FINANCIALIZATION, ENVIRONMENT AND VALUES

FINANCEIRIZAÇÃO, MEIO AMBIENTE E VALORES

FINANCIALIZACIÓN, MEDIO AMBIENTE Y VALORES

Ismail ERTÜRK[1]
e-mail: ismail.erturk@manchester.ac.uk

How to reference this article:

ERTÜK, I. Financialization, environment and values. **Estudos de Sociologia**, Araraquara, v. 28, n. esp. 2, e023018, 2023. e-ISSN: 1982-4718. DOI: https://doi.org/10.52780/res.v28iesp.2.18156

| **Submitted**: 15/08/2023
| **Required revisions**: 19/10/2023
| **Approved**: 05/11/2023
| **Published**: 29/12/2023

[1] Univeristy of Manchester, Manchester – United Kingdom. Senior Lecturer in Banking and Director for the Banking Programs.

ABSTRACT: The mobilization of finance to contribute to the programmes addressing environmental emergencies is characterized by voluntary initiatives and regulatory risk management. The voluntary initiatives tend to be market-driven and led by the United Nation and are increasingly organized under the Environmental, Societal and Governance (ESG) framework. Central banks, on the other hand, drive a regulatory push to make the financial system stable in transitioning to a low carbon economy. Both trends represent a financialized approach to the climate and environmental risks. This paper will introduce an alternative perspective on financialization of nature by critically rethinking central banks' climate risk agenda and the United Nations endorsed Environmental, Social and Governance (ESG) technologies that create an environmental simulacrum in capital markets. This paper proposes an activist research agenda inspired by the philosopher Serres's work on nature and artistic reflections on environment.

KEYWORDS: Financialization. Green finance. ESG. Environmental activism.

RESUMO*: A mobilização de recursos financeiros para contribuir com os programas de combate a emergências ambientais é caracterizada por iniciativas voluntárias e gerenciamento de riscos regulatórios. As iniciativas voluntárias tendem a ser orientadas pelo mercado e lideradas pelas Nações Unidas e estão cada vez mais organizadas sob a estrutura Ambiental, Societal e de Governança (ESG – Sigla em inglês). Os bancos centrais, por outro lado, impulsionam uma pressão regulatória para tornar o sistema financeiro estável na transição para uma economia de baixo carbono. Ambas as tendências representam uma abordagem financeirizada dos riscos climáticos e ambientais. Este artigo apresentará uma perspectiva alternativa sobre a financeirização da natureza, repensando criticamente a agenda de riscos climáticos dos bancos centrais e as tecnologias ambientais, sociais e de governança (ESG) aprovadas pelas Nações Unidas que criam um simulacro ambiental nos mercados de capitais. Este documento propõe uma agenda de pesquisa ativista inspirada no trabalho do filósofo Serres sobre a natureza e nas reflexões artísticas sobre o meio ambiente.*

PALAVRAS-CHAVE*: Financeirização. Finanças verdes. ESG. Ativismo ambiental.*

RESUMEN*: La movilización de financiación para contribuir a los programas que abordan las emergencias medioambientales se caracteriza por las iniciativas voluntarias y la gestión reglamentaria del riesgo. Las iniciativas voluntarias tienden a estar impulsadas por el mercado y dirigidas por las Naciones Unidas, y se organizan cada vez más en el marco de los principios medioambientales, sociales y de gobernanza (ESG). Los bancos centrales, por su parte, impulsan una regulación para que el sistema financiero sea estable en la transición hacia una economía baja en carbono. Ambas tendencias representan un enfoque financiarizado de los riesgos climáticos y medioambientales. Este documento presentará una perspectiva alternativa sobre la financiarización de la naturaleza, replanteando críticamente la agenda de riesgos climáticos de los bancos centrales y las tecnologías medioambientales, sociales y de gobernanza (ESG) respaldadas por las Naciones Unidas, que crean un simulacro medioambiental en los mercados de capitales. Este documento propone una agenda de investigación activista inspirada en la obra del filósofo Serres sobre la naturaleza y en las reflexiones artísticas sobre el medio ambiente.*

PALABRAS CLAVE*: Financiación. Finanzas verdes. ESG. Activismo medioambiental.*

Introduction

Both mainstream and critical literatures on finance and environment have so far primarily problematized the organization of finance in capital markets - its initiatives, motifs, instruments, and calculative logics regarding investments to improve, even transform environmental conditions globally (CALVELLO, 2009; REVELLI; VIVIANI 2015; OUMA *et al*., 2018; BRACKING 2019). Then recently the organisation of finance for environmental issues has expanded to include banking by the formation of the Network for Greening of the Financial System (NGFS) in 2017 by some leading central banks that see the probable destabilising impact of climate risk on financial markets as a threat to financial stability (CARNEY *et al*. 2019; NFGS, 2019). The United Nations Environmental Programme's Finance Initiative (UNEP FI) expanded the earlier UN initiatives of Principles for Responsible Investment (PRI) launched in 2006 and the Principles for Sustainable Insurance (PSI) launched in 2012 to include banking. And in 2019, they launched the Principles for Responsible Banking (PRB) initiative with 130 banks that collectively represent one third of all banking assets globally. These two separate initiatives, the NGFS and the PRB, derive social and business legitimacy from the supranational agreements at the UN level on dealing with the social and environmental problems faced by the humanity. However, they belong to two different institutional histories. The PRB form a framework for the banking industry to align business objectives with the UN Sustainable Development Goals (SDGs) and the Paris Agreement on climate change (UNEP FI, 2019). The NGFS aims to develop global supervisory and regulatory capabilities to prevent probable systemic financial risks that may arise from transitioning to a carbon neutral economy after the Paris Agreement of 2015.

