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THE GLOBAL POLITICAL ECONOMY OF GREEN FINANCE AND SOCIO-ECOLOGICAL TRANSFORMATION

Special Issue Guest Editors:
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JOHANNES JÄGER, LUKAS SCHMIDT
Global Green Finance and Sustainability:
Insights for Progressive Strategies

ABSTRACT *Green finance has been increasingly presented as being an effective solution to global environmental problems and climate change. However, today's global financial structures tend to reproduce global inequalities and contribute to continued, highly unequal over-use and destruction of the environment, as well as a global ecological crisis. This paper introduces the topic with a specific emphasis on green finance, and provides an overview of the contributions to this special issue on Global Finance and Socio-Ecological Transformation. We discuss the implications of global green finance and propose a typology that differentiates between neoliberal, reformist and progressive transformative types of green finance. Based on this, we present insights for progressive strategies and policies for financing a socio-ecological transformation towards global sustainable welfare.*

KEYWORDS *Green Finance, Sustainability, Socio-ecological Transformation, Strategies, Environmental Policies*

“...[G]reen finance represents the global financial community's first structured attempt to join financial performances and positive environmental impact ...”
(Berrou et al. 2019a: 4)

Introduction¹

It is widely recognised that, besides economic output, the concept of ‘welfare’ encompasses many additional important dimensions, such as environmental sustainability, job security and a more equal distribution

of income and wealth (Schultheiß et al. 2020, Novy et al. 2020). Debates on de-growth, numerous movements against environmentally destructive projects, concerns about climate change and the loss of biodiversity, and the recent rise of the Fridays-for-future movement, have shown the rising concerns about environmental issues. Additionally, we have seen the emergence of international trade union cooperation, e.g. the Trade Unions Democratic Energy Network (2019), demanding a global democratic energy transition requiring public investment and public ownership to overcome capitalist structures. However, the idea of sustainability had already been rediscovered in the 1970s, and rapidly found its way into mainstream discussions and policies. The original radical transformative perspective was abandoned in the 1980s and 1990s (Castro 2004). In the meantime, sustainability has become a dominant discourse, a central element of corporate social responsibility (CSR), and an important and growing business field. Among industrial companies and non-financial companies in general, it has become more common for them to represent themselves as 'green' by using CSR reporting in order to increase profitability. As Weber/ElAlfy (2019: 57) summarise:

“Corporations have realized that reporting on environmental and social issues can help achieve long-term profitability through developing a positive corporate image, which should satisfy stockholders’ interests.”

Green finance, as a central element of sustainable finance, has grown quickly over the past years (IMF 2019, UNCTAD 2020). The rise of green finance took place against the background of the financial crisis of 2008, a crisis that led to decreasing financial returns and that had considerably threatened the image of finance in the public perception. Hence, it is no surprise that green finance has become the new panacea for making capitalism more sustainable. The increasing importance of green finance has contributed to a more positive image of finance, and is mirrored by the global issuance of green bonds, which started in 2007 with around USD 1Bn globally, and surged to a value of USD 167bn in 2018 (Berrou et al. 2019a: 22). Compared to a total of USD 1.34tn of corporate bond issue in 2018 (Reuters 2018), it is an apparently significant and important development. Besides green bonds, there are also other financial products such

as green asset-backed securities, green loans, green funds, green project financing and green indices (Berrou et al 2019a). Alongside different green financial products, green finance can also be analysed by looking at different sectors or agents in the field of green finance. These agents include banks and the financial sector, multilateral development banks, and non-financial corporations. As an element of green finance, banks have started to introduce criteria to assess the environmental and sustainability risks of their borrowers, which helped to decrease their credit risk. This has been followed by focussing on green investment opportunities by establishing green mutual funds, green indices, such as the Dow Jones Sustainability index, and other investment vehicles (Weber / ElAlfy 2019).

Different institutions provide different definitions for green finance. In general, green finance tends to be defined according to the underlying motivations. Green finance is often referred to as “financial stocks and flows aimed at supporting the achievements of the environment-related SDG.” (Berrou et al. 2019: 13). Moreover, green finance is part of sustainable finance, which also encompasses social issues, while climate finance is considered an element of green finance (UNEP 2016, Berrou et al. 2019b: 34). It is generally assumed that environmental issues can be fixed within the current economic capitalist order. Often, reference to the UN Sustainable Development Goals (SDG) is made (Rezende de Carvalho Ferreira et al. 2016). However, it has to be noted that the SDG, although widely accepted or even hegemonic, are also criticised, because they explicitly, and contrary to the Millennium Development Goals (MDGs), privilege economic interests over universal entitlements. In so doing and by not questioning the current development paradigm, the SDG tend to undermine social struggles for more socially just and ecologically sustainable strategies (Weber H. 2017). In addition, it is claimed that the SDG are based on the assumption that decoupling is possible, which is considered a myth (Fletcher/Rammelt 2017), and SDG are considered as prioritising economic growth over sustainable resources use (Eisenmenger et al. 2020). Moreover, when dealing with SDG, international financial institutions such as the International Monetary Fund (IMF) are often criticised for not adequately addressing social inequalities (Donald 2019). In line with this, instead of assuming a compatibility between capitalist growth, a healthy environment, and social goals, critical political economy perspectives argue that capitalist dynamics tend to be in contradiction

with nature. In this perspective, the opportunities to fix global environmental problems are very limited, due to the expansionist dynamics of capitalism and its internal power structures. Therefore, it is argued that an incorporation of environmental issues under a capitalist framework is not a sufficient strategy for sustainability. Instead, the economic system has to be changed (Liodakis 2016; Zeller 2020), i.e. that a fundamental socio-ecological transformation has to take place.

