Fiscal and monetary policy in the climate crisis era

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Governments and central banks are still climate laggards

- Climate change is fundamentally transforming the global economy and the global ecosystems.
- However, despite some recent developments (e.g. Inflation Reduction Act), **governments** still hesitate to implement ambitious green fiscal policy packages.
- Since the launch of the Network for Greening the Financial System (NGFS) in 2017, many **central banks** and **financial supervisors** have been working on climate, but they have mostly done so by relying on a very passive risk exposure perspective.
- This slow action is incompatible with the implications of the climate crisis for fiscal and monetary policy.

Implications of the climate crisis for fiscal policy

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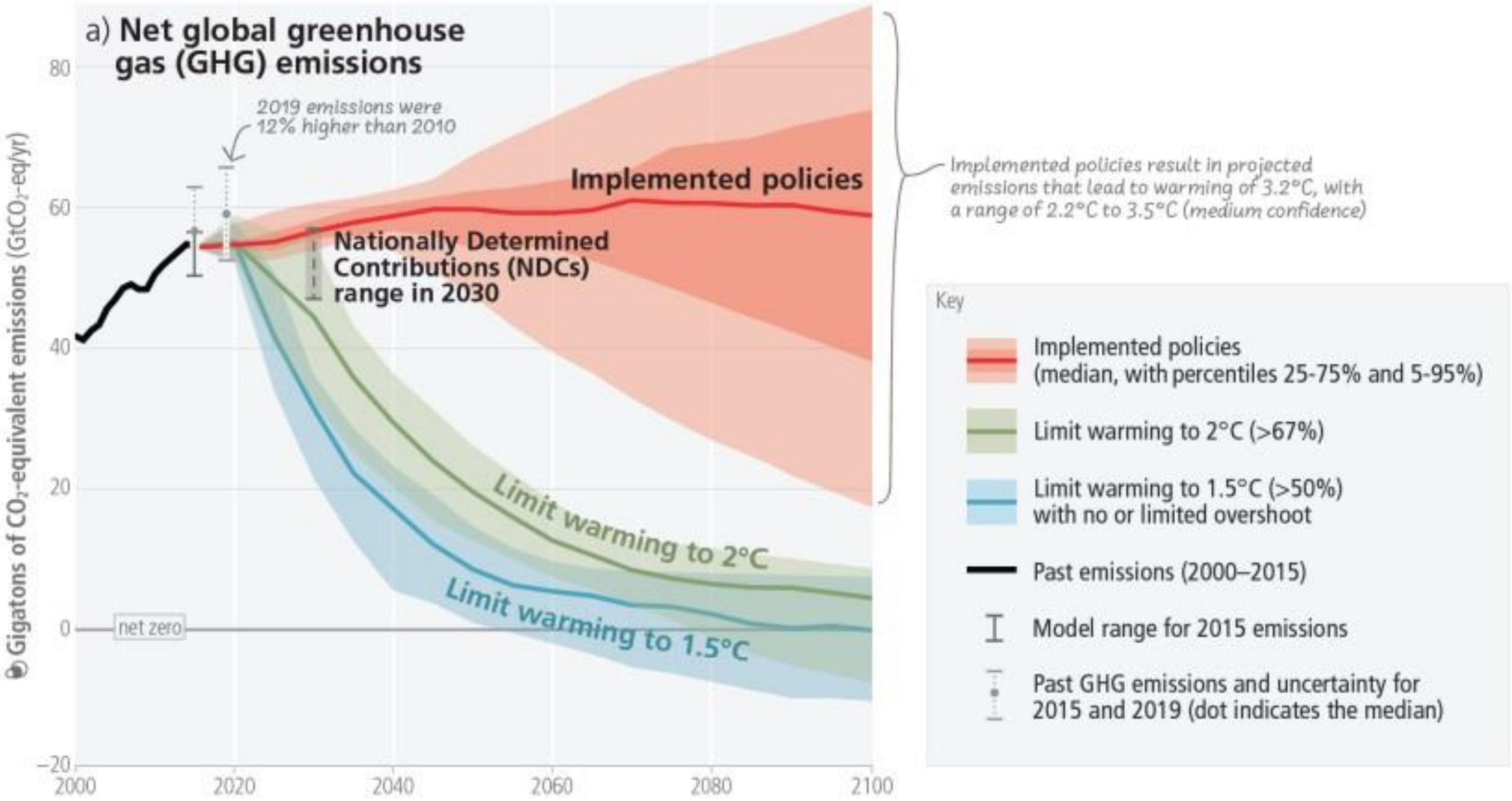
Implication #1: The less governments spend on climate now, the more they will spend later

1. **Climate mitigation spending**: Spending related to public transport, green subsidies, energy efficiency of public buildings etc.
2. **Climate adaptation spending**: Spending related to seawalls, flood barriers, stormwater management systems, climate-smart agliculture etc.
3. **Loss and damage spending**: Spending related to reconstruction after floods or hurricanes, resettlement of climate-affected communities, coverage of financial losses due to crop failures etc.

