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Department of Economics
SOAS University of London
Thornhaugh Street, Russell Square, London WC1H 0XG, UK
Phone: + 44 (0)20 7898 4730
Fax: 020 7898 4759
E-mail: economics@soas.ac.uk
<http://www.soas.ac.uk/economics/>

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Towards a climate just financial system

Yannis Dafermos*

Abstract: In recent years, private and public financial institutions have increasingly focused on addressing the implications of the climate crisis. However, existing efforts to align the financial system with climate change suffer from a significant limitation: they exacerbate global climate injustice. In this paper, I identify several climate finance injustice channels and explain how these can be addressed via the development of a ‘climate just financial system’. I define the latter as a system whereby climate justice criteria are incorporated into the policies governing public and private financial institutions, and the financing of private and public climate spending is in line with the principle of common but differentiated responsibilities and respective capabilities. A climate just financial system has three key elements: (i) differentiated climate responsibilities for global North and global South financial institutions, with the latter primarily focusing on climate adaptation and the former prioritising climate mitigation; (ii) climate justice stabilising mechanisms that establish a permanent commitment by global North countries to provide climate financing support to global South countries without making the latter more financially vulnerable; and (iii) the incorporation of climate justice criteria in the design and use of climate mitigation tools by global North financial institutions. Creating a climate just financial system requires significant transformations in multilateral financial mechanisms, public banking, central banking, financial regulation and private financial institutions. Although these transformations would face political and technical challenges, they can potentially be overcome if climate justice gets centre stage in the climate policy agenda.

Keywords: climate justice, climate-aligned development, central banking, public banking, climate finance, global financial architecture

JEL classification: D63, E50, Q01, Q54

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* Department of Economics, SOAS University of London. Thornhaugh Street, Russell Square, London WC1H 0XG, UK. Email: Yannis.Dafermos@soas.ac.uk

INTRODUCTION

Climate change is increasingly becoming a key concern for financial institutions around the world. A growing number of central banks and financial supervisors have been exploring how to protect the financial system from climate risks. This is exemplified by the climate stress testing exercises that several central banks and financial supervisors have undertaken to understand how exposed national financial systems are to climate risks (Alogoskoufis et al., 2021; Baudino and Svoronos, 2021; Bank of England, 2022). Certain central banks have also introduced measures to contribute to the decarbonisation of the financial system. For example, the Bank of England and the European Central Bank (ECB) have tilted their corporate bond purchases based on the climate performance of the bond issuers (Bank of England, 2021; Dafermos et al., 2022a; ECB, 2022), while the People's Bank of China has taken several initiatives to support green finance (People's Bank of China and UNEP, 2015; Dikau and Volz, 2021) and has recently introduced a carbon emission reduction facility (People's Bank of China, 2021).

At the same time, private financial institutions have increased their engagement with Environmental, Social and Governance (ESG) issues and have made attempts to quantify their exposure to climate risks. Credit rating agencies have started adjusting their credit risk models to account for climate-related financial risks (Mundey et al., 2022), while public banks have developed strategies to support green lending (Marois, 2021; Gungen, 2023).

However, a major limitation of all these ongoing climate-related initiatives in finance is that they ignore issues of global climate justice. The concept of global climate justice stems from the fact that, even though the cumulative greenhouse gas emissions that have caused climate change have primarily been generated by countries in the global North, climate change disproportionately affects countries in the global South. For example, the vast majority of climate-related disasters with higher losses as a percentage of GDP in the last two decades took place in the Small Island Developing States (SIDS) (see Fresnillo, 2020) and nine out of the ten most climate affected countries are in the global South (Eckstein et al., 2021).

Climate justice suggests that global North countries have a higher responsibility for reducing emissions than global South countries and they need to support global South countries that suffer from the effects of climate change. This has been explicitly recognised by the United Nations Framework Convention on Climate Change (UNFCCC) which states that countries should protect the climate system 'on the basis of equity and in accordance with their common but differentiated responsibilities and respective capabilities' (UNFCCC, 1992, p. 4).²

The fact that global climate justice has been neglected in climate-related financial initiatives has several adverse implications (see also Sokol and Stephens, 2022). First, there is a risk that these initiatives will exacerbate climate injustice. This can happen via attempts of global North private banks to use their structural power to exploit profit opportunities in climate mitigation and adaptation projects in the global South via the so-called Wall Street Consensus (Dafermos et al., 2021; Gabor, 2021a). It can also happen because of initiatives

² See also Brunnée and Streck (2013) and African Development Bank Group (2022).

that aim at reducing the exposure of global North financial institutions to climate risks, including exposure to climate vulnerable countries in the global South. But climate injustice can also be reinforced by decarbonisation actions of public and private financial institutions that might encourage green extractivist practices by non-financial corporations.