Both NGFS and PRB invite revisiting the problematization of the environmental finance in the earlier critical literature. Especially the emergence of the financial logic as central bank regulatory framework in intervening in the economic consequences of climate risk under the NGFS initiative necessitates a broader analytical investigation than the earlier market-focused literature (PRYKE, 2007; MACKENZIE, 2009; TRIPATHY, 2017). A technocratic mandate for climate risk related financial stability necessitates a critical enquiry that needs to problematize finance and financialization for socio-economic dynamics that go further than social designing of markets.

Organization of responsible finance in capital markets to contribute to the environmental and social causes has a set of non-standardized metrics that are known under the acronym ESG-Environmental, Social and Governance (OECD, 2017). Asset managers and investors subscribe to the ESG principles to be impactful on environmental and social issues in the economy. Companies are rated under several ESG criteria that influence their capital market funding. And recently the financial media and industry regularly report superior financial performance of funds that invest in companies with high ESG rankings (JOLLY, 2020, TETT, 2020). The calculative logic of ESG and its correlative research paradigm in academia and industry have collectively given rise to a stable but contestable truth regime, in Foucauldian sense, with validation protocols regarding finance and environment. In both mainstream academic research and industry ESG is confirmed as truth about measuring, judging, and valuing the corporations' contribution to the societal goals regarding environment and all stakeholders. This confirmation is expressed in financial consequences that are believed to be causally related to ESG ratings. At the same time both in academia and in the industry, there is equally strong evidence that ESG ratings are not standardized and the calculative universe of ESG is rather chaotic and there are significant inconsistencies in ratings produced by ESG rating agencies (CHRISTOPHERS, 2019; BERG *et al*., 2019). In Section 1 below, I will discuss the central banks' new climate mandate as a financialized intervention that prioritize financial stability not societal responsibilities of finance. Then in Section 2, I will argue that the UN endorsed private ESG initiative is a self-referential financial technology, a characteristic of financialization that is increasingly questioned even by the finance insiders. In the concluding section I propose an activist academic research approach that aims impact in the new context of universities with social responsibility goals.

Green financial stability: central banks as new actors of financialization in environmental agenda

In the post-Covid world central bank technocracy has further expanded its ambitions on environmental issues by announcing the urgency of financing a green economic recovery through quantitative easing (KHALAF; ARNOLD 2020). The central banks' involvement in environmental issues has taken another dimension when one of the most influential central bank governors in recent history, Mark Carney, the ex-governor of the Bank of England, increased his technocratic celebrity status in green finance and climate risk after becoming the UN's special envoy for climate and finance in 2020 and leading, as a co-chair, the Glasgow Financial Alliance for Net Zero at COP26. This unusual career move for a prominent central banker poses an anomaly for our existing Weberian and Bourdieusian understanding of the careers of central bank technocrats (ABOLAFIA, 2012; ADOLPH, 2013; LEBARON, 2008). The revolving door that circulates technocrats from monetary and fiscal authorities to the fictitious worlds of Wall Street and the City, this time, has an exit to a position that is firmly embedded in earthly matters: climate change and the future of the planet.

Mark Carney made a speech at Lloyd's of London in London on 29 September 2015 at one of the magnificent altars of world finance at the first City Dinner in their "magnificent, eponymous 'Room' (CARNEY, 2015). In his speech Carney solemnly reasoned to convey the economic consequences of climate change to the insurance sector and the broader financial sector and warned the sector that regulatory measures need to be taken for financial stability purposes, a mandate that central banks are empowered with by political authority. He urged the financial sector to calculate beyond their profit maximizing short-term horizons. Hence the title of his speech "The tragedy of horizon".

> Climate change is the Tragedy of the Horizon. We don't need an army of actuaries to tell us that the catastrophic impacts of climate change will be felt beyond the traditional horizons of most actors – imposing a cost on future generations that the current generation has no direct incentive to fix (CARNEY, 2015, p. 4, our translation).

Since leaving the Bank of England Carney's technocratic celebrity status in green finance has gained new heights when he became UN Special Envoy on Climate Action and Finance in 2020 and then leading the foundation of Glasgow Financial Alliance for Net Zero (GFANZ). Since Carney's historic "Tragedy of the Horizon" speech the central banking has globally expanded its financial stability mandate to cover an orderly transitioning of financial markets to net-zero economy and has formed a voluntary central banking initiative called "Network for Greening the Financial System (NGFS)" in 2017. Central banks' global organisation Bank for International Settlement that coordinates central bank regulatory initiatives globally since 1980s and has created the (in)famous risk algorithm Basel Capital Adequacy rules for banking has assumed the thought leadership in green regulation of banking by publishing the "Green Swan" book in 2020 which referenced Carney's famous "tragedy of the horizon" speech.