The more governments around the world spend on (1), the less they will spend on (2) and (3) in the coming years.

Implication #2: A single fiscal policy tool will not save the planet



Source: IPCC (2023)

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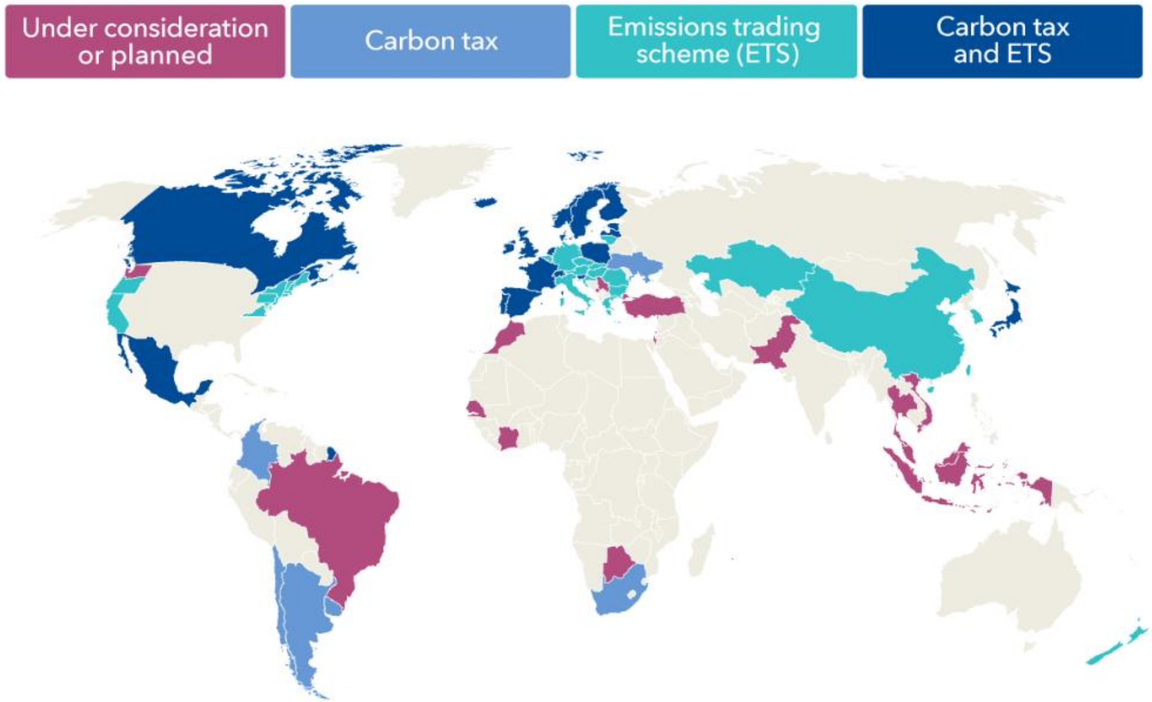
Implication #2: A single fiscal policy tool will not save the planet

- For several years, the majority of economists have been arguing that governments around the world need to **put a price carbon** to address climate change.
- However, carbon pricing can have adverse economic and distributional effects and cannot by itself lead to a significant reduction of emissions.