Second, it is likely that attempts to incorporate climate change into central banking and finance will suffer from an ‘one size fits all’ approach whereby financial institutions in the global South will be adopting methods and practices used in the global North without appropriate adjustments. From a justice perspective, governments, companies, households and banks in the global South should not be assessed about risk exposure and climate mitigation targets in the same way as their counterparts in the global North. This is not only due to their differentiated responsibilities, but also due to the fact that countries in the global South are in a different developmental stage and have a more limited policy space due to their subordinate position in the global financial architecture.

Third, the absence of a concrete climate justice agenda in climate finance initiatives is a barrier to the development of global stabilising mechanisms that would contribute to the reduction of global climate injustice. The current climate finance mechanisms do very little to cover climate-related spending in the global South in a sustainable way. Without putting justice at the core of climate finance mechanisms, the challenges that the global South is facing will be exacerbated.

To address these issues, I argue that there is an urgent need for the development of a ‘climate just financial system’, which I define as a system whereby climate justice criteria are incorporated into the policies governing public and private financial institutions, and the financing of private and public climate spending is in line with the principle of common but differentiated responsibilities and respective capabilities. A climate just financial system has three key elements: (i) differentiated climate responsibilities for global North and global South financial institutions, with the latter focusing primarily on climate adaptation and the former focusing primarily on climate mitigation; (ii) climate justice stabilising mechanisms that would commit global North countries to provide, on a permanent basis, climate financing support to global South countries without making the latter more financially vulnerable; and (iii) the incorporation of climate justice criteria in the design and use of climate mitigation tools by global North financial institutions.³

The rest of the paper is structured as follows. In the next section I analyse how the ongoing climate-related initiatives in private finance, public banking, central banking and financial supervision exacerbate global climate injustice. I then present the key elements of a climate

³ For the purposes of my analysis, I use the term ‘global North’ to refer to Annex II Parties which were members of the Organisation for Economic Co-operation and Development (OECD) in 1992 and, according to UNFCCC, have to provide financial resources and technology transfers to developing countries to help the latter address climate change, while the term ‘global South’ refers to Non-Annex I Parties that are mostly developing countries; see <https://unfccc.int/parties-observers>. The global North could alternatively be defined so that it also includes what UNFCCC defines as economies in transition (such as the Baltic states and several Central and Eastern European countries); these economies are part of the Annex I Parties. I have excluded these countries from the definition of the global North that I use in the paper because, according to UNFCCC, these countries do not have the same climate responsibilities as the Annex II Parties and their economic and social conditions imply different capabilities compared to Annex II Parties.

just financial system and discuss the political and technical barriers to the development of such a system. In the conclusion I provide directions for a research agenda that would enhance our understanding of climate finance injustices and would support the design of a climate just financial system.

HOW DOES CLIMATE FINANCE EXACERBATE GLOBAL INJUSTICE?

Although the initial reaction of the majority of private and public financial institutions to climate change was to refuse to engage with it, recent years have seen a complete reversal of this approach. A growing number of financial actors have been putting climate at the core of their decisions, strategies and practices. This involves the analysis and the management of financial exposures to climate risks, the use of policies that encourage decarbonisation, but also the identification of profitability opportunities that can emerge from climate change. These financial responses to climate change can reinforce global injustice through three channels: (i) the ‘Wall Street Consensus’ channel; (ii) the ‘exposing by self-protecting’ channel; and (iii) the ‘decarbonising by exploiting’ channel (see Table 1).

Table 1. Climate finance injustice channels

| Channel | Description | Examples |
|-----------------------------|--|---|
| Wall Street Consensus | Private global banks create new sources of profitability by exploiting the need for climate mitigation and adaptation in the global South | Financial institutions provide financing for climate private-public partnerships that are characterised by high returns and low risks for the private sector due to derisking |
| Exposing by self-protecting | The financial system increases climate vulnerability in global South countries by trying to protect itself from exposure to physical risks | Global North banks sell bonds of climate vulnerable countries leading to an increase in their yields; credit rating agencies downgrade climate-vulnerable companies and governments |
| Decarbonising by exploiting | Financial measures support decarbonisation actions that rely on green extractivism | Decarbonised central bank bond purchases and financial institutions’ transition plans encourage companies to accelerate decarbonisation via the extraction of transition materials, large-scale renewable energy projects and carbon offsets that exploit people and ecosystems in the global South |

