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From Climate Change to Sustainable and Inclusive Economies: A Policy Agenda

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Abstract
Climate change and neoliberalism are threat multipliers: they combine risks, increase instability and penalise disproportionately poor countries and poor people by virtue of their greater vulnerability disruption. This article examines the complex relationships between neoliberalism and climate change, and outlines a democratic economic strategy (DES) to address the transition from neoliberalism to a more dynamic, progressive and egalitarian system of accumulation, *and* the 'green' transition from unsustainable fossil fuel-dependent patterns of production to more diversified and sustainable economies. Both transitions must be pursued immediately, rather than gradually, separately or sequentially, for reasons of efficiency, consistency and legitimacy: the green transition will carry heavy costs and bring difficult political and economic challenges. Public support to address them will be forthcoming only through a shared commitment to transcend the destructive, polluting, exclusionary and income-concentrating logic of neoliberalism. DES offers a pathway to address these challenges and build sustainable and democratic economies.

Keywords
climate change, democratic economic strategy, neoliberalism, green transition, macroeconomic policy

Introduction

There is overwhelming evidence that the Earth's climate is heating up and that global warming has been accelerating. Human greenhouse gas (GHG) emissions have already raised temperatures by more than 1°C from the pre-industrial revolution baseline, and current trends suggest that

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temperatures could rise by up to 6°C by 2100 (IPCC, 2021). Disastrous consequences are inescapable even in relatively benign scenarios, and the time available to reduce emissions in order to avoid catastrophic outcomes is declining rapidly.[1]

These consequences should not be surprising. It has been known for several decades that GHG emissions would warm the planet, and the World Meteorological Organisation warned in the 1970s that the implications for humans would be severe. These implications will also be differentiated, since climate change is a threat multiplier: it combines risks, increases instability and penalises disproportionately poor countries and poor people by virtue of their greater vulnerability to any type of disturbance (Scherer and Tänzler, 2018; WDR, 2010).

Worldwide political and economic changes leading to a green transition must be pursued immediately.[2] Delays will make it harder to confront these challenges for four reasons. First, emissions change the Earth's climate in diffuse, gradual and cumulative ways: GHGs can remain in the atmosphere for decades, so a decline in emissions takes time to affect concentrations; temperature increases lag concentrations by decades to centuries, and changes in sea levels can lag temperatures by millennia. It follows that the dynamics of the climate system limit how much future mitigation can substitute for efforts today.

Second, mitigation costs tend to increase exponentially, since impacts worsen and cheaper options disappear as economies lock themselves into high-carbon infrastructures, systems of production and patterns of consumption.

Third, the carbon budget links cumulative global emissions to world temperatures. The calculation is sobering: the potential emissions from the oil and gas fields already in operation would warm the planet beyond 1.5°C; add the existing coal mines, and warming would exceed 2°C (Hansen et al, 2008; WDR, 2010: 71). In order to maintain the conditions for recognisable forms of life on Earth, countries *must not* consume all the technically recoverable fossil fuels; much of the known reserves can *never* be extracted; *no further prospection* should take place, and the fossil fuel-producing economies *must* diversify as rapidly as possible.[3]

Fourth, mitigation requires heavy investments in emerging sectors and innovative technologies, drastic innovations in exchange, consumption, housing and other essentials, and the transformation of the productive structure, including dismantling GHG-intensive industries and creating new 'green' industries. These investments will weigh especially heavily on the advanced economies, that must bear the highest costs of scrapping existing production structures (by virtue of higher investments in the past), and on the fossil fuel-dependent poor countries (that tend to be less diversified).[4]

This article claims that it is impossible to address the climate crisis and deliver a green transition within the productive and distributional framework of globalised and financialised neoliberalism, for reasons of practicality, effectiveness and legitimacy.[5] The challenges of coordinating global actions, leaving oil in the ground, diversifying the economy, building alternative growth drivers, securing macroeconomic stability and improving the distribution of income, wealth and power require the combination of green industrial policies with democratic macroeconomic and social policies. The state's role is crucial, because the state is the only institution that is at least potentially accountable to the citizenship,[6] that can balance the interests of current and future generations, and that can promote innovation and enforce the structural changes required by the green transition. This article outlines an ambitious democratic (human or pro-poor) strategy of economic diversification and redistribution to transform neoliberal economies towards a just and sustainable future.