This special issue analyses the implications of finance on the environment and seeks to address the question of which form of finance contributes to a socio-ecological transformation. Therefore, we consider a socio-ecological transformation to be a process needed to change the global capitalist mode of production in such a way that it is globally sustainable (avoiding climate change, the destruction of the biosphere etc.) and ensures globally equitable material living conditions for all. The role of green finance is thereby considered within the broader framework of global financial structures and developments. The recent Covid-19 pandemic has shown the importance of states and governments in combating the pandemic. In the current conjuncture, AK Wien Abteilung EU & Internationales (2020) holds that it is necessary, not just to save banks and multinational corporations, but the people and the climate. The climate crisis and the multiple ecological crises the planet faces are expected to have much more disastrous effects than the Covid-19 crisis. Combating the global environmental crisis requires vigorous public action. Similar to the Covid-19 crisis, environmental issues and policies affect different groups all over the globe in very different ways. Against this background, it is essential to discuss the limits and the implications of current financial structures and green finance in a global perspective, and also with reference to different groups in society.

This introduction starts with a short overview of environmental problems and their uneven nature on a global level in today's capitalism. The overview is followed by a critical assessment of the dominant perspectives on the role of green finance and proposes a typology to distinguish neoliberal, reformist and progressive transformative forms of green finance. The subsequent section demonstrates how the papers in this special issue are related, and which insights into socio-ecological transformation and the role of finance therein they offer. Finally, we present conclusions for progressive strategies and policies.

2. The highly unequal overuse of the global environment by the global North

Global capitalism leads to an overuse of natural resources (Fischer-Kowalski/Pallua 2016). This overuse carries with it significant environmental damage, and is not sustainable. Global warming is one of the most dramatic consequences. To keep global warming to +1.5 degrees centigrade by 2030, it is necessary to reduce global CO₂ emissions by 7.6 per cent per year from 2020 to 2030 (UNEP 2019a: 26). This is extremely unlikely to happen under current capitalist structures and the prevailing capitalist mode of production. Moreover, the access and use of environmental resources is highly unequal: the poorest 50 per cent of the global population account for only about 10 per cent of global emissions, while the richest 10 per cent account for about 50 per cent. It is mainly rich people in the global North (Kleinhüchelkoten/Neitzke 2016), but also rich people in the global South who cause these emissions. Oxfam (2015) estimates that the richest 1 per cent is responsible for about 30 times more emissions than the poorest 50 per cent of the world population. Industrialised countries use much more natural resources per capita compared to the usage of developing countries (Ritchie/Roser 2020). One characteristic of this uneven consumption of natural resources is that the global South is a net exporter of natural resources to the global North (Fischer-Kowalski/Pallua 2016). However, economic development goes hand-in-hand with higher use of resources and increased emissions, as shown very clearly in the case of China. Its global share of natural resource consumption increased from 7 per cent to 34 per cent between 1950 and 2010 (Fischer-Kowalski/Pallua 2016: 72). In the 2000s, China became the biggest emitter of greenhouse gases after the USA. Outsourcing 'dirty' production allowed the USA and the EU to reduce their own carbon footprints in domestic production. However, if the carbon incorporated into trade with China is considered, the footprint of the USA and the EU is substantially higher (UNEP 2019b see figure 1, Bergmann 2013). However, the role of China in the reduction of global CO₂ emissions is crucial (Pan et al. 2017). Compared to China, India's emissions per capita are less than one third (see figure 1). If India and other countries from the global South further develop economically, they would require more natural resources. Given the limits of the

planet, however, expanding the prevailing current mode of production and consumption in rich countries to the rest of the world would simply not be possible. Today’s highly unequal overuse of natural resources globally, but also within the EU (Ivanova/Wood 2020), and the use of developing countries as a global sink for waste (Laser/Schlitz 2019), are not a coincidence but an outcome of the specific configuration of contemporary asymmetrically structured global capitalism. In addition, the effects of climate change are unequally distributed among various socio-economic groups. For example, women in rural parts of developing countries are very vulnerable, as they typically rely heavily on climate-sensitive processes for their livelihoods (Oxfam 2015). Poor people are more exposed to natural disasters and less protected against the consequences of these catastrophes than is the wealthier part of society (Hallegatte et al. 2016).

Europe’s and the US’ relative overuse of global resources and their contribution to global environmental problems are disproportionately high. This is neither sustainable nor desirable from the point of view of the large majority of the world population. The question arises, thus, whether, to what extent, and which type of green finance can contribute to a necessary socio-ecological transformation that takes this international dimension of sustainability into account.