The ‘Wall Street Consensus’ channel is associated with profitability opportunities. Addressing climate change in the global South requires an unprecedented amount of additional investments both in climate mitigation and climate adaptation. Multilateral organisations, such as the World Bank and the International Monetary Fund (IMF), have argued that global South countries do not have the capacity to undertake this investment by relying on public financial resources – this is so due to their limited fiscal space (e.g., IMF, 2022). Hence, with the support of private finance, these organisations have called for the promotion of private finance through derisking, in the context of the so-called Wall Street Consensus (Dafermos et al., 2021; Gabor, 2021a). In practice, derisking can take place via subsidies that are provided to the private sector to reduce uncertainty about future returns on

climate projects as well as via regulations and guarantees that make these projects less risky. Derisking tools can create contingent liabilities for the governments in the global South and increase public spending without necessarily contributing to climate-aligned development.

The derisking approach to climate investment is particularly problematic from a justice perspective (Dafermos, 2023; UNCTAD, 2023). For a long time, global North financial institutions have been financing carbon-intensive companies and projects that have contributed to global warming. Even though they have profited from this type of financing which has disproportionately harmed the global South, they now wish to increase their profitability at the expense of the global South exploiting the needs that have been created due to the climate crisis.

But climate finance injustice can also arise from the ongoing attempts of private finance to protect itself from climate risks (Dafermos, 2023; UNCTAD, 2023). This 'exposing by self-protecting' channel applies particularly to physical risks. The rationale of this channel is as follows: The increasing severity and frequency of climate-related events disrupts economic activity which in turn can lead to credit and market losses that can adversely affect the liquidity and solvency of financial institutions. The latter, thus, have to measure these risks and reduce their exposure to them. However, financial institutions' attempts to reduce this exposure can be detrimental to the global South. Take the bonds issued by global South sovereigns. If climate risk models show that these bonds are characterised by higher physical risks due to the climate vulnerability of these countries, financial institutions might decide to reduce their exposure to these risks by selling these bonds. However, this can put a downward pressure on the bond price, increasing the cost of borrowing for these governments. Through this reaction of financial institutions, the governments of these countries might face higher debt burden problems and their ability to finance spending (including climate adaptation spending) might be undermined.

Credit rating agencies can magnify this process. As they are incorporating physical risks into their credit assessment models (see e.g. Munday et al., 2022), global South countries with high climate vulnerability are likely to see a downgrade of their ratings, simply because they are susceptible to climate-related events that have low responsibility for. As has been argued, this can set off a climate-public debt vicious cycle (Beirne et al., 2021; Kling et al., 2021; Fresnillo, 2020): climate vulnerability induces an increase in the cost of borrowing which makes it more difficult for these countries to finance investment in adaptation, which in turn makes them more vulnerable. Importantly, central banks' calls for the incorporation of climate risks into the credit models of financial institutions can reinforce this process.

Let me now turn to the 'decarbonising by exploiting' channel. Non-financial corporations that require external finance for their spending are increasingly under pressure to reduce their emissions. Take two examples from the recent ECB climate actions. First, the ECB has incorporated climate criteria into its corporate holdings and, as a result, it is now tilting its purchases towards bond issuers with a better performance from a carbon emissions perspective. Second, as a financial supervisor, the ECB has asked banks to analyse exposures to transition risks and take action to reduce such exposures. Climate-related monetary and financial policies such as these ones can incentivise non-financial

corporations to reduce their emissions to avoid disruptions to their access to bank credit and the bond markets.

However, from a global justice perspective, this can be problematic: finance-induced decarbonisation attempts of companies might rely (directly or indirectly) on green extractivist practices. These are practices associated with the extraction and expropriation of resources that harm local populations and ecosystems in the name of 'green transitions' (Bruna, 2022; Hu, 2023).

Green extractivism can take three forms which are sometimes interconnected (see also Fornaroli, 2023). The first form has to do with the fact that investments in solar panels, wind turbines, electric vehicles and batteries rely on specific transition minerals and metals, such as copper, lithium, cobalt and nickel, which are typically located in the global South (Voskoboynik and Andreucci, 2021; Bruna, 2022; Dorn et al, 2022; Franz and McNelly, 2023). Companies that invest in these green technologies depend – through their supply chains – on the extraction of such minerals and metals. This extraction often takes place under precarious working conditions and, in some cases, it leads to the violation of human rights (e.g. due to child or forced labour). Mining activities can also lead to the displacement of communities and land disputes that are conducive to conflicts and can destabilise local ecosystems and create water stress conditions (Church and Crawford, 2018; Zografos and Robbins, 2020).

