC, C/09/571932 / HA ZA 19-379, Judgement of 26 May 2021.

the private law obligation on the basis of which everyone must act in compliance with the 'due standard of care', with a view to avoiding to cause unjust harm to others. This obligation results from art. 162 of the Dutch Civil Code[89].

The plaintiff's argument and identified legal basis to sue are similar to the ones featuring the Urgenda case, in which the State of The Netherlands has been found liable for the adverse consequences of climate change, as its existing plans for reducing emissions were against the due 'duty of care'[90]. Tort law has increasingly served as a mechanism to bring claims in matters of climate responsibility, trying to indirectly influence public objectives and shape policy reforms[91]. Originating from the principle of rectifying wrongdoings and thus providing redress, tort law typically entails compensatory measures, primarily through awarding monetary damages as compensation. Its fundamental purpose is to provide full compensation of proven harms. In the context of negligence—or even more so, deliberate actions—an act is deemed negligent not only when it disregards established legal or regulatory duties but also when it fails to meet the standard of 'reasonableness' as determined by the

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[89] See Giabardo, *Climate Change Litigation & Corporate Responsibility. A Comment on "Milieudefensie and Others vs. Shell" (2021)*, available at http://www.glawcal.org.uk/stories/climate-change-litigation-corporate-responsibility-a-comment-on-milieudefensie-and-others-vs-shell-2021.

[90] See Spier, *'The "Strongest" Climate Ruling Yet': The Dutch Supreme Court's Urgenda Judgment*, in *Netherland International Law Review*, 2020, 67, 319–391; Van Zeben, *Establishing a Governmental Duty of Care for Climate Change Mitigation: Will Urgenda Turn the Tide?*, in *Transnational Environmental Law*, 2015, 4, 339 – 357.

[91] See Bouwer, *The Unsexy Future of Climate Change Litigation*, in *Journal of Environmental Law*, 2018, 30, 483–506; Giabardo, *Climate Change Litigation and Tort Law. Regulation Through Litigation?*, in *Rivista Diritto e Processo*, 2020, 361-381; Kysar, *What Climate Change Can Do About Tort Law*, in *Environmental Law*, 2011, 41, 1-71; Kysar, *The Public Life of Private Law: Tort Law as a Risk Regulation Mechanism*, in *European Journal of Risk Regulation*, 2018, 9, 48 – 65; Thorpe, *Tort-Based Climate Change Litigation and the Political Question Doctrine*, in *Journal of Land Use & Environmental Law*, 2008, 24, 79-105; Grossman, *Warming up to a Not-So-Radical Idea: Tort-Based Climate Change Litigation*, in *Columbia Journal of Environmental Law*, 2003, 28, 1.

court, considering the specific circumstances of the case[92]. The notion of 'reasonableness' is guided by unwritten standards of care. Therefore, the Court of The Hague underscored that actions contrary to widely accepted norms of unwritten law are unlawful[93]. Consequently, in formulating its corporate policy, the Shell group must adhere to societal standards of due care, with the evaluation of such standards necessitating a comprehensive examination of the circumstances surrounding each case.

Certainly, the determination of the 'reasonableness' of conduct and the substance of 'unwritten standards' cannot solely rely on discretion. External guiding principles and directives are essential for their interpretation and clarification. In the Royal Dutch Shell case, the Court drew upon various sources for this purpose. These included established scientific literature and findings from climate science, notably assessments from bodies like the Intergovernmental Panel on Climate Change and the Royal Netherlands Meteorological Institute, as well as reports from organizations such as the UN Environmental Protection. Additionally, the Court considered international agreements, conferences, and conventions, such as the UN Climate Conference 1992, the Paris Agreement 2016, the COP25 Conference 2019, and subsequent initiatives like the Climate Ambition Alliance. Furthermore, it took into account documents like the World Energy Outlook from the International Energy Agency for the years 2019 and 2020, as well as targets set by entities such as the European Court of Human Rights and the European Union. Lastly, supranational guidelines and soft law instruments, including the UN Guiding Principles on Business and Human Rights, the UN Global

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[92] See Giabardo, *Climate Change Litigation & Corporate Responsibility. A Comment on "Milieudefensie and Others vs. Shell" (2021)*, available at http://www.glawcal.org.uk/stories/climate-change-litigation-corporate-responsibility-a-comment-on-milieudefensie-and-others-vs-shell-2021.

[93] The Hague District Court, Vereniging Milieudefensie and Others v. Royal Dutch Shell PLC, C/09/571932 / HA ZA 19-379, Judgement of 26 May 2021.

Compact, and the OECD Guidelines for Multinational Enterprises, were also considered in the Court's determinations.

Particularly noteworthy are the references to the objectives outlined in the Paris Agreement as well as to human rights. Concerning the former, it is evident that the responsibility to achieve the target of limiting global temperature rise to well below 2°C extends beyond nation-states to encompass non-state actors as well. The Court emphasized that this monumental task cannot be shouldered by countries alone. While not legally binding for corporations, the Paris Agreement serves as a compelling benchmark for guiding conduct. Regarding human rights—a pivotal facet in discussions surrounding climate change[94]—the Court explicitly connects safeguarding against the perils of global warming with the fundamental right to life, as enshrined in key international conventions[95].

This extensive corpus of scientific evidence, along with international and supranational documents, indications, reports, and directives, serve as the Court's compass in interpreting and defining the inherently nebulous concept of unwritten behavioural standards. In its ruling, the Court ultimately mandates that to align with prevailing societal norms of care, in formulating the corporate policy of the Shell group, RDS should adhere to the guideline that the Shell group's CO2 emissions in 2030 must be reduced by a net 45% compared to 2019 levels, clarifying that such reduction concerns the whole Shell group's energy portfolio[96].

Undoubtedly, this decision will exert a profound influence on the business structure of RDS, shaping its investment decisions, financial trajectory, stakeholder relations, future prospects for growth, while causing a substantial re-evaluation of its

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[94] See Peel, *A Rights Turn in Climate Change Litigation?*, in *Transnational Environmental Law*, 2018, 7, 37 – 67.
[95] A similar argument has been made by the European Court of Human Rights; see European Court of Human Rights Verein KlimaSeniorinnen Schweiz and Others v. Switzerland (application no. 53600/20).
[96] The Hague District Court, Vereniging Milieudefensie and Others v. Royal Dutch Shell PLC, C/09/571932 / HA ZA 19-379, Judgement of 26 May 2021.

overarching priorities. This significant shift will reverberate throughout the fossil fuel energy market, possibly altering the landscape of free competition as well[97].

8. Environmental sustainability and the fight against climate change are key challenges of the current century. Both are deemed to be needed in order for life to continue on the Earth. Yet, they request a radical revision of the way businesses do business. In other words, businesses must not only limit the negative impacts of their economic activities on the environment but have also to contribute to the achievement of key environmental objectives.

Obviously for a paradigm change of this sort to take place, a huge amount of financial resources will be needed. While public money has been and will be mobilised, the big chunk of capital needs to be provided through private investments. This represents a substantial issue, possibly hindering the transition itself, as investors need to rethink the way they approach their investments since investing in sustainable economic activities might be less profitable in the short-term. Also, it is not certain whether this paradigm change can be obtained without intrusive provisions banning activities that are not considered to be in line with environmental objectives. Should the conclusion be reached that nudging measures are insufficient for these purposes, then more demanding rules might become necessary.

Furthermore, while the EU, thanks to the efforts of the European Commission and the other institutions and authorities, has taken the lead globally in fighting climate change and environmental degradation, many other jurisdictions around the world have shown so far a more reluctant stance in tackling these issues. Still, as the latter are global problems in nature, only internationally coordinated measures can be successful. In other words, unilateral action at EU level would be both ineffective to

[97] See Giabardo, *Climate Change Litigation & Corporate Responsibility. A Comment on "Milieudefensie and Others vs. Shell" (2021)*, available at http://www.glawcal.org.uk/stories/climate-change-litigation-corporate-responsibility-a-comment-on-milieudefensie-and-others-vs-shell-2021.

properly address such issues and detrimental for its economic system which would be made unable to compete with third-countries, thereby ending up undermining European well-being as well.

Also, it seems that mostly due to geopolitical tensions, on top of policy-makers' agenda is now competitiveness with potentially less attention being paid to sustainability. At EU level, it is still to be seen if environmental sustainability and the fight against climate change will keep on being considered top priorities by the new European Commission to be formed after the June 2024 European elections. Even in this respect, external factors will play a role in shaping the new Commission's political agenda for the next five years.

Relatedly, corporate purpose and directors' duties are key components of a well-balanced legal regime. Accordingly, they can play a prominent role even in the context of environmental sustainability and the fight against climate change. However, to avoid the risk of corporate litigation, a clear-cut legal basis is needed that properly defines both corporate purpose(s) and directors' duties relative to environmental sustainability-related matters.

Furthermore, against this background the rise of climate litigation should be considered very carefully. One of the main objections in this realm might be that courts, in adjudicating climate-related cases, could end up overcoming their mandate. This argument was advanced in the Urgenda case, where the Court was criticised as allegedly acting beyond its legitimate boundaries as set by the domestic legal framework[98]. These considerations raise questions about whether courts truly have the authority to address such issues, whether they are the best institutions to make these decisions given their far-reaching social effects, and if they are the most suitable

[98] See Van Zeben, *Establishing a Governmental Duty of Care for Climate Change Mitigation: Will Urgenda Turn the Tide?*, in *Transnational Environmental Law*, 2015, 4, 339 – 357.

actors to guide the climate transition[99]. Although these questions remain largely unanswered for the time being, there is little doubt that if political powers are unwilling or unable to take the lead, the judiciary (at least in developed countries) is likely to step in, thereby becoming a key player in climate change governance. Whether litigation is the ideal way to tackle climate-related issues is not at all sure; still the abovementioned litigation developments should prompt a regulatory reaction grounded in the consideration that lack of political action will increasingly be filled by the judiciary with the identified consequences.

To conclude with a note of optimism: despite contrasting signals coming from the market and the apparent inappropriateness of the legal frameworks in force in several jurisdictions, it is to be underlined that the transition to environmental sustainability and climate neutrality will, most likely, happen as it must happen for life to survive on the planet[100]. It is difficult to predict though how fast it will be and whether more devastating climate-related events will be needed to prompt effective government (re)action[101]. While the goals of the Paris Agreement might be missed by 2050, what is already certain, on the other hand, is that more sensible regulatory efforts all around the world are profoundly necessary. In this regard, some legislative options have been analysed and critically discussed throughout this paper, while engaging in an attempt to contribute to the ongoing policy-driven debate, on the assumption that the EU legal regime on sustainability and sustainable finance might be the international point of reference to properly support the transition to climate neutrality and environmental sustainability.

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[99] See Giabardo, *Climate Change Litigation & Corporate Responsibility. A Comment on "Milieudefensie and Others vs. Shell" (2021)*, available at http://www.glawcal.org.uk/stories/climate-change-litigation-corporate-responsibility-a-comment-on-milieudefensie-and-others-vs-shell-2021.

[100] See Emmert, *The Rise of the Eco-friendly Consumer*, in *Strategy+Business*, 2021, 104, https://www.strategy-business.com/article/The-rise-of-the-eco-friendly-consumer, pointing out that globally consumers are increasingly concerned about sustainability, and this is reflected in their product choices.

[101] See Schoenmaker – Schramade, *Principles of sustainable finance*, Oxford, 2019, *passim*.

NAVIGATING THE COMPLEXITIES: CHALLENGES FOR BANKS IN UNDERSTANDING AND ADAPTING TO EU SUSTAINABILITY LEGISLATION

Lela Melon [*]

ABSTRACT: *The banking sector is currently experiencing a significant paradigm shift propelled by global sustainability objectives and regulatory frameworks like the United Nations Sustainable Development Goals and the Paris Agreement. Within the European Union, a stringent set of sustainability regulations is reshaping banking practices, thereby presenting formidable challenges for banks in comprehending and adjusting to these intricate legal frameworks. This paper endeavors to delve deeper into these challenges, providing comprehensive insights into the multifaceted landscape of European Union sustainability legislation and its far-reaching implications for banks.*

1. The evolution towards sustainability within the banking sector is intertwined with broader global initiatives aimed at addressing pressing environmental and social concerns. At the forefront of this transformation are the United Nations Sustainable

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Development Goals (UN SDGs),[1] a universal call to action to end poverty, protect the planet, and ensure prosperity for all. Similarly, the Paris Agreement[2] stands as a landmark international treaty designed to combat climate change by limiting global warming to well below 2 degrees Celsius above pre-industrial levels.

In this context, the European Union (EU) has emerged as a trailblazer in enacting robust sustainability legislation,[3] which places significant demands on banks operating within its jurisdiction. From stringent reporting requirements[4] to adherence to sustainability criteria in investment decisions,[5] banks are confronted with a complex regulatory landscape that necessitates careful navigation. Moreover, the EU's ambitious sustainability agenda is continuously evolving, adding layers of complexity to an already intricate regulatory framework.

Against this backdrop, the present paper aims to unpack the various challenges faced by banks in understanding and adapting to EU sustainability legislation. From deciphering regulatory nuances to ensuring compliance with evolving standards, banks encounter numerous hurdles in their quest for sustainability. Balancing compliance with innovation poses a particularly daunting challenge, as banks strive to integrate sustainability considerations into their business models while fostering a culture of innovation. Furthermore, the international nature of banking operations complicates matters, as banks must navigate a patchwork of sustainability standards across different jurisdictions. Building sustainable business models requires significant

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[1] United Nations. (2015). Transforming our world: the 2030 Agenda for Sustainable Development. Retrieved from https://sdgs.un.org/2030agenda.

[2] United Nations Framework Convention on Climate Change. (2015). Paris Agreement. Retrieved from https://unfccc.int/sites/default/files/english_paris_agreement.pdf

[3] European Commission. (2019). The European Green Deal. Retrieved from https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52019DC0640

[4] European Commission. (2021). Proposal for a Directive of the European Parliament and of the Council amending Directive 2013/34/EU, Directive 2004/109/EC, Directive 2006/43/EC and Regulation (EU) No 537/2014, as regards corporate sustainability reporting (COM/2021/189 final). Retrieved from https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52021PC0189

[5] European Commission. (2019). 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. Retrieved from https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32019R2088

investment in technology, talent, and infrastructure, presenting financial challenges for banks, especially smaller institutions with limited resources.

Amidst these challenges, fostering a cultural shift towards sustainability emerges as a pivotal task for banks. This necessitates strong leadership, effective communication, and ongoing training initiatives to instill a sense of environmental and social responsibility across all levels of the organization. Navigating the complexities of EU sustainability legislation represents a formidable challenge for banks. However, by embracing sustainability as a core business principle and investing in the necessary resources and capabilities, banks can not only meet regulatory requirements but also drive positive environmental and social impact while remaining competitive in an increasingly sustainable world.[6]

2. The global push towards sustainability has prompted regulatory bodies worldwide to enact legislation aimed at fostering environmental and social responsibility across industries. In the EU, sustainability has become a central focus, with a comprehensive framework of regulations and directives guiding financial institutions towards sustainable practices. The present paper aims to explore the challenges faced by banks in navigating the EU environment on sustainability legislation, including interpreting regulatory frameworks, keeping pace with evolving standards, balancing compliance with innovation, navigating international standards, building sustainable business models, and fostering a cultural shift towards sustainability. The present work focuses on seven (7) challenges in particular that have been noticed in bank practices during the author’s implication in advisory role of those banks in Europe in the last two (2) years.

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[6] Mélon, L., & Recelj Mercina, A. (2024). Commercial banks and competition concerns—SDG policy priorities. In Commercial banking in transition: A cross-country analysis (pp. 201-220). Springer International Publishing.

2.1. The dynamic nature of EU sustainability legislation means that standards and requirements are continually evolving. Banks must remain vigilant to stay up-to-date with the latest changes and ensure ongoing compliance. This entails not only understanding new regulations as they are introduced but also adapting internal processes and reporting mechanisms accordingly.

The European Green Deal, for instance, sets ambitious goals that will likely result in further regulatory updates, necessitating a proactive and forward-looking approach. Announced in December 2019, the European Green Deal aims to make Europe the first climate-neutral continent by 2050, encompassing initiatives across various sectors, including finance. It includes the EU Taxonomy Regulation,[7] which provides a classification system for sustainable economic activities, guiding investments towards green projects. Compliance with the EU Taxonomy requires banks to assess and report the environmental impact of their lending and investment activities, which can be a complex and resource-intensive task.

To keep pace with these evolving standards, banks need to invest in robust monitoring systems that can track regulatory changes in real-time. These systems should be integrated with the bank's compliance framework to ensure that any new requirements are promptly addressed. Employing regulatory experts is also crucial, as they can provide insights into the implications of new regulations and help develop strategies for implementation. This expertise is essential for interpreting the nuances of legislation such as the Sustainable Finance Disclosure Regulation (SFDR),[8] which requires comprehensive disclosure on sustainability risks and adverse impacts.

[7] European Union. (2020). 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 (EU Taxonomy Regulation). Retrieved from https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32020R0852.

[8] European Union. (2019). 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. Retrieved from https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32019R2088.

Moreover, banks must enhance their data management capabilities to meet the increasing demand for detailed and accurate sustainability reporting. This includes implementing advanced analytics and reporting tools that can aggregate and analyze large volumes of data related to environmental, social, and governance (ESG) factors.[9] The ability to generate real-time, accurate reports not only ensures compliance but also provides valuable insights that can drive strategic decision-making.[10]

The need for continuous adaptation extends to the organizational culture as well. Banks must foster a culture of continuous learning and improvement, where employees at all levels are aware of sustainability goals and regulatory requirements. Regular training and development programs can help staff stay informed about the latest developments in sustainability legislation and understand their roles in achieving compliance.

2.2. One of the most significant challenges for banks is finding a balance between compliance and innovation. On one hand, stringent sustainability regulations demand adherence, often requiring substantial changes to existing practices. On the other hand, banks must innovate to remain competitive, integrating sustainability into their products and services. This balancing act involves aligning business strategies with regulatory expectations without stifling creativity and growth.

Developing green financial products, such as green bonds and sustainable investment funds, while ensuring they meet regulatory standards, exemplifies this challenge. Green bonds, for instance, are fixed-income instruments specifically earmarked to raise money for climate and environmental projects. The Green Bond

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[9] PwC. (2020). ESG Reporting: How Banks Are Addressing the Challenge. Retrieved from https://www.pwc.com/gx/en/financial-services/publications/assets/pwc-esg-reporting-challenge.pdf.

[10] Deloitte. (2021). Embedding Sustainability in Banking: The Role of Culture and Leadership. Retrieved from https://www2.deloitte.com/global/en/insights/industry/financial-services/sustainable-banking.html.

Principles (GBP) by the International Capital Market Association (ICMA)[11] provide guidelines that issuers must follow to ensure transparency and accountability in the use of proceeds. However, adhering to these principles can be complex and resource-intensive, often requiring banks to establish new reporting and verification processes.

Similarly, the Sustainable Finance Disclosure Regulation (SFDR)[12] mandates that financial institutions disclose how they integrate sustainability risks into their investment decisions and the impact of those risks. Compliance with SFDR involves not only changing disclosure practices but also ensuring that the underlying investment strategies genuinely incorporate sustainability criteria. This requires substantial investment in data collection, analysis, and reporting systems, which can strain resources, particularly for smaller banks.

Balancing compliance with innovation also demands a shift in organizational culture and mindset. Banks need to foster an environment where sustainability is seen not as a regulatory burden but as an opportunity for growth and differentiation. This involves training and educating employees at all levels about the importance of sustainability and encouraging them to develop innovative solutions that align with regulatory expectations. Leadership plays a critical role in driving this cultural change, as executives must champion sustainability initiatives and allocate resources towards their implementation. Moreover, collaboration and partnerships can facilitate the balancing act between compliance and innovation. By collaborating with fintech companies, banks can leverage advanced technologies such as artificial intelligence and blockchain to enhance their sustainability reporting and compliance processes. For example, blockchain can provide a transparent and immutable record of green bond transactions, ensuring compliance with regulatory standards while fostering

[11] International Capital Market Association. (2021). Green Bond Principles (GBP). Retrieved from https://www.icmagroup.org/sustainable-finance/the-principles-guidelines-and-handbooks/green-bond-principles-gbp/.
[12] European Union (2019) (n8).

trust among investors.[13]

Lastly, engaging with regulators proactively can help banks navigate the complexities of compliance while fostering innovation. By participating in regulatory sandboxes and pilot projects, banks can work alongside regulators to test new products and services in a controlled environment. This not only helps in fine-tuning compliance mechanisms but also provides valuable insights that can drive innovation. Balancing compliance with innovation requires a multifaceted approach involving robust compliance frameworks, cultural transformation, strategic partnerships, and proactive regulatory engagement. By embracing this holistic strategy, banks can meet regulatory requirements while driving positive environmental and social impacts through innovative financial products and services.

2.3. Banks operating in multiple jurisdictions face the additional complexity of aligning with various international sustainability standards. The EU's regulations may differ from those in other regions, creating a patchwork of requirements that banks must navigate. This necessitates a thorough understanding of both EU-specific and global sustainability frameworks, such as the Task Force on Climate-related Financial Disclosures (TCFD)[14] and the Global Reporting Initiative (GRI).[15] Harmonizing these diverse requirements into a cohesive strategy requires robust compliance frameworks and cross-border coordination.

The Task Force on Climate-related Financial Disclosures (TCFD) provides recommendations for voluntary climate-related financial disclosures that are consistent, comparable, reliable, clear, and efficient, and can help banks and other

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[13] *See more in* Forcadell, F. J., Aracil, E., & Úbeda, F. (2019). The influence of innovation on corporate sustainability in the international banking industry. Sustainability, 11(11), 3210. https://doi.org/10.3390/su11113210.

[14] *See* https://www.fsb-tcfd.org/.