Ambitious goals are imperative since, so far, most political systems have failed to give climate change the required priority, many countries have taken only token measures to reduce emissions, the oil industry (probably the most powerful lobby in the world) has resisted, and piecemeal initiatives have failed repeatedly. Just like the promise of a more equal future gave power and legitimacy to the war effort against fascism in the 1940s, today's world can find the strength to confront climate change through a shared commitment to transcend neoliberalism and financialisation: the sacrifices involved in the green transition can secure public support only if they are coupled with the reversal of the environmentally destructive and income-concentrating logic of the current system of accumulation.

This article includes five sections. Following this introduction, the second section reviews the drivers of climate change and the imperative of diversification. The third outlines the principles of a Democratic Economic Strategy (DES), including policies to drive sustainable growth, shift the energy matrix, diversify the economy, create employment, foster social inclusion, deliver welfare gains to the majority, and improve the distribution of income, wealth and power. The fourth reviews key policy issues distinguishing DES from conventional (neoliberal) approaches, focusing on fiscal, monetary and financial policies; the role of public investment; the balance of payments constraint, and social policies. The fifth section concludes the article. This article does not consider individual country cases or the impact of climate change on distinct social classes, genders or ethnic groups. Despite these limitations, this article will have achieved its goals if the approach and the policy suggestions outlined below can contribute to the emerging debates about alternative economic policies in the context of climate change.

Drivers of Climate Change

Climate change is at the crux of four tensions in the global economy. First is the tension between the boundless search for profits through extraction, production, exchange, speculation and plunder, and the limited capacity of the Earth to support these activities while maintaining a stable climate for the continuation of life as we know it. Capitalism posits an irresolvable challenge to climate stability, not merely because governments are 'unwilling to act', 'too short-termist', 'too weak to impose the right regulations', or because current treaties are 'too lax', although these statements are undeniably correct. The underlying problem is that the atmosphere, rivers, oceans, seasons and geological and metabolic processes that produce what appears, to us, as the 'natural conditions of production' cannot be fully commodified or wholly incorporated into the circuits of accumulation. Even when governments attach arbitrary ('shadow' or other) prices to natural resources, or impose taxes, charges or subsidies to create pseudo-markets to internalise social costs and benefits, these measures are unavoidably partial and imperfect and they can influence outcomes only at the margin. This is incompatible with the systemic challenges posited by climate change. It follows that, under capitalism, natural resources will *always* tend to be overexploited, the boundary between 'sustainable' and 'unsustainable' extraction will *always* remain fuzzy, and nature will *always* serve as a sink for the wastes accompanying the production of commodities for profit: unsustainability is a built-in feature of the mode of production.

For years, heterodox economists have highlighted the catastrophic implications of inaction and explained the need for aggressive state-led policies to address climate change. In contrast, mainstream economics lacks the tools to model cumulative processes taking place in imperfect markets and requiring systemic shifts in the mode of production; inevitably, the mainstream has been unable to devise policies to address climate change within a practical time horizon. Instead, it offers faith-based claims that the 'correct' prices emerging from fictional 'perfect' markets (or artificial prices conjured by otherwise 'inefficient' states) can deliver the 'right' incentives for individual decisions that would, cumulatively, stabilise the climate. In parallel, the mainstream hopes that technological fixes will become available before runaway climate change wrecks the existing natural balances and destroys the forms of life depending on them. This is misguided: uncoordinated individual actions will be too slow and too marginal to address a global problem created by a predatory and environmentally damaging mode of production (Hansen et al, 2008; Hendrix, 2017).

Second, there is a disjunction between the longstanding recognition of the environmental limits to growth and the inability of governments and intergovernmental institutions to address them. More than a quarter-century since the United Nations Framework Convention on Climate Change (UNFCCC) came into force, little has been tried, and even less has been achieved. GHG emissions from oil, gas and coal have risen almost relentlessly, from 20,522 megatons in 1990 to 33,513 in 2018, and declined only after the Global Financial Crisis (GFC) and the COVID-19 pandemic. Even worse, the share of the dirtiest fuel, coal, rose steadily between 1999 and 2014.[7]

Third, the tension between the accumulated emissions by the leading Western economies, on which basis they grew in the past, and the rising emissions by developing countries claiming the right to development today. A few advanced economies have managed to reduce GHG emissions recently, including the United States and the United Kingdom, but these outcomes were driven by deindustrialisation and the relocation of their manufacturing capacity (and corresponding GHG emissions) to the Global South.