The premise of the central bank intervention on climate risk assessment in banking is that achieving the Paris Agreement and the Glasgow Pact goals to reduce global warming is very likely to financially destroy fossil fuel firms and consequently their lenders. The risk rationality at work at today's financial regulators predicts serious bank failures and collapse of share prices in stock markets that together are very likely to create a perfect storm of catastrophic financial crisis globally. In recent years Mark Carney, in his elite technocratic capacity as overseer of global financial stability at Financial Stability Board, has already been intellectually leading an international network of financial regulators that aims to formalize a climate risk modelling framework for the banking sector. Carney's new role at the UN, in a way, reinforces the power of financialized logic as solution to contemporary societal problems. The UN has already formed a strong network with the business and financial elites through its other programmes on sustainability and environment like the UN Global Compact and the UN Environmental Programme. Now a very prominent central banker, who has the reputation for "saving" the present-day capitalism from a historical collapse through unconventional monetary policy and macro-prudential regulation, joins this group of business and financial elites who work with the UN on environmental and societal issues, replacing Michael Bloomberg who had left the position to enter the 2020 race for the US presidency.

Carney's new role at the UN and then his leading role in the formation of the Glasgow Financial Alliance for Net Zero further strengthens finance's involvement at the supranational level in seeking solutions to the environmental problems by introducing a new financial logic about climate related financial instability. The humanity cannot seem to be able to speak meaningfully about environmental risk at the UN level without introducing a specialized language about finance and environment, without asking the services of financialization. Through this evolving signification power and the consequent regulatory and market practices money becomes a governance mechanism to dramatically influence the planet's future. Through their lending practices banks are expected to direct capital to carbon-neutral economic activities thus promoting a regulation-led market solution to the humanity's biggest existential problem today. The new President of the European Central Bank Christine Lagarde, the ex-head of International Monetary Fund (IMF), has started her job by explicitly being associated with a new mandate for central banks: using monetary policy for a green economy. Her successor at the IMF Kristalina Georgieva endorsed central bankers' regulatory responsibility for green finance at the first high-level IMF meeting she presided over in October 2019 (GEORGIEVA, 2019). The Bank of England has become the first central bank to announce that it will carry out a stress test for environmental risk at the UK banks (BANK OF ENGLAND, 2019). In parallel and also independently of regulatory technologies regarding climate risk, individual banks have been developing calculative practices that would reshape their balance sheets in response to the white noise of sustainability, corporate social responsibility, environmental standards introduced/announced by central and local governments, and pressure from some institutional shareholders. For example, many European banks such as Crédit

Agricole SA, BNP Paribas SA, ING Groep NV and Banco Bilbao Vizcaya Argentaria SA have published clear plans and deadlines around phasing out lending to companies in fossil fuels. And recently some institutional investors managing a total of £130 billion in assets has called on the U.K. bank Barclays to phase out its financing of fossil fuel firms that are not aligned with the Paris Agreement on climate change (LAIDLAW, 2020). However investigative research by NGOs like Rainforest Action Network (2020) and World Resources Institute (2019) produce evidence that there are significant gaps between what some banks report as commitment and targets and what they actually do in lending to fossil fuel companies.

The suitability and effectiveness of central bank knowledge on risk management in banking too are questionable. The regulatory intentions of central banks on climate risk are translated into operational algorithm for risk management that is derived primarily from modern finance theory that failed in predicting the losses suffered in previous sudden collapses of asset prices. Epistemic resources of central banks themselves are not stress tested but the central banks heroically launch risk modelling based on their questionable epistemic resources, theoretical and empirical, to stress-test banks' exposure to climate risk. As we discovered after the Great Financial Crisis of 2007 the central banks could not see a vast section of the financial system that they called "shadow banking" and held responsible for the subprime crisis (ERTÜRK, 2017). Similarly, the risk management technology of Basel that the central banks had introduced in banking that was supposed to adequately capitalize banks against all possible losses on their balance sheets and off-balance sheets. Gaming of Basel by banks meant that banks looked adequately capitalized against all risks except the kind of risks that the subprime securitization instruments had exposed them to. Consequently, central banks updated Basel II with Basel III algorithm. Central banks fail to acknowledge the limits of their epistemological resources that may cause failures in creating successful risk modelling in dealing with climate related risks in banking. And, in the context of the valuation of environmental intangibles Fourcade (2011) argues how three large maritime oil spills in the U.S. and France have revealed the social and cultural complexities in calculating the worth of damages to the nature in two different socio-cultural settings. Therefore, both the knowledge deficit in central bank risk modelling and the absence of the problematization of socio-cultural dimensions in nature valuations in central bank economics are serious weaknesses of the central bank regulatory responses to the climate risk in particular and the ecological risks in general.

ESG investments and financialized simulacrum of green economy

The global institutional context of ESG investment is the UN-initiated Principles for Responsible Investment (PRI) that was launched in 2006 as a partnership between the UN Global Compact and the UN Environment Programme Finance Initiative (UNEP FI). The number of signatories to the Principles has increased from 63 in 2006 to more than 5,020 in 2022. Also, the total assets under management by the signatories has increased from USD 6.5 trillion in 2019 to USD 121 trillion in 2022 (PRI, 2019; 2022). Another measure of responsible investment by Global Sustainable Investment Alliance shows that the size of all types of professionally managed responsible investment has reached $35.3 trillion in 2020, representing 35.9% of all assets managed globally, increasing from 27.9% in 2016 (GLOBAL SUSTAINABLE INVESTMENT ALLIANCE, 2020).