Carbon pricing map

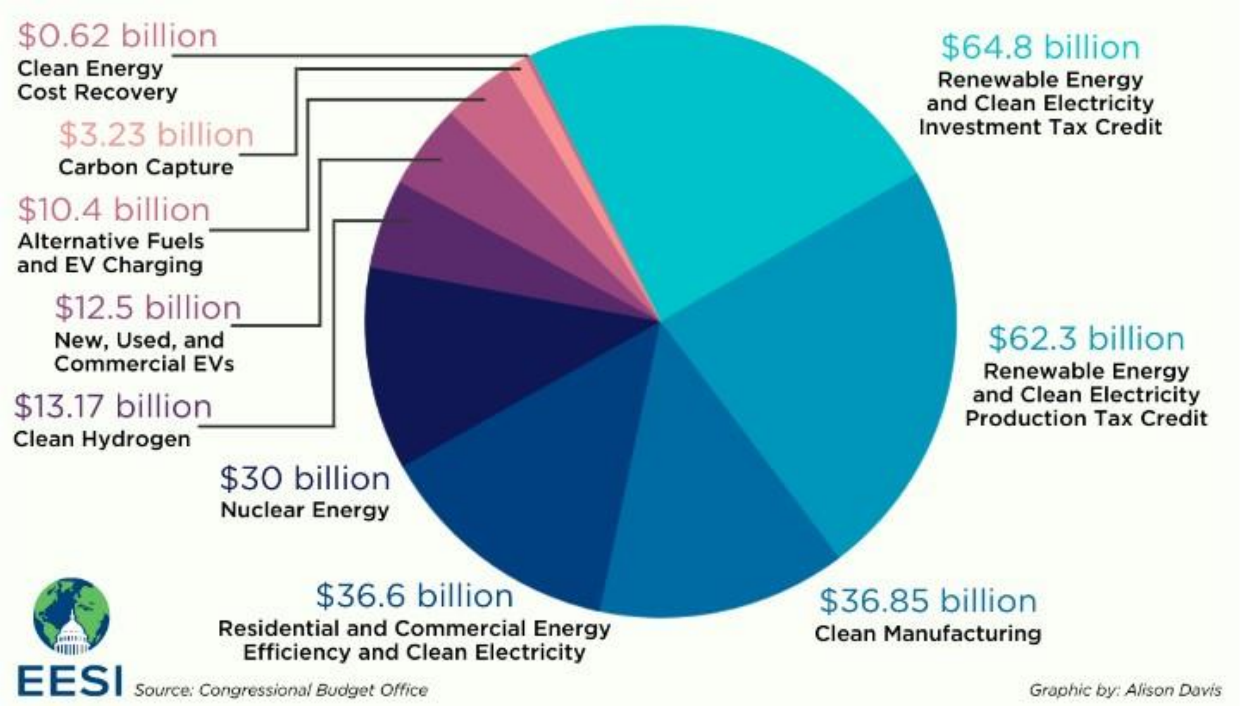


Source: World Bank Group and IMF, https://www.imf.org/en/Blogs/Articles/2022/07/21/blog-more-countries-are-pricing-carbon-but-emissions-are-still-too-cheap#:~:text=Despite%20the%20proliferation%20of%20carbon,today%20to%20%2475%20by%202030.

Implication #2: A single fiscal policy tool will not save the planet

- More attention has recently been paid to the role of green subsidies due to the Inflation Reduction Act (IRA).
- Green subsidies are an important tool, but they cannot by themselves address the climate crisis and they can lead to **macroeconomic rebound effects**.
- They can also intensify **green extractivism.**

Green tax credits in the Inflation Reduction Act



Source: EESI, https://www.eesi.org/articles/view/how-the-inflation-reduction-act-and-bipartisan-infrastructure-law-work-together-to-advance-climate-action

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Implication #2: A single fiscal policy tool will not save the planet

- A comprehensive green fiscal policy package needs to combine **sticks** and **carrots** to minimise detrimental side economic and financial effects and maximise environmental benefits.
- **Green public investment** needs to play a central role in green fiscal policy packages and should be designed in a way that minimises unnecessary, environmentally harmful, consumption (e.g. use of cars).
- **Environmental regulation** that restricts the use of carbon-intensive assets should accompany green fiscal policy packages.

