The Macroeconomics of Climate Change

Progress amid Geopolitical Turbulence

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It is an honor to speak at this Public Lecture Program event at the London School of Economics (LSE), I thanks CETEx for the opportunity.

We are entering the twenty-first century burdened by the ghosts of crises we were supposed to have solved in the twentieth. War is again a tool of politics, currency, trade and finance have been "weaponized", inequality is tearing apart our social fabric, and the specter of fascism walks among us once more. The Kantian Enlighted safeguards built to contain humanity's Hobbesian impulses — the rule of law, international treaties, multilateral institutions — are being eroded, abandoned, or openly mocked. At the same time, we are caught in a Faustian fascination with new forces we barely comprehend: artificial intelligence, social media, and digital echo chambers that misrepresent and distort truth and accelerate socio-political fragmentation and geopolitical turbulence.

Yet perhaps most tragically, we face the one threat we do understand — the Green Swan of climate change — and still procrastinate collectively. Nearly two decades after Stern's (2006) seminal warning that climate change represents the greatest market failure in history and that the costs of inaction vastly exceed those of early mitigation, awareness has never been so high, nor State power so cynic. And yet, we know. Climate change generates existential, irreversible disruptions, feeding a vicious circle of social inequalities, the rise of conservative populism, and the geopolitical fragmentation we are witnessing today.

So, despite all that, we need and somehow are making progress. In any event, we need urgent and decisive policy responses, especially macroeconomic policies, the topic at hand today, that must address all these dimensions simultaneously.

So first, the dangerous equation is when Climate Change worsens Inequality, and that brings more Populism

Climate change is not just an environmental issue—it is a systemic amplifier of inequality and political instability. Heatwaves, floods, and droughts strike hardest at those least able to cope: low-income households, precarious workers, fragile regions, and poorer nations. These shocks deepen structural divides that have grown since the 1980s with financialization, deindustrialisation, and the erosion of welfare systems.

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Inequalities feed resentment, which then turns against elites and against climate policies themselves. Without fairness and redistribution, the transition is seen as yet another injustice, not as a shared necessity. The Yellow Vest movement in France illustrated this vividly. In many countries, the result has been a rise of reactionary populism—anti-scientific, identitarian, and sovereigntist—undermining collective solutions and delegitimizing international cooperation precisely when it is most needed.

Second, the world remains trapped in a false dilemma between debt and austerity

The crises of 2008 and COVID-19 left governments with high debt levels after extraordinary interventions that prevented depression and social collapse. Yet once the immediate danger passed, many countries are reverting to fiscal orthodoxy, treating debt reduction and massive new military spending as the sole priority.

While fiscal discipline of course matters, the pace and composition of consolidation now threaten to delay the green transition. Resources for adaptation, resilience, and decarbonization risk being sacrificed on the altar of short-term austerity—despite the fact that public investment is the foundation of long-term stability. The paradox is clear: we mobilized trillions to rescue banks and economies during crises and wars, but still hesitate to mobilize comparable resources to save the planet.

Innovative policy action is essential. The greatest danger might not be the financial risk of temporary higher debt, but the systemic risk of failing to use that debt productively for the transition. Like in wartime, the question is no longer "Can we afford it?" but "Can we afford to do nothing?". And the good news here is that many reports show that we can do it.

Third, macroeconomic policy must evolve to confront climate risks and steer long-term transformation.

To confront climate risks, macroeconomic policy must evolve from managing the stabilization of short-term business cycles to also contribute to steering long-term structural transformation. It must *stabilize*, *finance*, and *regulate* in ways consistent with planetary boundaries, while taking good care of the political and redistributive consequences of climate policies. That means, thinking with an open, creative and inclusive mindset inspired by the seminal works of Stern (2006), Atkinson (2015), Acemoglu (2023), Ostrom (1990) and naturally Keynes and Schumpeter.