[15] *See* https://www.globalreporting.org/.

financial institutions provide better information to support informed capital allocation decisions. The TCFD framework emphasizes the importance of governance, strategy, risk management, and metrics and targets related to climate-related financial risks and opportunities. Adopting TCFD recommendations can enhance transparency and provide stakeholders with a clear understanding of how climate-related risks and opportunities are managed, but integrating these recommendations with existing EU requirements can be challenging.

Similarly, the Global Reporting Initiative (GRI) sets out standards for sustainability reporting, which are widely used globally. The GRI Standards enable organizations to report publicly on their economic, environmental, and social impacts. While the GRI framework is comprehensive, aligning it with specific regional regulations, such as the EU's Non-Financial Reporting Directive (NFRD)[16] and the Corporate Sustainability Reporting Directive (CSRD),[17] requires careful coordination. This alignment involves ensuring consistency in the data reported and meeting the varying levels of detail required by different frameworks.

Harmonizing these diverse requirements into a cohesive strategy requires robust compliance frameworks. Banks must establish integrated compliance systems that can handle multiple sets of requirements and produce unified reports. This includes developing centralized data collection and management systems that can aggregate information across different jurisdictions and reporting standards. Advanced technologies such as artificial intelligence and machine learning can play a crucial role in streamlining these processes by automating data collection and analysis,

[16] European Union. (2014). 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. Retrieved from https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32014L0095.

[17] European Union. (2022). Directive (EU) 2022/2464 of the European Parliament and of the Council of 14 December 2022 amending Regulation (EU) No 537/2014, Directive 2004/109/EC, Directive 2006/43/EC and Directive 2013/34/EU, as regards corporate sustainability reporting. Retrieved from https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32022L2464.

ensuring accuracy, and reducing the administrative burden.

Cross-border coordination is also essential for effective compliance with international standards. Banks need to foster collaboration between their regional and global compliance teams to ensure a consistent approach to sustainability reporting. This involves regular communication and sharing of best practices across different jurisdictions. Additionally, participating in international forums and working groups focused on sustainability can help banks stay abreast of emerging trends and regulatory developments, facilitating a proactive approach to compliance. Moreover, engaging with international regulatory bodies and standard-setting organizations can provide banks with insights into future regulatory trends and allow them to contribute to the development of global standards. This proactive engagement can help banks anticipate changes and adapt their strategies accordingly, ensuring long-term compliance and competitive advantage.

2.4. Transitioning to sustainable business models is another formidable challenge for banks. This requires banks to embed sustainability into their core operations, influencing everything from lending practices to risk management. Significant investments in technology, talent, and infrastructure are essential to support this transformation. Smaller banks, in particular, may struggle with the financial burden of these investments. Strategies to overcome these challenges include forming strategic partnerships, leveraging fintech innovations, and accessing green financing options to fund the necessary changes.[18]

Embedding sustainability into core operations starts with redefining business

[18] Grijalvo, M., & García-Wang, C. (2023). Sustainable business model for climate finance: Key drivers for the commercial banking sector. Journal of Business Research, 155, 113446. https://doi.org/10.1016/j.jbusres.2022.113446.

strategies to prioritize environmental, social, and governance (ESG) criteria.[19] This involves setting clear sustainability goals, such as reducing the carbon footprint of lending portfolios, increasing financing for renewable energy projects, and ensuring that investments support socially responsible initiatives. For instance, banks need to incorporate ESG risk assessments into their credit evaluation processes to identify and mitigate sustainability-related risks. This integration requires sophisticated risk management frameworks and tools that can evaluate the long-term environmental and social impacts of lending decisions.[20]

Investing in technology is crucial for enabling this transformation. Advanced data analytics, artificial intelligence (AI), and blockchain technology can provide the necessary capabilities to track and report ESG performance accurately.[21] AI can help banks analyze large datasets to identify patterns and trends in sustainability metrics, enhancing decision-making processes. Blockchain, on the other hand, offers transparency and traceability in green financing, ensuring that funds are used for their intended sustainable purposes. These technologies not only facilitate compliance with regulatory requirements but also enhance the bank's ability to innovate and offer new sustainable financial products.

Talent acquisition and development are equally important. Banks need to attract and retain professionals with expertise in sustainability, ESG reporting, and green finance. This may involve creating new roles such as Chief Sustainability Officer or Sustainability Analysts and investing in continuous education and training programs for existing staff. Developing a workforce that understands the intricacies of

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[19] McKinsey & Company. (2021). ESG and the Role of Banks: Integrating Sustainability into Risk Management. Retrieved from https://www.mckinsey.com/business-functions/risk/our-insights/esg-and-the-role-of-banks-integrating-sustainability-into-risk-management

[20] Ibid.

[21] International Finance Corporation (IFC). (2020). Blockchain and AI: Transforming Banking in Emerging Markets. Retrieved from https://www.ifc.org/wps/wcm/connect/news_ext_content/ifc_external_corporate_site/news+and+events/news/blockchain-and-ai-transforming-banking-in-emerging-markets.

sustainable finance can drive the cultural shift necessary for successful implementation of sustainable business models.[22]

Smaller banks often face financial constraints in making these investments. Forming strategic partnerships can provide a viable solution. Collaborating with larger financial institutions, fintech companies, or sustainability-focused organizations can help smaller banks access the resources and expertise they need. For example, partnerships with fintech firms can enable banks to adopt innovative technologies at a lower cost and improve their sustainability reporting and compliance capabilities.

Accessing green financing options is another strategy to support the transition. Green bonds and sustainability-linked loans[23] offer banks a way to raise capital specifically for sustainable projects.[24] The proceeds from green bonds can be used to finance renewable energy projects, energy efficiency improvements, and other environmentally beneficial initiatives. Sustainability-linked loans, on the other hand, tie the loan terms to the borrower's achievement of predefined sustainability targets, incentivizing banks to improve their ESG performance. Transitioning to sustainable business models involves comprehensive changes across all aspects of banking operations. Significant investments in technology, talent, and infrastructure are necessary, and strategic partnerships and green financing options can provide essential support, especially for smaller banks. By adopting these strategies, banks can successfully integrate sustainability into their business models, meeting regulatory expectations and driving positive environmental and social impact.

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[22] PwC. (2021). Building Talent for a Sustainable Future. Retrieved from https://www.pwc.com/gx/en/services/people-organisation/publications/building-talent-for-a-sustainable-future.html.

[23] KPMG. (2020). Sustainability-Linked Loans: Driving Positive Change. Retrieved from https://home.kpmg/xx/en/home/insights/2020/07/sustainability-linked-loans.html

[24] *See* European Investment Bank (EIB). (2021). Green Bonds: Financing the Future of Sustainability. Retrieved from https://www.eib.org/en/investor_relations/press/news/green-bonds-financing-the-future-of-sustainability.

2.5. For sustainability initiatives to be successful, banks must cultivate a culture that prioritizes environmental and social responsibility. This cultural shift involves strong leadership, clear communication of sustainability goals, and comprehensive training programs. Employees at all levels need to understand and embrace the importance of sustainability, integrating it into their daily activities and decision-making processes. Effective change management strategies and incentivizing sustainable practices can help foster this cultural transformation.[25]

Strong leadership is crucial in setting the tone for a sustainable culture within banks.[26] Leaders must demonstrate a commitment to sustainability through their actions and decisions, signaling to employees that sustainability is a top priority. This can be achieved by appointing dedicated sustainability leaders, such as a Chief Sustainability Officer, who can drive the sustainability agenda across the organization. Leadership must also ensure that sustainability goals are aligned with the overall business strategy, providing a clear roadmap for achieving these objectives.[27]

Clear communication of sustainability goals is essential to ensure that all employees understand the bank's commitment to sustainability and their role in achieving these goals. This involves regularly updating employees on sustainability initiatives, progress, and achievements through internal communications, such as newsletters, meetings, and intranet platforms. Transparency in communication fosters trust and encourages employee engagement, making them feel part of the sustainability journey.

Comprehensive training programs are vital for equipping employees with the

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[25] McKinsey & Company. (2020). Sustainability as a Cultural Transformation: How Banks Can Drive the Change. Retrieved from https://www.mckinsey.com/business-functions/sustainability/our-insights/sustainability-as-a-cultural-transformation-how-banks-can-drive-the-change

[26] PwC. (2021). Building a Sustainable Culture: The Role of Leadership and Communication. Retrieved from https://www.pwc.com/gx/en/services/people-organisation/building-a-sustainable-culture.html

[27] Harvard Business Review. (2019). The Leader's Guide to Corporate Culture. Retrieved from https://hbr.org/2018/01/the-leaders-guide-to-corporate-culture

knowledge and skills needed to integrate sustainability into their daily activities. These programs should cover various aspects of sustainability, including ESG principles, sustainable finance, and regulatory requirements. Training can be delivered through workshops, e-learning modules, and seminars, tailored to different levels of the organization. Continuous education ensures that employees stay informed about the latest sustainability trends and best practices.

Effective change management strategies are necessary to manage the transition towards a sustainable culture. This involves identifying potential resistance to change and addressing it through targeted interventions. For instance, engaging employees early in the process and involving them in decision-making can help reduce resistance and build support for sustainability initiatives. Additionally, providing clear explanations of the benefits of sustainability, both for the bank and for employees personally, can help in gaining their buy-in.

Incentivizing sustainable practices is another powerful tool for fostering a cultural shift. Banks can introduce reward systems that recognize and celebrate employees who contribute to sustainability goals. This could include performance bonuses, recognition awards, or other forms of incentives for individuals and teams that demonstrate leadership in sustainability. Linking sustainability metrics to performance evaluations can also motivate employees to integrate sustainability into their work.[28]

Creating a culture of sustainability is a long-term endeavor that requires ongoing commitment from all levels of the organization. By embedding sustainability into the core values and operations of the bank, employees will be more likely to adopt sustainable practices and contribute to the bank's overall sustainability objectives. Fostering a cultural shift towards sustainability involves strong leadership, clear

[28] Accenture. (2021). Incentivizing Sustainability: How Rewards Can Drive Organizational Change. Retrieved from https://www.accenture.com/us-en/insights/consulting/incentivizing-sustainability

communication, comprehensive training, effective change management strategies, and incentivizing sustainable practices. By implementing these measures, banks can build a workforce that is committed to sustainability and capable of driving positive environmental and social impact.

2.6. Accurate data collection and reporting are critical components of complying with EU sustainability regulations. However, banks often face significant challenges in gathering reliable data and ensuring its accuracy. The requirement to report on a broad range of sustainability metrics necessitates sophisticated data management systems.[29] Additionally, the lack of standardized reporting formats can complicate the process. Investing in advanced data analytics tools and collaborating with external data providers are essential strategies to overcome these challenges.[30]

One of the primary challenges in data collection is the sheer volume and diversity of information required. Banks must report on various sustainability metrics, including environmental impact, social responsibility, and governance practices. This data often originates from multiple sources and formats, making it difficult to consolidate and standardize. For example, environmental data might include carbon emissions, energy consumption, and water usage, each requiring specific measurement and reporting methods. Social data might encompass employee diversity, community impact, and customer satisfaction, while governance data includes board composition, executive compensation, and risk management practices.

To address these challenges, banks need to invest in advanced data analytics tools that can automate the collection, processing, and analysis of sustainability data.

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[29] McKinsey & Company. (2020). Data-driven Sustainability: The Role of Advanced Analytics in ESG Reporting. Retrieved from https://www.mckinsey.com/business-functions/sustainability/our-insights/data-driven-sustainability-the-role-of-advanced-analytics-in-esg-reporting.

[30] PwC. (2021). Sustainable Finance: Managing the Challenges of ESG Data Collection and Reporting. Retrieved from https://www.pwc.com/gx/en/services/sustainability/publications/sustainable-finance-managing-challenges-esg-data.html

These tools can help in integrating data from various sources, ensuring consistency, and improving the accuracy of the reported information. For instance, machine learning algorithms can identify patterns and anomalies in large datasets, helping banks detect inaccuracies and streamline data validation processes. Furthermore, blockchain technology can enhance data transparency and traceability, providing a secure and immutable record of sustainability-related transactions and metrics.[31]

Another critical aspect is the lack of standardized reporting formats, which complicates the process of comparing and benchmarking sustainability performance across different institutions. The EU has made strides in this area with initiatives like the Non-Financial Reporting Directive (NFRD) and the upcoming Corporate Sustainability Reporting Directive (CSRD), which aim to harmonize sustainability reporting standards. However, discrepancies still exist between different regulatory frameworks and industry standards. Adopting globally recognized frameworks such as the Global Reporting Initiative (GRI) and the Task Force on Climate-related Financial Disclosures (TCFD) can help banks align their reporting practices with international standards.

Collaboration with external data providers and industry stakeholders is another effective strategy. External data providers can offer specialized expertise and access to comprehensive sustainability datasets, reducing the burden on banks to collect all the necessary information internally. Partnerships with industry associations and participation in sustainability initiatives can also facilitate the sharing of best practices and the development of common reporting standards. For example, the Partnership

[31] International Finance Corporation (IFC). (2021). Leveraging Technology for Sustainable Finance: Blockchain and AI. Retrieved from https://www.ifc.org/wps/wcm/connect/news_ext_content/ifc_external_corporate_site/news+and+events/news/leveraging-technology-for-sustainable-finance

for Carbon Accounting Financials (PCAF)[32] provides a standardized methodology for measuring and reporting the greenhouse gas emissions of loans and investments, which can help banks improve the accuracy and comparability of their environmental data. Addressing data and reporting challenges is crucial for banks to comply with EU sustainability regulations. Investing in advanced data analytics tools, adopting standardized reporting frameworks, and collaborating with external data providers are key strategies to ensure accurate and reliable sustainability reporting. By overcoming these challenges, banks can enhance their transparency, meet regulatory requirements, and demonstrate their commitment to sustainability.

2.7. Banks must navigate the diverse expectations of various stakeholders, including regulators, investors, customers, and advocacy groups, regarding sustainability. Each stakeholder group may have different priorities and requirements, adding complexity to the challenge of managing their expectations.[33] Balancing these diverse expectations while maintaining regulatory compliance and pursuing business objectives requires effective stakeholder engagement strategies. Regular communication, transparency, and responsiveness to stakeholder concerns are essential to building trust and demonstrating commitment to sustainability.[34]

a) Regulators: Regulatory bodies play a critical role in shaping the sustainability agenda for banks. They set the standards and guidelines that banks must adhere to, ensuring that financial institutions integrate sustainability into their

[32] Partnership for Carbon Accounting Financials (PCAF). (2021). The Global GHG Accounting and Reporting Standard for the Financial Industry. Retrieved from https://carbonaccountingfinancials.com/standard

[33] Deloitte. (2021). Managing Stakeholder Expectations: The Role of Banks in Sustainable Finance. Retrieved from https://www2.deloitte.com/global/en/pages/risk/articles/managing-stakeholder-expectations-the-role-of-banks-in-sustainable-finance.html

[34] Deloitte. (2021). Managing Stakeholder Expectations: The Role of Banks in Sustainable Finance. Retrieved from https://www2.deloitte.com/global/en/pages/risk/articles/managing-stakeholder-expectations-the-role-of-banks-in-sustainable-finance.html

operations. To manage regulatory expectations, banks need to stay informed about the latest regulatory developments, engage proactively with regulators to provide input on proposed regulations, and demonstrate compliance through transparent reporting and disclosures. Building strong relationships with regulators based on trust and collaboration can help banks navigate the regulatory landscape effectively.[35]

b) Investors: Investors are increasingly considering environmental, social, and governance (ESG) factors in their investment decisions. They expect banks to demonstrate a commitment to sustainability and manage ESG risks effectively. To meet investor expectations, banks need to incorporate sustainability considerations into their financial disclosures, provide transparent reporting on ESG performance, and engage with investors to communicate their sustainability strategies and initiatives. Demonstrating a strong ESG performance can enhance investor confidence and attract sustainable investment capital.[36]

c) Customers: Customers are becoming more environmentally and socially conscious, driving demand for sustainable banking products and services. They expect banks to align with their values and provide solutions that promote sustainability. Banks can meet customer expectations by offering green financial products, such as sustainable investment funds, green loans, and eco-friendly banking services. Communicating the environmental and social benefits of these products and services effectively can help banks attract and retain customers who prioritize sustainability.

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[35] Global Banking Alliance for Women (GBA). (2021). The Importance of Customer-Centricity in Sustainable Banking. Retrieved from https://www.gbaforwomen.org/the-importance-of-customer-centricity-in-sustainable-banking/

[36] United Nations Environment Programme Finance Initiative (UNEP FI). (2021). Stakeholder Engagement: Guidance for the Financial Sector. Retrieved from https://www.unepfi.org/positive-impact-finance/stakeholder-engagement-guidance-for-the-financial-sector/

d) Advocacy Groups: Advocacy groups play a critical role in advocating for environmental and social causes and holding banks accountable for their sustainability practices. They may exert pressure on banks through public campaigns, shareholder activism, or regulatory advocacy. To manage expectations of advocacy groups, banks need to engage in dialogue with these stakeholders, listen to their concerns, and address their feedback constructively. Collaborating with advocacy groups on sustainability initiatives and participating in industry-wide initiatives can help banks demonstrate their commitment to addressing environmental and social issues.

Effective stakeholder engagement requires a proactive and systematic approach. Banks should establish dedicated teams or departments responsible for stakeholder engagement, develop clear communication channels to facilitate dialogue with stakeholders, and regularly solicit feedback to understand stakeholder expectations and concerns. By prioritizing stakeholder engagement and demonstrating responsiveness to stakeholder feedback, banks can build trust, enhance their reputation, and strengthen their social license to operate in the long term. Managing stakeholder expectations regarding sustainability is a complex but essential task for banks. By implementing effective stakeholder engagement strategies, including regular communication, transparency, and responsiveness, banks can navigate the diverse expectations of regulators, investors, customers, and advocacy groups successfully, demonstrating their commitment to sustainability and fostering trust and collaboration with their stakeholders.

3. In conclusion, the banking sector is undergoing a profound transformation driven by the imperative of sustainability, propelled by global agendas such as the United Nations Sustainable Development Goals and the Paris Agreement. Within the European Union, banks face formidable challenges in comprehending and adapting to

the intricate legal frameworks of sustainability legislation. From interpreting regulatory nuances to navigating international standards, building sustainable business models to fostering a cultural shift towards sustainability, banks encounter multifaceted obstacles on their journey towards sustainability.

However, amidst these challenges lies immense opportunity. By proactively addressing these hurdles and investing in the necessary resources and capabilities, banks can not only achieve regulatory compliance but also emerge as leaders in driving positive environmental and social impact. Embracing sustainability as a core business principle enables banks to innovate and adapt, positioning themselves competitively in an increasingly sustainability-focused world.

Through strong leadership, effective stakeholder engagement, and a commitment to transparency and accountability, banks can build trust and credibility in their sustainability efforts. By aligning business strategies with sustainability objectives, banks can contribute significantly to a more sustainable future, fostering economic prosperity while safeguarding the planet and promoting social equity.

In essence, navigating the complexities of EU sustainability legislation represents a challenging yet rewarding journey for banks. By embracing sustainability as a guiding principle, banks can not only thrive in the present but also help shape a more sustainable and resilient future for generations to come.

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BANKING BUSINESS AND APPEALING MYTHS: A CRITICAL REVIEW OF FINTECH AS A PANACEA FOR COMPETITION CONCERNS

Gabriella Gimigliano *

ABSTRACT: *This paper delves into the manner in which FinTech applications may address competition concerns within the EU legal framework governing commercial banks. The analysis aims to ascertain whether and how FinTech could either assist or challenge policymakers. Anchored in the findings of the 2007 Sector Inquiry Report, this chapter explores several critical questions within the context of EU regulations: (i) whether the social function of commercial banks has hindered the enforcement of competition law; (ii) whether FinTech innovations can enhance the capacity of European regulators to manage the costs and challenges associated with two-sided payment platforms; and (iii) ultimately, whether FinTech could facilitate the creditworthiness assessment and improve the analytical credit database.*

1. Given that in the last ten years the financial system has experienced a global financial crisis between 2007 and 2009, a sovereign crisis around 2011, and a pandemic health emergency between 2019 and 2021, no trade-off between efficiency and

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stability has had enough time to provide us with any valuable experience on the trade-off market and regulation in the banking sector[1].

With regard to competition, the European Union has since its inception provided primary rules applicable to any and all undertakings. Throughout the years, the Treaty provisions concerned have been renumbered, but no change has been made to their contents. In fact, arts. 101 and 102 of the Treaty on the Functioning of the European Union (TFEU) still focus on cartels and abuses of dominant position. By contrast, the enforcement procedure was amended when Regulation n. 1/2003 replaced Regulation n. 17/1962[2]. European policymakers leaned towards a more economic approach in the process of granting the art. 101(3) exemption, setting up a decentralized network of authorities. As for art. 107 TFEU, state aid has always been forbidden unless one of the exempting conditions listed in paragraphs 2 or 3 is met, but the financial and economic crises of recent years urged the Commission to temporary revise the assessment approach in order to make it more flexible[3].

It is worth mentioning that, generally speaking, there is no special competition legal framework for banks (or credit institutions, according to EU legal parlance). The concepts of undertaking, appreciable effect on trade between Member States, and the appreciable restriction of competition, are applied to the banking market with no material changes. The situation is slightly different for State aid, where soft rules have over time tailored the normative approach to the banks' features as middle-men in the operation of monetary function and the taking-up of reimbursable funds from the

[1] P. Massey – M. MacDowell, *EU competition law: an unaffordable luxury in times of crisis?* in *World Competition* 44, 2021 (n. 4), 405; X. Vives, *Competition and stability in banking*, Princeton University Press 2020; I. Kapsis, *Competition law and policy for the EU banking sector in a period of increased economic uncertainty*, in *International Journal of Law and Management*, (4) 2012, vol 54, 284-301

[2] European Parliament and Council Regulation n. 1 of 2003, OJ [1] 2003, 1, which replaced European Council Regulation n. 65 of 1962, OJ [204] 1962.