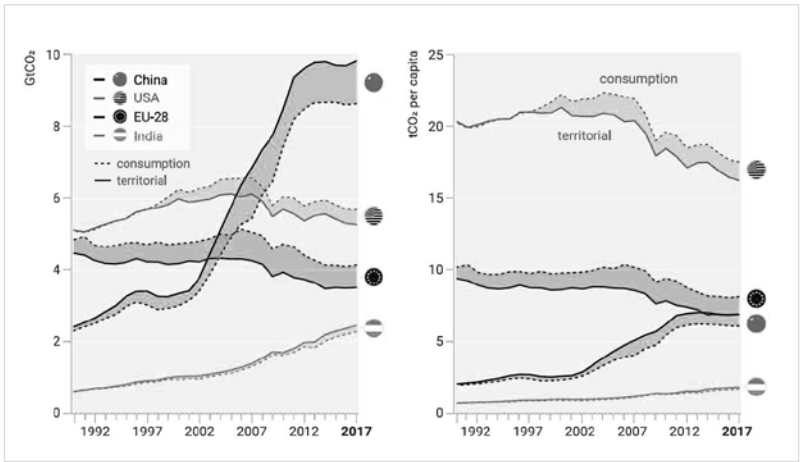


Figure 1: CO₂ emissions, 1992–2017

Source : UNEP 2019b

3. Dominant discourses and different types of green finance

Although the IMF (2019) does not find any evidence that sustainable or green investment provides higher risk adjusted returns, it is frequently argued that in general green finance following sustainability criteria is not just beneficial to the environment but also supposed to lead to higher profits for financial investors. Transnational capitalist leaders, their organic intellectuals, and representatives of private finance do not rest when it comes to promoting sustainability and calls for action against climate change. Larry Fink (2020), CEO of the world's largest financial investment company, in his well-known letter to investors is a perfect example of this phenomenon. In public discourses, it tends to be such views that dominate the framing of problems, while working class perspectives are not considered. These dominant discourses spread optimism regarding how capitalism and private finance can contribute to solve the environmental crises and the problem of climate change. We argue that besides these dominant discourses, other types of green finance also exist (for an overview see table 1). Although much less visible, they offer important entry points for progressive policies.

3.1. Neoliberal green finance

The promoted solutions within the dominant discourse on green finance and green capitalism tend to be in line with mainstream neoclassical environmental economics (Anderson 2019). We propose to classify this perspective on green finance, that is in line with neoclassical economic perspectives, as *neoliberal green finance*. These discourses tend to obscure the implications of environmental issues and policies on different economic and social groups in (global) society. Neoclassical perspectives hold that moral sanctions and codes, for example in the form of corporate social responsibility (CSR) or following ESG (Environmental, Social and Governance) criteria, can contribute to solving environmental problems. While the positive environmental effects of voluntary ESG measures tend to be at best quite limited (IMF 2019), they allow companies to promote themselves as environmentally friendly and to differentiate their products as sustainable. Thereby, they feign to avoid more drastic direct government regulation by pointing to their activities, implicitly arguing that there is no need for stricter regulation. This is a common way of justifying the benefits

Types of green finance	Elements of (green) finance	Forms of regulation	Implications
Neoliberal green finance	Private green finance	Voluntary standards (CSR, ESG)	No or very limited positive environmental effects legitimising finance, opposing general binding environmental rules
	Private green finance supported by public money	Subsidies, including public risk taking (guarantees)	Transfer of public finance to private (finance)
	Private green finance supported by neoliberal public regulations and policies	Market-making, transparent non-binding standards, supporting dispossession	Commodification, expropriation of public natural resources, contributing to further financialisation
Reformist green finance	Reformist public green finance	Raising public financial sources (taxes) causing positive environmental and social impact	Reformist strategy to support productivist green capitalism and beyond
	Reformist public command and control policies in finance (and beyond)	Binding regulations for the financial sector (forbidding certain financing activities, enforcing others), restricting harmful cross-border capital flows to allow for reformist domestic monetary and financial policies	Putting public and private finance at the service of productive green development
Progressive transformative green finance	Progressive public command and control policies aiming at global environmental rights and caps	Binding regulations for economic activities (national, international, north-south context)	Providing resources beyond green capitalism towards socio-ecological transformation (global sustainable welfare)
	Transformative public green finance	Public financial resources for public provision (national, international, north-south context)	Decommodification, socio-ecological transformation (global sustainable welfare)

Table 1: Types and elements of green finance, forms of regulation and implications

Source: own compilation

of private green finance (Rezende de Carvalho Ferreira et al. 2016). Weber/ElAly (2019: 69) point to the problem that “[so] far, sustainability reporting rather focused on positive impacts without being transparent about negative impacts.” Moreover, the problem remains that voluntary codes of conduct tend to be followed only and exclusively if they do not reduce but rather increase profitability. A series of voluntary codes of conduct has also emerged in the financial sector, representing an important cornerstone of what we call *neoliberal green finance*. Weber/ElAly (2019: 72f.) conclude:

“Hence, financial materiality seems to be the main driver for green finance so far. Though we see an increase in green finance, we also have to conclude that green finance is far from being in the core of the business for most MDB [Multilateral Development Banks], industrial companies, and banks. For most of them green finance is a niche product and service compared to their conventional business. [...] If we look on reporting, one might get the impression that green finance plays a major role in MDB, companies and banks. This, however, is less a matter of the ratio of green finance compared to other businesses, but it is because of the way of reporting. Most of the reporting is still to paint a positive picture to stakeholders and shareholders. It is used less as a strategic management tool, but as a tool to increase the reputation of firms. Furthermore, many of the reporting standards focus on what is profitable for the company and not for the environment. It is less about the impact of green finance on the environment, but rather the impact of green finance on the company itself. This supports green finance only as far as it has a direct positive impact on the business or as long as it has a positive impact on the reputation.”