Implication #3: Climate change is reinforcing global 'policy space' inequalities

The climate-public debt vicious cycle

High climate vulnerability

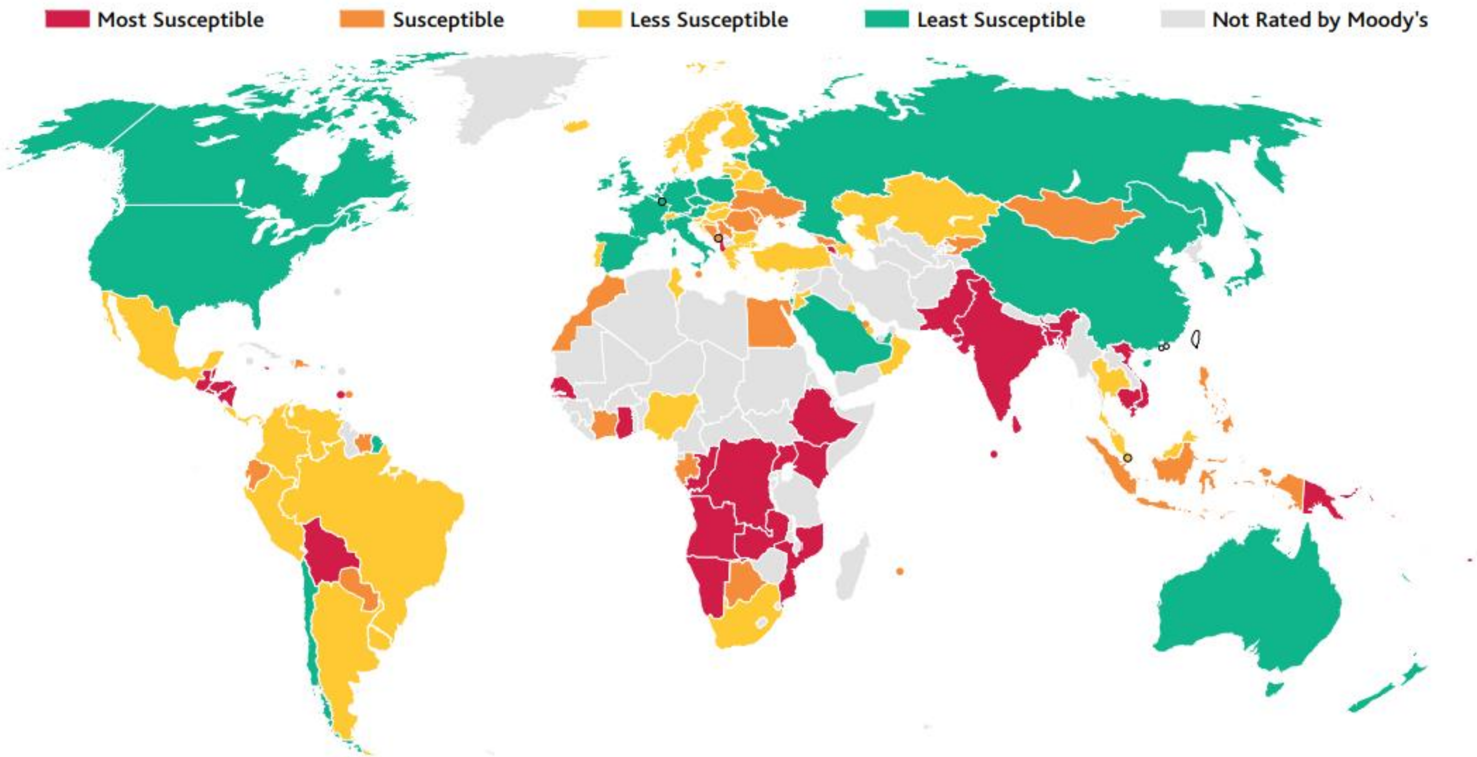
High public debt and cost of borrowing

Low investment in climate adaptation

See Beirne et al. (2021); Kling et al. (2021); Fresnillo (2020)