[3] A. Canepa, *La regolazione al tempo della crisi tra salvaguardia del mercato unico e flessibilità delle regole sugli aiuti di Stato*, in *Banca Impresa Società* 2016, (3), 445.

public to extend credit[4].

With the competition legal context in mind, this paper aims to critically review the idea of fintech innovations as a panacea for competition concerns[5].

Fintech has a broad meaning and ranges from decentralised ledger technology (DLT) to smart contracts, from artificial intelligence (AI) to crypto-assets, just to give a few examples[6]. Apart from the specific elements each individual fintech-based innovation features, it seems sensible to argue that they have some particular aspects in common. Indeed, they encourage fully integrated straight-through processing (of banking operations); undermine the middle-man function; and increase the quantity and the quality of data available in the contract relationship between service user and provider. This means that fintech is a driver of change of the banking business model, but it is not clear to what extent this may address competition concerns in the banking sector.

This legal analysis, based on the EU legal framework, focuses on competition concerns as dealt with by the last sector inquiry available, i.e., the 2007 retail banking report[7]. Therefore, it points to cartels and abuses of dominant position in retail banking, while State aid falls beyond the scope of this analysis, although it isa crucial aspect of recent regulatory development.

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[4] M. Maggiolino, *EU State aid law in the banking sector: the story of a revelatory change, in Law and Economics Yearly Review*, 2019, 64 -124.

[5] F. Capriglione, *Competition and stability in the digital paradigm*, in *Law and Economics Yearly Review*, 2023 (12), I, 3.

[6] FinTech is described as "technology-enabled innovation in financial services, regardless of the nature or size of the provider of the services". Commission, Consultation Document on "Fintech: a more competitive and innovative European financial sector", 15 June 2017; its follow-up: COM (2020) 591 final; Expert Group on Regulatory Obstacles to Financial Innovation (ROFIEG), 30 Recommendations on regulation, innovation and finance, December 2019; COM (2018) 109 final. More in detail, see: R. Baskerville, F. Capriglione, N. Casalino, *Impact, challenges and trends of digital transformation in the banking sector*, in *Law and economic Yearly Review*, 2020 (9), II, 341; V. Lemma, *The regulation of fintech banks: questions and perspective*, in *Open Review of Management, Banking and Finance*, 2019 (2), 30.

[7] COM (2007) 33 final.

The paper includes 3 further sections. Section 2 reminds us how the banking business is subsumed into the legal concept of "undertaking" as applied in EU competition law. Section 3 analyses the three competition concerns dealt with by the 2007 sector inquiry, namely, i) the fragmentation of payment systems, especially credit card payments; ii) the interoperability of credit registers; iii) collusive pricing policies at the national level, uncovering a high level of fragmentation along national lines. The legal investigation focuses on each of the above-mentioned aspects in order to scrutinize the extent to which FinTech may dispel competition concerns or raise new ones. It is worth remembering that, in the European legal framework, antitrust action has often been matched up with pro-competitive regulation aiming to build up a single market. Section 4 draws some conclusions.

2. The 2007 sector inquiry concerns the retail banking providing payment, savings, and lending services to consumers and small and medium enterprises.

The starting point of this legal analysis is the definition of credit institutions: these are defined by what they do, regardless of the business model or the legal form they take. Indeed, the "credit institution" concept comprises any "undertaking the business of which is to take deposits or other repayable funds from the public and to grant credits for its own account"[8]. As we know, in compliance with the universal banking model credit institutions may operate not only the banking business and what are known as passported activities but also investment services, as long as they obtain an ad-hoc authorization, and they may distribute insurance products[9].

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[8] European Parliament and the Council, Regulation (EU) no 575/2013 of 26 June 2013 on prudential requirements for credit institutions and investment firms and amending Regulation (EU) No 648/2012, in OJ [2013] L176/1 (Art 4, let. a). Annex I, European Parliament and the Council, Directive (EU) no 36/2013 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, in OJ [2013] L176/238).

[9] See J. H. Dahuisen, *Financial liberalisation and re-regulation*, in *European Business Law Review*, 2000, 373 – 380.

The positive harmonization process has consistently aimed to remove internal barriers and advancing liberalization. The First Banking Directive[10], introduced in the late 1970s, defined credit institutions and treated banking as a regulated activity[11]. Moreover, in an effort to keep under control any national attempt to protect national champions, this Directive established that the "economic needs of the market" may no longer work as a condition of authorization, with the consequence that the national competent authorities were no longer entitled to issue or refuse banking authorization on the grounds of "economic needs of the market"[12]. The liberalization process continued quite swiftly in the following years, backed by a strict application of state aid prohibition. Recently, the situation has changed. The banking crisis management experience underscored the trickiness of applying the "market economy investor test"[13], laid down in the Bank Recovery and Resolution Regulatory Package[14]. This test

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[10] First Council directive of 12 December 1977 on the coordination of laws, regulations and administrative provisions relating to the taking up and pursuit of the business of credit institutions, OJ [1977] L322/30.

[11] More details in: J Dalhuisen, *Home and Host Country regulatory control of trans-border banking services in the EU* 20 (Guido Alpa, Francesco Capriglione eds, Utet 2002); C Rossini, *Cross-border banking in the EC: host country under the Second Banking Directive*, in *European Review of Private Law* 4 (1995), 571-590.

[12] That notwithstanding, where a Member State encountered technical and structural impediments within its national banking system that precluded the immediate abandonment of this criterion, the State was authorized to continue its application for a transitional period of seven years following the implementation of the directive. Where this temporary exception was employed, the First Banking Directive provided that the 'economic needs' criterion should be applied on the basis of general predetermined standards aiming to promote "i) security of savings, ii) higher productivity in the banking system; iii) greater uniformity of competition between the various the banking networks; iv) a broader range of banking services in relation to population and economic activity". Article 3, lett. d), First Banking Directive.

[13] A critical investigation in: C. Brescia Morra, *Gestione delle crisi bancarie e aiuti di Stato. Alla ricerca di un equilibrio difficile*, in *Banca Impresa Società*, 2020 (2), 191.

[14] This regulatory package is made up of European Parliament and the Council, Directive (EU) No 59/2014 of 15 May 2014 establishing a framework for the recovery and resolution of credit institutions and investment firms and amending Council Directive 82/891/EEC, and Directives 2001/24/EC, 2002/47/EC, 2004/25/EC, 2005/56/EC, 2007/36/EC, 2011/35/EU, 2012/30/EU and 2013/36/EU, and Regulations (EU) No 1093/2010 and (EU) No 648/2012, of the European Parliament and of the Council, in OJ [2014] L173/190 (hereafter, BRRD); European Parliament and the Council, Regulation (EU) No

"aims to look at whether public authorities act as a private investor under normal economic-market conditions would do"[15]. This is almost the same regulatory approach applied in the European Court of Justice case law for the construction of the concept of undertaking in the framework of arts. 101 and 102 TFEU. Indeed, an activity of an economic nature exists as long as it faces actual or potential competition from private entities or if private entities were to enter the market under the same corporate, financial, and organization conditions[16].

However, due to their credit intermediation activity, banks are deemed to perform a primary social function[17]. This raises the question of whether this alone qualifies the banking business as a service of general economic interest (SGEI)[18] and, consequently, what trade-off there should be between competition and regulation provided that, under art. 107 TFEU, competition law is also applicable to SGEI unless it becomes an obstacle to the fulfilment of their mission. To address this, it is important to review what SGEIs are.

According to the 2000 Commission Communication, SGEIs differ from ordinary

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804/2014, of 15 July 2014 establishing uniform rules and a uniform procedure for the resolution of credit institutions and certain investment firms in the framework of a Single Resolution Mechanism and a Single Resolution Fund and amending Regulation (EU) No 1093/2010, in OJ [2014] L225/1 (hereafter, SRMR).

[15] See: G. Lo Schiavo, *State aids and credit institutions in Europe: what way forward?* in *European Business Law Review*, 2014, 427. Therefore, "in case of no private investor can be found in the market, public support qualifies as an economic advantage for the purpose of art 107 paragraph 1 TFEU".

[16] V. Louri, *"Undertaking" as a jurisdictional element for the application of EC competition law*, in *Legal Issues of Economis Integration*, 2002, 29(2), 143.

[17] R. M. Lastra, Multilevel governance in banking regulation, in M. P. Chiti & V. Santoro (eds), The Palgrave handbook of European Banking Union Law, Palgrave-Macmillan, 2019, 4.

[18] Similarly, banking activities listed as critical activities by the European Supervisory Risk Board were in no way considered services of general economic interest despite the fact that deposit-taking and lending activities, payment, clearing, settlement, cash, and custody services, capital markets and wholesale funding are considered businesses and operations "the discontinuance of which is likely in one or more Member States, to lead to the disruption of services that are essential to the real economy or to disrupt financial stability due to the size, market share, external and internal interconnectedness, complexity or cross-border activities of an institution or group, with particular regard to the substitutability of those activities, services or operations".

services since "they need to be provided even where the market may not have sufficient incentives to do so" in order to promote social and territorial cohesion and enhance the overall competitiveness of European industry[19]. Therefore, SGEIs demonstrate the existence of a market failure: States entrust some undertakings to operate SGEIs as they are "services that all citizens should have access to at an affordable price because they are indispensable for their welfare"[20].

This aspect came under the attention of the European Court of Justice (ECJ) in the Züchner case[21]. The Court has not ruled out that certain banking activities could be considered SGEIs but held that "Although the transfer of customers' funds from one Member State to another normally performed by banks is an operation which falls within the special task of banks, particularly in connection with international movements of capital, that is not sufficient to make them undertakings within the meaning of Article 90 (2) of the Treaty unless it can be established that in performing such transfers the banks are operating a service of general economic interest with which they have been entrusted by a measure adopted by the public authorities"[22]. Therefore, the operation of banking businesses in terms of credit intermediation

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[19] COM (2000) 580 final. It is up to the Member States to establish whether an economic activity is to be considered a service of general interest, how it should operate and, in the case it is such a service, whether compensation may be provided, while the Union, through the Commission, is in charge of performing a check for manifest error. More recently: COM (2011) 900 final. However, it is crucial to understand that classification as a Service of General Economic Interest (SGEI) does not inherently exempt an undertaking from the application of competition law.

[20] See A. M. Collins, M. Martínez Navarro, *Economic activity, market failure and services of general economic interest: it takes two to tango*, in *Journal of European Competition Law & Practice*, 2021, vol. 12 (5), 380 – 386; L. Gyselen, *Services of general economic interest and competition under European law – A delicate balance*, in *Journal of European Competition Law & Practice*, 2010, vol. 1(6), 491 – 499.

[21] EU Court of Justice, Gerhard Züchner *v.* Bayerische Vereinsbank AG, 14 July 1981, C-172/80. The defendant maintained that 'by reason of the special nature of the services provided by such undertakings and the vital role which they play in transfers of capital they must be considered as undertakings (…) entrusted with the operation of services of general economic interest within the meaning of Article 90 (2) and thus are not subject, pursuant to that provision, to the rules on competition in Articles 85 and 86 of the Treaty'.

[22] Gerhard Züchner *v.* Bayerische Vercinsbank AG, § 7-8.

function is not inherently deemed a service of general economic interest, despite its social significance. This legal conclusion was somewhat affirmed in the 1998 Commission Report to the Council of Ministers concerning the banking sector, which proposed further in-depth investigations. The promotion of small and medium enterprises, others focus on the provision of social loans or municipal financing, and still others emphasize the granting of guarantees for export credits[23].

However, the legal literature underscores that, whenever there is a SGEI, lawmakers generally impose duties to provide services, with or without compensation, setting out an organizational model subject to judicial review. This changes the dynamic relationship between the undertaking and the market, since the undertaking becomes a direct tool of public policy aimed at pursuing community welfare over the profit-making objective[24]. With this in mind, the electronification process first, and fintech regulatory strategies later, cast new doubts on the above-mentioned conclusions. In other words, it seems that, with some degree of regulatory ambiguity, the banking business is treated as if it were an SGEI as far as monetary function is concerned.

Firstly, within the framework of the Payment Accounts Directive (PAD)[25], banks are bound to enter into a payment account contract with anyone who requires one, and provide a payment account with basic features in such cases free of charge or at a reasonable price, depending on the financial situation of the prospective holder[26]. This

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[23] Report of European Commision to the Council of Ministers: services of general economic interests in the banking sector, adopted on 17 June 1998. These results were also mentioned in the COM (2000) 580 final, 15.

[24] M. Dugato, *L'attività bancaria e il servizio pubblico*, in *Banca Impresa Società*, 2018 (1), 3.

[25] European Parliament and Council Directive, n. 92 of 2014 on on the comparability of fees related to payment accounts, payment account switching and access to payment accounts with basic features, OJ [2014] L/57.

[26] The PAD delineates the category of potential beneficiaries and the essential needs to be addressed. It specifies a particular category of payment service providers—namely, credit institutions—mandating them to provide certain services and defining the scope of their responsibilities. However, it delegates to the Member States the authority to determine the number of banks assigned to this task, ensuring comprehensive territorial coverage at affordable rates and under uniform conditions. U. Malvagna, Sub

initiative is underpinned by the recognition that the transition to electronic retail payment services has reversed the traditional balance between public money (cash) and private money (scriptural forms) within the internal market, now favouring the latter. This shift entails the possession of a payment account to access the payment system.

The right to a payment account is granted to any consumer legally residing in the Union, and this right can be exercised in any Member State, according to a regulatory mechanism that does not compensate the banks in any way[27]. Indeed, the point is why banks must take on the operational risk or the litigation costs of payment account holders they have not chosen and that may have no or little familiarity with digital products, for the pursuit of a public good, namely, financial inclusion. Consequently, it sounds sensible to conclude that the provision of basic payment accounts is framed as an SGEI[28].

Second, there is the "framework for open banking" mechanism. Banks must allow trusted third parties access to the payment accounts free of charge to allow payment account holders to share transaction data in order to build up an internal market for data. Here, public policy makes a precise organizational choice: banks must take on the costs connected to investing in migration from access-to-account technologies to dedicated interfaces (Application Programming Interfaces, more

Art. 126-noviesdecies, in Commentario al Testo Unico bancario, Pacini: Pisa, 2021, 975.

[27] Article 17 PAD. It is consistently stated that "consumers (…) who do not hold a payment account in that Member State should be in a position to open and use a basic payment account in that Member State. In order to ensure the widest possible access to basic payment accounts, Member States should ensure that consumers have access to such an account in spite of their financial circumstances, such as unemployment or personal bankruptcy". COM (2011) 4977 final (preamble 7).

[28] The same conclusions were raised by:José luis Gómez-Barroso, Raquel Marbán-Flores, *Basic financial services: a new service of general economic interest?* in *Journal of European Social Policy* 2013, vol 23 (3), 332-339

commonly known as APIs)[29] as well as in managing said APIs, with no compensation[30].

Lastly, Regulation (EU) No. 751/2015 sets a price cap on the multilateral interchange fee (MIF)[31] applicable to consumer debit and credit card payment transactions[32], even if the payment service provider is not a bank. Since MIF triggers a spill-over effect in the acquirer-merchant relationship and in the merchant-consumer relationship[33], the MIF price cap *de facto* amounts to a price regulation[34].

To conclude, as far as the monetary function is concerned , the banking business works as an SGEI despite the fact that *it is not one.* There are three duties of note: to make a contract and provide a payment account service, to invest in API infrastructures, and to become a price taker (MIF). These duties suggest a regulatory approach typical of SGEI. However, there is no formal entrustment, there is no

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[29] API is "a way for two computer applications to talk to each other over a network using a common language that they both understand". M Zachariadis , P Ozcan, 'The API economy and digital transformation in financial services: the case of open banking' (1) Swift Institute Working Paper Series, 10-11 (2016). The Authors explain how "For example, APIs can be used by firms *internally*, to integrate diverse systems and allow for the exchange of data across different departments by performing API "calls" or sending queries to an API server. (…) Such *external* APIs can provide further integration with company partners and allow third parties to consume organisational data and lead to cross-selling and upselling opportunities down the line".

[30] The UK fintech strategy does not seem too different from the European approach: N. Divissenko, Open banking in the UK: a co-opetition scenario for innovation and evolution in the UK retail banking sector, in M. Bodellini, G. Gimigliano, D. Singh (eds), Commercial banking in transition. A cross-country analysis, Palgrave-Macmillan, 2024, 243; O. Borgogno, G. Colangelo, *Consumer inertia and competition-sensitive data governance: the case of open banking*, in EuCML 2020 (4), 143.

[31] Essentially, the MIF is a fee that acquirers pay to issuers for the services the issuers provide to merchants, despite there being no direct contractual relationship between the issuers and the merchants.

[32] European Parliament and the Council, Regulation (EU) n 751 of 2015 on interchange fees on card-based payment transactions, OJEU [2015] L123/1. With regard to the interaction between antitrust enforcement and regulation, see: G. Colangelo, M. Maggiolino, *Sistemi di pagamento e mercati a due versanti: gli insegnamenti dei casi MasterCard e American Express*, in *Mercato Concorrenza Regole*, 2017 (2), 215; V. Falce, *Il mercato integrato dei sistemi di pagamento a dettaglio tra cooperazione e concorrenza (Primi appunti ricostruttivi)*, in *Banca e borsa* 2008, vol. 61(5), I, 558.

[33] R. Pardolesi, *La concorrenza nell'industria delle carte di credito*, in *Dir. Banc.*, 2006, 3.

[34] S. Vaccari, *Le tariffe dei servizi pubblici tra teoria economica e regolazione amministrativa*, in *Rivista della Regolazione dei Mercati*, 2020 (2), 367.

administrative authority in charge of dynamically adjusting MIF tariffs[35], and the allocation of API-based costs remains unclear, while the framework for the provision of payment account services may deliver race-to-the-bottom incentives since the harmonization process has covered the product (payment account with basic features) rather than the conduct of service providers[36].

3. Although it may seem odd, the last banking sector inquiry dates to 2007. The Commission found that there were several indications that competition was not working properly in the banking market. For this reason, the Commission carried out (ex art. 17, reg. 1/2003) a sector inquiry that confirmed fears of fragmentation along national lines and with regard to entry barriers. In the end, the sector inquiry identified two main areas of concern regarding competition: payment systems and credit registers.

3.1. The 2007 sector inquiry into card-based payment systems highlighted significant disparities among Member States in their approaches to inter-bank, cardholder, and merchant fee structures and levels. The European Commission identified these discrepancies as indicative of market fragmentation within the EU. Furthermore, the Report noted that in several Member States—such as Belgium, Denmark, Finland, Hungary, Ireland, and Italy—membership criteria and governance frameworks restricted the issuance and acquisition rights exclusively to credit and/or financial institutions and their subsidiaries. In contrast, other countries, including France and Spain, required associate members to disclose business-sensitive

[35] G. Iannantuoni, *Il ruolo strategico delle autorità di regolazione*, in *Rivista della Corte dei Conti. Quaderni*, 2022, n. 1, 1.

[36] J. Hoffmann, Implementation of the Payment Accounts Directive (PAD), in ERA Forum, 2019 (20), 237.

information to principal members, without any reciprocal obligation for data sharing[37].

Concerns regarding both price and non-price competition focus on the role of intermediaries or "matchmakers" within the payment systems. The regulatory challenge at the EU level is to assess whether and to what extent decentralized ledger technology (DLT) could offer a viable alternative for coordinating these systems.

Regarding price competition concerns, the central issue revolved around the Multilateral Interchange Fee (MIF) [38]. This fee, established by the governing body of VISA, was applied by default in the absence of a bilateral agreement between the financial institutions representing the cardholder and the merchant. In the 2002 decision, the Commission determined that the MIF could be considered a restriction of competition based on its effects, given its impact on the market dynamics[39]. More specifically, the Commission stated that for the provision of card payment services, it was necessary to set "a remuneration paid between banks who must deal with each other for the settlement of a card payment transaction and thus have no choice of partner. The absence of some sort of default rule on the terms of settlement could lead to abuse by the issuing bank, which is in a position of monopsony as regards the acquiring bank for the settlement of an individual payment transaction. Thus, some kind of default arrangement is necessary, but the question of whether it qualifies for exemption or not will depend on the details of the arrangement".[40] Consequently, the

[37] COM (2007) 33 final, 4 ff.

[38] According to VISA rules, MIF was nothing more than a "transfer between undertakings that are cooperating in order to provide a joint service in a network characterized by externalities and joint demand". VISA argued that the Multilateral Interchange Fee (MIF) should not be subject to competition concerns. However, the European Commission did not fully align with VISA's perspective. The Commission acknowledged that the MIF agreement might not constitute a restriction of competition by object because it enhanced inter-system competition (between four-party and three-party payment platforms) and contributed to the stability and efficiency of card payment markets. Nevertheless, following its 2002 decision, the Commission determined that the MIF could be considered a restriction of competition by its effects, given its impact on the market dynamics.

[39] Commission decision of 24 July 2002, OJEC [2002] L318/17 (thereafter, VISA 2002).

[40] VISA 2002, § 79.

Commission provisionally authorized the revised Multilateral Interchange Fee (MIF) scheme under Article 101(3) of the Treaty on the Functioning of the European Union (formerly Article 81(3) of the Treaty of the European Community)[41].

Regarding non-price competition restrictions, a significant case is the antitrust proceeding involving Groupement Cartes Bancaires. The Court of Justice provided some guidance in its ruling on Groupement Cartes Bancaires v Commission, offering an initial interpretation but leaving the broader question open to further legal and regulatory development[42]. Indeed, the Third Chamber of the Court held that the multilateral agreement setting the card issuing/acquisition of merchants ratio may not be considered a restriction of competition by object since any measures should be analysed with regard to "the nature of the services at issue, as well as the real conditions of the functioning and structure of the markets – of the economic or legal context in which that coordination takes place". As for network industries or multi-sided markets, interactions between sides in the system must be analysed by antitrust and judicial authorities in terms of their own effects[43].