Fourth is the incongruous structure of the global economy, in which several countries and powerful corporations are invested in the production, export, processing and sale of fossil fuels, even though this is incompatible with climate stability. The impossibility of exploiting the known reserves of fossil fuels implies that assets worth hundreds of billions of dollars must be stranded (mines, oil platforms, refineries, ports, industrial plants, etc.). This will eliminate countless jobs and create vast accounting losses for countries and companies. Both have been reluctant to accept these losses; some countries justify their stance by the imperative to secure jobs and incomes, others by the lack of alternative exportables, and firms claim a duty to their shareholders, which often include the state itself. To these costs must be added the investments needed to change the world's energy matrix away from fossil fuels while, simultaneously, retrofitting our way of life to make it compatible with net zero, plus the escalating costs of mitigating climate change, since it can no longer be avoided.[8]

These tensions have been intensified by financialisation.[9] Financialisation undermines attempts at mitigation and adaptation because the financial institutions operate in highly competitive markets that determine and drive short-termist, speculative and procyclical investment strategies. These strategies are incompatible with long-term industrial policy goals, substantial shifts in the composition of activity, investments in innovative, new 'green' drivers of growth or the redistribution of income (Chesnais, 2016; Heynen et al., 2007; Hudson, 2010; Lavoie, 2014). This is why the financial institutions continue to fund environmentally damaging initiatives that conflict with internationally agreed targets and that expand the bundle of assets that must be stranded when the world finally moves away from fossil fuels (Ansari and Holz, 2020; Bos and Gupta, 2019; Jakob and Hilaire, 2015; McGlade and Ekins, 2015; Raval et al., 2020). The outcome has been the exhaustion of the carbon budget (given the limits set by the Paris Agreement) and the contraction of the space for alternative policies, while countries slowly squabble towards treaties that will, inevitably, deliver too little, far too late. In the meantime, global businesses profit from the depredation of the Earth's conditions to support life, while expecting public guarantees of even *higher* profits in order to reduce the damage that they are poised to inflict on the planet.

A Democratic Economic Strategy for Sustainable Growth

This section outlines a DES to drive the transitions to a diversified and sustainable economy, and to a more dynamic, progressive and egalitarian system of accumulation.

Principles

DES is inspired by non-mainstream traditions in economics, including the Post-Keynesian, Institutionalist, Evolutionary, Kaleckian and Marxian schools, and it encompasses the (earlier) pro-poor development literature, while also addressing the environmental constraint (Balakrishnan et al., 2010; Cornia, 2006; Saad-Filho, 2007, 2011, 2022). DES includes policies to drive sustainable growth, diversify the economy, support green manufacturing, create employment, deliver welfare gains to the majority, foster social inclusion and the satisfaction of basic needs, and improve the distribution of income, wealth and power within and between countries. These goals stand in sharp contrast with the environmentally destructive acquisitiveness of neoliberalism and imply a proactive state coordenating and directing the process.[10]

DES can be justified on three grounds. First, mainstream policies centred on static market-based allocative efficiency, price stability, low tax rates and 'fiscal austerity' are limited: their focus on short-term stabilisation undercuts the drivers of growth; worsens the distribution of income, power and wealth; induces volatility and recurrent crises; and fosters environmentally destructive activities. Second, despite their considerable value, purely logical critiques of the dominant paradigms are insufficient; they must be supplemented by alternative macroeconomic strategies to counter the argument that neoliberalism is 'the only game in town'. Third, DES can provide an important contribution to democratic, distributive and sustainable outcomes, especially in poor countries. This can be achieved optimally through a combination of rapid employment-intensive growth, economic diversification, productivity growth and the redistribution of income and assets.

The notion of DES can be related to five centrally important issues: (a) poverty, (b) distribution, (c) the environment, (d) policy goals and (e) political democracy and the protection of identities.

(a) DES recognises that *poverty is an urgent problem that must be addressed by public policy*.[11] For mainstream economics, poverty derives primarily from exclusion from market processes because of incomplete markets, market failures or limitations to voluntary exchange, and it is measured by the inability to reach arbitrary expenditure lines, for example, US$ 1.90 per day. This approach implies that markets are always and unproblematically creators of wealth and that low income is a symptom of market exclusion. From this point of view, poverty reduction must be driven by economic growth and the integration of poor people into expanding markets, for example, through new employment opportunities or sales of goods or services. This approach is partial, because adverse forms of market integration can *create* poverty; for example, peasants can be dispossessed by debtor rural development projects, established livelihoods can be undermined by the expansion of large retailers or the introduction of new transport networks, existing jobs and skills can be destroyed by technological change, and policy shifts (e.g. trade liberalisation) can have adverse implications for the poor. Economic growth can also trigger environmental stresses that destroy the productive capabilities of the poor (Harriss-White, 2005). In this context, it is useful to distinguish 'basic poverty', due to low income and low productivity, which tends to decline as the economy grows ('a rising tide lifts all boats'), from 'market-generated poverty', due to the loss of productive assets because of the adverse implications of economic growth (Dagdeviren et al., 2002). Targeted policies are always needed to minimise market-generated poverty, deliver income security, and promote social integration, sustainable livelihoods and the distribution of income and wealth. Similarly, economic concentration tends to increase volatility and enhance the vulnerabilities of the poor, while diversification enhances income security and protects livelihoods.

