Special Issue

1st Conference on Sustainable Banking & Finance CSBF 2023

This call is also open to submissions not linked to the conference

Theme title:

Climate and Finance changes: how the financial system can save itself by saving the world.

Guest Editors:

Francesca Battaglia^a, Punit Arora^b, Claudio Porzio^a and Dario Salerno^a
^aUniversity of Naples "Parthenope", Italy; ^bCity University of New York, USA

Background:

The environmental impacts of climate change are a global problem that is likely to have significant effects on the assessment of many companies in the coming decades.

These effects will stem from negative aspects such as new regulations or the expansion of emissions trading schemes into new sectors and new countries, but also extend towards positive aspects such as new technologies and customer behaviour. In this respect, the challenge for policy makers has been to articulate exactly what the policy mix should be and how it should be implemented, especially considering the very different economic, social and political circumstances of different countries (Hurlbert and Gupta, 2016). Given the scale and complexity of the issue, a growing body of research has analysed economic and market trends, and the development of new technologies and corporate governance practices as drivers of adaptation to, and mitigation of, the impacts of climate change (Galbreath, 2010; Foley and Olabi, 2017; Kube et al., 2018; Ballew et al., 2019; Fiordelisi, et al., 2023). A prime example focused on how investment decisions can reduce climate risk while maintaining or improving investment returns (Blyth et al., 2007; Andersson et al., 2016; Einig, 2022). In this regard, and given their exposure to a wide range of climate risks, many institutional investors and companies have global investment strategies (Ilhan et al., 2019; Ren et al., 2022). Thus, if

companies move to address these risks, this will have profound implications for their future profitability and investors' portfolios (Pankratz et al., 2019). Furthermore, the largest diversified banks, investment banks and asset managers are under increasing investor pressure to reduce their climate risk, suggesting that climate risks in these sectors may become relevant to investors (Roncoroni et al., 2019; Engle et al., 2020). Some of these banks have announced significant programmes to reduce their carbon footprint, invest in carbon trading or take other measures to address climate risk (Batten, 2016). The challenge is to understand how companies can transform climate risks into opportunities, improving investment returns while promoting the stable climate system upon which the global economy is based.

However, in addition to this, climate change could eventually become simply one factor in a global diversified portfolio (Thomas et al., 2007; Fuss et al., 2012; Auer, 2021). Indeed, including carbon- intensive sectors in an investment portfolio through appropriate asset allocation can improve the risk/return profile for investors, by reducing the overall volatility and correlation of the portfolio with general public markets (Laurikka and Springer, 2003). Another stream of research, will need to focus n infrastructure investment strategies in order to provide stable returns to investors, since the scale of climate change will require huge new infrastructure (Gersonius, 2013; Kim et al., 2017).

For example, electricity services now face renewable portfolio standards and new efficiency standards are leading to smart grid installations (Dagnachew et al., 2018); parking garages and storage facilities are now being equipped with solar cells to send energy into the grid; the constraints on water resources as a result of climate change will challenge infrastructure developers. Successful infrastructure fund managers will have a unique understanding of potential regulatory arbitrage in all jurisdictions, as well as a deep understanding of the global interaction between traditional power generation sources, renewable energy sources and the impact of a future carbon price (Alok et al., 2020).

Furthermore, the universe of carbon-intensive industries as several characteristics that also lend themselves to other asset classes. For example, private equity and venture capital present attractive attributes for climate change investors (Gaddy et al., 2017). In particular, venture capitalists typically invest in innovations around specific technologies and eventually seek to be invested in disruptive technologies that can change entire sectors (González-Uribe, 2020). As technology emerges, private equity investors intervene and provide expansion capital to enable start-ups to market their technologies (Maas et al., 2020). Private equity can offer a number of advantages in the universe of carbon-intensive industries where the complexities surrounding the regulation of clean energy, market access, technology, finance, and the management of risks related to raw materials require a sophisticated understanding in order to correctly manage the investment risk.

Another body of empirical research has focused on the relationship between corporate social responsibility (CSR) and climate change (Puppim de Oliveira et al., 2017; McIntyre et al., 2018). Broadly speaking, for most large companies, environmental impacts such as climate change are addressed as part of the CSR function and strategy (Gibson et al., 2007). From a governance perspective, CSR is defined as the way in which companies consider the interests of society by taking responsibility for the impact of their activities on internal and external stakeholders, as well as their impact on the environment (Chen, 2008). Given the increasing degree of risk associated with environmental issues, the development of environmental responsibility within the workforce is an important area of interest for companies. It ensures that all members of the workforce become responsible for their personal environmental impacts (Boiral, 2002). It also ensures that those who make management decisions are fully aware of the environmental effects of their actions (Mackenzie et al., 2013). Managers can make key strategic choices that, depending on the criteria considered, can have significant environmental impacts. Examples could include decisions such as developing environmentally friendly

products, choosing alternative procurement methods, selecting investments, mergers or acquisitions.