The second form of green extractivism is associated with large-scale renewable energy projects in the global South. Solar photovoltaic and wind power systems are typically land-intensive. As a result, global energy corporations that run such projects – and have little or no interest in local needs – often engage in land grabbing practices that create conflicts and have several adverse socioecological implications (Hesketh, 2022; Hu, 2023; Tornell, 2023). These practices are typically applied in alliance with local governments that legitimise the harm that the projects cause by referring to the need for green development.

The third form of green extractivism is linked to the carbon offsets that companies buy to reduce their reported net emissions. Many of these carbon offsets are associated with plantation, afforestation, reforestation and other land-use projects in the global South. In the past, several such projects have impoverished communities that depend on certain forests and land for survival and social reproduction. For example, as part of carbon offset projects, local people have been forcibly evicted from their land and have been constrained from harvesting crops, hunting and fishing, with negative implications for food security (Bachram, 2004; Fairhead et al., 2012; Lyons and Westoby, 2014; Bruna, 2022). These practices do not only affect the livelihoods of peasant and indigenous communities but are also at odds with the emissions rights of people who typically have a very low environmental footprint compared to the vast majority of people in the global North.⁴

Overall, the climate finance injustice channels discussed above illustrate why the lack of a global justice lens in the ongoing climate finance initiatives is likely to disproportionately

⁴ Carbon offsets that are generated through projects in the global South and have harmful social effects can also be considered a form of carbon colonialism. For an analysis of the concept of carbon colonialism, see Bahram (2004) and Dehm (2016).

harm communities and ecosystems in the global South. These climate finance injustices cannot be addressed without fundamental transformations in global finance.

CLIMATE JUST FINANCIAL SYSTEM: KEY ELEMENTS

Transforming the financial system so that is consistent with global climate justice primarily requires actions from governments as well as global coordination. But it also necessitates actions by central banks, financial regulators and (national and multilateral) public banks. If successful, these actions can lead to the development of a 'climate just financial system'. Table 2 shows the main elements of such a system which I describe in detail below.

Table 2. Elements of a climate just financial system

| Element | Description | Examples |
|---|---|---|
| I: Differentiated climate responsibilities between global North and global South financial institutions | Climate adjustments to monetary and financial tools in the global North focus on mitigation while these adjustments in the global South focus on adaptation | Green collateral frameworks and decarbonised asset purchases in the global North; climate adaptation credit controls |
| II: Climate justice stabilising mechanisms | Mechanisms by which the global North supports the financing of climate spending in the global South on the basis of climate debt responsibilities | Climate Justice Facility; climate just asset purchases and collateral frameworks |
| III: Incorporation of climate justice criteria in global North financial institutions' mitigation actions | Actions for decarbonising global North financial systems penalise companies that engage in green extractivism | Introduction of climate justice conditionalities in collateral frameworks and the lending practices of public banks; higher capital requirements for 'climate unjust' green loans |

Element I: Differentiated climate responsibilities between global North and global South financial institutions

The financial system can take actions to directly support the fight against climate change. I make a distinction between climate mitigation and climate adaptation monetary and financial tools (see also Dafermos, 2023; UNCTAD, 2023). Climate mitigation tools are those monetary and financial instruments that improve the financing conditions for climate mitigation activities and deteriorate the financing conditions for dirty activities. Climate adaptation tools are instruments that support the financing of activities that help households, communities and corporations to adapt to climate change and reduce their vulnerability to climate-related events.

Several central banking and financial regulation policies can be adjusted in a way that transforms them into climate mitigation or adaptation tools, or both. They include, for example, asset purchases, collateral frameworks, refinancing operations and capital requirements (see NGFS, 2021; Dafermos, 2022; Dafermos et al., 2022b; Dafermos and Nikolaidi, 2022). Let me use collateral frameworks as an example. The haircuts and eligibility of bonds that can be mobilised as collateral from banks to get access to central bank liquidity can be adjusted based on the emissions performance of the companies that issue them or

the greenness of the underlying projects. In that case, collateral frameworks can be transformed into a climate mitigation tool. At the same time, collateral frameworks can treat favourably (i.e. with lower haircuts and higher eligibility) private or public bonds that have been issued with the purpose of supporting climate adaptation projects. Such an adjustment would make collateral frameworks a climate adaptation tool.