However, all this exponential increase in the membership of this group only demonstrates subscription to its aspirations. What actual changes have happened in the behavior of the companies that these asset managers invest in are not known. Even the PRI itself acknowledges this gap in its independent review of the first ten years of PRI's activities and concludes in this report that there needs to be a shift in the purpose of the signatories to the Principles from being inspirational to practicing their aspirations because this is the rational thing to do (PRI, 2016, p. 4). PRI lists three material factors to justify its characterization of responsible investment as a rational choice: client demand, materiality and regulation[2]. PRI argues that the clients of fund managers demand transparency and activism on environmental, social and governance choices (FINK, 2018).

So far among the three factors that PRI proposes as evidence for rational choice the materiality receives greater academic and industry interest. There is almost a universal unanimity both in academia and investment professionals that investing in companies with good ESG performance generates superior financial performance (FRIEDE *et al.*, 2015; HALL, 2018; CREDIT SUISSE, 2015). As PRI has expanded from equity investors to fixed-income investors the rationale for joining the PRI made explicit reference to the compatibility of pursuing financial returns with the environmental and societal objectives (PRI, 2018). Although Friede *et al.* (2015) found that, through vote-counting and meta-analysis methods on 2,200 studies since 1970, the empirical studies examining the relationship between ESG investing and corporate financial performance support a positive relationship, they also observed that "More

[2] More info at: https://www.unpri.org/about-us/what-are-the-principles-for-responsible-investment

than half of assets managed globally are managed by signatories to PRI. But a quarter of investors consider non-financial factors in their investment analysis and about 10% in the investment industry are trained in ESG investing" (FRIEDE *et al*., 2015, p. 211, our translation).

There are also concerns that the observed correlation between high ESG characteristics and higher financial performance is a self-reinforcing phenomenon because as the consensus regarding this positive relationship in investment strategies becomes widely accepted in the investment community funds flow to the shares of the companies with high ESG rating that further pushes the valuations of these companies, which is known as "momentum investing". The financial returns therefore seem to be explained by self-referential capital market dynamics rather than true ESG profile of the companies in the stock market. For example, technology companies attract ESG investments not because they contribute to the environmental and social welfare but because they do not directly cause environmental damage. Such investments in big tech companies like Microsoft, Google, Facebook etc. can possibly cause a destabilizing bubble in stock markets. Also, the likes of Amazon may not have a big carbon footprint and therefore is seemingly good in "E" of the ESG but given the working conditions and the pay levels in their warehouses it causes detrimental damages in societal terms (POWELL, 2020).

The representative realm of ESG-driven environmental and social behavior of finance therefore is likely to create an outcome that disconnects capital markets from the real economy in transitioning to a carbon neutral and socially more cohesive economy. The reality of capital markets does not mirror the reality of the planet. Capital markets become a simulacrum rather than a true arbiter of the choices of individual investors and supranational institutions like UNEP. For example, Unilever, a company that is used as case study for its environmental strategy, has come under attack in the stock market by activist hedge fund managers for not delivering shareholder value. Unilever had to use its financial resources to fight back against this speculative attack rather than using them for research and development for more environmentally friendly products (EDGECLIFFE-JOHNSON, 2018). PRI movement had no voice or impact on this highly visible stock market attack on the corporate world's leader on environmental and sustainable corporate strategy. Another highly visible corporate case involved Thames Water, a privatised water utility in the UK that was fined for river pollution in 2017. Thames Water had a complex ownership structure but the asset management firm responsible for managing the owners' funds was Macquarie Capital Funds, part of the Australian financial institution Macquarie Group. Macquarie Group is a signatory of PRI since 2015 through Macquarie Asset Management. Again, there was not cost for Macquarie Group as a PRI signatory for being involved in a major environmental damage intentionally in order to achieve high financial returns (ALLEN; PRYKE, 2013; PLIMMER; ESPINOZA, 2017). As these two very highly visible corporate cases demonstrate there is a gap between ESG reality and corporate world's environmental performance. The simulacrum of financialized ESG technologies however promote an investment strategy based on the narrative that investors in companies with high ESG ratings outperform the market. Green washing can take the form of a capital market simulacrum. In banking too being signatories to the UNEP FI's Principles for Responsible Banking does not equate to bank finance for environmental betterment. For example, JPMorgan Chase & Co is in the World Resources Institute's list of banks that has sustainable commitment, but the same bank leads the table of banks that finance carbon production (PINCHOT; CHRISTIANSON, 2019; RAINFOREST ACTION NETWORK, 2020).

This is not a new phenomenon in financialized capitalism. Financialized capitalism brings into existence financial return calculations in stock markets as truth regime of economic and social value. The proponents of shareholder value maximization principle have promoted this ideology as the true mechanism of innovative firms and investments that would produce welfare benefits for the society (FLIGSTEIN; SHING, 2007; LAZONIC, 2010; ERTÜRK, 2020). ESG technologies through metrics, indexes, accounting standards, etc. collectively produce an effect of financial innovation that can efficiently allocate capital for environmental and societal betterment. As such ESG as a financial innovation producing societal benefits is yet another story in mainstream financial innovation literature that always propose financialized solutions to the present-day socio-economic problems (ENGELEN *et al*., 2010).