The Coase theorem, in the tradition of neoclassical theory, argues that well-established private property rights, together with low transaction costs, represent an efficient solution to environmental problems, which are seen as market failures (Harris and Roach 2013). Tradeable pollution permits, such as the CO₂ trading scheme establishing indirect property rights, can be seen as an example of this argument being put into practice. The financial sector provides financial services and products in the context of the carbon markets created under the Kyoto Protocol mechanism. Establishing property rights on nature, making nature tradable, and implementing financial and regulatory government policies supporting desired (environmentally friendly) behaviour creates new markets and,

hence, possibilities for extracting profit. The increasing importance of *neoliberal green finance* can be understood as an element of a broader long-term process of finance becoming more important in the economy, a phenomenon frequently referred to as financialisation (Lapavistas 2013). In this regard, *neoliberal green finance* contributes to a further commodification/marketisation of nature by deepening capitalist relations of production and capitalist dynamics, and by contributing to financialisation (Brunnengraber 2009). Against this background, Brand and Wissen (2014) argue that the financialisation of nature represents a strategy to deal with capitalist crisis tendencies. Moreover, when commodifying nature, one assumes commensurability, i.e. the notion that one form of nature can be compared to and substituted by another (Bracking 2020). Hence, expanding *neoliberal green finance* does not contribute to solving environmental problems, but on the contrary, deepens them.

The practical implication of the preferred neoclassical option can be illustrated in the case of Covid-19: instead of generally forcing people to stay at home, permits to go out could have been issued. The permits could then be sold and traded. Those who really wanted to go out (and can afford it) would do so. From a societal point of view, this means that the wealthy can avoid being locked down and the costs of adaptation are shifted onto the poor. In a global perspective, this neoclassical view implies that environmental costs (in form of pollution or waste) should be relocated to poorer countries, because it considers this an efficient solution, as people in these countries are less willing (and able) to pay for environmental protection (Johnson et al. 2007). Hence, this neoclassical perspective helps to legitimise the shifting of environmental costs to poorer countries and people, while providing profit opportunities.

Typically, a neoclassical perspective assumes that environmental problems are caused by externalities. By including so-called external costs, markets will send the correct signals and environmental problems can be solved (Harries and Roach 2013). Including externalities via subsidies or shifting private risks to public institutions, e.g. via guarantees, is attractive from the point of view of green financial capital because these measures increase profitability for private investors. This, however, implies that private financial capital is supported by state subsidies and public money, i.e. by taxpayers. Hence, it represents an element of *neoliberal green finance*.

3.2. Reformist green finance

Dominant neoliberal discourses on green finance suggest that, in order to implement a very costly ecological transformation, it is necessary to mobilise private financial resources. Lagoarde-Segot (2020: 2), however, holds that:

“... the SDG financing gap is primarily the result of an optical illusion created by looking at sustainable finance through the prism of the loanable fund theory. The biggest obstacle to financing the SDG may not be the scarcity of money, or the unavailability of policy options, but, rather, our economic zeitgeist.”

The reason for this illusion is that the common assumption of a ‘lack of finance’ is based on the loanable funds approach. As alternatives to this approach, Lagoarde-Segot (2020) points to the roles that central banks and endogenous/credit money could play in dealing with environmental problems. There is no lack of finance. The necessary financial means can be provided easily by appropriate monetary and public financial institutional arrangements. Thereby, central banks and also (multilateral) development banks are potentially important players. However, development banks are criticised for being still much more important for financing brown investment, and in so doing foil their environmental goals while trying to be recognised as ‘green’ (Weber/ElAlfy 2019). Such public structures of finance, from central banks to public development banks, represent an important element of *reformist green finance*. There is, thus, no lack of finance, but public money should be used for preferably public policies yet not subsidise directly or indirectly finance and industry, thereby inflating profits.

Environmental taxes, although also part of the neoclassical toolkit, are, however, less attractive to private investors than public funding, as they restrict certain behaviour and markets and may reduce profits. From a neoclassical perspective, they are still preferred over command and control policies that simply enforce companies or people to fulfil certain environmental rules and/or forbid certain environmentally damaging behaviour. Nevertheless, these command and control policies, important tools according to political ecology, have been effective in dealing with environmental problems. Examples of such policies include forbidding the use

of toxic substances, forcing industries to use certain filter technology, etc. Command and control policies are not the preferred solution in a liberal perspective as they restrict the freedom of individuals; also, indiscriminately, that of the wealthier ones. In order for private green finance to deliver desired environmental effects, an adequate regulatory framework and binding environmental rules are necessary (Wang and Zhi 2016). In this regard, we propose subsuming taxes and binding environmental rules and financial regulation that indeed provides environmentally (and socially) desirable outcomes under the header of *reformist green finance*.

