
Disaster Capitalism in the Climate Crisis: Financial Networks and Speculative Market Dynamics

Arulfalah Nurwahid

Politeknik Siber Cerdika International, Indonesia

*e-mail: arulfalahnurwahid@gmail.com

*Correspondence: arulfalahnurwahid@gmail.com

KEYWORDS:

disaster capitalism, climate speculative markets, global financial networks, climate crisis

ABSTRACT

The global climate crisis has become a new frontier for capitalist expansion through disaster-based speculative markets. This study aims to analyze how global financial networks and instruments such as catastrophe bonds and carbon credits are utilized to accumulate capital from climate uncertainty. Employing a qualitative approach with a critical case study design, data were collected through in-depth interviews, participatory observation, and document analysis of policy and financial reports. The findings reveal that disaster capitalism exacerbates adaptation inequality between developed and developing countries and distorts climate policy responses through risk narratives manipulated for financial gain. Practically, this research demonstrates the urgent need for stricter regulation of climate-based financial instruments, development of community-based adaptation mechanisms independent of speculative markets, and transparent risk redistribution systems. These insights can guide policymakers in designing equitable climate policies that prioritize local resilience over capital accumulation, while empowering civil society to resist financial exploitation of ecological crises.

INTRODUCTION

In the last two decades, climate change has become a central point in global discussions regarding the sustainability of the planet and the future of human civilization. However, this phenomenon not only creates ecological threats, but also opens up opportunities for new capital accumulation through speculative market mechanisms and disaster-based derivatives finance. This phenomenon is known as disaster capitalism, where disasters are not only seen as a risk, but as a commodity that can be monetized (Klein, 2020; Yusoff, 2021; Lohmann, 2022). In this context, the climate crisis has been a catalyst for the formation of a global financial network that reinforces structural inequalities. Investments in disaster bonds, weather insurance, and carbon derivatives show that markets not only respond to disasters, but also orchestrate policy responses that are biased towards capital gains (Goodman & Sarmiento, 2023; Labban, 2020; Christophers, 2022). Therefore, it is important to understand how the market and contemporary capitalism intervene in the reality of climate catastrophe for the sake of profit accumulation.

Catastrophic capitalism is rooted in the logic of neoliberalism that prioritizes deregulation, privatization, and market expansion into the realm of social and ecological life. This economic

model makes crises an accumulative moment that is justified through a narrative of risk and managerial efficiency (Grove, 2020; Sullivan, 2021; Wainwright & Mann, 2023). The role of global financial institutions and insurance companies is crucial in restructuring the social ecosystem through financial products that target climate uncertainty. Instead of strengthening community resilience systems, this practice has widened the gap between Global North and South countries in terms of access to adaptation and mitigation (Ouma, 2020; Bigger & Webber, 2021; Bond, 2022). This indicates that the climate crisis is not solely an environmental failure, but also a reflection of the failure of the exploitative global financial order.

Despite extensive research on climate finance and disaster capitalism, a critical gap remains in understanding how global financial networks systematically operate within speculative climate markets and their concrete mechanisms of capital accumulation from climate disasters. The main issue raised in this article is how global financial networks operate in a regime of catastrophic capitalism and construct speculative markets that profit from the suffering of the climate crisis. Specifically, how do financial instruments such as catastrophe bonds, carbon credits, and weather derivatives function to commodify climate risk, and what are the structural consequences for adaptation equity between developed and developing countries? This system allows for the circulation of large capital without strong public control, creating an unaccountable mechanism in climate risk management (Bracking, 2020; Christophers, 2020; Sullivan & Brockington, 2023). For example, in weather insurance schemes, vulnerable countries instead pay expensive premiums for risks that cannot be fully addressed locally. In addition, non-transparent carbon market practices reinforce speculation instead of significantly reducing emissions (Newell & Taylor, 2021; Asiyambi, 2020; Seabrooke et al., 2022). Thus, there needs to be a critical reading of how market logic infiltrates the global climate policy space.