(b) *Democratic economic strategies must benefit the poor more than the rich*; that is, growth is democratic only if it reduces both absolute and relative poverty. Growth and equity were traditionally perceived to be negatively correlated at least in the initial stages of growth (Kuznets, 1955), which served to validate distributionally regressive policies in developing countries. This claim was challenged by empirical evidence and by the Scandinavian and East Asian experiences, which suggested that equity can support rapid growth (Reinert, 2008). At a later stage, the World Bank's 'inclusive growth' paradigm implied that economic growth is 'good for the poor', because it generally alleviates basic poverty. However, if unqualified, this approach could support baseless notions of 'trickle down', or the idea that the allocation of morsels to the desperately needy can justify the wholesale enrichment of the privileged. Instead, DES insists that growth must reduce inequalities, in order to build cohesion and deliver social justice.

(c) *Democratic strategies must protect the environment*, because humans are not merely part of nature; our numbers, technologies and environmental footprint have turned our species into stewards of the Earth. DES recognises the economic implications through the notion of 'environmental constraint', which refers to each nation's command over the bounty of nature, the resource intensity of production, and the implications for consumption, the balance of payments and the reproduction of life (Ghosh, 2012; Hoffmann, 2011; Storm, 2011). In order to protect the natural balances against the boundless demands of profit-making, a democratic society should seek to expand the autonomy of humans from non-renewable resources. Shifting the energy matrix towards renewables is a step in that direction; society can similarly seek to reduce its reliance on the oceans, fish stocks, aquifers, marginal lands, cattle, scarce minerals and fragile ecosystems.

(d) *The key goals of DES* – macroeconomic stability, environmental sustainability and improvements in distribution, social welfare and economic diversity – *should be pursued directly*, rather than being conditional upon 'trickle down', profit-seeking or the interests of finance, and their achievement must be unambiguous across a broad spectrum of measures. These goals can be mutually supportive; for example, macroeconomic stability, including intertemporal fiscal and balance of payments equilibrium, real exchange rate stability and the minimisation of inflation and macroeconomic volatility can assist distribution; economic diversification can expand government revenue sources, and the latter can fund distributive programmes. These outcomes cannot be achieved at the expense of the environment; conversely, environmental sustainability cannot be pursued through the compression of the living standards of the poor. *Macroeconomic stability, distribution and environmental sustainability* are the best frameworks for implementing democratic economic policies in the long term.

(e) *DES must be nested within democratic political processes.* This principle operates at two levels. At the macro level, outcomes depend on the political structures supporting DES, especially mass mobilisations in support of distribution, diversification and sustainability. Mobilisation is essential because policies imposed from the top are disconnected even from the groups most interested in their success, making them arbitrary (even if well-intentioned), unaccountable and, often, politically fragile. These are not process failures, but symptoms of political flaws in the strategy (Wiig and Kolstad, 2018). In the absence of transparency, mass intervention and strong institutions of representation (trade unions, community associations, nongovernmental organisations (NGOs), electoral systems, the Courts, an open media, etc.), it is impossible to gauge support for conflicting goals, select between alternative uses of resources, and assess government performance. Democratic accountability also increases the resilience of DES, making it less vulnerable to political

> shifts either because of government changes or through backroom deals between politicians and local elites. At the micro level, DES must protect individual rights and collective identities, including those grounded on gender, ethnicity, cultural inheritance and personal choice. This is not only because of the basic duty to include everyone as an equal member of society but also because democratic societies must promote individual flourishing while recognising the identities that their members have, or choose to partake, and their preferred modes of living.

The Importance of Growth

Economic growth is important for the success of DES, especially in poor countries. Growth reduces basic poverty directly (see above); it can also support poverty reduction indirectly by inducing financial development and spawning taxes and savings that can support green investments, transfers and pro-poor social policies. If growth is appropriately targeted, it can also reduce market-generated poverty, for example, by inducing labour scarcities that can lift real wages, financing public goods and funding redistributive programmes. In contrast, in stagnant economies, improvements in welfare, distribution, sustainability, and mitigation and adaptation to climate change must rely primarily on transfers, which can be limiting and trigger political tensions.

