The Role of Fiscal Policy in Climate and Economic Resilience

Enabling climate adaptation by households and firms

A general framework for thinking about the role of policies in increasing resilience

- Adaptation: a response to an identified climate shock
- Resilience: A general improvement / shift in the response to shocks from various sources, including climate
- Even if we focus directly on adaptation, policies & institutions matter for the overall welfare impact of a climate shock …

Total impact of policy consists of the climate vulnerability AND the overall development context

Investment “needs”

- Standard approach in climate diagnostics is to estimate cost of various adaptation or resilience responses, which usually require investment
- These estimates always involve assumptions about the policy framework in the relevant sector
- A deeper challenge is the tacit assumption that the government is in the lead on climate adaptation
- Even in high income economies, most adaptation decisions are made by households and firms

Household adaptation

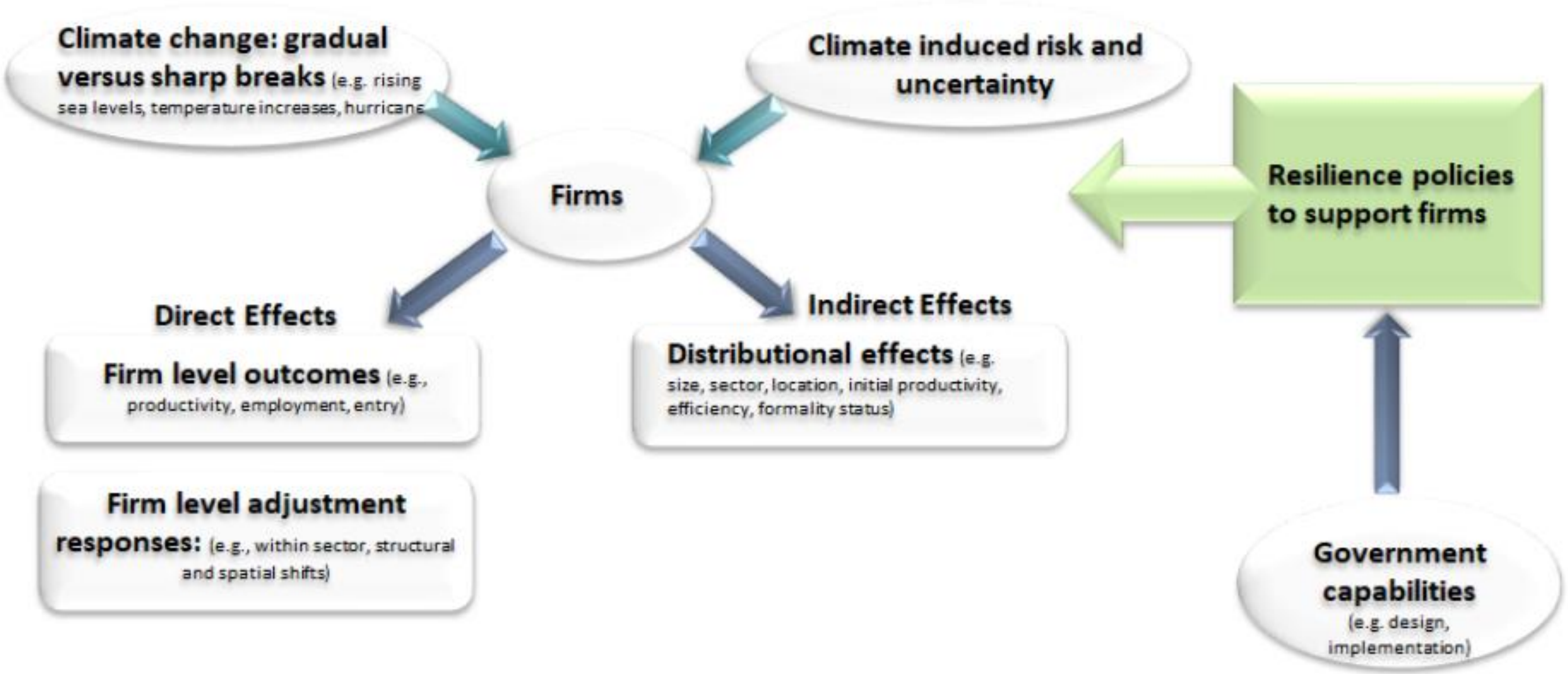
- Cooling
- Where to live
- Job choice
- When & where to travel
- Public sector provides some key parameters for these decisions, but they are decentralized

Firm adaptation

- Supply chains
- Location
- Production technology
- Where and when to work
- Also depends on household decisions and public sector parameters
- Grover and Kahn (2024)

Microeconomics of firm adaptation

Figure 1: Key themes for firms in the context of climate change adaptation



Relevant fiscal instruments

- Small but important public expenditures: data, especially hydromet data
- Land and property taxation
- Framework for energy and water regulation (via SOEs, PPPs, regulated utilities)
- Mixed public-private insurance and protection gaps
- Intergovernmental fiscal relations (e.g. risk-sharing in federal systems)

Implications for public expenditure

- Interactions of public investment with explicit and implicit insurance (including potential moral hazard)
- Incorporating subsidies and regulation into infrastructure investment recommendations
- Wider reach of disaster risk management – not just for catastrophes any more
- Supply chain resilience – tradeoff between efficiency and redundancy
- Fundamental issue of willingness-to-pay for risk reduction – evidence not clear (and corresponding rationale for fiscal role)

Some recurring questions for fiscal policy & climate

- Are we financing maladaptation?
- *de facto* insurance: Moral hazard and adverse selection
- Asymmetry in assumed government capabilities
- Debt-financed adaptation not immune to existing imperfections in sovereign debt (e.g. impatient policymakers – Aguiar 2023)
- Issues raised by various Martin Weitzman papers highly salient for adaptation even if originally applied to mitigation