National public banks can also be instructed by governments to take action that supports climate mitigation and adaptation. For example, they can be asked to allocate a specific proportion of their loans to mitigation or adaptation projects. In some countries, a similar approach could be applied to private banks as well, via a credit controls policy.

In the context of climate justice, the decisions of government, central banks and financial regulators about the climate adjustment of monetary and financial policies need to be guided by climate justice considerations. This suggests that global North and global South countries need to adopt a 'one size doesn't fit all' approach to the climate alignment of their financial systems. In the global North, the design and implementation of climate mitigation tools is urgently needed so as for the financial system to contribute to the reduction of emissions of countries that have the highest responsibility for the climate crisis. On the contrary, in the global South more emphasis should be placed on how financial and monetary policies can be adjusted to support adaptation. In addition, when climate mitigation tools are used to support decarbonisation in the global South, the penalties for dirty activities need to be less strict compared to what should be the case in the global North. This is so for two reasons: first, these countries have a lower responsibility for the climate crisis, and, second, penalties for carbon-intensive activities should not undermine development.

Element II: Climate justice stabilising mechanisms

The financing of the growing climate-related spending in the global South cannot rely only on national policies. Support from global North to global South governments is essential as well. This is consistent with the UNFCCC which has called for financial assistance from Annex II Parties to non-Annex I Parties. As a result of this call, climate finance from global North to global South has increased over the last years. However, this amount of finance has remained very low compared to what is needed given the scale of the climate crisis. On top of it, the vast majority of public climate finance is in the form of loans. This tends to increase the interest payments and the debt burden of global South countries. Climate finance has also focused primarily on the support of climate mitigation projects; much less attention has been paid to climate adaptation despite the urgency of investing in adaptation projects in the global South (see OECD, 2022).

To develop proposals that can support climate financing in the global South in a way that can prevent climate instability and is consistent with justice perspectives, we need to use the following facts as starting points. First, for several decades, central banks in the global North have supported the financing of public spending through money creation. They have been able to do so due to the powerful position of their countries in the global financial architecture. Central banks in the global South have not been, however, able to support public spending in the same way: the subordinate position of the global South in the global monetary and financial system (Alami et al., 2022) has significantly restricted the policy space of global South central banks. This was very clearly illustrated during the COVID-19

crisis whereby fiscal spending in the global North increased much more compared to fiscal spending in the global South (Stevano et al., 2021). Therefore, global South governments have a lower capacity to finance climate adaptation, losses and damages compared to governments in the global North.

Second, global North countries owe a climate debt to global South countries. This is a historical debt that these countries have acquired due to their disproportionated contribution to greenhouse gas emissions. The concept of climate debt has a human rights basis: all people in the planet have the right to the same quantity of resources and equal proportion of environmental space; hence, those who use more resources or occupy more space have a debt with the others (for a detailed analysis of the concept of climate debt, see Warlenius, 2018 and Adow, 2020). Climate justice stabilising mechanisms should, thus, be designed in a way that leads to the repayment of this climate debt instead of creating more debt for countries in the global South.

Third, climate losses and damages will increase exponentially in the coming years (even in the extremely optimistic scenario that global warming will be limited to less than 1.5 °C) and will require an increasing amount of climate spending. This suggests that there is a need for mechanisms that allow the automatic financing of spending for losses and damages. For instance, if discussions about the provision of financial support take place only after a severe climate-related event has occurred in a global South country, it is very likely that the support will be delayed and fragmented.

We have recently seen several proposals that try to address the climate reality associated with some of these facts. These include debt relief programmes and debt-for-climate swaps (Volz et al., 2020; Thomas and Theokritoff, 2021; Essers et al., 2021; Chamon et al., 2022; Zucker-Marques and Volz, 2023), as well as the climate use of Special Drawing Rights (SDRs), for instance through a Global Climate Mitigation Fund, as suggested in the Bridgetown Initiative (Mariotti, 2022; Persaud, 2023). These proposals can partially address some of the structural problems that stem from the global financial architecture. But they do not explicitly address the existence of a climate debt, they focus primarily on climate mitigation, and they are not designed to cover the increasing amount of climate adaptation, loss and damage spending.⁵ Climate reparations (Perry, 2021) or a fossil fuel levy that would fund reconstruction spending after a climate event in climate vulnerable countries (Persaud, 2023) can deal more explicitly with the climate injustice issues that are directly associated with the existence of climate debt. However, reparations and levies rely on pre-existing financial resources and, thus, their size cannot be sufficiently high to cover the growing needs for spending on climate adaptation, losses and damages.