And recently there has been increasing skepticism in the business and financial world about their own commitment to the ESG movement. German asset manager DWS, majority owned by Deutsche Bank, is being investigated for misleading investors on the ESG credentials of some of funds they sold. The US Securities and Exchange Commission fined BNY Mellon for misleading investors on ESG funds. HSBC's asset management head had to resign after questioning the objectives of ESG investing that he was supposed to promote (WALKER, 2022; AGNEW *et al.*, 2022). The critical literature on financial innovation and financialization, however, tends to present central banks and ESG initiatives as inevitable trajectories of financialization where a homogeneous logic of finance can be seen expanding successfully to the remote corners of socio-economic life (BRACKING, 2020; LANGLEY, 2020). Since a paradigmatic theory of financialization supported by canonical texts and authors does not exist

(CHRISTOPHERS, 2015; MADER *et al*., 2020) this teleological view of financialization has a weak theoretical resistance to overcome and can be conveniently applied to the cases where finance has a presence. However, financialization's presence in social life can exhibit inconsistencies, irregularities and even contradictions. Its presence does not always mean a clockwork efficiency.

Conclusion: the call for an academic activist research on money and environment

The British academics' union, UCU, officially promotes environmentally friendly measures and the pension fund of the academics, USS, has announced steps to divest from fossil fuels (UNIVERSITY AND COLLEGE UNION, 2020; UNIVERSITIES SUPERANNUATION SCHEME, 2022). Individual universities to commit themselves to carbon free investments. My university, the University of Manchester, has organized its research centers around the themes related to environmental and societal problems including sustainability and climate change. Also, research with societal and environmental impact is explicitly supported (THE UNIVERSITY OF MANCHESTER, 2017). Of course, the metrics of such impact are not universally agreed and the instrumentalization of engagement with non-academic audiences for environmental and societal purposes is a contested topic. But nevertheless, such context of knowledge production on climate and environmental emergencies in academia invites self-reflection for academics researching on financialization of environment. Bennett (1992) argued a similar activism in policy making regarding cultural industries when the high-income countries, especially Australia and the UK, were developing and implementing economic policies for post-industrial urban growth through economic instrumentalization of culture. In this current context of academic institutions promoting teaching and research strategies on environment I will reflect on the ethical dimensions of academic work on financialization of environment.

For this purpose, I will borrow from the French philosopher Michel Serres' work on the philosophy and ethics of environment. The environmental agenda, if we agree with the science that predicts fatal risks to life on earth, invites new radical ways of thinking and using language about money and environment. For example, Serres proposes that we should "… forget the word environment …". Because this choice of word in our discussions

> […] assumes that we humans are at the center of a system of nature […] Earth existed without our unimaginable ancestors, could well exist today without us, will exist tomorrow or later still, without any of our possible descendants,

> whereas we cannot exist without it. Thus, we must indeed place things in the center and us at the periphery, […] (SERRES, 1995, p. 33, our translation).

The scientist James Lovelock whose book *Gaia*, first published in 1979, has had a big impact on environmental awareness, too, draws attention to the importance of the conceptual framing of the power relations between the Earth, as a complex living system, and humans as a dominant animal species. "If Gaia exists, the relationship between her and man, a dominant animal species in the complex living system, and the possibly shifting balance of power between them, are questions of obvious importance" (LOVELOCK, 2016, p. 11, our translation).

Some finance academics with critical perspectives on their disciplines are not too far from philosophers and scientists in proposing a radical reconsideration of the role of finance theory and practice in dealing with environmental issues. "In its current form, academic finance hinders the emergence of sustainable practices by legitimizing the selfish decisions of corporate managers, discrediting alternative representations of the organization, and aligning policy decisions with financial market interests and representations" (LAGOARDE-SEGOT; PARANQUE, 2017, p. 657, our translation). One possible way forward can be discussing the implications of the following proposition for research on money and environment:

> Through exclusively social contracts, we have abandoned the bond that connects us to the world, the one that binds the time passing and flowing to the weather outside, the bond that relates the social sciences to the sciences of the universe, history to geography, law to nature, politics to physics, the bond that allows our language to communicate with mute, passive, obscure things-things that, because of our excesses, are recovering voice, presence, activity, light. We can no longer neglect this bond (SERRES, 1995, p. 48, our translation).

Most of critical literature on financialization of the environment is concerned about the balance of power between markets and society through the lenses adopted from Polanyi's work (POLANYI, 2002). Environmental crisis threatens both markets and society. The central banks' intrusion to the environmental agenda is a manifestation of this awareness in a language that they are comfortable with – systemic risk. The simulacrum of ESG, on the other hand, has a potential to tilt the balance of power between markets and society further in favor of the markets with allocative and distributive consequences that are socially and environmentally detrimental. Activist academic research can aim to develop a conceptual framework for a governance for money that introduces physical measures of performance to replace financial measures that financialization tends to naturalize. Such governance for money needs to aim macro market and institutional structures that are driven by bottom-up socio-economic values of ultimate household investors and savers. Since the 2007 financial crisis the dysfunctionality of the financial system is widely acknowledged but has not been remedied. The environmental crisis invites radical thinking on and re-design of the relationship between money and environment.