The industrial policy literature suggests that a virtuous circle of sustainable growth, including green investments, productivity growth, redistribution, poverty reduction and improvements in the balance of payments, requires the identification of priority sectors for public investment and targeted incentives for the expansion and diversification of capacity and output. In parallel, it is essential to address the environmental constraint, develop technologies to reduce the human impact on the environment and meet the immediate needs of the poor around employment, skills and basic goods and services. Key sectors are likely to include construction, renewable electricity generation and transmission lines, greening the supply chains, retrofitting the building stock, and expanding housing, water, sewerage, public transport and health provision, sustainable irrigation facilities, and education and technical training.[12] Debates about competing investments can be informed by a 'social rate of return' ranking projects according to their financial costs as well as the impact on welfare, livelihoods and human rights, ecological sustainability, externalities, and promotion of diversification and long-term growth. Qualifying projects should normally yield positive returns, but the selection should not be determined only by profitability.[13] These initiatives can be successful only with state planning, regulation, adequate funding and performance monitoring, and they must be supported by accommodating fiscal, monetary and financial policies.

State-led coordination is essential, because the state is the only institution that can influence the pattern of employment, the production and distribution of goods, services, income and assets, and the relationship between humans and nature. Only the state can limit the power of unaccountable private interests, raise sufficient funds for democratic economic reforms and ensure that economic activity is guided by the demands of the majority. In this sense, DES is distinctive not because the state enjoys unlimited property rights or manages individual firms, but because of the way in which the state coordinates economic activity in pursuit of distributive and sustainable ends.

Democratic Policies for Diversification, Distribution and Development

This section reviews key policy issues distinguishing DES from conventional approaches, focusing on the role of public institutions and the selection and implementation of economic policies driving diversification, distribution and green growth. These policies can help to address the urgent challenges of poor countries, but their applicability is wider, as they draw upon a range of successful experiences of rapid growth, gains for the majority, and expansion of economic and political democracy. This section examines, in sequence, fiscal monetary and financial policies; the role of public investment; the balance of payments constraint and exchange rate policy; and social policies and equity.

Fiscal, Monetary and Financial Policies

Fiscal policy can play a vital role in the reduction of poverty and the delivery of welfare gains by directing resources (taxes, primary commodity rents, all manner of gains from trade, borrowed funds, etc.) to priority sectors. These resources can support diversification and macroeconomic stability, help manage aggregate demand, promote productivity growth and environmental sustainability, and relax the balance of payments and supply constraints. Fiscal policy can also sustain 'business confidence' and consumer expectations.

DES should restore the primacy of fiscal policy, given the limitations of the priority given to monetary and financial policies under neoliberalism, which was often destabilising and failed to raise savings, investment, the quality of investment and the GDP growth rate, and that tended to worsen the distribution of income (Bumann and Lensink, 2013; Hamdaoui and Maktouf, 2019). Moreover, financial liberalisation tends to raise interest rates, fuels the build-up of external and domestic debt and bouts of speculation, and threatens disaster if public policies diverge from the interests of the financial market operators (Jalilian and Kirkpatrick, 2005). The weight and influence of the financial sector, its short-termism and the destabilising impact of financial crises make it essential to regulate finance and align its operations with the goals of DES.

It follows that poor countries should avoid so-called 'market-based' financial systems (Zysman, 1983), because they promote short-termist 'arms-length' relationships between banks and the corporate sector. Instead, DES requires close relationships between firms and banks, mediated by the state rather than the capital markets. It also requires strengthening (or creating) state-owned financial institutions to operate as arms of public policy, supporting the green transition. These relationships can better support industrial policies, regional integration, economic diversification, environmental sustainability and distributive outcomes (Amsden, 2001; Reinert et al., 2018).

Public Investment

Targeted public investment can achieve several goals simultaneously: accelerate economic growth, create employment, promote priority areas, support economic diversification and environmental programmes, boost new industries, expand consumption possibilities, improve distribution and alleviate the balance of payments constraint.

Although mainstream economics insists that public investment crowds out (and is less efficient than) private investment, empirical studies offer no firm evidence for this claim. Instead, public investment can crowd in private investment in upstream and downstream sectors such as those supplying inputs, machinery, fuels and consumables, building services, cleaning, training, maintenance and security, trading and finance (Berg et al., 2015; Fournier, 2016; Johansson, 2016).