There have been several initiatives to develop stricter rules. While the EU High Level Expert Group in Sustainable Finance (2018) provides some modest suggestions to increase transparency, China has developed a much stricter framework. A green credit policy requires investors in China to allocate investment towards green industries and to withdraw from industries with a negative impact on the environment. In addition, environmental indicators are considered in banking supervision and risk assessment (Weber 2017). Also, the IMF (2019) insists on the importance of the regulatory context for private finance. However, not necessary all types of regulation can be considered as being elements of *reformist finance*. Introducing standards or standardised labels for what is considered green finance may not address general flaws of *neoliberal green finance*, but instead legitimise certain practices without tackling environmental problems. While institutions such as the European Commission (2019) tend to favour *neoliberal green finance*, UNCTAD (2019) emphasises the role of state finance and public provision (Gallagher/Kozul-Wright 2020). UNCTAD (2019) moreover, is sceptical about the beneficial effects of neoliberal (green) private finance and cross-border financial capital flows and proposes limiting the negative effects of it and relying on domestic public green finance instead. Measures proposed by UNCTAD (2019), hence, represent, to a large degree, central elements of *reformist green finance*.

3.3. Progressive transformative green finance

Progressive transformative green finance goes beyond a Polanyian critique demanding a re-embedding of finance in order to be able to address ecological needs (Lagoarde-Segot/Paranque 2018); it also aims to replace the capitalist mode of production by expanding de-commodified forms of

provision and democratic and rational forms of production. De-commodification of the economy and social planning, instead of capitalist accumulation strategies, become the guiding principles. Such a socio-ecological transformation should reduce the amount of surplus value extracted and assure a sustainable way of production that does not undermine the working and living conditions of others (namely people in other parts of the world, future generations). Reducing the use of nature and assuring an equal access to globally sustainable welfare as an attractive form of production and living are at the centre of this strategy. It is based on international solidarity and democratic well-being, including maximum individual caps for the use of the environment, guaranteeing for everybody today and for future generations decent living and working conditions, referred to as sustainable welfare (Koch/Buch-Hansen 2020). Based on solidarity, international cooperation should ensure that natural resources are used in a rational way and that everybody has the right to have access to a minimum amount of natural resources (e.g. in the form of food, energy etc.). While in the core countries this will imply de-growth in certain areas (but growth in others), in peripheral countries, the preservation of pre-capitalist subsistence-based modes of production and the development of new, less invasive and less resource-intensive forms of production can be important cornerstones of such a strategy. This, however, implies a different form of national and international regulation and a radically different role of finance therein. Cross-border financial flows have to be strictly regulated and national and domestic financial services are to be provided as a public good and guided by democratic decision making. *Progressive transformative green finance* relies on democratically planned public finance financed via central banks and development banks, it taxes capital and the wealthy to generate financial means, and seeks to break with the power of capital while supporting a transformation towards post-capitalist societies.

4. Contributions to this special issue

The dominant neoliberal discourses and forms of green finance turn out to be highly problematic in environmental terms, provide legitimacy to finance and its agents, and, hence, are not part of the solution but rather part of the problem. From a critical progressive perspective, a more radical

rupture is required in order to adequately address environmental problems. Alternative strategies imply a different role of finance and require state intervention and regulations that forbid or demand certain behaviour and technologies. Against the background of a critical political economy perspective, it is not a technical question of implementing binding rules, but an issue of social and political power relations that are decisive. These power relations and social and political struggles will determine the configuration and role of finance and its environmental and social implications. The contributions in this special issue shed light on specific aspects of green finance, show problematic tendencies, processes and structures and also provide insights towards alternatives.

This special issue starts with an overview, by Johannes Jäger and Lukas Schmidt, of the role of green finance within the context of global financial structures. Adopting a critical political economy perspective, they provide a theoretical framework for analysing the environmental impact of global capitalism and the role of finance by focussing on global asymmetries and dependencies. They adapt regulation theory in order to analyse how different development models are related and how different forms of (green) finance fit into specific national development models. Thereby, they distinguish between neoliberal green financial strategies supporting the status quo and related financialised patterns of accumulation, *reformist green finance* contributing to green capitalism, and finally, *progressive transformative green finance*. It is only the latter that could possibly break, they claim, with the disastrous environmental impact of expansionary capitalism and contribute to a fundamental socio-ecological transformation. Such a transformation would avoid the overuse of natural resources by a few and would be consistent with achieving globally viable sustainable welfare.

In his contribution, Samuel Decker analyses the transformative potential of Green Deal concepts. Against the background of the need for a socio-economic transformation, he develops a theoretical framework that systematically allows for the analysis of the transformative potential of different strategies. Therefore, he focuses on the impact on redistribution, socialisation and the role of planning in different Green Deal concepts and assesses the “Ecosocialist Green New Deal” proposed by the Democratic Socialists of America, the “Green New Deal for Europe” of the Democracy in Europe Movement (DiEM), and UNCTAD’s “Financing a Global

Green New Deal” and their potential for a socio-ecological transformation. While the “Ecosocialist Green New Deal” proves to be the most progressive proposal, the DiEM and UNCTAD approaches also include some initial versions of planning in the form of central banksupported green investment. This is very different to the European Commission’s Green Deal proposal, which makes no mention of any specific policy measures in any of the areas of redistribution, socialisation and planning.