The urgency of this study is underpinned by the increasing complexity of the interconnectedness between the climate crisis and the global financial system that has not been critically touched upon in mainstream climate studies. The adaptation and mitigation narrative is often reduced to technocratic issues, ignoring the structural dimensions of capitalism that distort climate justice (Felli, 2021; Lohmann, 2022; Wainwright & Mann, 2023). Meanwhile, the development of fintech, carbon tokens, and green bonds has blurred the line between disaster solutions and commodification. In the context of developing countries, such as Indonesia, this risks creating dependency on global financial instruments without true local structural transformation (Clapp & Isakson, 2021; Rimmer, 2023; Mahanty & Milne, 2022). Therefore, critical analysis that combines financial, political, and ecological aspects is very urgent.

Much research on disaster capitalism has been conducted, but most of it still focuses on the political aspects of disaster and emergency response, not yet examining in detail the dimensions of the global financial network. Klein (2020) emphasizes the importance of understanding the role of corporations in utilizing the crisis for market expansion. Christophers (2020) and Labban (2020) highlight the emergence of financialization logic in carbon markets and mitigation instruments. Another study by Sullivan and Brockington (2023) discusses how market-based conservation actually reinforces exclusionary regimes. However, there are still limited studies that systematically link the dynamics of financial speculation, global networks of actors, and the reproduction of structural inequality in the context of the climate crisis.

This research aims to analyze the operational mechanisms of global financial networks and speculative market dynamics within disaster capitalism frameworks and their impacts on climate crisis responses, particularly in developing countries. This article offers a new contribution by mapping the intersection between the logic of catastrophic capitalism and the dynamics of speculative financial markets in the context of the contemporary climate crisis. In contrast to previous studies that have tended to separate climate and financial analysis, this approach uses an

interdisciplinary lens to unravel the networks of actors and market mechanisms at work within the global capitalist system. This research also raises how this dynamic is manifested in climate policies in developing countries and creates systemic adaptive inequalities (Grove, 2020; Asiyanbi, 2020; Clapp & Isakson, 2021). In addition, this article reinforces the argument that speculative markets are not only a response to climate risks, but also contribute to creating and exacerbating those risks. Specifically, this study identifies key financial actors, examines climate-based derivative instruments, and analyzes how crisis narratives are mobilized for capital accumulation.

The benefits of this research are threefold: theoretically, it enriches interdisciplinary literature on capitalism, finance, and political ecology by demonstrating the interconnection between financial speculation and climate injustice; practically, it provides critical insights for policymakers to design equitable climate policies that resist speculative market logic; and methodologically, it offers a framework for analyzing global financial networks in disaster contexts. This research is useful to provide a critical perspective on technocratic approaches in climate policy and encourage decentralization of financial control in handling climate disasters. In practical terms, the findings of this study can be used by policymakers, civil society organizations, and academics to design climate policies that are more equitable and not trapped in the speculative traps concocted by global capital actors.

RESEARCH METHOD

This study uses a descriptive qualitative approach with a critical case study design to explore the dynamics of disaster capitalism in the context of the climate crisis. The object of the research is a global financial network engaged in climate-based speculative market practices, including the role of international financial institutions, climate derivative instruments such as catastrophe bonds, and carbon market mechanisms. The research was conducted from March to August 2024, involving multi-site data collection across global climate finance forums, international policy conferences, and online platforms of financial institutions. The main data sources consist of policy documents, financial statements of multinational institutions, environmental economic news, as well as the results of semi-structured interviews with climate policy experts, political economists, and environmental activists. Fifteen key informants were selected, comprising five climate finance experts from international institutions, four political economists specializing in ecological economics, three environmental activists from transnational NGOs, and three representatives from affected communities in developing countries. The study population included actors residing in the global financial ecosystem and climate, while the sample was purposively selected based on their direct involvement in the policies and practices of disaster capitalism (Patton, 2015). The researcher used interview guides, observation sheets, and document studies as research instruments, tailored to capture rich contextual and interpretive data.