The web of relationships between economic growth, diversification, poverty, the balance of payments and the environment, and the fact that growth can reduce as well as create poverty, inequality and environmental stresses implies that rates of investment and growth must be high in DES, especially in poor countries; this will require more expansionary policies than those possible under neoliberalism. In addition, investment and growth must target diversification, balance of payments sustainability, the needs of the poor and the environmental constraint. These efforts, in the scale required and the time available, can be successful only with planning, regulation, funding and strict performance assessments. Countries can draw upon experiences in Chile, Indonesia, Singapore, South Korea and Taiwan POC between the 1970s and the 1990s, and those in China, Ethiopia, Malaysia and Vietnam subsequently. In all cases, choices between alternative goals and their resourcing needs should be done transparently, while recognising competing interests and building social cohesion around democracy, sustainability, stewardship of nature and responsibility for future generations.

Balance of Payments and Exchange Rate Policy

Most currencies are not international means of circulation or reserve value; their issuing countries have a binding balance of payments constraint, which can be 'the single most important constraint on capital accumulation and growth' (UNCTAD, 2002: 32). The balance of payments constraint can trigger inflation, exchange rate crises, unemployment and other destabilising outcomes, with severe consequences for the poor. Developing countries generally have a much tighter balance of payments constraint than the advanced economies, which can more easily bypass supply bottlenecks through imports funded by exports, currency inflows attracted by interest rate movements, regulatory changes, foreign investments and so on.

The balance of payments constraint includes two types of restrictions: on trade and on capital flows. Mainstream economic strategies invariably recommend the liberalisation of imports in order to foster competition and productivity growth and to shift resources towards the economy's comparative advantages. These policies are not conducive to diversification, new production capabilities, productivity growth, macroeconomic stability, sustainability, mitigation of climate change or improvements in distribution. In contrast, DES requires the integration of trade and financial policies across four areas.

First is the *promotion and diversification of exports*. Exports can contribute to productivity growth because they expose domestic producers to compete in foreign markets; export growth is also essential for the accumulation of currency reserves, which can reduce the balance of payments vulnerability, macroeconomic volatility and exchange rate fluctuations.

Second is *the management of import restrictions*. Despite mainstream claims to the contrary, 'openness and trade integration, either separately or together, do *not* have a measurable impact on long-run growth' (Weller and Hersh, 2004: 492). Imports should be liberalised cautiously because of their potential implications for productive capacities, employment, inequality, global emissions and environmental sustainability (Harrison et al., 2011; ITF, 2015 Siddiqui, 2015).

Third is the *regulation of the capital and financial account of the balance of payments*, including capital controls to curb flows for tax evasion or pursuing easy profits. Unregulated capital movements can also finance unsustainable patterns of production and consumption, facilitate debt accumulation and increase vulnerability to balance of payments crises (UNCTAD, 2002: 33; Weller and Hersh, 2004: 478–479). Capital controls can include restrictions on foreign currency bank accounts, loans and currency transfers; taxes or non-interest bearing 'quarantines' on inflows or outflows; restrictions on payments between connected firms; multiple exchange rates; and so on. Managing these controls will burden the monetary authorities, but this task is not beyond the capabilities of most central banks, that already must control exchange rate movements and regulate domestic finance.

Finally, a DES-compatible exchange rate regime can choose between dollar/euroisation, fixed or adjustable exchange rates, managed floating, or free-floating regimes (which are too unstable to be considered seriously). Dollar/euroisation is the most constraining system, and it should normally be avoided. Small countries with extensive currency substitution may have to adopt fixed exchange rate systems. This is not ideal because the need to defend the rate must dominate fiscal and monetary policies. Other countries may be able to adopt a managed floating regime or an adjustable peg, which maximises the scope for policy discretion.

Any exchange rate regime must be managed carefully. Although overvaluation can offer immediate benefits through cheaper imports and lower inflation, DES should avoid ‘exchange rate populism’, since overvaluation can harm domestic production and employment and induce consumption and asset bubbles. Experience suggests that diversification and the growth of productivity, exports and employment are more easily obtained with selective import restrictions, export incentives, capital controls and a moderately undervalued exchange rate (Agosín and Tussie, 1993; Gereffi and Wyman, 1990; Leibovici and Crews, 2018; Lukauskas et al., 2013; Rajagopal and Zlatev, 2018). This may be achieved in diverse ways, including a relatively low peg, expansionary monetary policies, the regulation of currency trading, capital controls and regular interventions in currency markets.