Monetary policy must become adaptive. Climate change generates persistent supply shocks that interact with demand and inflation. Central banks can preserve credibility while tolerating temporary inflation deviations linked to transition costs, using longer convergence horizons, tolerance bands and a even a higher target for inflation with forward-looking climate scenario analyses. Automatic, pro-cyclical, standard inflation targeting, tightening in response to "greenflation" would only undermine Schumpeterian transformation.

Fiscal policy must also adapt. Debt-sustainability assessments should become dynamic, integrating the growth effects of productive climate investment and redistribution, while allowing temporary flexibility for mitigation, adaptation, and disaster response. What matters is the trajectory of public net worth—assets, resilience, and future capacity—not exclusively short-term debt ratios. Excessively rigid tightening in response to "high debt" risks undermining fair and effective Keynesian stabilization.

If properly regulated, AI could make targeted pro-climate transfers with redistributive taxation—consistent with Atkinson's anti-inequality framework—not only feasible but also manageable in a decentralized way. Above all, the transition must embed social justice: progressive taxation and "climate shields" for the most vulnerable are the foundation of political legitimacy and success. Social partners, local authorities, and citizens must be involved; participation at the local level is essential. Following Ostrom's insights, scarce climate-related budgetary resources should be treated as a Common Pool of Resources (CPR). Rather than assuming that only central authorities can design effective rules, adaptive fiscal policy should recognise the capacity of communities, organised civil society, and local governments to create and sustain institutions for the equitable and durable management of shared resources. The democratic dimension is not an accessory; it is the engine of sustainable transformation.

Financial and regulatory policy must align capital allocation with climate goals. Prudential frameworks, capital requirements, and disclosure standards should reflect climate risks. Green taxonomies, credible carbon prices, and transparency on exposure are essential to steer investment flows. Global solidarity levies, carbon border taxes, and green bonds can mobilize the scale of financing required.

And national and global coordination are both needed. Central banks, ministries of finance, economy, environment, and social affairs, independent technical bodies must quantify and use some form of ecological planning for resource allocation.

Fourth, a new Bretton Woods 2.0 moment is needed to finance and coordinate global climate action

The current geopolitical context—wars, fragmentation, and declining trust—makes global cooperation harder, but also more urgent. We cannot wait for a perfect universal agreement. A pragmatic approach is needed: *plurilateral* coalitions of willing countries, new financing mechanisms, and global tax initiatives to fund the transition.

Financing climate action in the most vulnerable countries is not charity—it is a moral, economic, and geopolitical necessity. It demands a deep reform of the international financial system: expanded guarantees to de-risk investment in middle- and low-income economies, larger official development assistance, and a refocusing of multilateral development banks on low-carbon transition finance.

A *Bretton Woods 2.0* in my opinion, should establish a **World Climate Agency**—coordinating with the IMF, World Bank, development banks, BIS, and OECD—to provide a coherent analytical framework, credible instruments, and fairer burden sharing. Global solidarity levies on

aviation, shipping, financial transactions, or fossil assets could form a new fiscal base for climate justice between North and South.

In parallel, initiatives such as the Glasgow Financial Alliance for Net Zero can catalyse private capital, provided that policy frameworks ensure transparency, predictability, and credible carbon pricing.

Fifth and to conclude, Ultimately, politics—not economics—is what is missing

Inaction is a political choice, not a constraint. It reflects the dominance of short-term interests and the fear of confronting entrenched power. To break this paralysis, we must rebuild a macroeconomic architecture that links stabilization, ecological transformation, and social justice.

Nothing is written in stone. Awareness has never been greater. The science is clear. The instruments exist. What remains uncertain is our collective will to use them. The Green Swan is in sight. The question is whether we confront it together, or let it become the harbinger of a crisis from which there will be no recovery.

So, let's finish with some hope: in my country Brazil, the land of optimism, there is a saying that goes like this: "In the end, everything turns out well — and if it hasn't yet, it's because it's not the end.".

Thank you

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