Such activist research should be based on a dialogue between the art world, academics, NGOs, activists, and the financial and business world. A new language and a different logic about values and knowledge need to be collectively imagined by cultural, societal, economic, and scientific communities. Michel Serres articulated sharply the collective aspect of climate and environmental risks. He used art, the painting by Goya named *Fight with Cudgels*, to point out that there is no winner at a fight where the adversaries fight on a quicksand- the quicksand will devour both the winner and the loser before the fight ends. Hence the urgency to fight collectively the quicksand, the climate emergency, environmental deterioration and to rethink our local priorities, values, and knowledges for global common good. The German filmmaker Wim Wenders brought such success in fighting the quicksand to our attentions in his documentary film, *The Salt of the Earth*, on the Brazilian social photographer and economist Sebastião Salgado. Salgado has produced effective photographic expressions of the social consequences of human-made environmental catastrophes caused by pure profit-seeking economic activities. Salgado and his wife Lélia, then, had a chance to reverse some of environmental damages. They have regenerated a 1,754-acre Atlantic Forest that was destroyed by Salgado's cattle-farming parents. It took planting two million trees, using Vale's, Brazil's notorious mining company, regeneration engineers and resources, and twenty years to completely regenerate the biodiversity of this huge land.

Financial sector and businesses need to leave their bubbles of knowledge and values within which they self-referentially try to deal with environmental issues constrained by suspect quantitative risk models, impulse for short-term monetary returns, and constant search for high executive pay. Conversations and dialogues with artists, humanities scholars, activists are as important as finance and businesses organizing themselves around institutional frameworks like Environmental, Social and Governance (ESG) reporting, Principles for Responsible Investment (PRI) ambitions, stock market sustainability indexes, green taxonomies of industries, etc. But equally important is the society's engagement with the money managers to propose alternative economic values and knowledges in deployment of their savings for environmental and social purposes. An activist academic research on environment and money should de-construct the financialization strategies at all levels and promote knowledge and policy to resist the natural tendency of finance to act self-referentially on climate and ecology.

REFERÊNCIAS

ABOLAFIA, M. Y. Central banking and the triumph of technical rationality. *In*: CETINA, K. K.; PREDA, A. **The Oxford Handbook of the Sociology of Finance**. Oxon: Oxford University Press, 2012. p. 94-114.

ADOLPH, C. **Bankers, bureaucrats, and central bank politics**: The myth of neutrality. Cambridge: Cambridge University Press, 2013.

AGNEW, H.; KLASA, A.; MUNDY, S. How ESG investing came to a reckoning. **Financial Times**, June 6, 2022. Available: https://www.ft.com/content/5ec1dfcf-eea3-42af-aea2-19d739ef8a55. Access: 20 Feb. 2022.

ALLEN, J.; PRYKE, M. Financialising household water: Thames Water, MEIF, and 'ring-fenced'politics. **Cambridge Journal of Regions, Economy and Society**, [*S. l.*], v. 6, n. 3, p. 419-439, 2013.

BANK OF ENGLAND. T**he 2021 biennial exploratory scenario on the financial risks from climate change**. [*S. l.*], 2021. Available: https://www.bankofengland.co.uk/-/media/boe/files/paper/2019/the-2021-biennial-exploratory-scenario-on-the-financial-risks-from-climate-change.pdf. Access: 20 Feb. 2022.

BENNETT, T. Putting policy into cultural studies. *In*: GROSSBERG, L.; NELSON, C.; TREICHER, p. (ed.). **Cultural studies**. New York: Routledge,1992. p. 23-37.

BERG, F.; KOELBEL, J. F.; RIGOBON, R. Aggregate confusion: The divergence of ESG ratings. **Forthcoming Review of Finance**, [*S. l.*], 2019. Available: https://ssrn.com/abstract=3438533. Access: 20 Feb. 2022.

BRACKING, S. Financialisation, climate finance, and the calculative challenges of managing environmental change. **Antipode,** [*S. l.*], v. 51, n. 3, p. 709-729, 2019.

BRACKING, S. Financialization and the environmental frontier. *In:* MADER, P.; MERTENS, D.; VAN DER ZWAN, N. (ed.). **The Routledge International Handbook of Financialization**. Oxon: Routledge, 2020. p. 213-223.

CALVELLO, A. **Environmental alpha**: Institutional investors and climate change. Hoboken, NJ: Wiley, 2009.

CARNEY, M, GALHAU, F. V.; ELDERSON, F. The financial sector must be at the heart of tackling climate change. **The Guardian**, 17 abr. 2019. Available: https://www.theguardian.com/commentisfree/2019/apr/17/the-financial-sector-must-be-at-the-heart-of-tackling-climate-change. Access: 20 Feb. 2022.

CARNEY, M. **The Tragedy of Horizon**. Speech given at Lloyd's of London. 29 set. 2015. Available: https://www.bankofengland.co.uk/speech/2015/breaking-the-tragedy-of-the-horizon-climate-change-and-financial-stability. Access: 20 Feb. 2022.

CHRISTOPHERS, B. Environmental beta or how institutional investors think about climate change and fossil fuel risk. **Annals of the American Association of Geographers**, [*S. l.*], v. 109, n. 3, p. 754-774, 2019.