Social Policies

DES requires the integration of macroeconomic and social policy, and specific programmes to protect the poor and improve social welfare. To maximise their impact, democratic social policies should typically be universal and prioritise the provision of public goods and the social wage rather than being limited to small handouts; for example, public education, training, health services, housing, water and sanitation, parks and public amenities, environmental preservation, food security, affordable clothing, shoes and public transportation can have low managerial costs and improve living standards of the poor directly.

In many countries, the administrative infrastructure required to provide public goods and services is already in place, or it can be created relatively cheaply. Public goods and services and social wage programmes can also be rolled out gradually (e.g. one product or service at a time, and they can be regionally focused), making them simple and cost-effective. In spite of their universal coverage, they can incorporate several advantages of targeted programmes, which may be called ‘smart targeting’: they are *universal* because they are available to all, and they are *targeted* because specific priority groups will benefit differently from each project or initiative.

All social programmes are expensive to run, and the budget limitations in poor countries should not be underestimated. In general, these programmes should be funded by taxation or, exceptionally, foreign aid. Cost-sharing and user fees can be unfair and inefficient, and they should be avoided.

Funding the Transition

Implementation of DES will be costly, but it can be funded by taxes and surcharges on high incomes, capital gains, dividends and land; compulsory savings schemes; taxes on carbon-intensive luxury goods (e.g. holidays, business class travel and SUVs), and Tobin-type taxes on financial transactions and international capital flows, which would also ‘throw sand in the wheels’ of financialisation. Parallel cuts in consumption can reduce emissions directly, helping to mitigate climate change. They can also be targeted at the rich and the advanced economies, since their consumption levels are both higher and more carbon-intensive than those of the poor (Beuret, 2019; Colarossi, 2015; Gore, 2015; Turner, 2020).

Additional resources can be raised through domestic loans, which will transfer costs to the future generations that will also benefit from those policies and projects. Borrowing may not crowd out consumption or other investments, if the economy is operating below capacity. The added gain from borrowing to invest is that wages tend to increase as the economy approaches full employment, benefitting the poor, while higher interest rates would tend to dislocate low-return conventional investments, normally based on already-existing comparative advantages, supporting diversification and mitigation (Foley, 2007: 8–10).

Investments and their running costs can also be funded by external loans and transfers, for example, drawing upon global taxes on emissions, financial transactions, transportation and luxury consumption, as well as conventional aid. This could be supplemented by the allocation of (to be introduced) oil extraction quotas supporting the right to development of poor oil-export dependent countries, since they generally produce relatively little oil and lack alternative sources of foreign exchange. Obviously, larger and wealthier countries must accept correspondingly smaller quotas (Lahn and Bradley, 2016). Finally, poor countries could benefit from dedicated emissions permits, perhaps linked the Kyoto Protocol, and from transfers of green technologies funded by aid or global taxes, which would accelerate the spread of appropriate technologies supporting the energy transition (EWG, 2019; Khor et al., 2017).

Conclusion

This article traces the relationships between neoliberalism and climate change and shows that the impact of climate change will be felt primarily by the poor, the poorest countries and the oil export-dependent economies. It argues that the challenges of environmental sustainability, economic diversification, and redistribution of income, wealth and power should be addressed simultaneously through a democratic development strategy for reasons of efficiency, consistency and legitimacy.

The transition from environmentally destructive neoliberalism towards democratic and sustainable economies will require sacrifices; they can be accepted, and the transition can gain legitimacy, only if they are accompanied by improvements in distribution and democratic shifts in governance. These processes will not be completed easily or spontaneously, given the predilections of the privileged, the interests of large corporations, the timidity of politicians and the pressures from the oil lobby. They have all profited from the (neoliberal and financialised) global economic structure and feel that wealth will protect them against the ravages of climate change. However, humans have never experienced a comparable challenge; while the North can probably escape wholesale devastation, at least in the medium term, the dislocations in the Global South will be huge, with dire consequences for lives and livelihoods.

This article shows that these challenges can be addressed through the careful coordination of policies to achieve growth and environmental sustainability through 'green' investments, diversification, and redistribution of income, wealth and power. Implementation of this DES will depend on mass support, which can be secured only through redistribution; without it, the poor and the poor countries cannot be mobilised. Closing the feedback loop between systemic transformation, diversification, mitigation, equity and democratic governance can provide the drive and legitimacy for comprehensive climate adaptation policies that will, ultimately, benefit most people and most existing forms of life on Earth.

The political process is central to the success of DES. On the one hand, efficient institutions of representation and negotiation are essential for the management of competing interests. On the other hand, democratic policies can be implemented only if the power of the traditional elites is curtailed, since they are generally committed to social, economic and political inequality, and benefit from unsustainable patterns of production, consumption and growth. Only the mobilisation of poor people can neutralise the political distortions due to entrenched inequalities.