Against this backdrop, the goal of this special issue (SI) is to contribute to the literature on environmental topics related to the functioning of financial systems and corporate governance. The aim is the development of both qualitative and quantitative studies that analyse the interaction between global warming, financial institutions and their relationships with firms and regulators. In particular, we would like to encourage academics, from different disciplines, to provide theoretical contributions and empirical evidence that document and explore the phenomenon under investigation but also provide new insights and pioneering results.

Possible Topics

This Special Issue aligns with the aim of BEER to publishing articles that help societies become more sustainable. Indeed, we believe that a deeper understanding of the complex relationship between climate change and finance may foster awareness that global warming is an economic and financial issue as well as an environmental and moral problem. Specifically, this issue will stimulate the discussion about the bidirectional nature of the relationship between climate change and finance and aims to encourage novel research about the following main, but non-exclusive, topics:

- Financial system characteristics and carbon emissions across the globe
- Estimating the impact of central banks investment on global warming
- The impact of climate change on corporate governance practices
- The impact of ESG factors on the stability of the global financial system
- Global warming and financial institutions
- Green bonds and sustainability-linked loans
- Climate risks and asset management
- Climate risk, financing decisions, firm performance and innovation

Submission Instructions

Submissions must represent novel research and not be currently under consideration for

publication elsewhere.

Papers accepted for publication in the Special Issue will be double-blind reviewed in

accordance with the BEER review process guidelines. The final decision will be based on the

Special Issue's relevance, technical quality, innovative content, and originality of research

approaches and results.

Authors should refer to the author Guidelines for instructions on submitting to BEER.

https://onlinelibrary.wiley.com/page/journal/26946424/homepage/forauthors.html

Submissions should indicate the special issue and then "Climate and Finance changes: how

by saving the world the financial system can save itself?" when prompted.

Submission Opening Date: 01 November 2023

Submission Closing Date: 31 January 2024

Guest Editors

Francesca Battaglia, PhD - Department of Business and Quantitative Studies -

University of Naples "Parthenope" – <u>francesca.battaglia@uniparthenope.it</u>

Punit Arora, PhD – City University of New York - parora@ccny.cuny.edu

• Claudio Porzio – Department of Business and Quantitative Studies – University of

Naples "Parthenope" – claudio.porzio@uniparthenope.it

Dario Salerno, PhD – Department of Business and Quantitative Studies – University of

Naples "Parthenope" - dario.salerno@uniparthenope.it

5

References

Alok, S., Kumar, N., & Wermers, R. (2020). Do fund managers misestimate climatic disaster risk. The Review of Financial Studies, 33(3), 1146-1183.

Andersson, M., Bolton, P., & Samama, F. (2016). Hedging climate risk. Financial Analysts Journal, 72(3), 13-32.

Auer, B. R. (2021). Implementation and profitability of sustainable investment strategies: An errors-in-variables perspective. Business Ethics, the Environment & Responsibility, 30(4), 619-638.

Ballew, M. T., Leiserowitz, A., Roser-Renouf, C., Rosenthal, S. A., Kotcher, J. E., Marlon, J. R., & Maibach, E. W. (2019). Climate change in the American mind: Data, tools, and trends. Environment: Science and Policy for Sustainable Development, 61(3), 4-18.

Batten, S., Sowerbutts, R., & Tanaka, M. (2016). Let's talk about the weather: the impact of climate change on central banksBank of England Working Paper No. 603.

Blyth, W., Bradley, R., Bunn, D., Clarke, C., Wilson, T., & Yang, M. (2007). Investment risks under uncertain climate change policy. Energy Policy, 35(11), 5766-5773.

Boiral, O. (2002). Tacit knowledge and environmental management. Long Range Planning, 35(3), 291-317.

C. Chen, J., Patten, D. M., & Roberts, R. W. (2008). Corporate charitable contributions: A corporate social performance or legitimacy strategy? Journal of Business Ethics, 82, 131-144.

Dagnachew, A. G., Lucas, P. L., Hof, A. F., & van Vuuren, D. P. (2018). Trade-offs and synergies between universal electricity access and climate change mitigation in Sub-Saharan Africa. Energy Policy, 114, 355-366.