One key aspect that both pricing and non-pricing arrangements share is the pivotal role played by card platforms, such as VISA, a privately-held for-profit corporation. These platforms act as intermediaries to internalize the indirect and two-sided network externalities inherent in payment services. Specifically, the platform is established as a common locus (whether virtual or physical) designed to facilitate interactions between the two market sides and to minimize transaction costs[44]. Since the platform's governing body possesses the authority to determine membership

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[41] The following Commission decision sticks with the same regulatory approach.

[42] Judgement of the European Court of Justice of 11 September 2014, Case C-67/13 P (hereafter, 2014 Cartes Bancaires). More specifically: J. Ruiz Calzado, A. Scordamaglia-Tousis, Groupement des Cartes Bancaires v Commission: shedding light on what is not a 'by object' restriction of competition, in Journal of European Competition Law & Practice 2015, 1 – 3.

[43] 2014 Cartes Bancaires, § 86.

[44] See D. S. Evans and R. Schmalensee, Markets with two-sided platforms, in 1 Issues in Competition Law and Policy 667 (ABA Section of Antitrust Law 2008), 674 ff.

criteria, fees, and the structure and level of Multilateral Interchange Fees (MIFs) [45]. These decisions can significantly affect the characteristics and costs of services offered to end users, as well as overall market efficiency. At the same time, such arrangements may restrict access to new products, services, or potential members, thereby impacting the competitive dynamics between established participants and new entrants (intra-system competition).

In the context described, a key question arises: can FinTech supplant the traditional platform-based coordination model, thereby addressing the competition issues inherent in the role of intermediaries like VISA? Considering decentralized ledger technology (DLT), particularly public DLT[46], FinTech has the potential to replace conventional matchmakers. These intermediaries, such as VISA, currently facilitate market coordination by bringing together issuers and acquirers, as well as cardholders and merchants, to enable payment services. In a public and permissionless DLT system, each network node is authorized to access information and validate transactions by solving an algorithm. This decentralized validation mechanism could potentially perform many functions traditionally managed by matchmakers like VISA. These functions include the exchange of payment information, clearing activities, and the settlement of payment transactions[47].

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[45] 'The platform can affect the volume of transactions by charging more to one side of the market and reducing the price paid by the other side by an equal amount': J. C. Rochet & J. Tirole, Two-sided markets: a progress report, November 29, 2005. Available at: https://www.tse-fr.eu/sites/default/files/medias/doc/by/rochet/rochet_tirole.pdf

[46] The DLT is a data ledger that may be public, private or hybrid. In a public DLT, every node of the network is empowered to read and validate transactions over the ledger by means of a proof-of-work mechanism; in the fully private ledger there is a central-decision maker who releases write-permissions, while read-permissions may be public or restricted; in the middle, there are the hybrid cases. More details in: M. Pilkington, Blockchain technology: principles and applications, in X. Olleros, M. Zhegu (eds), Research handbook on digital transformation, Cheltenham: Edward Elgar, 2016, 1-39.

[47] In the future, we may learn from the ongoing experience of the pilot regime on DLT market infrastructures for tokenised financial instruments. European Parliament and the Council, Regulation (EU) n 858 of 2022 on a pilot regime on market infrastructure based on distributed ledger technology, OJ [2022] L151/1.

A significant aspect of permissionless blockchain – a subset of DLTs - is the presence of a complex and often opaque ecosystem of stakeholders, including software developers, validators, record keepers, and exchanges. Since this type of DLTs does not fit any existing legal category, one may question how a "group of people running a common system should be treated from a legal perspective. Should they all be individually responsible for the actions of the system? Should none of them be individually responsible for the actions of the systems, if there is not a single party with absolute control?"[48]. The questions raised seem much more crucial in terms of legal reasoning, given that the EU is working toward the interoperability of payment networks, prioritizing intra-system over inter-system competition.

3.2. The 2007 Competition Sector Inquiry highlighted a significant issue: the lack of open and affordable access to high-quality credit data. Such access is essential for commercial banks aiming to offer lending products. The Report indicates that in several Member States, credit data markets remain underdeveloped. Furthermore, the operation of credit data registers by commercial banks is often considered non-compliant with competition law in certain jurisdictions.

Since 2007, regulatory advancements have predominantly addressed the supervisory dynamics between entities such as deposit-taking institutions, financial corporations, and asset management vehicles engaged in substantial lending activities, and central banks, including the European Central Bank. One notable example is AnaCredit, a granular analytical credit database operated by central banks to facilitate banking supervision. AnaCredit, akin to other central credit registers, supports supervisory functions by providing detailed credit data.

Conversely, in the context of the contractual relationship between

[48] A. Walch, *D*econstructing "decentralization", in C. Brummer, (ed), *Cryptoassets. Legal, regulatory, and monetary perspectives*, Oxford University Press: Oxford, 2019, 39 – 68.

consumers/borrowers and lenders/commercial banks, a regulatory gap persists. This gap could potentially be bridged by deploying an Artificial Intelligence (AI) system[49].

However, the deployment of Artificial Intelligence (AI) must strictly adhere to the limitations set forth by the General Data Protection Regulation (GDPR). Specifically, Article 22(1) of the GDPR[50], except as outlined in subsequent provisions, safeguards the rights of data subjects (i.e., individuals whose data is being processed) against the risks associated with automated decision-making processes that operate without human intervention. This regulation ensures that individuals are not subject to decisions solely based on automated processing unless specific conditions or exceptions apply.

This legal background came to the attention of the Court of Justice in the Schufa case. Schufa is a private German credit information agency that provides its contractual partners, such as credit and financial institutions, with data on the creditworthiness of individuals (the data subjects). Schufa generates a credit score using statistical and mathematical methods. In a notable case, a third party denied a loan application based on the Schufa score. This scenario raises several legal questions regarding the application of AI systems in assessing the creditworthiness of potential borrowers: a) whether the act of scoring constitutes a form of data processing under GDPR; b) whether generating a score equates to making a decision, considering the GDPR's apparent distinction between scoring and decision-making processes; c) to what extent a data subject's right under Article 14 of the GDPR—to obtain information from the controller (Schufa) about the existence of automated decision-making

[49] Artificial Intelligence is defined in the regulation proposal as a 'software that is developed with one or more techniques and approaches listed in the Annex I and can, for a given set of human-defined objectives, generate outputs such as contents, predictions, recommendations, or decisions influencing the environments they interact with'. More in depth: L. Ammannati, G.L. Greco, *Il credit-scoring "intelligente": esperience, rischi e nuove regole*, in *Riv. dir. banc.*, 2023, 461.

[50] Art. 22(1) GDPR provides that "The data subject shall have the right not to be subject to a decision based solely on automatedprocessing, including profiling, which produces legal effects concerning him or her or similarlysignificantly affects him or her".

processes and the underlying logic—can be reconciled with the limitations imposed by commercial and industrial secrecy. These questions are crucial in determining the boundaries and compliance requirements for the use of AI systems in credit assessments within the framework established by the GDPR. The Court holds that art 22(1) GDPR is fully applicable to the case in point according to a teleological interpretation. In this case, the court was faced with balancing Schufa's trade secret, and on the other, Schufa's obligation to provide "meaningful information over the logic involved" as required under the GDPR. The court needed to carefully weigh these interests, as both are recognized within the GDPR framework. The court determined that protecting trade secrets or intellectual property could indeed justify not disclosing the specific algorithm used to calculate credit scores. However, the GDPR also mandates that data controllers must provide data subjects with "meaningful" information. This includes an overview of the factors considered in the decision-making process and their relative importance on an aggregate level. Such information is essential for the data subject to effectively challenge any decision under Article 22(1) of the GDPR.

4. This paper scrutinizes competition issues within the banking sector, drawing insights from the 2007 European Commission Sector Inquiry, and evaluates whether FinTech applications might address these challenges. The focus of this analysis is not to delve into the specifics of FinTech innovations themselves but rather to explore the current state of banking and competition law that these innovations will inevitably encounter.

The legal investigation is rooted in EU antitrust enforcement and the harmonization process for banking and payment systems. Initially, it examines whether banking activities, given the critical role of credit intermediation, qualify as a Service of General Economic Interest (SGEI). Landmark cases such as the Züchner decision and the 1998 Commission Report to the Council on the banking sector suggest that there is no exemption from articles 101 and 102 TFEU. However, the application of some regulatory schemes in the harmonization process reveal inconsistencies and ambiguities: from the price cap set in the secondary rules rather than by an administrative independent authority, to the duty to provide and the duty to invest established by means of directive. The SGEI looks like the *elephant in the room* of the legal framework for banking business as far as the monetary function is concerned. The digital euro project spurs legal scholars to (re-)think how the subsidiarity principle designs the relationship between central bank and commercial banks as for the operation of the monetary function.

As a second step, the legal investigation focused on two types of competition concerns addressed by the 2007 Commission Sector Inquiry on retail banking. They concern the payment card industry and the interoperability of credit registers. The paper emphasized how fintech-based innovations such such permissionless blockchain and artificial intelligence could cope with some competition concerns but also raise some other regulatory concerns. This is the case of ambiguous internal governance of the permissionles blockchain and the clashes between automated creditworthiness assessment and personal data protection in the GDPR. This legal context is under review: European policymakers are collecting the first DORA[51] experiences and, at the same time, they are working on the PSD3[52] and the FIDA[53]; both are still in the drafting phase, aiming to respectively rationalize and consolidate the legal framework for payment services and enabling consumers and firms to better control access to their financial data.

However, there are two further competition concerns that fall beyond the

[51] European Parliament and the Council, Regulation n. 2554 of 2022, of 14 December 2022, on digital operational resilience for the financial sector, OJ [2022] L333/1.
[52] PSD3 is the acronym for Payment Services Directive.
[53] FIDA is the acronym for Financial Data Access.

scope of the 2007 Competition Sector Inquiry but seem critical to a forward-looking approach.

The first concerns business models other than the vertically-integrated model that fintech innovations may bring about, namely, "beyond banking" and "bank-as-a-service (BaaS)[54]. The "beyond banking" model amounts to an attempt to organise the provision of banking services under a platform model. Indeed, banks are trying to be alternatives to Big Techs: such a business model entails "the creation of one-stop shops for the purchase of both banking products and goods" or, in a less ambitious way, "a limited extension of the ecosystem notion of products to include final needs close to the bank financial services actually provided. For example, in the field of mortgage banking, platform complementarity would dictate that banks not only provide loans, but also facilitate home owner's insurance, house maintenance services, or even furniture". By contrast, the BaaS model means a white-label form of banking and implies setting up cooperation between banks and fintech firms: "the delivery of BaaS consists in replacing the business capital that would normally underpin the provision of banking services with a contract that grants the right to have direct access to the flow of those services. More specifically, the capital at stake under BaaS is the banking licence and the services of a bank with their associated balance of rights and duties"[55]. Both business models are based on fintech innovations and challenge the authorization and supervision rationale.

The second competition concern deals with consolidation risk at the expense of small and medium banks. This is the experience in China, where a leading role was played by the State rather than by the market. Indeed, the argument is that unlike big banks, small and medium banks do not have the necessary ability to raise the capital

[54] J. R. Martinez Resano, *Regulating for competition with BigTechs: banking-as-a-service and "beyond banking"*, Banco de Espana, 2021, available at: https://repositorio.bde.es/bitstream/123456789/21156/1/6_BigTechs_FSR41.pdf

[55] Op. cit.

required and finance the digitization process[56]. The Chinese and other comparable experiences raise questions for European lawmakers on how to protect the pluralism of banking business models.

In any case, fintech is changing the banking market structure and challenging the consolidated approach to competition and to banking regulation.

[56] D. Chen, Chinese commercial banks and fintech-competition and cooperation, in M. Bodellini, G. Gimigliano, D. Singh, Commercial banking in transition. A cross-country analysis, Palgrave-Macmillan: Cham (Swiztrland), 2024, 333.

INTERNATIONAL SANCTIONS AND GEOPOLITICAL TENSIONS: THE IMPACT ON COMMERCIAL BANKING

Christos Hadjiemmanuil *

ABSTRACT: *International sanctions impact on both commercial banking activities and the configuration of the global banking landscape. This issue has come to the fore in the last two years, following Russia's invasion of Ukraine in February 2022. International sanctions of a financial nature have been a crucial part of the overall Western response. They have already had the effect of disrupting cross-border financial links and networks that until recently seemed unassailable. But the impact of international sanctions, and more broadly of the geopolitical fragmentation we are currently witnessing, does not stop at Russia's borders. In today's increasingly fluid and conflict-ridden international environment, the active use of sanctions as a tool of political coercion and geo-economic decoupling poses significant risks for bankers, especially given the complexity and ambiguity of the obligations under the various sanctions regimes that claim authority over them.*

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1. Reading the excellent essays in *Commercial Banking in Transition*,[1] one cannot fail to recognize the extent to which the character of banking law and practice worldwide is bound to change radically under the pressure of the three major factors examined by the authors: the invasion of fintech and digital finance, the need to adapt to the goals of sustainable development, and the parallel adjustments in the areas of prudential supervision and the management of banking crises. These are issues of enormous importance, which will inevitably determine the way in which banks organise their commercial activities and define their business models. They are bound to have a strong impact on the nature and contestability of banking markets and, ultimately, on the structure of the banking industry as a whole.

However, the analyses do not cover another issue, namely international sanctions and their impact on commercial banking activities and the configuration of the global banking landscape. This issue has come to the fore in the last two years, following Russia's invasion of Ukraine in February 2022. International sanctions of a financial nature have been a crucial part of the overall Western response. They have already had the effect of disrupting cross-border financial links and networks that until recently seemed unassailable. But the impact of international sanctions, and more broadly of the geopolitical fragmentation we are currently witnessing, does not stop at Russia's borders. In today's increasingly fluid and conflict-ridden international environment, the active use of sanctions as a tool of political coercion and geo-economic decoupling poses significant risks for bankers, especially given the complexity and ambiguity of the obligations under the various sanctions regimes that claim authority over them.

The legality of economic sanctions not based on UN Security Council resolutions but unilaterally imposed by states or regional organisations against third parties (other

[1] Marco Bodellini, Gabriella Gimigliano, and Dalvinder Singh (eds), *Commercial Banking in Transition: A Cross-Country Analysis* (Palgrave Macmillan, 2004).

states, their citizens or, in the case of regional organisations, non-member states) has long been hotly contested by many countries of the global South, while defended as an effective and civilised means of enforcing international legality by leading sanctioners such as the United States and the EU. The arguments are well known and there is no need to repeat them in the context of the present discussion.[2] A parallel debate concerns the practical effectiveness of sanctions. It is often argued that, while economic sanctions can cause great damage to the economy and society of the targeted state, they generally fail to bring about the desired change in its international behaviour and increase the defiance of the local population towards the sender states.[3] This requires looking separately at the immediate (economic) and ultimate (political) objectives of sanctions. In the case of the current sanctions against Russia, for example, the question of effectiveness could be addressed in two steps: Have the sanctions succeeded in reducing the financial and real capacity of the Russian economy and state? And to the extent that they have, have they furthered, or are they likely to further in the longer term, the ultimate goals of undermining Russia's ability to wage war and denying its war aims?[4] Without detracting from the importance of these issues, we will also avoid this debate.

Instead, we will follow a third, narrower line of inquiry, which concerns the impact of sanctions on those who are affected by them incidentally or indirectly – in

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[2] For a general introduction to the issue, see Christos Hadjiemmanuil, 'Economic and Financial Sanctions in International Law: Nature, Sources and Reviewability', in Régis Bismuth, Luc Thévenoz, and Chiara Zilioli (eds), *International Sanctions: Monetary and Financial Law Perspectives* (Brill, forthcoming 2024).

[3] For a recent version of this argument, see Narges Bajoghli, Vali Nasr, Djavad Salehi-Isfahani, and Ali Vaez, *How Sanctions Work: Iran and the Impact of Economic Warfare* (Stanford: Stanford University Press, 2024).

[4] Any assessment of the effectiveness of sanctions regimes must also encompass their cost-effectiveness. By disrupting the (presumably mutually beneficial) trading and financial links between the target and sender states, sanctions entail almost by definition significant costs for both. Thus, from the perspective of the senders, it must be asked whether their intended effect justifies the self-imposed harm to the senders' economy.

particular, their impact on commercial banks, their relationships with particular clients and the geographical scope of their activities. In other words, our concern here is not with the obvious impact of sanctions on banks directly targeted by them (eg, Russian banks targeted individually or as a group by Western sanctions), but with the broader impact of the proliferation of sanctions regimes on the domestic and international activities of banks, including in sending states and third countries.

To address this issue, after briefly noting the growing role of financial measures in sanctions regimes (section 2) and their centrality to the "weaponisation" of finance (section 3), we examine the challenges that financial sanctions pose to the banks that are required to implement them. The proliferation of sanctions regimes, combined with the growing geopolitical fragmentation we have seen in recent years, increases the cost, complexity, legal uncertainty and risk of banks' compliance efforts. This may lead banks to pre-emptively adapt to the increased compliance costs and risks by "de-risking", i.e., by off-boarding certain categories of clients, severing links with foreign correspondents and withdrawing from certain regions or countries (section 4). These moves can have serious consequences for the clients or populations affected (section 5). Yet other issues arise in the case of international banks with significant activities in jurisdictions hit by sanctions. These banks may face particular difficulties in their attempt to reconcile conformity with the restrictive measures imposed by the sender states and the avoidance of severe losses on their exposures in the targeted jurisdictions (section 6). To a limited extent, the incentive of banks and/or their home countries to minimise their exposure to the adverse effects of financial sanctions by reorganising their financial linkages may be a factor in the fragmentation and deglobalisation of international finance (section 7).

2. The restrictive measures included in recent sanctions regimes comprise commodity or sector-specific import and export restrictions or tariffs, arms

embargoes, travel bans on individuals, and targeted financial sanctions. These measures may be used in any combination. However, financial sanctions are a standard and essential element.

Financial sanctions are measures that target the financial assets and economic resources of the designated individuals and entities.[5] They can take of variety of forms; however, asset freezing measures (or, to use the American term, blocking sanctions) remain the most common, prominent, and symbolically potent form of financial sanctions. Specifically, freezing measures consist of the obligation of financial institutions in the sender (that is, sanction-imposing) states to freeze the bank accounts of the targeted persons (and legal entities controlled by them), to refuse to execute any payment transactions on their behalf, and to desist from making funds and other financial services available to them. A similar obligation applies to the custodians or debtors of other financial and real assets of the targeted persons in the sender states. In other words, the measures cover the interruption of the targeted persons' access to existing funds as well as future access to funds and other financial resources. Financial institutions and other relevant parties are further required to disclose to the authorities all information in their possession relating to the implementation of the freezing measures, such as information on the existence of assets affected thereby and on identified violations; and to desist from any actions that contravene the measures.

The freezing measures may be accompanied by other financial restrictions such as: the prohibition on financial institutions and other persons operating within the

[5] The first comprehensive attempt to examine the feasibility of targeted financial sanctions, known as 'the Interlaken Process', was initiated by the Swiss government in 1998 and brought together policy-makers and academic experts. The final report includes important definitions, drafting suggestions for UN Security Council resolutions and guidance on national implementation; Swiss Government, in cooperation with UN Secretariat and Watson Institute for International Studies, 'Targeted Financial Sanctions: A Manual for Design and Implementation. Contributions from the Interlaken Process' (Watson Institute for International Studies, Brown University 2001).

territory of the sender states or otherwise falling under their jurisdiction to provide services and technical and financial assistance to targeted persons; prohibitions on persons under the jurisdiction of the sender states to invest, extend loans, or provide insurance in certain economic sectors of the target state, or to finance trade transactions relating to the importation or exportation of certain categories of goods from or to the target state; and the exclusion of financial institutions located in the target states from cross-national payment systems and messaging services such as SWIFT located in the sender states.

The sweeping and very diverse forms of financial sanctions that the US,[6] the European Union (EU)[7] and other Western states imposed in parallel against Russia and Belarus immediately after the invasion of eastern Ukraine in February 2022 show that the list is not closed and that the financial sanctions toolbox admits of continual variation, specification, and expansion.[8] For example, in addition to blocking the assets

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[6] US White House, 'Fact Sheet: Joined by Allies and Partners, the United States Imposes Devastating Costs on Russia' (24 February 2022), at <https://www.whitehouse.gov/briefing-room/statements-releases/2022/02/24/fact-sheet-joined-by-allies-and-partners-the-united-states-imposes-devastating-costs-on-russia/> (accessed 31 May 2024). The US sanctions were imposed as part of the Russian Harmful Foreign Activities Sanctions program, introduced on the authority of US President Joe Biden's Executive Order 14024, 'Blocking Property with Respect to Specified Harmful Foreign Activities of the Government of the Russian Federation' (15 April 2021), 86 FR 20249, and subsequently enhanced by Executive Orders 14039 (20 August 2021), 14066 (8 March 2022), 12068 (11 March 2022), 14071 (6 April 2022), and 14114 (22 December 2023). They are applied in accordance with the Russian Harmful Foreign Activities Sanctions Regulations (1 March 2022), 87 FR 11297, 31 CFR Part 587.

[7] The imposition by the EU of sweeping sanctions in response to the invasion commenced on 23 February 2022 with an amendment of a pre-existing instrument imposing sanctions on Russia in relation to its occupation of Crimea in 2014; starting with Council Regulation (EU) 2022/262 of 23 February 2022 amending Regulation (EU) No 833/2014 concerning restrictive measures in view of Russia's actions destabilising the situation in Ukraine [2022] OJ L 42 I/74. In the following 24 months, the instrument was revised on another 22 occasions. See now Council Regulation (EU) No 833/2014 of 31 July 2014 concerning restrictive measures in view of Russia's actions destabilising the situation in Ukraine [2014] OJ L 229/1, as amended (most recently by Regulation (EU) 2024/745 of 23 February 2024 [2024] OJ L 745/1).