In the wake of the damage caused by neoliberal experiences in several countries, it has become clear that economic and political democracy will require the extension of the political sphere and the reconstruction of collectivity, citizenship and policymaking capacity. This will demand the elimination of regressive institutions and policy practices built in the wake of the neoliberal 'reforms' (e.g. independent central banks, tight fiscal deficit rules, conditional welfare policies), and the reduction of the influence of neoliberal institutions, NGOs and international organisations on the selection, management and evaluation of public policies. Democratic participation and accountability will enhance the legitimacy of the strategic goals suggested in this article, buttress the regulatory framework supporting the chosen policies and minimise elite-driven deviations from the agreed goals. Transparency, participation and democratic accountability can boost efficiency and social cohesion, without which countries may not be able to confront the challenges to come.

It will be difficult to address climate change, and not only for technical reasons or ideological prejudices. The main constraint is the structure of the global economy that is based on the plunder of nature and its use as a sink for the rejects of production for profit. Examination of the climate crisis shows that effective policies will be costly, complex and resisted, since they must transform several aspects of economic reproduction. Today's neoliberal and financialised societies are not merely 'unprepared' to address the climate crisis: they have actively precipitated it while dismantling the institutional structures that could protect the conditions supporting life on Earth: neoliberal capitalism has exposed the Earth to dangers that it can neither address nor contain. Unsurprisingly, despite the urgency of the tasks at hand, most countries, companies and households have tended to avoid decisive action, which only increases the severity of the problem and the sharpness of the 'handbrake turn' that must come soon. There is still time, but only just. The moment for action is now.

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Notes

1. See Woodward (2019). The Emissions Gap Report (2021) suggests that there is a 50–50 chance that global warming will exceed 1.5°C by 2040 and, unless changes are both immediate and drastic, it will be impossible to limit global warming to 2.0°C by the end of the century, as was set by the Paris Agreement (UNEP, 2021).
2. A 'green transition' involves a shift from a greenhouse gas (GHG) emission-intensive economy to a low-emission economy, which will require structural changes in the dominant patterns of production and consumption.
3. See Bendell (2018), Lahn and Bradley (2016) and Saad-Filho (2022). 'Economic diversification' concerns the rapid expansion of the non-renewables sector to achieve a more balanced distribution of economic activity in terms of output, exports, employment and taxation.
4. Fossil fuels, including oil, gas and coal, or, for brevity, 'oil' or 'renewables' (these terms are used interchangeably in what follows), serve as shorthand for all primary resources that cannot be produced, processed, extracted or traded at will or until stocks are exhausted because of global constraints; other examples, not discussed here, include palm oil, because of deforestation; meat, for its heavy imprint on the environment; and hard minerals (e.g. copper, iron, nickel, tin, lead, lithium, cobalt, gold, silver and rare earths), for ecological reasons (see World Bank, 2017).
5. Neoliberalism, financialisation and its implications are discussed in a vast literature; for a survey, see Fine and Saad-Filho (2017).
6. This remains true even when states are not democratic in practice, which necessitates political reforms; in contrast, it is impossible to render for-profit corporations 'democratic', since they are accountable to their investors rather than society at large.

7. See https://www.iea.org/data-and-statistics, http://www.globalcarbonatlas.org/en/CO2-emissions and Jorgenson (2014).
8. In the case of the developing countries, these costs will require significant compensatory funding as well as changes in local laws and accounting rules (Khor et al., 2017; Morrissey, 2016).
9. For an early review of the literature, see Arrighi (1994). For a historical overview, see Panitch and Gindin (2012).
10. Dissenting mainstream economists such as Jeffrey Sachs and Joseph Stiglitz have offered valuable critiques of mainstream policies; however, their work is not examined in what follows because their attachment to neoclassical economics is incompatible with the democratic economic strategy (DES) priorities around systemic transformation, sustainability and distribution (see Fine et al., 2001).
11. This aim is not only important in itself; it is also mandated by the United Nations through the Universal Declaration of Human Rights, the UN Declaration on the Right to Development, the Millenium Development Goals and the Sustainable Development Goals.
12. These examples are merely indicative. The impact of growth on poverty depends on the initial distribution of income and, especially, its distribution near the poverty line, as well as the occupational composition, skills and other features of the workforce.
13. See Lim and Lim (2012) for a similar approach focusing on pro-poor outcomes.

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