Implication #3: Climate change is reinforcing global 'policy space' inequalities

Susceptibility Moody's-rated sovereigns to physical climate change

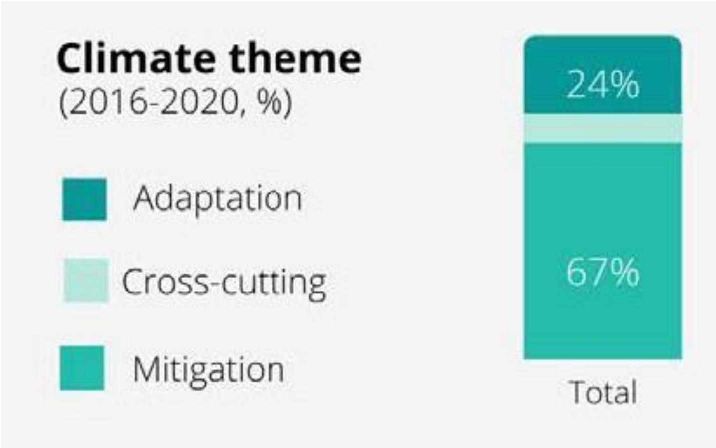


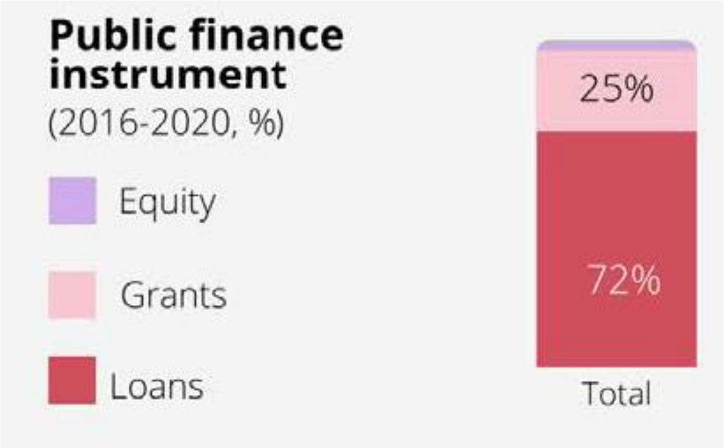
Source:
https://www.moodys.com/sites/products/ProductAttachments/Climate_trends_infographic_moodys.pdf

Implication #3: Climate change is reinforcing global 'policy space' inequalities

- The financing of the growing climate-related spending in the Global South cannot rely only on national policies. Support from Global North to Global South governments is essential as well.
- This is consistent with the UNFCCC which has called for financial assistance from Annex II Parties to non-Annex I Parties.
- As a result of this call, climate finance from Global North to Global South has increased over the last years. However, this finance still falls short of the target of USD100bn.

Climate finance provided and mobilised





Source: OECD (2022)

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Implications of the climate crisis for monetary policy

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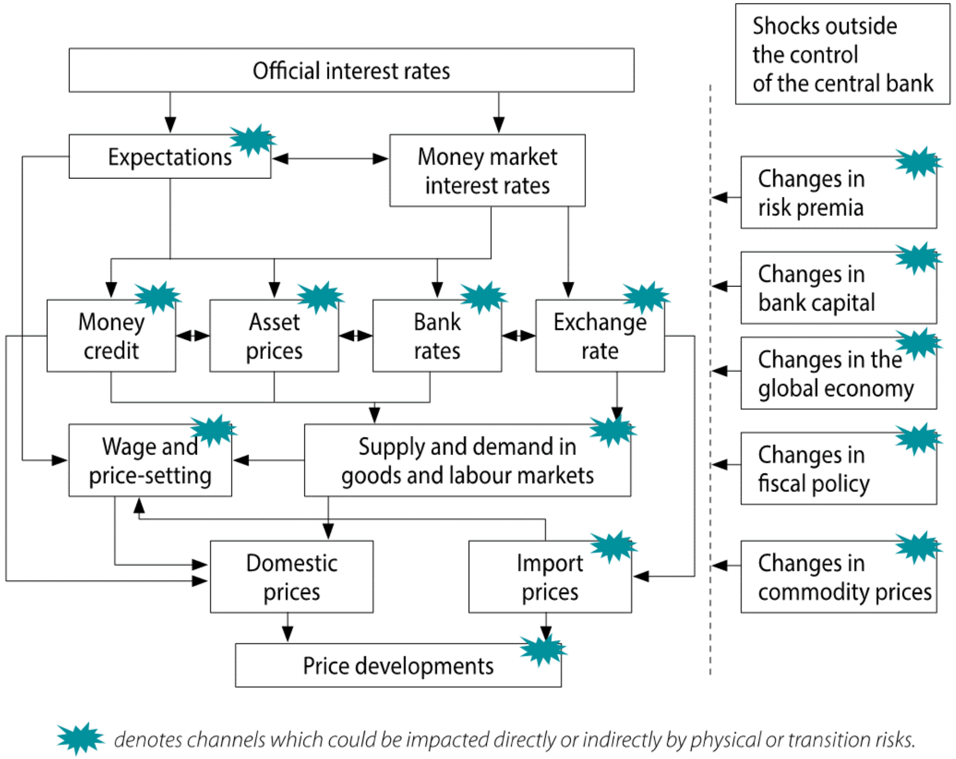
Implication #1: Climate change significantly limits the ability of central banks to control inflation

- New sources of inflation: (i) climateflation; (ii) fossilflation; (iii) greenflation (Schnabel, 2022)
- Climate change impairs the transmission channels of monetary policy, such as the expectations channel, the credit channel and the asset price channel.
- Controlling inflation in the future might require a more systematic use of other instruments that are under the control of governments.