Elisabeth Springler, in her contribution, focusses on macroeconomic stability and financial innovation in the context of green finance and sustainability. She shows how green finance emerged because of the developments of the 2008 crisis and how neoliberal market forces were promoted. Risk is privatised and financial fragility increases because of securitisation and other novel financial techniques. However, against the background of a heterodox economic perspective, a distinction between a neoliberal use of financial innovation and its institutional use is made. She concludes that a strong institutional embeddedness of green finance is required in order to ensure macroeconomic stability. In addition, a strong state is desirable to enable coordination between different agents in the economy, thereby contributing to sustainability.

These rather theoretical and general perspectives are followed by a series of selected case studies. The first of these concerns China. Bernhard Tröster and Karin Küblböck analyse the impact of China’s financial strategy on natural resources in Latin America and Sub-Saharan Africa. This is highly relevant as China has started to behave, in certain aspects, in much the same way as a core country of the world economy. The country uses multiple strategies to assure an inflow of natural resources in order to meet its rising demand for resources. Thereby, finance in the form of foreign direct investment and loans plays an important role. There is no doubt that China pushes peripheral countries into a subordinated situation. Nevertheless, the authors argue that China attempts to increase resource efficiency in peripheral countries. This could potentially trigger policies to diversify the economy and contribute to productivist development. However, this leaves the problem of the increasing and unequal overuse of natural resources unresolved.

Simone Claar, in her contribution, analyses green finance and the role of transnational classes in the area of investment in renewable energy. She points to the theoretical gaps in international political economy literature and proposes a global ecological political economy perspective building on a critical tradition. Green economy and green finance are clearly identified as being part of free market approaches. For the case of South Africa, she shows how green finance and green economy are related. It becomes evident that transnational capitalist classes are key actors promoting green investment in renewable energy. Thereby, she points to the conflicts between different classes and their factions at the national and international levels, and asks whether we can already speak of a new green transnationalist capitalist class faction.

In their contribution, Susanne Soederberg and Lama Tawakkol analyse, from a global political economy perspective, the humanitarian-development nexus that frames refugee situations as development opportunities. In the case of the Jordan compact, and the development financing that has derived from it, they show how the global capitalist power structures and paradoxes that go along with neoliberal practices advance global (financial) capitalist class interests. They focus in particular on the role of water as a key resource. They conclude that the Jordan compact turns the Syrian crisis into an opportunity for global development finance and its institutions that supports private finance rather than refugees or communities. With their case study, they clearly show how, under the conditions of finance-driven development strategies, development activities often provide more benefit to the developer and creditor than to the targeted group.

Finally, Yuliya Yurchenko analyses Europe's energy sector, a sector that is crucial due to its impact on climate change. Building on a critical political economy perspective, she analyses the EU's strategies for emissions reduction and the implications of the liberalisation of the energy market, including the potential outcomes of the Green Deal proposals. These measures have not delivered the desired outcome but have led to monopolisation and energy poverty. She concludes that a radically different approach, namely energy democracy, is needed for a socio-ecological transformation

in Europe. This means that universal access, stability and security of supply should be guaranteed, while renewable energy capacity has to be developed quickly and in an organised manner under public and democratic control. This, however, could be jeopardised by the existence of the Energy Charter Treaty and the treaties in the making such as CETA, TiSA and TTTIP that would curtail states' powers.

5. Implications for progressive strategies and policies

Common approaches and dominant discourses of green finance tend to be justified by neoclassical environmental economics and by financial institutions and their allies. Based on the brief assessment outlined in the introduction, the proposed typology and the contributions in this special issue, it can be concluded that the prevailing form of global finance and the green financial strategies that we call *neoliberal green finance* are highly problematic, not just in social terms but also for the global environment. *Neoliberal green finance* relies very much on voluntary standards under the heading of corporate social responsibility (CSR) and environmental and social goals (ESG). Green washing, social washing and cherry picking are common practices. Meanwhile, these practices have started to be considered problematic, even in mainstream financial media (Marsh 2020). Moreover, voluntary measures are often employed to argue explicitly and implicitly against the necessity of implementing binding rules. Standards, such as many of those discussed today, tend to increase the legitimacy of green finance, have a market-making impact, and are therefore more likely to strengthen and support financial capital than effectively contribute to solve environmental problems. Such regulations represent an essential element of *neoliberal green finance*. In general, *neoliberal green finance* contributes to further financialisation, increases global social inequalities, and shifts the burden of environmental damage and costs disproportionately to the working class in both the global South and the global North. From a progressive perspective, alternative forms of finance and binding rules are effective in environmental terms and socially desirable, and hence, a socio-ecological transition is required. While *reformist green finance* potentially contains certain forms of financialisation and, at least in part, contributes to productive green growth in some countries, this

form of green growth is not expected to end the highly unequal overuse of natural resources and the related global environmental problems. Alternatively, a *progressive transformative green finance* based on public finance and public provision is more likely to lead to a socio-ecological transformation that will end the overuse of global environmental resources, and promotes a more equal global use of natural resources based on environmental caps and rights under the title of sustainable welfare.