[8] For an overview of the financial sanctions against Russia, see Christine Abely, *The Russia Sanctions: The Economic Response to Russia's Invasion of Ukraine* (Cambridge University Press, 2024), 27 – 39. In view of their substantive expansiveness and sweeping scope of application *ratione personae*, one

of individual members of the Russian elite (senior Russian government officials, elected politicians, supporters of the military effort, as well as high net-worth individuals, or 'oligarchs', with past or present connections to the Kremlin), the financial sanctions against Russia also targeted the leading Russian banking groups, controlling between themselves over 80% of the Russian banking sector's total assets.[9] The US immediately subjected many of these banking groups to full blocking sanctions (i.e., asset freezing), while in the case of the country's largest bank, Sberbank, and its subsidiaries correspondent and payable-through account sanctions were applied, thus cutting it off from the US financial system.[10] The senior executives of certain banks have also been targeted individually.[11] The combined effect of the sanctions imposed by the US, the EU and their allies against the leading Russian banks, while not always amounting to the outright freezing of their assets, encompassed bans on correspondent banking relationship with them, the prohibition processing of payment to or from them, the prohibition on the provision to them of the services necessary to conduct cross-border transactions denominated in major currencies such as the dollar, the euro, and the yen (including in relation to the clearing and settlement of dollar

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could be justified to consider the sanctions targeting Russia and Belarus as more akin to the comprehensive economic sanctions of the 20th century than to the more narrowly and precisely scoped 'smart' sanctions of recent decades. See Régis Bismuth, 'The New Frontiers of European Sanctions and the Grey Areas of International Law' (2023) 5 *Revue Européenne du Droit* 8, 8–10.

[9] The most distinctive and daring measure, of course, involved the prohibition of transactions in relation to the reserves held by the Central Bank of the Russian Federation in accounts in the Member States, such as France and Germany, resulting in the freezing of a large part of Russia's foreign exchange reserves, totalling some $300 billion; Reg 833/2014, art 5a (esp. para (4)). See also U.S. Department of the Treasury, Office of Foreign Assets Control (OFAC), Directive 4 under Executive Order 14024, 'Prohibitions Related to Transactions Involving the Central Bank of the Russian Federation, the National Wealth Fund of the Russian Federation, and the Ministry of Finance of the Russian Federation' (28 February 2022), as amended. The freezing of central bank reserve assets, however, goes beyond the scope of the present discussion.

[10] US White House (n 6).

[11] US Department of the Treasury press release, 'U.S. Treasury Takes Sweeping Action Against Russia's War Efforts' (8 May 2022), at <https://home.treasury.gov/news/press-releases/jy0771> (accessed 31 May 2024).

obligations), and their disconnection from interbank messaging services, in particular from SWIFT. Moreover, the measures adopted by the EU included a restriction on dealing with transferable securities issued by major credit institutions established in Russia with over 50 per cent public ownership or control.[12]

The range of the persons affected and their connections to the target state's behaviour may also vary widely. Taking another example from the EU sanctions regime against Russia, European banks were prohibited from accepting deposits by non-resident Russian nationals exceeding in total €100,000 – a restriction by no means narrowly or precisely targeted.[13]

3. Following the terminology popularised by a seminal article by Henry Farrell and Abraham L Newman,[14] the package of financial sanctions imposed by the US, EU and their allies in response to Russia's invasion of Ukraine has been repeatedly referred to as the 'weaponisation of finance'.[15] The term had been used a few years earlier in a report of the Eurasia Group consultancy to describe Washington's use of financial 'carrots' (provision of access to US capital markets) and 'sticks' (sanctions limiting access to the US marketplace and to US intermediaries) as coercive tools of foreign policy, enabling the US to achieve its goals without need to resort to its military

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[12] Reg 833/2014, art 5(1).

[13] Reg 833/2014, art 5b(1).

[14] Henry Farrell and Abraham L Newman, 'Weaponized Interdependence: How Global Economic Networks Shape State Coercion' (2019) 44(1) *International Security* 42. For an extensive discussion of their ideas, see Daniel W Drezner, Henry Farrell and Abraham L Newman (eds), *The Uses and Abuses of Weaponized Interdependence* (Washington, DC: Brookings Institution, 2021).

[15] E.g., Nicola Bilotta, 'The Weaponisation of Finance and the Risk of Global Economic Fragmentation', Istituto Affari Internazionali, *Commentaries* No 22/19 (19 April 2022); and Lucia Quaglia and Amy Verdun, 'Weaponisation of Finance: the role of European Central Banks and Financial Sanctions Against Russia' (2023) 46 *West European Politics* 872.

might.[16] In their contribution, Farrell and Newman provide a convincing explanation for the US's unique ability to act in this manner. For this purpose, they start by pointing to the structural role of global economic and financial networks, consisting of multilateral arrangements, practices, and infrastructures. These increase interdependence between states, thus reducing their policy autonomy. Despite their multilateral character, however, the economic networks do not shape the participating states' strategic options in a symmetrical way. The theoretical literature on network topography indicates a 'tendency of complex systems to produce asymmetric network structures, in which some nodes are "hubs", and are far more connected than others'.[17] When a network's structural asymmetry is high, a lop-sided situation emerges, which enables the states exercising effective jurisdiction over the network's central nodes to 'weaponise' the network's interdependent relations, that is, to leverage them to coerce others. In particular, the states whose dominant or strategic position in the network gives them a bargaining advantage over the other participants can use the network as a privileged source of strategically valuable information about, and eventually a choke point against, their adversaries.[18]

Clearly, the model appears to fit very well the privileged position of the US in the global financial system and, simultaneously, to explain the predilection of the US for financial sanctions.

In international finance, the dollar's dominance as the currency of choice for denominating contracts and making cross-border payments, with the euro a distant second, represents a first choke point over which the US exercises effective control. The exclusion of a targeted country or financial institution from dollar-denominated

[16] Ian Bremmer and Cliff Kupchan, 'Top Risks 2015', Eurasia Group report (5 January 2015); summary at <https://www.eurasiagroup.net/media/eurasia-group-publishes-top-risks-2015> (accessed 31 May 2024).
[17] Farrell and Newman (n 14), 45, 49–53.
[18] Ibid, 45, 54–58.

payments constitutes a serious impediment to its ability to participate effectively in foreign trade and international financial transactions, as the difficulties faced by Iran clearly demonstrate.[19]

To a large extent, the weaponisation of the dollar is pursued through the extraterritorial enforcement of US sanctions regimes.[20] The US claims exceptionally wide jurisdiction over financial transactions denominated in US dollars, financial institutions using the US payment system, and companies belonging to US groups. Almost all dollar-denominated funds transfers between financial institutions (or, more generally, dollar-denominated non-cash payments) will at some point require the channelling of the relevant messages and credit-debit book entries through an American corresponding bank or payment system, even when neither the end parties of the transfer nor their banks are US persons, or persons resident or located in the US. This, however, provides an opportunity to the US authorities to control the international flow of dollar-denominated funds by requiring the US-based links of the payments chain to interrupt the processing of the transaction as it crosses their accounting systems, even transitorily, and to block the relevant amounts.

The global bindingness of US sanctions is underpinned by a system of secondary sanctions, whereby severe penalties are threatened on any party that facilitates dollar-denominated payment transactions by the targets of US sanctions regimes by providing direct or indirect access to the US clearing, settlement, and other systems.

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[19] See Thomas Oatley, 'Weaponizing International Financial Interdependence', in Drezner et al (n 14).

[20] Beyond its territorial jurisdiction, a state may exercise prescriptive and/or enforcement jurisdiction in accordance with the nationality principle, or on other grounds. See, eg, James Crawford, *Brownlie's Principles of Public International Law* (9th edn, OUP 2019), 440–69; and Menno T Kamminga, 'Extraterritoriality' (last updated September 2020) in Anne Peters and Rüdiger Wolfrum (eds), *Max Planck Encyclopedia of Public International Law* (OUP 2008–) (MPEPIL), <www.mpepil.com> (accessed 31 May 2024).

The prohibitions apply even when neither the end parties (that is, the payer and the payee) nor the relevant dollar accounts are located in the US.[21]

More generally, secondary sanctions may be imposed on non-US persons and companies doing business with sanctioned states or persons outside the US, even if no dollar-denominated payments are involved or there is no other link to US accounts, assets, and persons. While such third parties are not legally bound to comply with US sanctions, they may be denied access to the US market if they continue to do business with the primary targets of US sanctions. The denial of access need not be direct (exclusion from doing business in the US), but may be indirect (refusal by US financial institutions to do business with foreign persons subject to secondary sanctions so as not to violate the sanctions regime themselves). This can be a strong reason for a non-US bank to refrain from doing business with the targeted states or persons. The fact that this expansive extraterritoriality is highly controversial[22] does not detract from its effectiveness.

While third countries may object to the extraterritorial imposition of sanctions-related obligations on their nationals, in practice they cannot provide full and effective protection – and banks are unlikely not to take this into consideration. Notably, the EU has sought to counteract the extraterritorial effect of certain US sanctions programs

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[21] See, eg, Christopher M Swift, 'European Banks and Extraterritorial Sanctions: Lessons from the BNP Paribas Settlement' (2015) 21 *International Trade Law & Regulation* 61. On the extraterritorial effects of US economic sanctions more generally, see Eric L Hirschhorn, Brian J Egan, and Edward J Krauland, *US Export Controls and Economic Sanctions* (4th edn, OUP 2021), 209–17.

[22] See, e.g., Abely (n 8), 40–52; and UN Special Rapporteur on the negative impact of unilateral coercive measures on the enjoyment of human rights, 'Expert Consultation on "The Notion, Characteristics, Legal Status and Targets of Unilateral Sanctions," convened on 26 April 2021' (Geneva: UN, Office of the High Commissioner on Human Rights, 14 May 2021), <www.ohchr.org/sites/default/files/Documents/Issues/UCM/expert-consultation-26April2021.pdf> (accessed 31 May 2024).

(relating to Iran, Cuba, and Libya) by enacting the so-called Blocking Statute.[23] Intended to safeguard the private interests of EU traders as well as the Union objectives of promoting international trade and the free movement of capital,[24] the instrument nullifies the effect in the EU or in relation to EU persons of foreign judicial decisions, arbitral awards, and administrative decisions based on the foreign laws and regulations instituting sanctions programs listed in its Annex, whose extraterritorial scope of application the EU considers to violate international law.[25] The instrument also establishes a right of action in favor of EU persons suffering harm as a result of the application of the extraterritorial sanctions.[26] This enables, for instance, the recovery of blocked funds by the clients of EU banks which due to their presence in the US are forced to conform with the US blocking measures. More generally, the Blocking Statute forbids EU persons to comply with the illicit extraterritorial sanctions.[27] However, in view of the bind in which many enterprises with presence in the US could find themselves as a result, this obligation is qualified by the possibility for parties negatively affected by the prohibition to request authorization to fully or partially comply with the foreign sanctions.[28] The recognition of the potential need for compliance with extraterritorial sanctions points to the relative impotence of the Blocking Statute, which has been weakly enforced in practice. Moreover, even if pursued rigorously and effectively, this approach could not prevent banks and other private parties caught between the conflicting demands of different jurisdictions from

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[23] Council Regulation (EC) No 2271/96 of 22 November 1996 protecting against the effects of the extra-territorial application of legislation adopted by a third country, and actions based thereon or resulting therefrom [1996] OJ L 309/1, as amended.

[24] Reg 2271/96, 1st–5th rec and Art 1.

[25] Reg 2271/96, Art 4.

[26] Reg 2271/96, Art 6.

[27] Reg 2271/96, Art 5(1).

[28] Reg 2271/96, Art 5(2); and Commission Implementing Regulation (EU) 2018/1101 of 3 August 2018 laying down the criteria for the application of the second paragraph of Article 5 of Council Regulation (EC) No 2271/96 protecting against the effects of the extra-territorial application of legislation adopted by a third country, and actions based thereon or resulting therefrom [2018] OJ L 199 I/7.

simply choosing to avoid the resulting legal risk, either by off-boarding customers potentially targeted by a sanction's regime or, more dramatically, by withdrawing from high-risk regions and countries altogether.[29]

A second choke point is SWIFT.[30] Given SWIFT's global reach and unrivalled position as the world's premier interbank communication channel, exclusion from its services hinders the ability of sanctioned banks to execute cross-border payments effectively and securely, at low cost and without undue delay.[31] Exclusion from SWIFT alone may not be fatal to the ability of these banks to carry out certain cross-border transactions. This would require sanctions of a different kind, namely asset freezes and prohibitions on the provision of related services. However, it is almost certain that the corridors through which banks can make or receive international payments and conduct trade finance-related business will be significantly reduced, dealing a severe blow to the sustainability of their international activities. As a company incorporated in Belgium, SWIFT is obliged to apply the EU's restrictive measures. In addition, it has occasionally proved willing to apply US sanctions as well. Reasons of commercial

[29] Commission Guidance Note, 'Questions and Answers: Adoption of Update of the Blocking Statute' [2018] OJ C 277 I/4, para 5.

[30] See Susan V Scott and Markos Zachariadis, *The Society for Worldwide Interbank Financial Telecommunication (SWIFT): Cooperative Governance for Network Innovation, Standards, and Community* (London: Routledge, 2014).

[31] See Joanna Diane Caytas, 'Weaponizing Finance: US and European Options, Tools, and Policies' (2017) 23 *Columbia Journal of International Law* 441; Farrell and Newman (n 14), 58–60, 65–70; and Marco Cipriani, Linda S Goldberg, and Gabriele La Spada, 'Financial Sanctions, SWIFT, and the Architecture of the International Payments System' (2023) *Federal Reserve Bank of New York, Staff Report* 1047. Even when not used as a choke point, SWIFT can be of significant use to the states having jurisdiction over, and effective control, of the networks central nodes, namely, the US and the EU, because it constitutes a unique source of strategically relevant information. In 2006, the US's unilateral and secretive access to the relevant information, in apparent violation of European privacy and data protection law, caused a great controversy; however, the matter was eventually put to rest with the adoption of an EU-US information sharing agreement; see Marieke de Goede, 'The SWIFT Affair and the Global Politics of European Security' (2012) 50 *Journal of Common Market Studies* 214; and Agreement between the European Union and the United States of America on the processing and transfer of Financial Messaging Data from the European Union to the United States for the purposes of the Terrorist Finance Tracking Program [2010] OJ L 195/5.

prudence, if not strict legal obligation, may explain this choice. The use of SWIFT as a choke point, however, will be particularly effective when the US and EU policy objectives coincide, and the restrictions of their sanctions regimes converge.[32]

4. The effective implementation of financial sanctions is achieved primarily through the imposition of obligations on financial institutions and other entities and professionals involved in the handling of the relevant assets. These private persons of the sender states are made responsible for identifying and freezing the relevant assets and for preventing violations, under threat of often severe penalties.[33]

For banks, therefore, one of the main effects of sanctions is an increased compliance burden. Banks must closely monitor transactions to ensure that they are not inadvertently facilitating prohibited transactions with sanctioned entities or countries. This requires significant expenditure on compliance infrastructure, transaction monitoring, staff training, and due diligence on customers and their activities. The burden can be particularly heavy for banks with a significant overseas presence, which must navigate a maze of (sometimes conflicting) sanctions regimes imposed by different countries or bodies. Failure to comply can result in significant fines, bans, and reputational damage. Many G-SIBs have already faced significant penalties for sanctions violations, underscoring the importance of robust compliance mechanisms.[34]

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[32] See Farrell and Newman (n 14), 69.

[33] See Richard Gordon, Michael Smyth, and Tom Cornell, *Sanctions Law* (Oxford: Hart, 2019), 244–75.

[34] See Swift (n 21). The most notable case is the settlement of the US authorities' case against BNP Paribas SA in 2014, in which the bank pleaded guilty to numerous sanctions violations and agreed to pay penalties of $8.9 billion; US Department of Justice, Press Release No 14-686, 'BNP Paribas Agrees to Plead Guilty and to Pay $8.9 Billion for Illegally Processing Financial Transactions for Countries Subject to U.S. Economic Sanctions' (30 June 2014), at <https://www.justice.gov/opa/pr/bnp-paribas-agrees-plead-guilty-and-pay-89-billion-illegally-processing-financial> (accessed 31 May 2014).

Banks are expected to mitigate this compliance risk by implementing appropriate policies and procedures to enable them to implement the restrictive measures in force from time to time on the basis of individual risk-based assessments. However, in an increasingly complex sanctions environment, this can result in significant compliance costs without any guarantee that inadvertent breaches of sanctions obligations will be avoided in all cases. This leaves banks with a residual compliance risk with potentially serious consequences.[35] Depending on the circumstances, many banks may find it safer and less costly, rather than accepting and managing the costs and risks of individualised, case-by-case compliance, to simply withdraw from certain markets and/or off-board certain categories of counterparties and customers whose profile suggests that they may be potentially targeted by sanctions, or otherwise tainted by geopolitical risk. Such pre-emptive adaptation to the potential imposition of sanctions against targeted countries and individuals is a distinct possibility, particularly for banks with extensive cross-border activities and complex structures, given the difficulty of predicting the precise scope of sanctions regimes (which are dynamic by nature) and the conflicting demands of the jurisdictions involved.

Considerations of profitability (in particular, the desire to avoid excessive compliance costs and managerial complexity) and a reluctance to take legal and operational risks (including the personal liability of the relevant decision-makers) may therefore make it rational for banks to terminate otherwise legitimate business relationships and refuse to engage in further transactions. This is particularly likely to

[35] A more judicious and proportionate definition of the restrictive measures can help. This could be helpful, for example, in relation to the prohibition on European banks accepting deposits of more than €100,000 from non-resident Russian citizens – a restriction that is far from narrowly or precisely targeted, and therefore appears both disproportionate and difficult to implement. But the proportionality and precision of the obligations is not in the hands of the industry, nor does it completely eliminate the compliance risk.

be the case where the counterparties or markets in question are of limited importance to the banks.

Such an indiscriminate flight to safety is closely related to the phenomenon of de-risking in the context of anti-money laundering. In recent years, both the Financial Action Task Force (FATF)[36] and the European Banking Authority (EBA)[37] have underlined the negative implications of de-risking,[38] which not only contributes to market inefficiencies and the potential channeling of activities outside the regulated banking system, but also imposes significant costs on the excluded users of banking services (whether existing or potential) in terms of loss of access to essential financial services and financial exclusion.[39] To make matters worse, affected clients and communities often have no legal recourse or due process rights to prevent their off-boarding, or even to know the reasons for it.[40]

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[36] FATF, 'High-Level Synopsis of the Stocktake of the Unintended Consequences of the FATF Standards' (27 October 2021). See also Georgios Pavlidis, 'The Dark Side of Anti-Money Laundering: Mitigating the Unintended Consequences of FATF Standards' (December 2023) 2 *Journal of Economic Criminology*, Art 100040, at <https://doi.org/10.1016/j.jeconc.2023.100038> (accessed 31 May 2024).

[37] EBA Opinion on 'de-risking' (EBA/Op/2022/01, 5 January 2022).

[38] The FATF has defined de-risking as 'the phenomenon of financial institutions terminating or restricting business relationships with clients or categories of clients to avoid, rather than manage, risk in line with the FATF's risk-based approach'; FATF plenary meeting statement, 'FATF Clarifies Risk-Based Approach: Case-by-Case, Not Wholesale De-Risking' (24 October 2014), at <https://www.fatf-gafi.org/en/publications/Fatfgeneral/Rba-and-de-risking.html> (accessed 31 May 2024). According to the FATF, 'de-banking' must be distinguished by the narrower concept of 'de-risking': '[t]he loss of access to financial services represents de-risking if it is not based on a case-by-case assessment of risk and ability to mitigate that risk'; FATF, 'High-Level Synopsis . . .' (n 36), 2. On its part, the EBA uses 'de-risking' to refer more broadly to all situations '[w]here a financial institution takes a decision to refuse to enter into, or to terminate, business relationships with individual customers or categories of customers associated with higher [money laundering/terrorist financing] risk, or to refuse to carry out higher [money laundering/terrorist financing] risk transactions'; EBA (n 37), para 1.

[39] In this regard, the FATF notes that '[t]he effects of de-risking are not evenly distributed: some regions are perceived to be more impacted than other and smaller and more financially isolated economies, emerging market economies, as well as conflict zones, tend to be impacted more significantly'; FATF, 'High-Level Synopsis . . .' (n 36), 2.

[40] Ibid, 5–6. Cf EBA (n 37), paras 13–21.