Einig, S. (2022). Financial return or social responsibility? An investigation into the stakeholder focus of institutional investors. Business Ethics, the Environment & Responsibility, 31(2), 307-322.

Engle, R. F., Giglio, S., Kelly, B., Lee, H., & Stroebel, J. (2020). Hedging climate change news. The Review of Financial Studies, 33(3), 1184-1216.

Fiordelisi, F., Galloppo, G., & Paimanova, V. (2023). Climate change shocks and socially responsible investments. Business Ethics, the Environment & Responsibility, 32(1), 40-56.

Foley, A., & Olabi, A. G. (2017). Renewable energy technology developments, trends and policy implications that can underpin the drive for global climate change. Renewable and Sustainable Energy Reviews, 68, 1112-1114.

Fuss, S., Szolgayová, J., Khabarov, N., & Obersteiner, M. (2012). Renewables and climate change mitigation: Irreversible energy investment under uncertainty and portfolio effects. Energy Policy, 40, 59-68.

Gaddy, B. E., Sivaram, V., Jones, T. B., & Wayman, L. (2017). Venture capital and cleantech: The wrong model for energy innovation. Energy Policy, 102, 385-395.

Galbreath, J. (2010). Corporate governance practices that address climate change: An exploratory study. Business Strategy and the Environment, 19(5), 335-350.

Gersonius, B., Ashley, R., Pathirana, A., & Zevenbergen, C. (2013). Climate change uncertainty: building flexibility into water and flood risk infrastructure. Climatic change, 116, 411-423.

Gibson, K., & O'Donovan, G. (2007). Corporate governance and environmental reporting: an Australian study. Corporate Governance: An International Review, 15(5), 944-956.

González-Uribe, J. (2020). Exchanges of innovation resources inside venture capital portfolios. Journal of Financial Economics, 135(1), 144-168.

Hurlbert, M., & Gupta, J. (2016). Adaptive governance, uncertainty, and risk: policy framing and responses to climate change, drought, and flood. Risk Analysis, 36(2), 339-356.

Ilhan, E., Krueger, P., Sautner, Z., & Starks, L. T. (2019). Institutional Investors' Views and Preferences on Climate Risk Disclosure. Swiss Finance Institute Research Paper No. 19-66.

Kim, K., Ha, S., & Kim, H. (2017). Using real options for urban infrastructure adaptation under climate change. Journal of Cleaner Production, 143, 40-50.

Kube, R., Löschel, A., Mertens, H., & Requate, T. (2018). Research trends in environmental and resource economics: Insights from four decades of JEEM. Journal of Environmental Economics and Management, 92, 433-464.

Laurikka, H., & Springer, U. (2003). Risk and return of project-based climate change mitigation: a portfolio approach. Global Environmental Change, 13(3), 207-217.

Maas, C., Steinhagen, P., Proksch, D., & Pinkwart, A. (2020). The role of innovation in venture capital and private equity investments in different investment phases. Venture Capital, 22(1), 105-126.

Mackenzie, C., Rees, W., & Rodionova, T. (2013). Do responsible investment indices improve corporate social responsibility? FTSE4 Good's impact on environmental management. Corporate Governance: An International Review, 21(5), 495-512.

McIntyre, J. R., Ivanaj, S., & Ivanaj, V. (Eds.). (2018). CSR and climate change implications for multinational enterprises. Edward Elgar Publishing.

Pankratz, N., Bauer, R., & Derwall, J. (2019). Climate change, firm performance, and investor surprises. SSRN Electronic Journal; DOI:10.2139/ssrn.3443146.

Puppim de Oliveira, J. A., & Jabbour, C. J. C. (2017). Environmental management, climate change, CSR, and governance in clusters of small firms in developing countries: Toward an integrated analytical framework. Business & Society, 56(1), 130-151.

Ren, G., Zeng, P., & Song, T. (2022). Corporate fraud as a negative signal: Implications for firms' innovation performance. Business Ethics, the Environment & Responsibility, 31(3), 790-808.

Roncoroni, A., Battiston, S., Escobar-Farfán, L. O., & Martinez-Jaramillo, S. (2021). Climate risk and financial stability in the network of banks and investment funds. Journal of Financial Stability, 54, 100870.

Thomas, S., Repetto, R., & Dias, D. (2007). Integrated environmental and financial performance metrics for investment analysis and portfolio management. Corporate Governance: An International Review, 15(3), 421-426.