To address the climate reality facing the global South we need a more holistic framework. Such a framework should rely on the establishment of climate justice stabilising mechanisms that would create a commitment for governments in the global North to provide, on a permanent basis, climate financing support to global South governments, in the context of global climate justice. The main climate justice financial mechanism would be what I call a *Climate Justice Facility* (CJF). This would involve the creation of money by global North central banks for the provision of climate loans to global South governments. The CJF would have the

⁵ For the limitations of SDRs, in particular, see Pforr et al. (2022) and van Tilburg et al. (2022).

following features. First, the climate loans to global South governments would be perpetual, that is they would not have a maturity date and, thus, their principal would not be repaid. The lack of principal repayment would compensate for the climate debt that global North countries owe to the global South. Second, the CJF would allocate responsibilities among global North governments based on the cumulative emissions of their countries: the higher the contribution of a country to the cumulative global emissions the higher the proportion of the climate loans issued by climate vulnerable countries that the central bank of this country will provide. Third, the interest rate on climate loans should be equal to zero to avoid increasing the financial burden of global South countries. Alternatively, the interest rate could be slightly higher than zero to (partially) compensate for the implications that CJF would have for the value of the currencies of global North countries.

Figure 1 provides an example that illustrates how the CJF would work in practice from a balance sheet perspective. Suppose that a developing country, let's say Barbados, suffers from a climate-related event and needs a perpetual loan to deal with climate-related financial losses in properties and infrastructure. It then applies for a loan to the CJF which approves the loan (based on the criteria that have been specified for the types of spending that can be accepted under the mechanism) and asks the global North central banks (let's say the Fed, the ECB, the Bank of England, the Bank of Japan, the Reserve Bank of Australia and the Bank of Canada) to provide perpetual loans. The higher the contribution of a specific country to cumulative emissions, the higher the amount of perpetual loans that it should provide. The CJF then collects the loans which are in different currencies and transforms them into a pooled loan in BBD which is provided to the Government of Barbados. This climate loan will remain permanently on the liability side of the balance sheet of the Government of Barbados since it will never be repaid. It is expected that the balance sheet of the CJF will be continuously expanding due to the growing needs for climate-related spending in the global South.

Figure 1. Balance sheet representation of the mechanics of the Climate Justice Facility: an example

| ECB | Climate Justice Facility (CJF) | Government of Barbados |
|-------------------------------------|---|--|
| +EUR climate loan +EUR reserves | +BBD pooled climate loan +EUR climate loan +USD climate loan +GBP climate loan +JPY climate loan +AUD climate loan +CAD climate loan | + BBD deposits + BBD pooled climate loan |
| +USD climate loan +USD reserves | | |
| + GBP climate loan + GBP reserves | | |
| +JPY climate loan + JPY reserves | | |
| +AUD climate loan +AUD reserves | | |
| +CAD climate loan +CAD reserves | | |

In general, the perpetual climate loans can be used either for climate adaptation projects or the coverage of losses and damages based on specific criteria and taxonomies of activities

that need to be developed and agreed at the global level. In the case of climate adaptation, the funds received from the CJF could be managed by national designated authorities or accredited entities, drawing on the processes that have been developed by the Green Climate Fund (see WRI, 2021). However, formal mechanisms need to be developed that ensure that local knowledge is properly integrated into the design of projects (Omukuti et al., 2021; Soanes et al., 2021). Civil society and community-based organisations can play a key role in that.⁶ As far as losses and damages are concerned, it is essential to have fast track processes in place to ensure that those affected by acute climate-related events receive funds quickly. Losses and damages associated with gradual changes in climate patterns can rely on procedures like those that can be used for climate adaptation.

Several general points about the CJF are in order. First, the CJF should be viewed as a complementary tool to and not as a substitute for other climate justice initiatives that governments of global North countries need to take (such as debt relief programmes, climate use of SDRs and climate reparations). A specific advantage of the CJF is that – instead of relying only on pre-existing financial resources – it would lead to the creation of new financial resources through the endogenous creation of money by central banks in the global North. This could significantly expand the financial capacity for undertaking climate spending. Second, the CJF would reduce the power of global private banks since it would make their presence for climate finance purposes in the global South less necessary. Thus, it would reduce the injustice that is reinforced through the Wall Street Consensus. It would also allow governments in the global South to focus on how to develop climate projects that work for the local population, instead of using resources to create an environment that is conducive to the profitability of private financial institutions, but does not necessarily promote effective and just climate solutions. Third, the existence of a permanent mechanism of financial support for climate vulnerable global South countries would reduce their physical risks and would, therefore, limit the deterioration of their ratings by credit rating agencies. It would, thus, attenuate the strength of the ‘exposing by self-protecting’ channel described in the previous section. Fourth, since the CJF can create exchange rate depreciation pressures on global North currencies, it would create an incentive to global North governments to intensify their climate mitigation efforts so as to reduce climate-related damages in the global South.