Despite the increasing awareness of the controversial nature of de-risking, however, the existing debates are focused on the banks' treatment of their clients in a domestic context.[41] In contrast, little consideration has been given to the implications of de-risking in an international setting and/or beyond the anti-money laundering regime. If anything, the assumption is that in the presence of sanctions compliance and reputational risks can justify the refusal to accept certain clients, even though this should not be done in an indiscriminate manner.[42] The financial authorities

[41] The issue of unwarranted bank closures gained particular prominence in the UK last year following a public row over the closure of controversial politician Nigel Farage's account at the prestigious private bank Coutts. This event sparked a wider debate about the practices of UK banks in closing the accounts of individuals and small and medium enterprises (SMEs), and ultimately led the House of Commons Treasury Select Committee to request information. Data sumbitted to the Treasury Committee by eight major banks revealed that in 2023 they closed 2.7% of all SME accounts (or 140,000 accounts out of a total of 5.3 million) for a variety of reasons, typically including concerns about financial or economic crime, failure to pass all due diligence checks, or financial viability. Three banks reported that certain accounts (4,214 in total) were closed for reasons of 'risk appetite' (which should probably be taken to mean unfocused or potential, as opposed to actually verified, concerns, although in one case the description also included accounts closed for 'non-compliance'). As the classification of reasons was not consistent across the banks, it is likely that some or all of the other banks also closed accounts for similar reasons, although they classified these closures under a different heading. According to Harriett Baldwin MP, chair of the Treasury Committee, this '[left] questions over whether decisions on the de-banking of certain businesses, based on what banks perceive as a risk, are happening informally'. HC Treasury Committee, 'New De-Banking Figures Show More than 140,000 Business Accounts Closed by Major Banks', press release (27 February 2024), at < https://committees.parliament.uk/committee/158/treasury-committee/news/200127/new-debanking-figures-show-more-than-140000-business-accounts-closed-by-major-banks>. See also Financial Conduct Authority (FCA), 'UK Payment Accounts: Access and Closures' (September 2023); FCA, 'Research Note: International Perspectives on De-Risking' (September 2023); and HC Treasury Committee, Eighth Report of Session 2023–24, 'SME Finance' (HC 27, 8 May 2024), paras 63–80. In its final report, the Treasury Committee concluded that: 'Banks may need to close business accounts because of regulatory requirements and concerns around financial crime, but thousands of accounts are being closed for vaguely defined reasons relating to "risk appetite" or "reputational risk". What qualifies for this type of account closure varies from bank to bank with little regulatory guidance. . . . It is essential that the FCA publish clear instructions . . . about how such criteria can and cannot be used within the existing regulations. These instructions should be designed to ensure consistency between institutions and prevent the above criteria from being applied more broadly than the law permits.' HC Treasury Committee, Eighth Report, paras 77–78.

[42] Thus, in the UK, the FCA accepts that 'reputational risk may be legitimately considered, for example in decisions about relationships with sanctioned individuals or their close associates', even though 'this

of the major banking jurisdictions are unlikely to prioritise the interests of non-resident users of the banking system, nor to be particularly concerned about ensuring their access to financial services. Their concern about the wider impact of sanctions on the structure of the global financial economy may also be limited – even though some authorities and central banks are clearly aware of the potential impact of geopolitical and geo-economic fragmentation on the stability of their own economic and financial systems.[43]

However, it would be wrong to ignore the practical implications of banks' pre-emptive adaptation to sanctions regimes. By refusing to serve certain categories of customers or communities, by terminating correspondent banking relationships with certain foreign banks, or by withdrawing from certain markets or countries, a bank is multiplying the effect of the sanctions regimes that have prompted it to act in this way, and pushing their boundaries beyond their formal scope. This could contribute to reversing half a century of financial globalisation or, at the very least, cause significant problems for many financial institutions and their customers, some of whom would lose access to essential financial services.

5. Two recent cases arising in connection to the war in Gaza illustrate how the likelihood, as distinct from the actual imposition, of sanctions may lead to the de-

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criterion [should not be] interpreted too broadly'; FCA, 'UK Payment Accounts: Access and Closures' (n 41), para 4.11. Similar considerations would appear to justify the refusal of banks to open accounts in favour of charities operating in geopolitically sensitive areas: 'some charities work abroad and might be deemed higher risk by some account providers because of these links to a higher risk jurisdiction or sanctions nexus and limitations of their internal financial controls'; ibid, para 6.38.

[43] See, eg, the report of Wilko Bolt, Jan Willem van den End, Jos de Grip, Kostas Mavromatis, Ralph Verhoeks, and Nander de Vette, Geo-economic Fragmentation: Economic and Financial Stability Implications' (De Nederlandsche Bank, December 2023). International financial institutions such as the International Monetary Fund (IMF) are likely to take an even more comprehensive view of developments. See, eg, 'The Financial Stability Implications of the War in Ukraine' [April 2022] IMF, *Global Financial Stability Report* 1.

banking of persons other than those immediately targeted and, in certain cases, to a change of bank's willingness to service particular areas and groups.

The first case concerns proposals made in the US Congress to impose sanctions against the Prosecutor of the International Criminal Court (ICC) Karim AA Khan and other ICC officials in response to the prosecutor's request for arrest warrants for Israeli leaders.[44] Such a move would not be unprecedented, since in 2020 the previous US administration had used sanctions against the then ICC Prosecutor Fatou Bensouda and another ICC official, on the ground that the ICC infringed the national sovereignty of the US (which is not a party to the Rome Statute, the treaty establishing the ICC) by launching an investigation of war crimes potentially committed by US military personnel in Afghanistan.[45] The sanctions were revoked a few months later by the incoming administration of President Joe Biden.[46] While they lasted, they required the freezing (blocking) of '[a]ll property and interests in property [of the targeted persons] that are in the United States, that hereafter come within the United States, or that are or hereafter come within the possession or control of any United States person'.[47] This

[44] Initially, the US Secretary of State Antony Blinken implied that the administration would be willing to work with Congress for this purpose; Simon Lewis, Humeyra Pamuk, and Patricia Zengerle, 'Blinken says he'll work with US Congress on potential ICC sanctions', Reuters.com (21 May 2024), at <https://www.reuters.com/world/us/blinken-says-hell-work-with-us-congress-respond-icc-move-gaza-2024-05-21>. A few days later, however, the White House let it be known that, even though the prosecutor's actions overstepped the ICC's jurisdiction, 'sanctions against the ICC [would not be] the right approach'; US White House, 'Press Briefing by Press Secretary Karine Jean-Pierre and National Security Communications Advisor John Kirby' (28 May 2024), at <https://www.whitehouse.gov/briefing-room/press-briefings/2024/05/28/press-briefing-by-press-secretary-karine-jean-pierre-and-national-security-communications-advisor-john-kirby-5>.

[45] The two ICC officials were added in the list of persons targeted by US sanctions (the Specially Designated Nationals and Blocked Persons List, or SDN List, maintained by the Department of Treasury's Office of Foreign Assets Control, or OFAC) on 2 September 2020, in pursuance of US President Donald Trump's Executive Order 13928, 'Blocking Property of Certain Persons Associated with the International Criminal Court' (11 June 2020), 85 FR 36139.

[46] US President Joe Biden, Executive Order 14022, 'Termination of Emergency with Respect to the International Criminal Court' (1 April 2021), 86 FR 17895.

[47] Executive Order 13928, Sec 1(a).

was accompanied by the prohibition of any ‘transaction that evades or avoids, has the purpose of evading or avoiding, causes a violation of, or attempts to violate any of the [primary sanctions against the targeted persons]’ or ‘conspiracy formed to violate any of [those sanctions]’.[48]

It has been rightly pointed out that, while only two individuals were actually targeted under the anti-ICC sanctions program, the consequences for the operations of the ICC globally could have been significant if this had remained in place.[49] Not only it was always possible that additional persons could be designated but the very wide and ill-specified nature of the prohibitions created uncertainty and the risk of inadvertent contravention. Combined with the stiff penalties threatened against violators and/or the fear of losing access to the US market, these factors could dissuade professional and other counterparties, including banks, to pre-emptively severe their links to the ICC and its officials and refuse to provide any further services to them.

The second case relates to the decision of the Biden administration to sanction a small number of persons belonging to the Israeli settler movement and are responsible for violent attacks on Palestinian civilians in the West Bank.[50] According to a report in the London-based *Observer* newspaper, while this move was originally interpreted as a political rebuke to extremists with limited further implications, some Israeli experts are now seeing it as ‘a potential threat to the financial viability of all

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[48] Executive Order 13928, Sec 5. A third prohibition sought to prevent ‘the making [or the receipt] of any contribution or provision of funds, goods, or services by, to, or for the benefit of [the targeted persons]’; Executive Order 13928, Sec 3. As a result, US persons or entities operating anywhere in the world (including the foreign branches of US entities) were prohibited from transacting with, or providing services to, the two ICC officials, unless they had first obtained a license from the US government.

[49] Human Rights Watch, ‘US Sanctions on the International Criminal Court: Questions and Answers” (14 December 2020), at <https://www.hrw.org/news/2020/12/14/us-sanctions-international-criminal-court>.

[50] US President Joe Biden, Executive Order 14115, ‘Imposing Certain Sanctions on Persons Undermining Peace, Security, and Stability in the West Bank’ (1 February 2024), 89 FR 7605.

Israeli settlements and companies in the occupied West Bank'.[51] Specifically, these experts consider that 'the relatively small list of sanctions targets in West Bank settlements could still prompt financial institutions to draw back from offering services to any people or companies based there, because of fears they could accidentally facilitate illegal transactions'.[52] This could expose them to secondary sanctions – something that, given their dependence on their links to the US financial system and dollar transactions, Israeli banks can ill-afford. And while the targeted persons are for the time being limited to a few violent individuals and small groups, in principle the terms of the sanctions program allow the targeting of any person or entity 'responsible for or complicit in . . . threaten[ing] the peace, security, or stability of the West Bank'.[53] The former head of Israel's Iran sanctions program Shuki Friedman is quoted as saying that:

> Many banks are already re-assessing their dealings with the West Bank after a warning from FinCEN, the US government's Financial Crimes Enforcement Network . . . [Despite the small number of targeted persons,] in practice [the US executive order is] actually casting a shadow on all activities that come through the West Bank . . .It delegitimises them in a way that if you're a financial institution, insurance company, institutional investor, hedge fund, anything to do with these activities, you will be cautious about it. You take a step back. This is the real meaning of this order.[54]

His remarks are echoed by those of Michael Sfard, a human rights lawyer, who noted that:

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[51] Emma Graham-Harrison and Quique Kierszenbaum, 'Could New US Sanctions Threaten the Future of West Bank Settlements?', *The Observer*, 12 May 2024, 24. <https://www.theguardian.com/world/article/2024/may/12/could-new-us-sanctions-threaten-future-of-west-bank-settlements> (accessed 31 May 2024).
[52] Ibid.
[53] Executive Order 14115, Sec. 1(a)(i).
[54] Graham-Harrison and Kierszenbaum (n 51), 24.

Very quickly once you have a scattered number of designated individuals and entities the whole West Bank settlement world becomes a minefield. . . . The banking system doesn’t want to risk being charged with providing any kind of support to designated individuals. So every attempt to do business means reviewing whether you might stumble on a risk of secondary sanctions.[55]

Another expert was more sanguine, considering that a very narrow enforcement by Israeli banks would have few wider repercussions; but this was linked to his view that the American sanctions were imposed as ‘lip service’ to public opinion.[56] This, however, goes back to the assessment of the probability of aggressive application of the sanctions by the US authorities; it is not an argument against their potency and wide-reaching practical implications should they be applied with determination.

These cases of apparently narrowly focused financial sanctions show how much wider the implications of the primary sanctioning decisions can be, and the type of chilling effect that they can have, creating strong incentives for banks to off-board whole networks of client relationships and leading to the forcible de-banking of the relevant clients.

6. For most banks, the primary consequence of sanctions is the aforementioned need to adapt their operational arrangements to identify targeted persons and transactions and to ensure that the restrictive measures are applied to them. However, internationally active banks and banking groups with activities on both sides of the divide between the sender and the target states will face sanctions-related risks of a different magnitude and nature. These banks may be compelled to completely withdraw from one or the other area, often at very considerable costs. These banks

[55] Ibid, 25.
[56] Ibid.

may be forced to withdraw completely from one area or the other, often at very high cost.

It is easy to see that withdrawal from the territory of the sender states may be unavoidable for the banks of the target state, especially if they themselves are directly targeted by financial sanctions. As has already been noted,[57] the larger Russian banks were put in this position as a result the invasion of Ukraine.[58] In the case of Sberbank, restrictions on payments in Western currencies involving its group entities, combined with a depositor run on its Austrian subsidiary Sberbank Europe AG (a bank serving more than 780,000 customers in eight Central and Eastern European countries), led to a rapid deterioration in the liquidity position of that subsidiary, resulting in its collapse.[59] As for the second largest Russian banking group, VTB, its German subsidiary was completely 'ringfenced', following the German authorities requiring its management not to take any further instructions from the parent institution or giving it any access to its financial assets or economic resources.[60]

Interestingly, the predicament of international banks that happen to operate in the target jurisdictions may be similarly tough, albeit for converse reasons. The international banks may find themselves caught between a rock and a hard place as they try to meet the conflicting demands of the different states while salvaging their investments. As the example of European banks operating in Russia clearly shows, this may not be easy to achieve.

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[57] Supra, section 2.

[58] On the implications of the sanctions against Russia for the Russian and global banking and financial systems, see Claudia Girardone, 'Russian Sanctions and the Banking Sector' (2022) 33 *British Journal of Management* 1683, esp 1685–1687; and IMF (n 43).

[59] Single Resolution Board (SRB), 'Sberbank Europe AG: Croatian and Slovenian Subsidiaries Resume Operations After Being Sold While No Resolution Action Is Required for Austrian Parent Company', press release (1 March 2022), at <https://www.srb.europa.eu/en/content/sberbank-europe-ag-croatian-and-slovenian-subsidiaries-resume-operations-after-being-sold>

[60] 'Russian Bank VTB No Longer Has Control of European Subsidiary, German Regulator Says', Reuters.com (10 April 2022), at <https://www.reuters.com/business/finance/russian-bank-vtb-no-longer-has-control-european-subsidiary-german-regulator-2022-04-10> (accessed 31 May 2024).

Banks may choose to minimise their sanctions-related and reputational risks by exiting the relevant market. But given the negative political and economic environment, this may only be possible at considerable cost, or not at all. For instance, when the French Société Générale, one of the largest foreign players in the Russian market, sold its Russian subsidiaries in April 2022, it had to recognise net losses of around €3.2 billion.[61]

Alternatively, banks may decide to stay, at least for the time needed to gradually wind down their local operations. However, this may require them to adapt their practices and reduce their activities to the extent necessary to ensure that they do not contravene the sanctions regime. Failure to do so could expose their entire groups to penalties, including the dreaded US secondary sanctions, and threaten their overall viability. Some banks with large investments in Russia have decided to follow this route. As a result, as of May 2024, subsidiaries of seven European banking groups[62] were still operating in Russia.

One would generally expect the impact of sanctions in the profitability and market value of international banks to be commensurate with their exposure to the sanctioned economy.[63] Paradoxically, this does not apply to the Russian subsidiaries of the European groups under discussion, which have proved to be particularly profitable in the intervening period, despite the fact that they have had to cut back very sharply

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[61] Société Générale, 'Societe Generale Has Closed the Sale of Rosbank and Its Russian Insurance Subsidiaries', press release (18 May 2022), at <https://www.societegenerale.com/sites/default/files/2022-05-18-press-release-societe-generale.pdf> (accessed 31 May 2024).

[62] Namely, the Austrian Raiffeisen Bank International, the Italian UniCredit and Intesa Sanpaolo, the German Deutsche Bank and Commerzbank, the Dutch ING Group, and the Hungarian OTP.

[63] Thus, following the Russian invasion of February 2024, an equity price index of European banks fell by over 20%, led by the fall in the price of the banks with the largest exposures to Russia and Ukraine, while the fall in the prices of US banks (whose exposures to these countries were much more modest) fell by only 8%; IMF (n 43), 13.

on their lending activities.[64] One reason for this is that these foreign-owned entities have benefited from large inflows of very low-cost rouble deposits from local depositors 'flying to quality', which they redeposit with the Central Bank of the Russian Federation at much higher rates, thus benefiting from the wide spread. This is, of course, an aberration – and one that appears to be of limited benefit to the parent banking groups, as the strict capital controls imposed by the Russian state do not allow them to repatriate these profits.[65]

In reality, the European banks are in a bind. Although they have initially managed to remain within the four corners of the existing Western restrictive measures, by continuing to serve the Russian economy (and especially by providing an essential cross-border payment corridor for enterprises which are not individually targeted by sanctions[66]), they have attracted the ire of the US authorities. Specifically, in December 2023, the White House issued an executive order authorising the imposition of secondary sanctions on foreign banks which are found to facilitate 'significant transactions or providing services involving Russia's military-industrial base'.[67] While this provision has not yet been used to designate any European bank, the threat is there. Indeed, in May 2024 US Treasury Secretary Janet Yellen made it almost explicit by stating that the American administration is 'looking at potentially a tougher stepping-up of . . . sanctions on banks that do business in Russia'; banks would

[64] The combined profits of the seven subsidiaries in 2023 amounted to more than €3bn, three times more than in 2021, with the largest of them, Raiffeisen Bank International, reporting profits of €1.8bn; Euan Healy and Anastasia Stognei, 'Western Banks in Russia Paid €800mn in Taxes to Kremlin Last Year', FT.com (29 April 2024), at <https://www.ft.com/content/cd6c28e2-d327-4c2a-a023-098ca43eacfb> (accessed 31 May 2024).
[65] 'Rouble-Rousers', *Economist* (UK ed, 8 June 2024), 68.
[66] The role of Raiffeisen was particularly important in this regard, with the bank accounting for nearly half of all payments with the rest of the world in February 2023; ibid.
[67] US President Joe Biden, Executive Order 14114, 'Taking Additional Steps with Respect to the Russian Federation's Harmful Activities' (22 December 2023), 88 FR 89271, Sec 1, amending Executive Order 14024, Sec 11.

only be sanctioned only ‘if there was a reason to do so, but operating in Russia creates an awful lot of risk’.[68]

Even if the threat of US secondary sanctions were not enough to force the remaining European banks to retreat from Russia, supervisory pressure could lead to the same result. Conceptually, sanctions issues can be a prudential concern. Beyond the obvious operational and reputational risks associated with complying with the restrictive measures per se, banking groups with a significant market presence in the targeted jurisdictions may face other risks. The disruption of international payment flows may impede the effective refinancing of the relevant subsidiaries, exposing them to liquidity crunches such as the one that brought down Sberbank Europe AG. The sender and target states may impose conflicting obligations on the different parts of these groups, while the political risk of expropriation must also be considered. The ring-fencing of the subsidiaries in the target states may exacerbate the problem if it impedes the flow of information to, and the effective and coordinated management of the evolving situation by, senior management at the group level, or the consolidated supervision of the groups’ overall condition by their supervisors. In light of these factors, supervisors may require such banking groups to wind down or divest their activities in the target jurisdictions. In the present case, according to credible press reports, in May 2024 the European Central Bank (ECB) asked all euro area banks still operating in Russia to accelerate their withdrawal from the country and to submit detailed exit plans. However, the main reason for the supervisory demand appears to be, not the aforementioned considerations, but the potential imposition of US

[68] David Lawder, ‘European Banks in Russia Face “Awful Lot of Risk”, Yellen Says’, Reuters.com (25 May 2024), at <https://www.reuters.com/business/finance/european-banks-russia-face-awful-lot-risk-yellen-says-2024-05-25> (accessed 31 May 2024). See also ‘US Sanctions Electioneering’, *Eurointelligence* newsletter (29 May 2024), at <https://www.eurointelligence.com> (accessed 31 May 2024). In response to this threat, Raiffeisen has announced that its Russian subsidiary will stop processing outgoing payments in US dollars on 10 June 2024; *Economist* (n 65).

secondary sanctions.[69] In this sense, the ECB appears to be preemptively and indirectly enforcing for prudential reasons policy decisions of a third state, which go beyond the restrictive measure of the EU.[70]

However, exiting the Russian market can be very costly and complex for the banks concerned. Previous attempts to liquidate and repatriate their investments in their Russian subsidiaries have been unsuccessful. This was due to a lack of local counterparties willing to buy the subsidiaries at fair prices, but also to the fact that certain potential counterparties were themselves targeted persons, so that dealing with them would be a punishable violation of the sanctions regime. Perversely, an inflexible application of existing sanctions may make the divestment demanded by Western authorities more difficult. Thus, an attempt by Raiffeisen Bank International to divest some of its Russian assets by swapping them for a stake in an Austrian non-financial company failed due to the objections of the US Treasury Department, which, while insisting that the bank should reduce its exposure to Russia, nevertheless objected to the proposed swap deal on the ground that the Austrian asset appeared to be indirectly held by a sanctioned Russian oligarch, whose involvement would expose the bank to significant sanctions risk.[71]

At the same time, banks that simply try to wind down their Russian operations may face objections from the other side, as the Kremlin does not take kindly to attempts by Western banks to extricate themselves. A bank that stops providing

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[69] Owen Walker, Martin Arnold, Sam Jones, Max Seddon and Silvia Sciorilli Borrelli, 'ECB Pressures Banks to Speed Up Russia Exits on Fear of US Action', FT.com (17 May 2024), at <https://www.ft.com/content/77653edb-2951-4ee2-8953-60de359c2002> (accessed 31 May 2024); and *Economist* (n 65).

[70] For a critical assessment of the ECB's involvement in the enforcement of financial sanctions against Russia, which, according to the authors, implicates the ECB and the Eurosystem in foreign policy-making, jeopardises its independence and detracts from its primary monetary objective, see Quaglia and Verdun (n 15).

[71] Chris Cook and Max Seddon, 'US Treasury threatens Austria's Raiffeisen Bank over Russia unit', FT.com (15 May 2024), at <https://www.ft.com/content/96824956-8865-4e6a-91a6-866c6b3fc66c> (accessed 31 May 2024).

financial services to the country against the wishes of the Russian state risks having its local assets nationalised or simply being prevented from repatriating its funds.

All in all, the example of the European banking groups operating in Russia suggests that the exit of foreign banks from a sanctioned jurisdiction may be tantamount to the loss of all or a large part of their investments there.

7. The proliferation of international sanctions regimes and, more generally, geopolitical tensions add uncertainty and complexity to the environment in which banks operate. They introduce significant risks that banks must manage, including the risk of losses on their exposures to sanctioned states or entities, operational risks associated with the disruption of banking services in conflict zones, and strategic risks associated with a changing economic landscape. More generally, they can disrupt trade and financial flows, investment patterns and levels of cross-border and even domestic activity. They can also lead to fluctuations in currency values, commodity prices and interest rates. The dislocations and increased volatility increase banks' credit and market risks, affect their profitability, and force them to revise their strategies.