What to do?

From a progressive perspective, representing the interests of the majority of the working class and the disposed and marginalised groups in the global South, as well as in the global North, a combination of strategies is important. In general terms we distinguish three strategic entry points that are not mutually exclusive but are interlinked and can and should therefore be combined.

Firstly, a central strategy should be a defensive one, combating further financialisation entering through the backdoor of *neoliberal green finance*. This is necessary in order to prevent not only financialisation in the core countries but also a deepening exploitation of peripheral countries via financial means. These defensive strategies should avoid falling into the trap of false promises of *neoliberal green finance*, but rather understand them as constituting a Trojan horse. Although green finance might appear an attractive gift of finance, it brings with it a bias towards private solutions instead of binding public environmental rules, the latter being crucial for a substantial socio-ecological transformation. Moreover, it enhances the possibilities for financial capital to extract surplus value and supports neoliberal forms of uneven and imperialist global capitalism.

More recently, political initiatives such as the important Sustainable Finance Beirat der Bundesregierung (2020) in Germany has been arguing in favour of transparent standards and binding regulations in its preliminary report. However, it proposes a regulatory framework that intends to reach environmental goals and simultaneously to increase the competitiveness of German finance. As the Chairperson of the Sustainable Finance Committee, Karsten Löffler (2020), prominently states on the webpage:

“With the establishment of the Sustainable Finance Committee, the German government is putting the financing of climate and sustainability goals on the agenda. In doing so, it is highlighting their importance for the entire economy

and thus for the future-proofing and international competitiveness of Germany as a financial centre.“

The position of the institution is not surprising, given that a huge majority of its members are representatives from the financial industry. It is very likely that future proposals will be in line with these preliminary suggestions and finally address mainly the needs of the financial sector and industry and to promote finance in Germany. Although this might include elements of *reformist green finance*, it is more likely to contribute, in the main part, to *neoliberal green finance*.

Progressive strategies should not subsidise but push back and contain private forms of *neoliberal green finance* at the local, national, macro-regional and international level. Specific measures at a national level range from ending tax privileges for private finance and avoiding any kind of subsidies for finance, to strict regulation, the closing of environmental markets, and resisting further commodification and financialisation of nature. Instead, de-commodification and a public democratic management of finance and the commons should be introduced. At the international level, international agreements of any form should increase, not reduce, the financial autonomy of peripheral states and avoid all types of dependencies. Internationally active public institutions in the global North, such as development banks, should not support the expansion of private financial capital to the global South, as this is expected to cause financial instability and increase financial dependency, encourage further extraction of financial and natural resources, and deepen environmental and social problems.

At the EU level this means analysing critical current policy issues (EU High Level Expert Group in Sustainable Finance 2018, European Commission 2019) etc. by disclosing the neoliberal tendencies within these, opposing them and providing political alternatives.

Secondly, priority should be given to strict financial and environmental rules as central elements of *reformist green finance*. This can be a first step toward reforming capitalism and making it greener and potentially more equal. In a global perspective this is not sufficient to address environmental problems and the highly uneven use of global natural resources. However, *reformist green finance* can be a first step towards radical reformism. This strategy does not only include measures against financialisation but should

also support finance as a means for productive and more egalitarian ways of organising the economy. *Reformist green finance* should, therefore, rely mainly on public finance based on taxing financial and capital income, on wealth taxes and through a monetary policy that accommodates and directly finances desired forms of public investment by means of binding lending targets for banks, and through the use of public banks with environmental and social goals etc. This is to ensure that the public interest reigns over capitalist interests regarding how the environment is used, and that public financial resources are not appropriated by private financial capital but rather belong to the public and are used for public purposes.

At the EU level, expanding the public sector and using European institutions such as the ECB and its structures to finance a socio-ecological transformation are essential actions. In the EU, this would require opposing all strategies of a Green Deal that do not lead to a productive transformation of the economy and a substantial reduction of the use of resources. Instead, what should be proposed is to strengthen public financial instruments and implement binding environmental rules for finance (and other economic sectors) in general, such as imposing lending targets for banks and other binding measures for the whole sector. In addition, it is important to deal with the inequalities within Europe (EuroMemo Group 2020). Similar strategies may also be adopted by the global South. Beyond the role of central banks, Oscar Reyes (2020) presents a series of further measures, such as the building of green development banks and the implementation of binding rules that force institutional investors and public pension funds to change their investment policies in the direction of sustainable criteria. Christian Zeller (2020) proposes going beyond this, by strengthening public social policy and pension systems in the tradition of pay-as-you go public schemes instead of policies based on financial markets. It is essential that the policy autonomy of countries is not restricted by European rules, international trade and investment agreements or similar treaties. Regarding finance, Europe should support progressive strategies put forward by UNCTAD (2019) that aim at increasing autonomy and repressing international (financial) capital, while making the periphery less dependent and less vulnerable to international (European) capital flows (Gallagher/Kozul-Wright 2020). This includes combatting tax evasion by the wealthy within the EU and its (related) tax havens. In addition, it is

necessary to put limits on EU multinationals in the South and on Southern multinationals in the EU that extract wealth and destroy the environment. *Reformist finance* in an international Nord-South context should consist of grants but not (soft) loans, nor should a form of neoliberal conditionality be imposed that facilitates access of capital, i.e. also green financial capital, from the global North. Moreover, it is necessary to ensure that the public money benefits the working class but does not inflate private financial profits. Instead of supporting green capitalism in the periphery, which often goes along with the destruction of the environment and the expulsion of people from their lands and traditional means of production, the EU should contribute to sustainable welfare and production.