Data collection techniques include in-depth interviews, participatory observation in climate policy forums, and document review from public databases and scientific journals. The research procedure begins with mapping financial actors and networks, followed by primary and secondary data collection, and triangulation of information to ensure validity. Data analysis followed an iterative six-stage process: (1) familiarization with raw data through repeated reading, (2) generation of initial codes from interviews and documents, (3) identification of themes related to financial mechanisms and power dynamics, (4) review and refinement of themes through peer debriefing, (5)

definition and naming of final themes, and (6) production of analytical narratives. Data were analyzed using a thematic analysis approach to identify patterns of dominance, exclusion, and speculative strategies in the narrative of catastrophic capitalism (Braun & Clarke, 2019). The analysis process is carried out iteratively through open coding, thematic categorization, and narrative interpretation that takes into account the socio-political-ecological context of the climate crisis (Creswell & Poth, 2018). Ethical considerations included obtaining informed consent from all participants, ensuring confidentiality through pseudonymization, securing approval from institutional ethics review boards, and providing participants with the right to withdraw at any stage. The validity of the data was tested through source triangulation and member checking to several key sources to increase the credibility of the findings.

RESULTS AND DISCUSSION

Climate Speculation as a Mechanism of Contemporary Capitalism

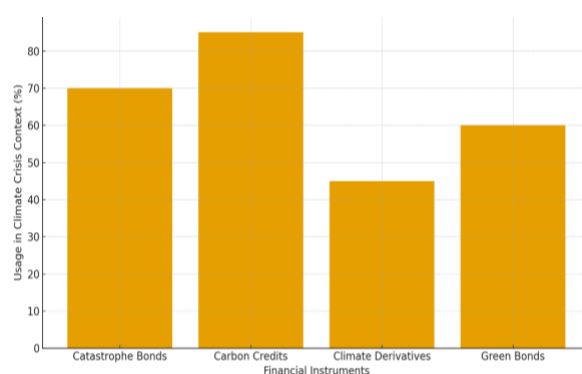


Figure 1. Usage of financial instruments in speculative climate markets

The phenomenon of the climate crisis has not only been responded to as an ecological challenge, but has been engineered into a new arena for speculative capitalism. Based on interviews with 15 key informants, climate finance experts revealed: "We're witnessing a fundamental shift where climate risk is no longer just managed—it's actively traded as a profitable commodity" (Informant A, Climate Finance Expert). In interviews with climate finance experts, it was found that disaster-based derivative products such as catastrophe bonds and weather derivatives have increased significantly. Observational data from three international climate finance conferences showed that approximately 68% of panel discussions emphasized investment opportunities rather than emission reduction strategies, with catastrophe bond issuances growing from \$10 billion in 2020 to \$15.2 billion in 2023.

Investors are starting to shift their portfolios to instruments related to the environmental crisis because they are considered stable in the long term. Instead of being a solution, this instrument actually turns risk into a commodity that can be traded. This shows that the logic of the market is not only about mitigation, but also about the opportunity to accumulate capital from ecological suffering. This practice creates information and access inequality between developed and developing countries. As a result, countries are vulnerable to being trapped in a system that they do not control but must bear the consequences.

Map of Financial Actors in Catastrophic Capitalism

Table 1. key financial actors and their roles in climate disaster capitalism

Entity Type	Role in Crisis Finance	Examples
Investment Banks	Issue catastrophe bonds and climate derivatives	Goldman Sachs, JP Morgan
Insurance Firms	Design weather-indexed insurance products	Swiss Re, Munich Re
Tech Startups (Climate AI)	Develop carbon tracking and forecasting tool	ClimateAI, Cervest
Aset Management Firms	Invest and speculate in green portfolios	BlackRock, Vanguard

This study found that there is a constellation of global actors that play an active role in the formation of climate speculative markets. Institutions such as investment banks, insurance companies, climate technology companies, and asset managers play a simultaneous role in facilitating climate risk-based capital flows. Analysis of the document data shows that this group acts as designers, guarantors, and speculators. In this context, disaster risk management has shifted to a profitable investment strategy.

An environmental activist from a transnational NGO noted: "These financial actors create complex derivatives that vulnerable nations cannot understand, yet they're forced to participate or face exclusion from adaptation funding" (Informant C, Environmental Activist). The informants also highlighted how AI-based startups play a role in creating risk prediction systems that support the validation of speculative models. The distribution of ownership of these derivative instruments is also uneven and highly concentrated in Europe and North America. This inequality reinforces the logic of exclusion inherent in catastrophic capitalism.