In this setting, it is imperative for policymakers and regulators seeking to protect economic efficiency and the stability of the global financial system to be mindful of the direct and indirect effects of sanctions regimes on banks and their clients, to use restrictive measures judiciously and proportionately, and to explore ways to mitigate their adverse effects.

Moreover, policymakers should be aware of the potential unintended consequences of an excessively aggressive use of the sanctions tool. From a structural viewpoint, sanctions and geopolitical fragmentation can disrupt established patterns and frameworks of international cooperation and exchange, threatening the smooth functioning and coherence of the global financial system.

The deterrent effect of sanctions on cross-border activity is uneven, both in terms of the banks affected and the geographical pattern that emerges, ie, the shape of the transaction networks and corridors that define the global financial landscape. Ultimately, however, sanctions could encourage the establishment of separate regional cross-border payment and financial arrangements and the use of alternative currencies by countries challenging the current Western dominance of the global financial system. In the past, attempts to create alternative cross-border payment structures and/or to reduce the centrality of the dollar in the global financial system, have yielded meagre results.[72] Nonetheless, by attempting to economically and financially isolate a number of larger countries simultaneously, the Western powers may be forcing them to build up their own alternatives, which may appear ineffective and marginal at the moment, but may gradually scale up. Moreover, the weaponisation of the dollar and SWIFT creates incentives for countries that are uncertain about their position in the international system to maintain alternative arrangements as an option that could prove useful in the event of geopolitical turbulence, even if they continue to use the dominant systems for most purposes.[73] Thus, while important network economies favour the continuation of the dollar's dominance of global finance, the seeds of fragmentation are also present and can lead to a multipolar, though not necessarily symmetrical, landscape of discrete and antagonistic trading blocs and their respective payment and banking networks.

[72] Oatley (n 19), 124–125.

[73] For a similar conclusion, see ibid, 126; and Abely (n 8), 39.

CONFLICT AND ECONOMIC SANCTIONS AND THE IMPACT ON BANK RESILIENCE AND STABILITY: A PRIMER

Dalvinder Singh [*]

ABSTRACT: *Conflict is the most devastating of all exogenous shocks in view of the human and social impact, and the economic and financial disruption it will cause. The Russia and Ukraine conflict is different to the traditional conflicts we have images of; countries deciding to engage in war to settle their differences.*

This paper explores the Russian invasion of Ukraine to assess the indirect impacts of the conflict on the European Union banking system.

1. Conflict is the most devastating of all exogenous shocks in view of the human and social impact, and the economic and financial disruption it will cause. The Russia and Ukraine conflict is different to the traditional conflicts we have images of; countries deciding to engage in war to settle their differences. According to the Uppsala Conflict Data Program (UCDP):[1] The Russian invasion of Ukraine is one sided, with Russia occupying and seeking to destabilise a political position, but also to seek annexation of territory to create another geographical border with the West. The Russian government claim that its 'Special Military Operation' seeks to 'denazify' and

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[1] Uppsala Conflict Data Program, Department of Peace and Conflict Research <https://ucdp.uu.se/encyclopedia>

'de-militarise' Ukraine.[2] The Russian invasion of Ukraine on 24th February 2022 will be explored to assess the indirect impacts of the conflict on the European Union (EU).

I seek to explore this exogenous shock in two ways: first, the indirect effects of the conflict on the EU and the use of economic sanctions. This section, will argue economic sanctions are one of the major lines of response to such geopolitical shocks at the country level and individual level. Targeted sanctions can have direct consequences, but equally important are the indirect consequences of targeted sanctions, especially when it comes to banking. I will review this in relationship to Sberbank. We also provide a box to show how the conflict has impacted the financial stability of Ukraine, in Box 1. Given the limited literature on this type of exogenous shock, I thought it would be useful to see how conflict impacts banking and what role they continue to play during conflict.

The fact that geopolitical events cause significant volatility in the global financial markets is rather unsurprising. Scrutinising the impact of geopolitical events of the past—both exogenous and endogenous to the financial system—Izzeldin et al. review the S&P 500 index (and a set of other market indicators), to look at how such an event impacts market volatility. They show that the Russia and Ukraine conflict does not compare with other geopolitical events in history such as the Global Financial Crisis (GFC), but is nonetheless significant in comparison to other geopolitical events such as certain terrorist attacks, (except for the 9-11 terrorist attack) in terms of volatility. Indeed, if we look at their S&P 500 timeline and volatility, Russia's annexation of Crimea in 2014 (and the ensuing war in the Donbas region of Ukraine) impacted market volatility more than Russia's recent act of aggression. They conclude that it is possibly attributed to the markets perception that the war would not last long.[3] The Ukraine

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[2] Recorded fatalities in UCDP Ukraine < https://ucdp.uu.se/country/369>

[3] Marwan Izzeldin, Yaz Gülnur Muradoglu, Vasileios Pappas, Athina Petropoulou and Sheeja Sivaprasad, 'The impact of the Russian-Ukrainian war on global financial markets' (2023) International Review of Financial Analysis, 87

Central Bank financial stress index also provides an insight into the impact of geopolitical events on local market volatility.[4]

Figure FSI1. Financial Stress Index

Source: NBU.

It shows, the ‘full scale invasion of Russia’ as a systemic event with all indicators making up the index increasing significantly. However, the 2014 events peaked higher than the 2022 Russian aggression and continued for longer with the ensuing debt restructuring the country entered into during 2015. Notwithstanding the significance of the war, the 2008-2009 GFC peaked higher. This is possibly due to the continued level of threat persisting for longer and thus local market indicators anticipating its continuance, albeit Russia’s aggression was nonetheless a significant systemic event. See Box 1.

2. The use of economic sanctions because of geopolitical events has a long and deep history.[5] Economic sanctions can be explored at two levels: at the country level

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[4] Methodology for calculating the Financial Stress Index for Ukraine: The financial stress index is calculated on the basis of 20 indicators grouped into five subindices: subindex of the banking sector, household behavior, corporate securities, government securities, and foreign exchange market. Each subindex is assigned an initial weight according to its volume and impact on the country's financial sector.
<https://bank.gov.ua/ua/stability/fsi>

[5] Kern Alexander, *Economic Sanctions: Law and Public Policy* (Palgrave Macmillan, 2009) at p. 8-10;

and at the international organisation level. It is also important to note that not all countries have a sanctions regime and that economic sanctions can be targeted at various state and non-state actors. In the EU (Common Foreign and Security Policy (CFSP)) context, Member States will adopt sanctions and measures decided by the European Commission. Alexander explains the main purpose of economic sanctions as: 'restricting foreign trade and finance or withholding economic benefits such as state aid from targeted states or other targeted non-state actors to accomplish broader security or foreign policy objectives.'[6]

Alexander also notes that the key issue in the field of economic sanctions is their effectiveness to ultimately achieve the political aim they were intended for and their legal compliance both at the country and individual institutional level. While it is generally viewed that the negative consequences of the economic sanctions is primarily on those targeted with it, it is equally apparent that the response by the target, in the form of counter sanctions, can also result in serious economic consequences for those countries applying the sanctions.[7] The economic sanctions of more recent times are significantly 'smarter' as to who they target, in terms of naming individuals and corporations. This is evident in the conflict between Russia and Ukraine and the international response and support for Ukraine. The impact on the global supply of oil and gas has detrimentally impacted global trade and the cost of energy both in the EU and worldwide. Despite the EU's reliance on Russian oil and gas prior to the war, the move has been made to significantly reduce its dependency by 2030, as part of the EU's ambitions.[8]

Takis Tridimas & Jose A. Guiterrex-Fons, 'EU Law, International Law, and Economic Sanctions against Terrorism: The Judiciary in Distress' (2009) 32 Fordham Int'l LJ 660; Matthew Happold and Paul Eden, *Economic Sanctions and International Law*, (Bloomsbury: Oxford 2016)

[6] *Ibid*., Alexander 2009 at p. 10.

[7] T. Clifton Morgan, Constantinos Syropoulos, and Yoto V. Yotov 'Economic Sanctions: Evolution, Consequences, and Challenges, Journal of Economic Perspective' (2023) , p.5.

[8] REPowerEU

We would argue that economic sanctions are a form of exogenous shock in view of its geopolitical nature and it being external to the banking system. While no banks have failed as a result of the geopolitical events, Russian banks that have been the target of economic sanctions have been placed in resolution. The case of Sberbank will be explored. This short section will also explain the EU sanctions applied to Russia and the individuals targeted. It also briefly shows the challenges associated with compliance and the challenges posed by those enabling circumvention.

The impact of the conflict on both trading partners has been significant and the ripple effects have been global. This ripple effect of the war has contributed to rising global energy prices and price of commodities, but it is not the sole reason for such price inflation since there is evidence of prices rising before the conflict. The complexity of the conflict and the opportunity of some countries to act in their own self-interest particularly in light of their own political views about the conflict, means the impact of using trade as a response is not likely to have the desired effect.[9] Where trade has declined with some countries, it has increased with others who are politically aligned to the interests of Russia, either implicitly or explicitly. Russia's response to finding new trading partners is a common strategy adopted by those impacted by economic and financial sanctions.[10] The importance of oil and gas to the global economy is being exploited. China, India and Turkey, despite their non-aligned positions, are now seeking to exploit the geopolitical tensions for their own benefit and forge important trading links with Russia for oil and gas. This compensates Russia for the loss of trade with the EU, US, and UK, who have cut trade links and introduced economic sanctions.

<https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/european-green-deal/repowereu-affordable-secure-and-sustainable-energy-europe_en>

[9] Zsolt Darvas and Catarina Martins, 'The Impact of the Ukraine Crisis on International Trade Working Paper', Issue 20 (2022), Bruegel, <https://www.bruegel.org/sites/default/files/2022-12/WP%2020.pdf>

[10] Mario Arturo Ruiz Estradaa and Evangelos Koutronas, 'The Impact of the Russian Aggression against Ukraine on the Russia-EU Trade' (2022) Vol.44 *Journal of Policy Modeling* 599-616.

The trading relationship between the EU and Russia is longstanding and evolved into Russia becoming a major trading partner for the EU.[11] The 1997 Agreement on the Partnership and Cooperation (PCA) formalised this relationship in the form of a 'strategic partnership'.[12] The political ambitions of the 1997 Agreement were not only for the purposes of trade between the two but to encourage Russia to continue its economic reforms and integrate it into the 'open international trading system' as it transitioned to a market economy. This trading relationship with Russia has culminated into it being the EU's fifth being the EU's fifth largest trading partner, which equates to approximately 5.8% of the EU's total trade in goods. With respect to Russia, the EU is ranked as its first trading partner, with 37.9% of its exports coming from the EU. A significant proportion of the total trade in goods is in fuel and minerals, which represent 62% of the total trade in goods.[13] The trade in services is also relatively significant for both parties with the EU dominating this sector of trade. In this respect, the EU trades at a deficit in goods but trades at on a surplus in services with Russia.[14] While the illegal annexation of Crimea by Russia led to significant reciprocal restrictions in trade between the two partners—especially dual use goods, and technology and services relating to such goods—[15] the relationship between the two

[11] Agreement on partnership and cooperation establishing a partnership between the European Communities and their Member States, of one part, and the Russian Federation, of the other part; Protocol 1 on the establishment of a coal and steel contact group 28.11.1997 L327/47: Protocol 2 on mutual administrative assistance for the correct application of customs legislation: Final Act - Exchanges of letters - Minutes of signing 28.11.1997 L327/51

[12] Anna Garashchuk, Fernando Isla Castillo and Pablo Podadera Rivera, 'The Empirical Evidence of the EU–Russia Failed Strategic Partnership: Did it have a Positive Impact on Bilateral Trade?' (2021)Vol.30(5) European Review ,657-685.

[13] See Paris A Fokaides, 'Cooperation of EU with Russia in the field of energy: a review' 7(1) Current Sustainable/Renewable Energy Reports (2020) 1-8.

[14] EU trade relations with Russia. Facts, figures and latest developments. <https://policy.trade.ec.europa.eu/eu-trade-relationships-country-and-region/countries-and-regions/russia_en>

[15] Council Regulation (EU) No 833/2014 of 31 July 2014 concerning restrictive measures in view of Russia's actions destabilising the situation in Ukraine; See also EU restrictive measures against Russia over Ukraine (since 2014) <https://www.consilium.europa.eu/en/policies/sanctions/restrictive-measures-against-russia-over-ukraine/>

parties had been deteriorating long before this.[16] Indeed, it could be argued that the illegal annexation of Crimea was a test in order to gauge the European response to what was Putin's bigger ambition culminating in the war with Ukraine.

The EU trade relationship with Ukraine is also based on an Association Agreement from June 2014.[17] The Agreement is evidence of Ukraine's aspirations to form closer ties with the EU, rather than its other neighbour, Russia. Included in this Agreement is the desire to achieve greater economic integration based on the Deep and Comprehensive Free Trade Area (DCFTA), combined with legislative reforms to improve economic relations. The illegal invasion of Ukraine by Russia has spurred even closer ties between the EU and Ukraine, with the Priority Action Plan for the enhanced implementation of the ambitions provided in the DCFTA.[18] It has also brought Ukraine closer to accessing the EU single market, in view of the European Council decision to grant Ukraine candidate status on 23 June 2022. In June 2023, the EU decided to enable full trade liberalisation between the EU and Ukraine in response to Russia's aggression.[19] The objective of this initiative was to enable Ukraine to mitigate the lost trade with the rest of the world via the Black Sea route cut off by Russia, by opening access to the single market for Ukraine trade, accelerate closer EU economic relations, and put Ukraine on the road to accession to the EU.

The initial agreement culminated in the EU, accounting for 39.5% of Ukraine's trade in goods and services. On the other side, Ukraine is ranked the EU's 15th largest

[16] Ref missing, is it one of the ones in 18 ?
[17] ASSOCIATION AGREEMENT between the European Union and its Member States, of the one part, and Ukraine, of the other part 29.5.2014 L161/3; EU trade relations with Ukraine. Facts, figures and latest developments. <https://policy.trade.ec.europa.eu/eu-trade-relationships-country-and-region/countries-and-regions/ukraine_en>
[18] PRIORITY ACTION PLAN For enhanced implementation of the EU-Ukraine DCFTA in 2023-2024
[19] Regulation(EU) 2022/870 of the European Parliament and of the Council of 30 May 2022 on temporary trade-liberalisation measures supplementing trade concessions applicable to Ukrainian products under the Association Agreement between the European Union and the European Atomic Energy Community and their Member States, of the one part, and Ukraine, of the other part

trading partner. Ukraine's major exports to the EU are iron and steel, and various foodstuffs including cereals. The EU's major exports to Ukraine are machinery, transport equipment, and vehicles.[20]

The EU member states have enacted various measures against Russia, in defence of Ukraine's threatened sovereignty. This has included: economic sanctions and restrictive measures on important individuals, private institutions, and the Russian State;[21] Member State sale of military equipment to the Ukrainian war effort;[22] and the provision of humanitarian aid for both fleeing refugees and the countries hosting them, coordinating with partners and allies within the United Nations (UN), the Organization for Security and Co-operation in Europe (OSCE), the North Atlantic Treaty Organization (NATO) and the Group of Seven (G7). The EU's institutions have also enacted measures regarding forcibly displaced Ukrainian children[23]. This is all coordinated via the Ramstein Group, also known as the Ukraine Defense Contact Group (UDCG), made up of 50 countries supporting Ukraine. It is estimated that EUR 143 billion has been committed to these various issues arising from the conflict.[24] These restrictive measures, enacted since 2014 (see timeline), are, in a nutshell, designed to weaken Russia's economic base, depriving it of critical technologies and markets, and significantly curtailing its ability to wage war[25]. The EU has been comprising a list of those subject to these restrictive measures, most recently including

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[20] Ukraine Trade Picture: <https://policy.trade.ec.europa.eu/eu-trade-relationships-country-and-region/countries-and-regions/ukraine_en>

[21] EU response to Russia's invasion of Ukraine <https://www.consilium.europa.eu/en/policies/eu-response-ukraine-invasion/>

[22] Arming Ukraine without crossing Russia's red lines https://www.brookings.edu/articles/arming-ukraine-without-crossing-russias-red-lines/

[23] https://www.europarl.europa.eu/RegData/etudes/BRIE/2023/747093/EPRS_BRI(2023)747093_EN.pdf

[24] Uppsala Conflict Data Program, Department of Peace and Conflict Research, Ukraine <https://ucdp.uu.se/country/369>

[25] European Council, Timeline - EU sanctions agianst Russia <https://www.consilium.europa.eu/en/policies/sanctions/restrictive-measures-against-russia-over-ukraine/history-restrictive-measures-against-russia-over-ukraine/>

(13 April, 2023) the Wagner Group and RIA FAN, a military and media organisation, respectively. The total is now 1,473 individuals and 207 entities[26]. There have been 10 packages of sanctions altogether. The first was on 23 February 2022.[27] It targeted 27 high-profile individuals and entities, and entailed an asset freeze—a prohibition from making funds available to the listed individuals and entities—and a travel ban on listed persons—preventing them from entering or transiting through EU territory. Additionally, the Council unanimously adopted a decision to add violation of restrictive measures to the list of 'EU crimes' in the Treaty on the Functioning of the EU[28], while also adopting a decision that fully suspends the visa facilitation agreement between the EU and Russia from 12 September 2022[29]. On 8 December 2022, the Council further adopted a decision on the non-acceptance of Russian travel documents issued in Ukraine and Georgia[30].

In addition to the EU's goal of protecting Ukraine, on a common European path through its rebuilding into a modern prosperous state and ultimate integration into the EU bloc,[31] the EU is also motivated by the very significant and varied disruptive

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[26]European Council, Russia's war of aggression against Ukraine: Wagner Group and RIA FAN added to the EU's sanctions list <https://www.consilium.europa.eu/en/press/press-releases/2023/04/13/russia-s-war-of-aggression-against-ukraine-wagner-group-and-ria-fan-added-to-the-eu-s-sanctions-list/>

[27]European Council, 'EU adopts package of sanctions in response to Russian recognition of the non-government controlled areas of the Donetsk and Luhansk oblasts of Ukraine and sending of troops into the region', (2022) <https://www.consilium.europa.eu/en/press/press-releases/2022/02/23/russian-recognition-of-the-non-government-controlled-areas-of-the-donetsk-and-luhansk-oblasts-of-ukraine-as-independent-entities-eu-adopts-package-of-sanctions/>

[28]European Council, 'Sanctions: Council adds the violation of restrictive measures to the list of EU crimes', (2022) <https://www.consilium.europa.eu/en/press/press-releases/2022/11/28/sanctions-council-adds-the-violation-of-restrictive-measures-to-the-list-of-eu-crimes/>

[29]European Council, 'Council adopts full suspension of visa facilitation with Russia', (2022) <https://www.consilium.europa.eu/en/press/press-releases/2022/09/09/council-adopts-full-suspension-of-visa-facilitation-with-russia/>

[30]European Council, 'Council adopts decision not to accept Russian documents issued in Ukraine and Georgia', (2022) <https://www.consilium.europa.eu/en/press/press-releases/2022/12/08/council-adopts-decision-not-to-accept-russian-documents-issued-in-ukraine-and-georgia/>

[31]The Polish Institute of International Affairs, 'Ukraine's Reconstruction Already on the Agenda', (2023)<https://www.pism.pl/publications/ukraines-reconstruction-already-on-the-agenda ;

effect this conflict is having on the global market system. Due to the ongoing conflict, world prices for crucial commodities, like fuels and fertilisers, have spiked to record levels. The war has also led to great uncertainty about the security of the energy supply.[32] Russia, hitherto a main supplier, has suspended gas delivery to a number of EU member states. In response, as of March 2022, EU leaders agreed to phase out the EU's dependency on Russian fossil fuel imports (see bottom)[33]. EU countries are also responding to the global food crisis to ensure food is getting to countries in need[34], in Africa, the Middle East and Asia[35]. In September 2022, the European Council President, Charles Michel, co-chaired a summit on global food security, in the margins of the UN General Assembly week, during which global leaders issued a declaration stressing the need to strengthen international cooperation and partnership initiatives[36].

The international order itself has been greatly tested by the Russian invasion of Ukraine[37], causing a strong response by the international legal order and increased efforts to develop a co-operative EU foreign policy to combat it[38]. It has also led to a rekindling of transatlantic relations, reminding the EU of its crucial geopolitical

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https://www.europeum.org/en/articles/detail/5542/policy-paper-ukraine-s-integration-with-the-eu-in-the-context-of-the-war>

[32] European Council, 'Energy prices and security of supply' <https://www.consilium.europa.eu/en/policies/energy-prices-and-security-of-supply/>

[33] European Council, 'EU response to Russia's war of aggression against Ukraine' <https://www.consilium.europa.eu/en/policies/eu-response-ukraine-invasion/>

[34] European Council, 'Food security and affordability' <https://www.consilium.europa.eu/en/policies/food-security-and-affordability/>

[35] European Council, 'Food for the world' <https://www.consilium.europa.eu/en/food-for-the-world-eu-countries-mitigate-impact-russia-war/>

[36] European Council, 'Leaders' Summit on Global Food Security' <https://www.consilium.europa.eu/en/events-gsc/global-food-security-summit-20-september-2022/>

[37] O. A. Hathaway, 'How Russia's invasion of Ukraine tested the international legal order', Brookings (2023) <https://www.brookings.edu/on-the-record/how-russias-invasion-of-ukraine-tested-the-international-legal-order/>

[38] Nicholas Wright, Richard Whitman and Heidi Maurer, 'Russia's invasion of Ukrained has been a reality check for EU foreign policy cooperation', LSE Blogs, (2023) <https://blogs.lse.ac.uk/europpblog/2023/01/23/russias-invasion-of-ukraine-has-been-a-reality-check-for-eu-foreign-policy-cooperation/>

dependence on the US[39]. The EU has progressively imposed restrictive measures in response to developments in Belarus' response to the Russian invasion of Ukraine. The EU had also previously imposed a series of measures following the fraudulent presidential elections in Belarus in August 2020[40]. It strongly condemns the invasion and illegal annexation of Ukraine's Donetsk, Luhansk, Zaporizhzhia and Kherson regions, also condemning Belarus' involvement in Russia's military aggression[41]. In response to Belarus' actions, the EU has adopted a variety of measures in 2022 (see timeline[42] and background information[43]), including: individual and economic sanctions targeting 22 people[44]; restrictions on trade; a SWIFT ban for five Belarusian banks; a prohibition on transactions with the Central Bank of Belarus; limits on the financial inflows from Belarus to the EU[45]; and a prohibition on the provision of euro-denominated banknotes to Belarus. On February 24th, March 2nd and 9th, June 3rd 2022, and on February 27th 2023, the EU extended such restrictive measures due to the ongoing conflict.