Apart from the CJF, additional climate justice stabilising mechanisms could include climate just asset purchases and climate just collateral frameworks. Climate just asset purchases would involve the purchase by global North central banks of climate bonds issued by global South governments and non-financial corporations. Climate just collateral frameworks are frameworks whereby these climate bonds are included in the assets that global North central banks accept as collateral for the provision of central bank money to financial institutions. Both climate justice asset purchases and collateral frameworks would reduce the cost of borrowing for climate-related spending in the global South, since they would increase the demand for these bonds.⁷

⁶ For the role of such organisations in climate adaptation fund projects, see Manuamorn et al. (2020).

⁷ A mechanism that has recently been launched and intends to reduce the cost of borrowing for African countries (especially for climate-related bonds) is the Liquidity and Sustainability Facility (LSF). The LSF accepts African government eurobonds as collateral and, by using funds received from SDRs, multilateral development banks and other financial institutions, it provides liquidity to private investors that hold these eurobonds on their balance sheets (for more information, see <https://lsfacility.org/>). Gabor (2021b) has argued that an important limitation of the LSF is that the margins/haircuts specified for sovereign bonds by LSF are pro-cyclical which means that they will increase if the countries that issue them face a crisis. Climate just collateral frameworks provide an

Element III: Incorporation of climate justice criteria into global North financial institutions' mitigation actions

Simply decarbonising their monetary and financial policies would not be sufficient for global North countries. As explained in Section 2, many companies that try to reduce their emissions – and could be supported by global North financial systems through the use of climate mitigation tools – rely (directly or indirectly) on green extractivist practices that have adverse effects on societies and ecosystems in the global South.

Take, for example, the decarbonisation of the ECB corporate bond purchases that started in October 2022 (see ECB, 2022). Based on the design of this decarbonisation, the ECB is currently tilting its purchases towards bonds that have been issued by companies that have a relatively better climate performance based on their emissions profile. However, the ECB has introduced no conditionalities about the ways by which companies green their operations. For example, a company that has reduced its emissions by relying on green materials that have been extracted in the global South under exploitative labour conditions and by buying carbon offsets that have forcibly displaced indigenous people from their land is treated, under this decarbonised programme, in the same way as a company that has a similar emissions profile but has not relied on such practices (see also Fornaroli, 2023). In a climate just financial system, these two companies would be treated very differently.

More broadly, climate justice suggests that when they use climate mitigation tools to support the financing of decarbonisation, global North governments, national public banks, central banks and financial regulators need to ensure that companies that engage in green extractivism are not supported. The same is the case for multilateral public banks that might provide 'green' loans to companies that potentially exploit global South communities to achieve climate mitigation targets. Any support to such companies should be conditional to the lack of such practices. This would require the collection of data on how companies address their needs for transition materials (e.g. whether the supply chains and renewable energy projects of companies are conducive to conflicts, whether companies make use of recycled materials to reduce the need for extraction etc.), the local implications of large-scale renewable energy projects and the exact carbon offsets that companies rely on in order to achieve decarbonisation targets (i.e. to what extent these carbon offsets are linked with projects that adversely affect global South communities). This data needs to be collected by public authorities and 'green extractivism' conditionalities should be incorporated simultaneously into several policies, most notably fiscal, regulatory and trade policies, not just monetary/financial policies.

IS A CLIMATE JUST FINANCIAL SYSTEM POLITICALLY AND TECHNICALLY FEASIBLE?

From a political economy point of view, developing a climate just financial system faces several barriers. First, governments in the global South need to accept that their climate debt

alternative to the LSF. Their advantage is that they can create a permanent demand from climate sovereign bonds and their haircuts be set at a permanently lower level to reflect climate justice perspectives.

has created a responsibility to support climate spending in the global South on a permanent basis. This support cannot always be provided on a 'win-win' basis, as it is often argued that is the case in 'Wall Street Consensus' initiatives. This means that governments that will decide to support the development of a global just financial system might not be very popular among citizens in the global North. However, higher political support might be achieved if governments highlight in their narratives that their countries can benefit from higher economic stability in the global South.