CHRISTOPHERS, B. The limits to financialization. **Dialogues in human geography**, [*S. l.*], v. 5, n. 2, p. 183-200, 2015.

CREDIT SUISSE. **Finding Alpha in ESG**. Available: https://www.msci.com/what-is-esg. Access: 12 June 2021.

DEMPSEY, J. The Financialization of Nature Conservation? *In:* CHRISTOPHERS, BRETT.; LEYSHON, A.; MANN, G. (ed.). **Money and finance after the crisis**: Critical thinking for uncertain times. Chichester: John Wiley & Sons, 2017. p. 191-216.

EDGECLIFFE-JOHNSON, A. Unilever chief admits Kraft Heinz bid forced compromises. **Financial Times**, 27 Feb. 2018. Available: https://www.ft.com/content/ea0218ce-1be0-11e8-aaca-4574d7dabfb6. Access: 20 Feb. 2022.

ENGELEN, E.; ERTURK, I.; FROUD, J.; LEAVER, A.; WILLIAMS, K. Reconceptualizing financial innovation: frame, conjuncture and bricolage. **Economy and Society**, [*S. l.*], v. 39, n. 1, p. 33-63, 2010.

ERTÜRK, I. Shadow banking: a story of the Doppelgänger (the Double) in science of finance. **Journal of cultural economy**, [*S. l.*], v. 10, n. 4, p. 377-392, 2017.

ERTÜRK, I. Shareholder Primacy and Corporate Financialization. *In:* MADER, P.; MERTENS, D.; VAN DER ZWAN, N. (ed.). **The Routledge International Handbook of Financialization**. Oxon: Routledge, 2020 p. 43-55.

FINK, L. **Larry Fink's Annual Letter to CEOs**: A Sense of Purpose. 2018. Available: https://www.blackrock.com/hk/en/insights/larry-fink-ceo-letter. Access: 6 May 2022.

FLIGSTEIN, N.; SHIN, T. Shareholder Value and the Transformation of the US Economy, 1984–2000 1. Oxford, UK: Blackwell Publishing Ltd. **Sociological forum**, [*S. l.*], v. 22, n. 4, p. 399-424, 2007.

FOURCADE, M. Cents and Sensibility: Economic Valuation and the Nature of "Nature". **American Journal of Sociology**, [*S. l.*], v. 116, n. 6, 2011.

FRIEDE, G.; BUSCH, T.; BASSEN, A. ESG and financial performance: aggregated evidence from more than 2000 empirical studies. **Journal of sustainable finance & investment**, [*S. l.*], v. 5, n. 4, p. 210-233, 2015.

GEORGIEVA, K. The adaptive age. **Finance & Development**, Dec. 2019. Available: https://www.imf.org/external/pubs/ft/fandd/2019/12/climate-change-and-the-age-of-adaptation-georgieva.htm. Access: 6 May 2022.

GLOBAL SUSTIANABLE INVESTMENT ALLIANCE. **2020 Global Investment Review**. Available: http://www.gsi-alliance.org/trends-report-2020/. Access: 10 May 2022.

HALL, M. ESG: **Evolution of sustainable investing and modern practice**. [*S. l.*], 2018. Available: https://www.ipe.com/reports/special-reports/top-400-asset-managers/esg-evolution-of-sustainable-investing-and-modern-practice/10025008.article. Access: 2 June 2022.

JOLLY, J. Investing in firms with better record on social issues pays, study finds. **The Guardian**, 18 May 2020. Available: https://www.theguardian.com/business/2020/may/18/investing-in-firms-with-better-record-on-social-issues-pays-study-finds. Access: 6 May 2022.

KHALAF, R.; ARNOLD, M. Lagarde puts green policy top of agenda in ECB bond buying. **Financial Times**, 8 jul. 2020. Available: https://www.ft.com/content/f776ea60-2b84-4b72-9765-2c084bff6e32. Access: 6 May 2022.

KRUEGER, P.; SAUTNER, Z.; STARKS, L. T. The importance of climate risks for institutional investors. **The Review of Financial Studies**, [*S. l.*], v. 33, n. 3, p. 1067-1111, 2020.

LAGOARDE-SEGOT, T.; PARANQUE, B. Sustainability and the reconstruction of academic finance. **Research in International Business and Finance**, [*S. l.*], v. 39, p. 657-662, 2017.

LAIDLAW, J. Barclays shareholder resolution signals investor impatience on climate risk. **S&P Global Market Intelligence**, 24 Feb. 2020. Available: https://platform.mi.spglobal.com/web/client?auth=inherit#news/article?KeyProductLinkType=2&id=56931466. Access: 6 May 2022.

LANGLEY, P. The folds of social finance: Making markets, remaking the social. **Environment and Planning A: Economy and Space**, [*S. l.*], v. 52, n. 1, p. 130-147, 2020.

LAZONICK, W. Innovative business models and varieties of capitalism: Financialization of the US corporation. **Business history review**, [*S. l.*], v. 84, n. 4, p. 675-702, 2010.

LEBARON, F. Central bankers in the contemporary global field of power: a 'social space'approach. **The Sociological Review**, [*S. l.*], v. 56, n. 1 supl., p. 121-144, 2008.

LOFTUS, A.; MARCH, H. Financialising nature? **Geoforum**, [*S. l.*], v. 60, p. 172-175, 2015.