Effects of climate change on monetary policy transmission channels



Source: NGFS (2020)

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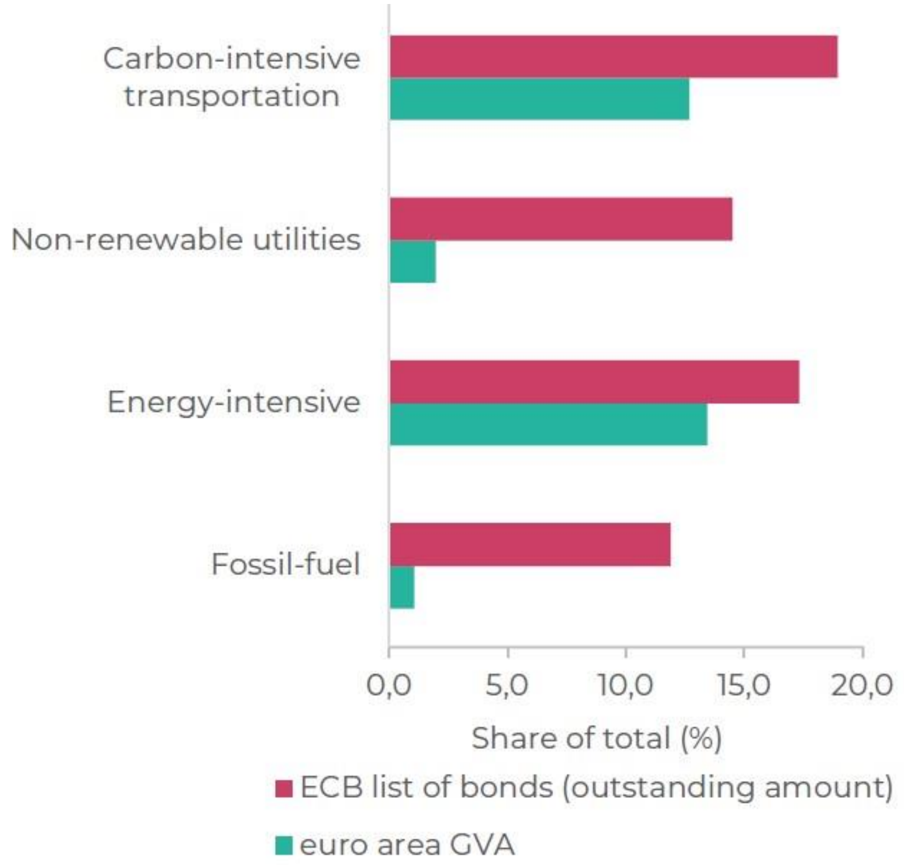
Implication #2: Central banks can no longer undermine the climate transition in the name of market neutrality

- Many central bank operations (such as the ECB's corporate bond purchases and the Eurosystem collateral framework) suffer from a **carbon bias** (Matikainen et al., 2017; Dafermos et al., 2020).
- As governments are becoming more committed to taking climate action, central banks will have less room to stick to market neutrality and implement policies that undermine the climate transition.

The carbon bias in the ECB corporate QE programme



Source: Dafermos et al. (2020)

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Implication #3: Traditional risk exposure approaches have a limited ability to prevent financial instability that stems from physical risks

- Climate change poses significant financial risks to households, firms and governments.
- However, reducing the exposure of the financial system to these risks would be counter-productive.
- Instead, central banks need to find ways to play a stabilising role, for example by intervening to prevent climate-induced asset price deflation or by supporting the financing of climate adaptation.

A climate-aligned central banking toolbox

Tool category	Examples
Coordination-based inflation targeting framework	Price caps, wage bargaining coordination
Climate mitigation tools	Decarbonised asset purchases, collateral frameworks and refinancing operations
Climate adaptation tools	Favourable treatment of climate adaptation bonds in asset purchase programmes and collateral frameworks
Climate loss and damage tools	Climate rescuer of last resort

Source: Adapted from Dafermos (forthcoming)

Key messages

- We need a **climate policy mix** mindset now!
- We need a new **global financial architecture** that recognises climate injustice and allows countries in the Global South to use fiscal policy to address climate change.
- **Market neutrality** cannot be the guiding principle of central banking in the climate crisis era.
- Even if **central banks** decide not to contribute to climate mitigation, they will still need to adjust their tools to address the implications of climate-induced financial instability and inflation.