Second, powerful global North private financial institutions are unlikely to support the development of a global just financial system since this would reduce their structural power. Currently, the lack of financing mechanisms that address climate justice allows these institutions to affect policy making in the global South since they can present themselves as 'climate fixers' in the sense that they can provide finance to climate projects that global South governments cannot fund due to their limited policy space. It is, therefore, likely that these institutions will undermine initiatives that can reduce their ability to influence political decisions in the global South.

Third, the mandates of the central banks in the global North need to be modified to support the commitments of their governments to address global climate justice. This can be politically challenging since central banking circles typically resist to take responsibilities for issues that move beyond their standard mandates, such as inflation targeting.

However, the political feasibility of an agenda that would be conducive to a global just financial system might gradually change. As the climate crisis deepens and the global injustices of climate change become even more visible, governments in the global South are likely to increase their pressure on global North governments to address the injustice problem. This was exemplified in COP27 whereby several global South governments demanded the adoption of concrete measures for addressing loss and damage in the global South (see Wyns, 2023).

Another political economy issue that requires particular attention is related to the fact that the provision of financing for climate projects is a necessary but not a sufficient condition for reducing climate vulnerability, damages and losses. Due to political economy reasons, governments in the global South might not necessarily use the funding that they will receive in a way that protects local communities – they might, instead, use this funding in a way that supports the interests of specific powerful groups. Hence, mechanisms need to be put in place which would ensure, for instance, that the climate loans received by global South governments in the context of the Climate Justice Facility would achieve their stated aims.

The development of a climate just financial system also faces significant technical challenges. A very crucial one is how to define climate adaptation projects. Recent taxonomies of sustainable activities already include adaptation activities. However, specific screening criteria have to be developed in identifying these projects at the micro level. Importantly, adaptation projects that also contribute to the achievement of non-climate-related development targets need to be prioritised.⁸

⁸ For the dual use of climate adaptation infrastructure, see Khan et al. (2022).

Another technical challenge is the quantification of the climate debt responsibilities of global North countries in the context of climate justice mechanisms and the development of the technical details about the issuance of climate loans from global South governments.⁹ Equally challenging is the collection of data for the impacts that Global North companies have on global South communities through green extractivist practices. The quantification of these impacts is essential for the incorporation of climate justice criteria in financial regulation, monetary policies and the lending practices of private and public banks.

CONCLUSION

This paper calls for a new approach to climate finance that would be conducive to addressing the global injustices of the climate crisis. Despite the political economy and technical challenges in developing a global just financial system, a justice approach to climate finance is urgently needed to prevent and reverse the adverse effects of climate finance on global South communities.

Three limitations of the proposals of this paper should be highlighted. First, in my analysis I have focused only on global climate justice: other types of climate injustices, such as those related to gender and race, but also procedural injustice issues, have not been included in what I define as a 'climate justice financial system'.¹⁰ Incorporating these different types of injustices into the framework of this paper is left for future research. Second, developing a climate just financial system along the lines discussed in this paper would not be sufficient to address the injustices of the climate crisis. Doing so would require additional transformations, most notably in fiscal, regulatory and trade policies. Also, many of the required transformations might not be compatible with the structural features of the existing global capitalist system. However, the changes suggested in this paper would still be very fundamental and have the potential to have a significant positive contribution to the livelihoods of climate vulnerable populations in the global South. Third, the injustices that are associated with environmental problems that move beyond climate (such as water scarcity, hazardous waste disposal, deforestation and biodiversity loss) have not been analysed in this paper. Adopting a broader environmental justice perspective is essential for a successful transformation of finance.

The development of a climate just financial system requires a significant amount of innovative interdisciplinary research. The purpose of this research should be two-fold. First, it should aim at improving our understanding of the climate injustices created or exacerbated by the ongoing climate finance initiatives. Second, such research should explore in detail the technical and political economy aspects of the three elements of the climate just financial system that I analysed in this paper.

⁹ For the quantification of such responsibilities, see Matthews et al. (2014), Skeie et al. (2017), Hickel (2020) and Fanning and Hickel (2023).

¹⁰ For the disproportionate impact of climate change on racialised communities and women both in the global North and the global South, see e.g. Pearse (2017), Eastin (2018), Abimbola et al. (2021), Ahmed and Eklund (2021) and Perry (2023).

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