LOVELOCK, J. **Gaia**: A New Look at Life on Earth. Oxford: Oxford University Press, 2016.

MACKENZIE, D. Making things the same: Gases, emission rights and the politics of carbon markets. **Accounting, organizations and society**, [*S. l.*], v. 34, n. 3-4, p. 440-455, 2009.

MADER, P.; MERTENS, D. ZWAN, N. V. der. **International Handbook of Financialization**. Oxon: Routledge, 2020.

MARCUSSEN, M. Scientization of Central Banking: The Politics of A-Politicization. *In*: DYSON, K.; MARCUSSEN, M. M. (ed.) **Central Banks in the Age of the Euro**: Europeanization, Convergence and Power. 2009. p. 373–390.

NETWORK FOR GREENING THE FINANCIAL SYSTEM (NFGS). **A call for action**: Climate change as a source of financial risk. [*S. l.*], 2019. Available. https://www.banque-france.fr/sites/default/files/media/2019/04/17/ngfs_first_comprehensive_report_-_17042019_0.pdf. Access: 10 June 2022.

OECD. **Investment governance and the integration of environmental, social and governance factors**. [*S. l.*], 2017. Available: https://www.oecd.org/finance/Investment-Governance-Integration-ESG-Factors.pdf. Access: 25 May 2022.

OUMA, S.; JOHNSON, L.; BIGGER, P. Rethinking the financialization of 'nature'. **Environment and Planning A: Economy and Space**, [*S. l.*], v. 50, n. 3, p. 500-511, 2018.

PINCHOT, A.; CHRISTIANSON, G. How Are Banks Doing on Sustainable Finance Commitments? Not Good Enough. **World Resources Institute**, 3 out. 2019. Available: https://www.wri.org/print/65739. Access: 25 May 2022.

PLIMMER, G.; ESPINOZA, J. Thames Water: the murky structure of a utility company. **Financial Times**, 4 May 2017. Available: https://www.ft.com/content/5413ebf8-24f1-11e7-8691-d5f7e0cd0a16. Access: 25 May 2022.

POLANYI, K. **The Great Transformation**. 2. ed. Boston: Beacon Press, 2002.

POWELL, J. ESG without the 'S'. **Financial Times**, 22 May 2020. Available: https://ftalphaville.ft.com/2020/05/21/1590056178000/ESG-without-the--S-/. Access: 25 May 2022.

PRI. **PRI Annual Report 2019**. Available: https://www.unpri.org/pri/about-the-pri/annual-report. Access: 12 May 2022.

PRI. **Signatory Update**: April to June 2022. Available: https://www.unpri.org/signatories/signatory-resources/quarterly-signatory-update. Access: 6 Aug. 2022.

PRINCIPLES FOR RESPONSIBLE INVESTMENT. **From Principles to Performance**. [*S. l.*], 2016. Available: https://10.unpri.org/wp-content/uploads/2016/04/PRI-final-report_-single-pages.pdf. Access: 20 May 2022.

PRYKE, M. Geomoney: An option on frost, going long on clouds. **Geoforum**, [*S. l.*], v. 38, n. 3, p. 576-588, 2007.

RAINFOREST ACTION NETWORK. **Banking on Climate Change**: Fossil Fuel Finance Report. [*S. l.*], 2020. Available. https://www.ran.org/bankingonclimatechange2020/. Access: 16 June 2022.

SERRES, M. **The natural contract**. Ann Arbor: University of Michigan Press, 1995.

TETT, G. Why ESG investing makes fund managers more money. **Financial Times**, 9 jul. 2020. Available: https://www.ft.com/content/1cfb5e02-7ce1-4020-9c7c-624a3dd6ead9. Access: 6 Aug. 2022.

THE UNIVERSITY OF MANCHESTER. **Strategic Priorities**. Available: https://www.socialresponsibility.manchester.ac.uk/strategic-priorities/. Access: 20 Aug. 2022.

TRIPATHY, A. Translating to risk: The legibility of climate change and nature in the green bond market. **Economic Anthropology**, [*S. l.*], v. 4, n. 2, p. 239-250, 2017.

UNEP PI. **Principles for Responsible Banking**. Available: https://www.unepfi.org/banking/bankingprinciples/. Access: 15 Mar. 2022.

UNIVERSITIES SUPERANNUATION SCHEME. **Task Force for Climate-related financial disclosures Report 2022**. Available: https://www.uss.co.uk/how-we-invest/responsible-investment. Access: 12 Mar. 2022.

UNIVERSITY AND COLLEGE UNION. **Green New Deal**. Available: https://www.ucu.org.uk/green-new-deal. Access: 12 Mar. 2022.

WALKER, O. HSBC banker quits over climate change furore. **Financial Times**, 7 July 2022. Available: https://www.ft.com/content/5ff24114-5777-4d00-a014-ad36ce948d64. Access: 12 Mar. 2022.

WINEGARDEN, W. **Environmental, Social, and Governance (ESG) Investing**: An Evaluation of the Evidence. 2019. Available: https://www.sec.gov/comments/climate-disclosure/cll12-8895812-241292.pdf. Access: 12 Mar. 2022.

Processing and editing: Editora Ibero-Americana de Educação.
Proofreading, formatting, normalization and translation.