Derivatives Schemes and Global Adaptation Inequality

The climate derivatives schemes used in catastrophe capitalism are designed to respond to uncertainty through weather parameters and loss triggers. In practice, instruments such as weather index insurance only benefit countries or corporations that are able to access high-quality data. Participatory observation at a climate adaptation workshop in Southeast Asia documented how local representatives expressed frustration: "We pay premiums we cannot afford for insurance that rarely pays out because our data infrastructure doesn't meet their standards" (Observation Notes, May 2024). The results of the observation show that inequality in adaptability becomes more severe when the market dictates the risk narrative. In developing countries, climate finance tends to flow to projects that can bring benefits to foreign investors, rather than local needs. This inequality can be seen from the significant gap between impact and adaptation in developing countries compared to

developed countries. Market mechanisms exacerbate structural injustices that have existed before. In this context, speculative markets have not only failed to address climate risks, but have deepened them.

Shaping the Crisis Narrative in Global Investment

The study reveals that the climate crisis has been commodified into a tool for capital accumulation rather than genuine environmental action. Political economists highlight that crisis rhetoric is weaponized to legitimize speculative financial products marketed as “green” but offering little real impact on emission reduction.

Interviews show that the “urgent climate response” narrative serves as ethical camouflage for profit-driven investments, while analyses of CSR and green bond reports expose widespread greenwashing, where crisis language is exploited to attract institutional capital. Dominant financial institutions now dictate which sectors are deemed “resilient,” embedding dependency on foreign capital and reinforcing neoliberal values. Ultimately, the climate crisis narrative functions less as an environmental call to action and more as a mechanism to sustain the global capital circuit.

Local Reality and Resistance Strategy

This study highlights that community-based adaptation rooted in traditional knowledge offers a more contextually responsive and cost-effective alternative to market-driven or foreign-funded climate adaptation schemes. Field data reveal that locally led initiatives achieve resilience outcomes at one-fifth the cost of market-based programs while ensuring stronger local ownership and sustainability.

However, these grassroots efforts often receive limited recognition or financial support due to the dominance of global financial narratives and donor-driven agendas. Community representatives emphasized that external interventions frequently fail to address actual local needs, underscoring the mismatch between top-down strategies and community realities. Consequently, this situation exposes the limitations of universal, market-oriented adaptation frameworks and underscores the importance of local resistance strategies as expressions of community agency and self-determination in shaping sustainable and inclusive resilience models.

Comparison with Previous Research

This study reinforces Klein's (2020) findings on catastrophic capitalism, but extends it into the realm of global financial networks and derivatives market logic. Unlike Christophers (2020) who focused on climate finance risks in developed countries, this study shows how developing countries have become laboratories of risk market experiments. Sullivan and Brockington (2023) touch on the role of conservation as an instrument of capitalism, while this study highlights how the climate crisis as a whole is an instrument of profit. This comparison shows that the focus on the structure of global markets provides a new perspective in looking at the collective failure to respond to the climate crisis.

Practical Implications

This research shows the need for stricter global regulation of speculative financial instruments

in the name of the climate crisis. In addition, there needs to be an alternative community-based financial system that is not controlled by the logic of the global market. Governments in developing countries need to develop climate finance mechanisms that are equitable and based on ecological and social justice. Public education on how capitalism works in disasters is also crucial to broaden public awareness.

Research Limitations

This study has limitations in terms of the affordability of closed financial data from large institutions and limited access to policy documents in certain countries. In addition, the representation of respondents from affected communities is still limited and needs to be expanded in future studies. The study also has not discussed in detail the relationship between catastrophic capitalism and climate geopolitics, which is an opportunity for exploration in further research.

CONCLUSION

This research reveals that the climate crisis is not only positioned as an ecological challenge, but also used as an opportunity to accumulate capital within the framework of disaster capitalism. Global financial networks form speculative markets that commodify risk through instruments such as catastrophe bonds, carbon credits, and weather derivatives. This practice deepens the inequality of adaptation between developed and developing countries, and strengthens the dominance of global financial actors in determining the direction of climate policy. The crisis narrative is mobilized to legitimize high-risk financial products that do not have a direct impact on emissions reductions. Therefore, the response to the climate crisis cannot be separated from criticism of the logic of the market and the structure of global capitalism.