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[39] Jeremy Shapiro and Jana Puglierin, 'The art of vassalisation: How Russia's war on Ukraine has transformed transatlantic relations', European Council on Foreign Relations, (2023) <https://ecfr.eu/publication/the-art-of-vassalisation-how-russias-war-on-ukraine-has-transformed-transatlantic-relations/>

[40] European Council, 'EU Sanctions against Belarus' <https://www.consilium.europa.eu/en/policies/sanctions/restrictive-measures-against-belarus/

[41] European Council, 'EU response to the Ukraine invasion' <https://www.consilium.europa.eu/en/policies/eu-response-ukraine-invasion/>

[42] European Council, 'Timeline - EU sanctions against Belarus' <https://www.consilium.europa.eu/en/policies/sanctions/restrictive-measures-against-belarus/belarus-timeline/>

[43] European Council, 'Restrictive measures against Belarus' <https://www.consilium.europa.eu/en/policies/sanctions/restrictive-measures-against-belarus/>

[44] European Council, 'Belarus' role in the Russian military aggression of Ukraine: Council imposes sanctions on additional 22 individuals and further restrictions on trade', (2022) <https://www.consilium.europa.eu/en/press/press-releases/2022/03/02/belarus-role-in-the-russian-military-aggression-of-ukraine-council-imposes-sanctions-on-additional-22-individuals-and-further-restrictions-on-trade/>

[45] European Council, 'Russia's military aggression against Ukraine: EU agrees new sectoral measures targeting Belarus and Russia', (2022) <https://www.consilium.europa.eu/en/press/press-releases/2022/03/09/russia-s-military-aggression-against-ukraine-eu-agrees-new-sectoral-measures-targeting-belarus-and-russia/>

Following the political upheaval in Belarus and the restrictive measures adopted by the EU, the Belarusian regime reacted by instrumentalising migrants for political purposes and launching hybrid attacks along the EU border. The EU responded with assistance to vulnerable people, including through financial support, preventing human trafficking and supporting temporary asylum and return measures[46].

Additionally, the EU Council adopted additional measures on Belarusian trade operations[47], including prohibition of imports from Belarus and exports to Belarus. The new measures, namely the trade bans on potassium chloride, have affected both the Belarusian economy and the EU global food supplies[48]. The Council also acted to suspend visa facilitation provisions for officials of the Belarus regime[49].

3. Reparations is a critical part of the funding for Ukraine's recovery and reconstruction after the work. The Council of Europe's Committee of Ministers decided to put in place a register to receive claims for damages.[50] The assets outside of Russia are likely to be the primary mechanism for the payment of such reparations. However, this is quite controversial with a number of political and legal challenges to overcome.

[46] European Council, 'Eastern Partnership' <https://www.consilium.europa.eu/en/policies/eastern-partnership/belarus/>

[47] European Commission, 'EU sanctions in response to the involvement of Belarus in the Russian military aggression against Ukraine', (2022) <https://trade.ec.europa.eu/access-to-markets/en/news/eu-sanctions-response-involvement-belarus-russian-military-aggression-against-ukraine>

[48] European Parliament Research Service (EPRS), 'Russia's War on Ukraine: Sanctions targeting Belarus' <https://www.europarl.europa.eu/RegData/etudes/ATAG/2022/729428/EPRS_ATA(2022)729428_EN.pdf>

[49] European Council, **'**Belarus: Council suspends visa facilitation provisions for officials of the Belarus regime', (2021) https://www.consilium.europa.eu/en/press/press-releases/2021/11/09/belarus-council-suspends-visa-facilitation-provisions-for-officials-of-the-belarus-regime/

[50] An International Register of Damages for Ukraine Promises Accountability, But Could Victims Be Left Behind? <https://www.ictj.org/latest-news/international-register-damages-ukraine-promises-accountability-could-victims-be-left>

The EU, US and UK have different views on this matter with the UK having the clearest legal position of ensuring those assets are used for paying reparations.

4. The economic sanctions included limiting Russia's access to the financial system to finance its economy and ultimately its war against Ukraine. The direct sanctions have certainly disrupted and limited trade with Russia. Those sanctions have equally placed a significant burden on global trade and the price of oil. The EU initially placed 7 banks on the sanctions list. However, the loss of confidence soon spread to Sberbank even though it was explicitly exempted due to its role in the financing arrangement for oil and gas. Leading to Sberbank experiencing a bank run and being placed into resolution or national insolvency arrangements to ensure orderly closure of its business.

This section explores the issue of financial sanctions from a European and European Banking Union (EBU) perspective. The move involved excluding key Russian banks and their subsidiaries from access to the international SWIFT messaging system for cross border payments.[51] This decision to deny access to the SWIFT followed the decision of Canada, the EU, UK and US to extend sanctions to the payment system. This decision was extended by the EU to include credit institutions from Belarus, in view of its direct assistance to Russia to sustain its war against Ukraine.[52] The original list of key Russian banks included the banks that were already subject to previous

[51] Ukraine: EU agrees to exclude key Russian banks from SWIFT; Council Regulation (EU) 2022/345 Of 1 March 2022 Amending Regulation (EU) No 833/2014 Concerning Restrictive Measures In View Of Russia's Actions Destabilising The Situation In Ukraine, Annex XIV
Bank Otkritie; Novikombank; Promsvyazbank; Bank Rossiya; Sovcombank; Vnesheconombank (Veb); VTB Bank'.
Swift, An update to our message for the Swift Community, 20 March 2022.
< https://www.swift.com/news-events/news/message-swift-community>

[52] The EU subsequently extended the list to include some credit institutions in Belarus see COUNCIL REGULATION (EU) 2022/877 of 3 June 2022 amending Regulation (EC) No 765/2006 concerning restrictive measures in view of the situation in Belarus and the involvement of Belarus in the Russian aggression against Ukraine.

sanctions. Girardone explains that the position of VTB and Sberbank, both in Russia and Europe, was one of home domination but of limited importance in the EU. In terms of market capitalisation, Sberbank was the second largest bank in the EU, and it had a significant presence in local government finance in Austria and Germany.[53] The decisions to prohibit access to dollar payments and SWIFT for several banks, and the compliance with Russian countersanctions, culminated in liquidity pressures and a loss of depositor confidence. In the past, the inability to access dollar markets led the European Central Bank (ECB) and the Single Resolution Board (SRB) to decide ABLV the Latvian (and ABLV Luxembourg subsidiary) bank was failing, or likely to fail, because the US found it was complicit in breaching international economic sanctions.[54] In view of this position, the ECB and SRB at the Banking Union level, and other European national resolution authorities, had no choice but to decide Sberbank was failing or likely to fail due to, inter alia, its ability to pay future liabilities.[55] Table 1 shows the jurisdiction in which Sberbank was located, in the form of subsidiaries. The state-owned bank had its European parent entity located in Austria and had established subsidiaries in a number of participating countries of the Banking Union. In non-participating European Member States, the national resolution authority has the responsibility to decide whether the bank is failing or likely to fail, according to the Bank Recovery and Resolution Directive (BRRD). For instance, SRB decided that the parent entity in Austria does not provide critical functions to the real economy and so

[53] Claudia Girardone, Russian Sanctions and the Banking Sector, 33, Br. J. Manag, 1683-1688 at p. 1686.

[54] For an examination of the case see D Singh, European Cross Border Banking and Banking Supervision, Oxford University Press, 2020 at p. 175-179. For an excellent analysis of FOLF see Christy Ann Petit, Failing or likely to fail: banking union cooperation tested since 2017, Vol.45(1) *Journal of European Integration* (2023) 157-180.

[55] Assessment of the conditions for resolution in respect of Sberbank
Europe AG, Decision of the Single Resolution Board, 01/03/2022, (SRB/EES/2022/19).
"On 26 February 2022, the Institution notified to the ECB that, due to the substantial deposit outflows of the Institution and its subsidiaries, which severely impacted their liquidity reserves and liquidity coverage ratio ("LCR"), it could reasonably be expected that the Institution is likely to be unable to pay its debts and liabilities as they fall due in the near future, as no measures were available to provide relief to the liquidity position or slow down the deposit outflows."

national insolvency proceedings could achieve the expected resolution objective. In contrast, Sberbank's other subsidiaries, located in Slovenia and Croatia, were considered critical to the real economy, so a resolution in the public interest was decided and they opted for the sale of business tools. The material entities in Hungary and Czech Republic were ultimately owned by the Austrian parent entity and the resolution authorities decided that the subsidiary was failing or likely to fail as a result of the initial decision.

The resolution decisions within the EU as a whole were assisted by the European Resolution College for Sberbank. It meant the Member State resolution authorities and the SRB could coordinate their decisions. The national resolution authorities needed to ensure payout of covered deposits in accordance with sanctions lists. The timing of payouts could be delayed when the bank has a significant amount of non-resident customers. The sale of assets in these circumstances would equally need to comply with sanctions lists.

There is no automatic recognition by third countries of resolution decisions of the SRB or other European national resolution authorities. They can decide on a case-by-case basis whether they align with the EU, like the UK and Switzerland have. However, Serbia, a potential EU accession country, has declined to comply with the international position against Russia. Nevertheless, Serbia did place Sberbank into its special insolvency proceedings. The decisions taken by several third countries are noted in Table 1. Countries that support Russia have declined to follow suit, namely Belarus and Russia itself where the banks continue to operate.

5. It is not surprising that the close trading relationship between the EU and Russia, prior to the war, also included significant business activity from European banks. The banks with the largest exposures in Russia are, in order of asset size,

Raiffeisen Bank International (Austria), Societe Generale (France), UniCredit (Italy), Credit Agricole (France), Intesa Sanpaolo (Italy). As a result of the international sanctions and of Russian counter sanctions, the ability and indeed the corporate will to divest from Russia has been very challenging.

An area significantly impacted is the exposure to Russian securities due to the imposition of economic sanctions. This has meant securities brokers and dealers, holding Russian securities for their own or clients, have had to cease trading to comply with international sanctions and Russian sanctions. This has meant that clients have found it difficult to transfer funds from the sale of securities or even sell securities listed on Russian exchanges. In the UK for instance, it has led to special investment bank administration proceedings in order to manage the closure of brokers and dealers exposed to Russian securities trading for UK clients, residents and non-residents. The challenges associated with the adoption of sanctions has been on numerous fronts. For instance, it is unclear whether client assets can be returned and/or profits can be repatriated without breaching economic sanctions of various countries. Russian sanctions prohibited foreign residents from trading on the Moscow Exchange (MOEX). In respect of EU and UK sanctions, compliance focus is placed on residency and whether the transaction is in the UK or EU. Regarding US sanctions, compliance requires consideration of a nexus between the US and the client and/or transaction.

Table 1: The Resolution of Sberbank

Russia Federation						
Sberbank Russia (Ultimate Parent Entity: 100% State-Owned)						Going Concern
Open Joint Stock Company SberBank					Belarus	Going Concern
'Sberbank Of Russia' Joint Stock Company					The Republic of Kazakhstan	JSC Bereke Bank Sale of Business
European Union and European Banking Union	BU	SRB Decision Resolution/ National Insolvency	EU	Resolution Decision	Third Country	Recognition of SRB and/or EU NRA decisions?
Sberbank Europe AG	Austria	National Insolvency				
Sberbank d.d.	Croati a	Resolution Sale of Business				
Sberbank d.d.	Sloveni a	Resolution Sale of Business				
Sberbank Magyarorsz ág Zrt.			Hungary	Insolvency /Liquidation		
Sberbank CZ, a.s			The Czech Republic	Insolvency/ Liquidation		
Sberbank BH d.d.					Bosnia Herzegovina Sarajevo	Sale of Business Asa Banka Nasa I Snazna Dionicko Drustvo Sarajevo
Sberbank a.d. Banja					Bosnia Herzegovina)	Sale of Business

Luka					(together, the "Group")	Atos Bank A.D. Banja Luka
Nasa Aik Banka A.D. Beograd					Serbia	Dissolved
Sberbank CIB (UK) Limited					United Kingdom	Insolvency Proceedings
Sberbank (Switzerland) AG					Switzerland	Tradexbank AG Sale of Business
Sberbank JSC					Ukraine	Liquidation (2016)

Source SRB Decisions and Orbis Bank Focus

Box 1
The Impact of the Conflict on Ukraine Banking System

Ukraine introduced Martial Law on 24 February 2022.[56] It exercised its new powers to call up men aged 18 to 60 for military service, to support the war effort. It equally prioritised humanitarian assistance. Additionally, in order to prioritise the protection of its people and support the war effort, the central bank of Ukraine introduced a number of measures to safeguard the continuity of the banking system, and the access to liquidity and to demand deposits. [57] This section reviews the measures of the central bank of Ukraine and how it ensured the continuity of the banking, payment system and foreign exchange market in the midst of the war.[58]
It comes as no surprise that the banking system has experienced considerable stress as a result of the war. The war has significantly increased the number of non-performing loans and banks are increasing loan loss provisions to mitigate this. As people move to support the war effort, it will impact the continuity of the real economy.[59] Those losses are likely to arise from physical damage to collateral and non-performing loans to name a few, leading to significant loss of income.[60] The World Bank indicates: 'the total damage is estimated at US$26.3 million and potential losses

[56] Law of Ukraine On the legal regime of martial law (Bulletin of the Verkhovna Rada (VVR), 2015, No. 28, p.250)https://zakon.rada.gov.ua/laws/show/389-19#Text
[57] As Haas and Pivovarsky, explain these were managed via the 'Kyiv Approach' which introduced voluntary out-of-court restructuring of loans at p. 4-5.
[58] Oleksiy Druhov and Vira Druhova, *Banking System in Ukraine 2022: Before and in the Wartime*, *Bezpieczny Bank* (2022) 33-48.
[59] S&P Global, Ukrainian banks' profits crushed by war-related loan loss provisions, 24 August 2023 <https://www.spglobal.com/marketintelligence/en/news-insights/latest-news-headlines/ukrainian-banks-profits-crushed-by-war-related-loan-loss-provisions-71809065>
[60] World Bank, p. 23. – what is this paper? Needs ref, same for below

suffered by the banking sector are expected to be US$8.1 billion'.[61] The central bank recently highlighted a small decline in NPL's. This is possibly due to the delay in recording loans as NPL's and the policy of writing off retail loans.[62]

The challenge faced by the official safety net is the lack of reliable information about the actual losses. This is not surprising since the containment measures are ensuring continuity of the banking system and potentially camouflaging risks.[63] These measures extend to forbearance on regulatory prudential requirements as well. For instance, the increase in risk weights on consumer loans and the capital requirements for operational and market risk have both been postponed.[64] What may appear surprising is the relative stability of the deposit base in the country.[65] The banking system has not experienced bank runs due to the war. However, a few non-systemically important banks have been closed and put into liquidation proceedings due to insolvency, evidence of money laundering, and terrorist financing.[66]

The 2023 Financial Stability Report offers interesting insights into the impact of the conflict and into the relative stability of the economy and banking system.[67] The Report recognises the significant amount of international assistance it receives, and is committed to receiving over the next 4 years, has provided the much-needed stability. However, it is rather unsurprising that the central bank highlights weaknesses in the mortgage lending market, in view of the security risks and destruction of property. Household income is being maintained through payments to those attached to the military, to the government, and in state-owned companies. The weak consumer demand means deposits are relatively stable in the banking sector.

The payment system and the reliance on internet banking has been critical to safeguard trust in the banking system and preserve the bank and customer

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[61] World Bank p. 190.

[62] Banks' NPL Portfolio Drops by UAH 7 Billion in H1, 1 August 2023.
'As a reminder, the NBU improved its estimate of a potential portfolio loss caused by the war to around 20%, compared to the previous estimate of 30%, as the pessimistic scenario of prolonged adverse effects from electricity shortages did not materialize.'
<https://bank.gov.ua/en/news/all/obsyag-nepratsyuyuchih-kreditiv-u-bankah-u-pershomu-pivrichchi-skorotivsya-na-7-mlrd-grn>

[63] The World Bank highlights: 'several significant anti-crisis regulatory forbearance measures have been introduced, including deferral of sanctions on banks that breach minimum regulatory requirements (except for related party lending) during martial law. Audits of banks' statements for 2021 and regular annual stress tests/asset quality reviews (AQRs) have been postponed.' at p. 126.

[64] Financial Stability Report, 2023 at p. 44.

[65] World Bank: 'Overall, since the beginning of the war until mid-June, retail hryvnia deposits surged by 20 percent, while FX deposits declined by 4.9 percent.' At p. 126.

[66] NBU Adopts Decision to Revoke Banking License and Liquidate JSCB CONCORD JSC, 1 August 2023
https://bank.gov.ua/en/news/all/natsionalniy-bank-uhvaliv-rishennya-vidklikati-bankivsku-litsenziyu-ta-likviduvati-at-akb-konkord

[67] Ukraine Central Bank, Financial Stability Report 2023
<https://bank.gov.ua/admin_uploads/article/FSR_2023-H1_eng.pdf?v=4>

relationship. The capacity for electronic payments increased post-Covid and has played an even more critical role during the war. The demand for credit has recently improved despite the war.[68] The central bank survey for consumer loans and corporate loan has seen a significant increase in demand, thus in the latter case, ensuring finance for working capital. The lending rate and criteria has been relaxed to ensure that current circumstances do not precipitate a large number of insolvencies for corporations and small and medium-sized enterprises (SMEs), due to the disruption of war.

The banking sector has benefited from the high interest rate environment, as explained in the Ukraine Financial Stability Report 2023. As a result of this environment, banks (across all the different sectors) have posted profits, as net income increased by 51%. This is notwithstanding the significant credit risks, in specific geographical locations, they are exposed to and provisioned for since 2022.

The exposure of the banks to the potential losses of the corporate and retail sector is evident. The Ukraine banks are also heavily exposed to the state, with the banks holding significant amounts of sovereign bonds. The World Bank report indicates that this is a more recent situation since banks held in 2013 7% and in 2021 28% of their total assets in sovereign bonds.[69] Sovereign exposures are considered safe investments in comparison to other asset classes and they are incentivised by the generous capital adequacy allowances, in view of their zero-risk weight. Archarya and Steffen find that domestic banks increased their exposure to the sovereign in order to cement themselves as national champions and receive explicit or implicit support in times of trouble.[70] In view of this, domestic banks have been meeting their reserve requirements with the central bank by holding domestic government securities up to the maximum limit. In order to meet potential liquidity needs, the long-dated instruments can be pledged as collateral under the terms of the reserve requirements.

State-owned banks are playing a very important role during the war, despite the challenges they pose during normal times and the expectation of privatising such banks. This results in these banks holding even greater levels of state capital. The potential for a bank and sovereign vicious circle is extremely significant. Nonetheless, the status of state-owned banks also means they are less likely to fail in war circumstances. The level of deposits in state-owned banks has been significantly increasing. The two state-owned banks, Privatbank and Oschadbank, now account for

[68] For First Time Since Full-Scale War Broke Out, Banks Highlighted Rise in Demand for Consumer Loans and in Corporate Loan Application Approvals – Bank Lending Survey, 26 July 2023. <https://bank.gov.ua/en/news/all/vpershe-z-pochatku-povnomasshtabnoyi-viyni-banki-vidznachili-zrostannya-popitu-na-spojivchi-krediti-ta-kilkosti-shvalenih-kreditnih-zayavok-biznesu--rezultati-opituvannya-pro-umovi-bankivskogo-kredituvannya>

[69] World Bank (2022) at p. 125. – needs proper ref

[70] V Archarya and S Steffen, 'The Greatest Carry Trade Ever? Understanding Eurozone Bank Risks' (NBER Working Paper No 19039, Issued in May 2013.

over half of the country's banking network, and hold over 60% of retail deposits. The Central Bank of Ukraine explain the implicit guarantee offered to state-owned banks, in contrast to some private banks. The Financial Stability Report 2023 notes: in times of crisis, the state may be the most reliable shareholder that has funds and is willing to support domestic banks. With this in mind, clients perceive state-owned banks as a safe haven and tend to re-deposit their savings in them during crises.
The World Bank notes a number of short- to long-term steps Ukraine could take to ensure financial stability and capacity to support recovery and reconstruction. In the first instance, continuous efforts need to be put in to understand the extent of the losses and the size of the recapitalisation challenges that lie ahead. To ensure there is a good understanding of which banks are more exposed to losses and which are viable from a forward-looking perspective. This information would also inform the exposure of the deposit insurance scheme to depositors, if a bank were to fail, and minimise the potential disruption to the critical operations of the banking system. In the long-term, the World Bank proposes an assessment of when it would be appropriate to transition from measures put in place under martial law to normal market rules and requirements. This would, nonetheless, require a coherent NPL strategy to assist with the recovery phase. Special programmes will need to be put in place for viable corporate to enable them to continue as a going concern. Significant efforts will also need to be put in place to recover insured losses. In line with this is the recommendation that a special war insurance pool is put in place to support critical sectors of the economy, such as the agricultural sector.