The downside of *reformist green finance* that is oriented toward productive green capitalism remains, however; the strategy of green productive growth is likely to lead to further overuse of nature because of international capitalist competition and the resulting competition for scarce natural resources. However, reducing dependence on foreign resources (or on externalising environmental damage to others) by supporting local and national autonomous self-reliant ecological productive strategies might be a potentially progressive strategy towards more radically reformist processes. *Reformist green finance* could play an important role in that.

Thirdly, *progressive transformative green finance* based on public provision and de-commodification is needed to support a socio-ecological transformation based on international cooperation that promotes development models that go along with an equal and rational global (per capita) use of natural resources. This strategy alone is expected to achieve a sustainable and egalitarian use of global natural resources. The driving forces for such a socio-ecological transformation can only be the subaltern and wage-dependent classes, and an orientation towards international solidarity. Multilateral cooperation based on international solidarity is an essential precondition. Productive and financial capitalists, together with the labour aristocracy, are likely to oppose such an approach. An international regime and agreements that support a transformation towards sustainable welfare must be based on institutions that allow for a globally rational and equitable use of resources, and that introduce maximum caps for the individual use of resources (Koch/Buch-Hansen 2020), and that also confer individual environmental rights to natural resources, such as good quality food

etc. The social and political basis of this would be ecologically and internationally oriented working class and solidarity movements. Undoubtedly, it is important what happens in large globally relevant societies such as China, and also in Europe. Different national hegemonies in these countries (regions) could support a different international mode of foreign relations and an alternative global hegemony and so reinforce progressive domestic movements and developments. While *progressive transformative green finance* and a global social ecological transformation are certainly far from being achievable in the current political conjuncture, these should remain a central point of reference and a goal in progressive discourses and strategies.

How to get there?

To begin with, it is important not to fall into the trap of the dominant neoliberal discourses on green finance promoted by financial capital's organic intellectuals and its institutional allies. These discourses are, rather, merely a strategy to further support and legitimise finance at the cost of workers (and even productive capital). Today's environmental problems are a consequence of capitalist development models in global capitalism and the class relations they are based on. Strategies to combat environmental problems must, therefore, be based on working class solidarity (in particular with marginalised and less privileged groups at the national and international level) and aim at changing the class relations, and hence, the mode of production. The disfavoured and exploited groups in the global South have a vital interest in preserving the environment. However, it are these groups that less natural resources use and that tend to be most negatively affected by environmental problems and the global ecological crisis.

It is necessary to break with the power of finance (and capital) in general, in order to support workers and democratic autonomy at the national level, and to ensure solidarity at the international level. This means not leaving the political debate about sustainability and green finance to financial capital and its allies, but rather to strengthen the capacity of trade unions, workers associations, and progressive NGOs (those that do not ride the wave of *neoliberal green finance*) and activists to actively participate in these discourses and intervene in them. Alongside building international solidarity coalitions, it is necessary to take action and politically influence national, European and international institutions and agree-

ments, and contribute to a progressive new international multilateralism, thereby opposing a further deepening of neoliberal regulations and practices at the cost of peripheral countries and workers. In so doing, it is necessary to strengthen international progressive forces, not to buy into dominant discourses promoted by (financial) capital but to rely on proper theoretical concepts and assessments to promote solutions that represent a socio-ecological transformation towards global sustainable welfare.

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ABSTRACT Green Finance wird zunehmend als zentrales Element für wirksame Lösungsstrategien bei globalen Umweltproblemen und gegen den Klimawandel präsentiert. Nichts desto trotz tragen die gegenwärtigen Strukturen des globalen Finanzsystems dazu bei, dass globale Ungleichheiten reproduziert, die Übernutzung von Umweltressourcen vorangetrieben und damit die globale ökologische Krise vertieft werden. Der Beitrag gibt einen Überblick zu den aktuellen Entwicklungen und der Rolle von Green Finance sowie zu den Zugängen in der Schwerpunktausgabe zu Global Finance and Socio-Ecological Transformation. Wir diskutieren die Auswirkungen von Green Finance auf globaler Ebene und schlagen eine Typologisierung vor, die zwischen neoliberalen, reformistischen und progressiv-transformativen Zugängen zu Green Finance unterscheidet. Auf dieser Basis präsentieren wir Schlussfolgerungen für progressive Strategien und politische Maßnahmen zur Finanzierung einer sozial-ökologischen Transformation in Richtung eines global nachhaltigen Wohlstands.

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