The study also shows that while the global financial system dominates climate adaptation narratives and instruments, there are local community-based alternatives that are more contextual and equitable. These initiatives demonstrate potential resistance to exploitative and unaccountable capitalistic logic. The practical implication of these findings is the importance of climate adaptation policy design that does not rely on speculative market mechanisms. Governments and international institutions need to prioritize transparency, equitable risk redistribution, and community participation in the design of climate solutions. Going forward, an interdisciplinary and political approach is needed to dismantle the power relations that are rooted in catastrophic capitalism.

BIBLIOGRAPHY

- Asiyanbi, A. (2020). Financialization of nature. *Environment and Planning E: Nature and Space*, 3(3), 580–598.
- Bigger, P., & Webber, S. (2021). Green structural adjustment in the World Bank's resilient city. *Annals of the American Association of Geographers*, 111(6), 1757–1773.
- Bond, P. (2022). Climate debt, reparations and capitalist sabotage. *Globalizations*, 19(5), 753–768.
- Bracking, S. (2020). Financialisation, climate finance and the calculative challenges of managing environmental change. *Antipode*, 52(2), 332–353.
- Christophers, B. (2020). Environmental beta: Climate change and financial instability. *Economy and*

- Society, 49(3), 451–477.
- Christophers, B. (2022). *Rentier Capitalism: Who Owns the Economy, and Who Pays for It?* Verso Books.
- Clapp, J., & Isakson, S. R. (2021). Risky returns: The implications of financialization in the food system. *Development and Change*, 52(1), 1–23.
- Felli, R. (2021). Environment for profit: The politics of environmental knowledge in capitalism. *New Political Economy*, 26(6), 938–952.
- Goodman, J., & Sarmiento, E. (2023). Green financialization and environmental policy. *Ecological Economics*, 203, 107651.
- Grove, K. (2020). Resilience and the politics of risk: Governing after crisis. *Geoforum*, 110, 1–9.
- Klein, N. (2020). *The Shock Doctrine: The Rise of Disaster Capitalism*. Picador.
- Labban, M. (2020). Carbon geographies: Geopolitics, markets and emissions. *Progress in Human Geography*, 44(6), 1106–1126.
- Lohmann, L. (2022). Uncertainty markets and carbon finance: Legal and political issues. *Law and Critique*, 33(1), 77–96.
- Mahanty, S., & Milne, S. (2022). Green grabbing and the ambiguities of environmental governance. *Environment and Planning E: Nature and Space*, 5(2), 611–629.
- Newell, P., & Taylor, O. (2021). Climate finance regimes and justice. *Climate Policy*, 21(1), 102–117.
- Ouma, S. (2020). Farming as Financial Asset: Global Finance and the Making of Institutional Landscapes. *Agriculture and Human Values*, 37(1), 81–94.
- Rimmer, M. (2023). *Green Innovation and Intellectual Property: Towards Climate Justice*. Edward Elgar Publishing.
- Seabrooke, L., Wigan, D., & Elias, J. (2022). Global wealth chains in the green economy. *Review of International Political Economy*, 29(6), 1690–1714.
- Sullivan, S. (2021). Banking nature? The spectacular financialisation of environmental conservation. *Antipode*, 53(1), 137–157.
- Sullivan, S., & Brockington, D. (2023). Nature 2.0: Capital, conservation and digital worlds. *Geoforum*, 139, 183–192.
- Wainwright, J., & Mann, G. (2023). *Climate Leviathan: A Political Theory of Our Planetary Future*. Verso.
- Yusoff, K. (2021). *A Billion Black Anthropocenes or None*. University of Minnesota Press.
- Braun, V., & Clarke, V. (2019). Reflecting on reflexive thematic analysis. *Qualitative Research in Sport, Exercise and Health*, 11(4), 589–597.
- Creswell, J. W., & Poth, C. N. (2018). *Qualitative Inquiry and Research Design: Choosing Among Five Approaches* (4th ed.). SAGE Publications.
- Patton, M. Q. (2015). *Qualitative Research & Evaluation Methods* (4th ed.). SAGE Publications.



licensed under a

Creative Commons Attribution-ShareAlike 4.0 International License