



The Next Phase of Green Recovery: From Public Stimulus to Private Incentives?

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Avoiding another lost decade

How should today's fiscal policy learn from the Great Recession?

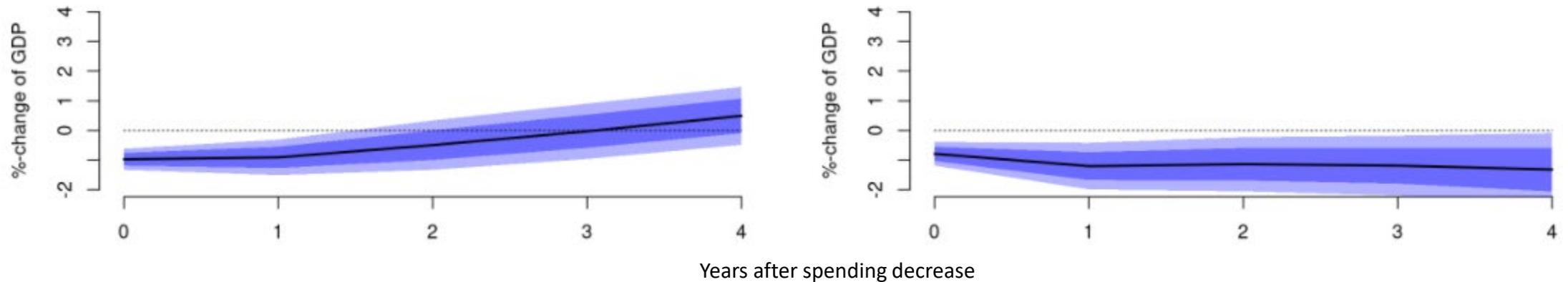
- 2008 stimulus phase
 - Cuts to direct taxes
 - Spending for immediate stabilization of economy, without focus on long-term structural shift
- 2010+ consolidation phase
 - Expenditure cuts, especially on investments, incl. climate (“cannot afford”)
 - Few tax increases, and if so, for direct taxes, without focus on taxes encouraging structural change
- Impact
 - Double dip recessions / slow recovery – (Gechert & Rannenberg 2018)
 - Lost decade for climate

How should today's fiscal policy learn from the Great Recession?

- Current stimulus phase
 - Incorporating long-term structural shift into current stimulus packages
 - Evidence till date indicates synergies between stabilization and green goals
 - Moszoro 2021: green investments have higher labor multiplier than conventional ones
 - Batini et al 2021, Hepburn et al 2020: green investments can have high output multipliers
- But what about the next phase?
 - If cutting expenditures, which ones?
 - If raising taxes, which ones?

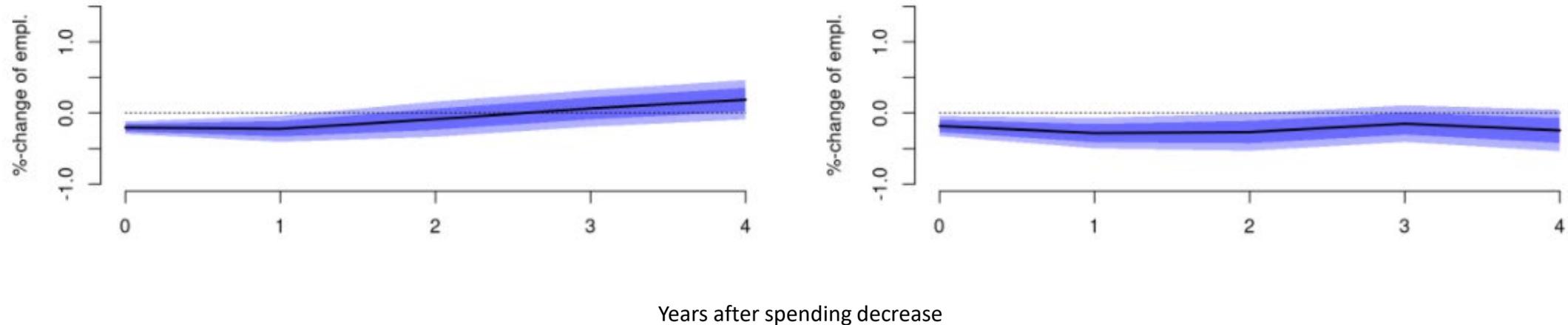
If cutting expenditures, which ones?

Output effects of cutting government consumption vs investments



Cutting government consumption exhibits mean reversion (i.e. only transitory decline), whereas cutting public investments, which build the future economy, has persistent effects

Employment effects of cutting government consumption vs investments



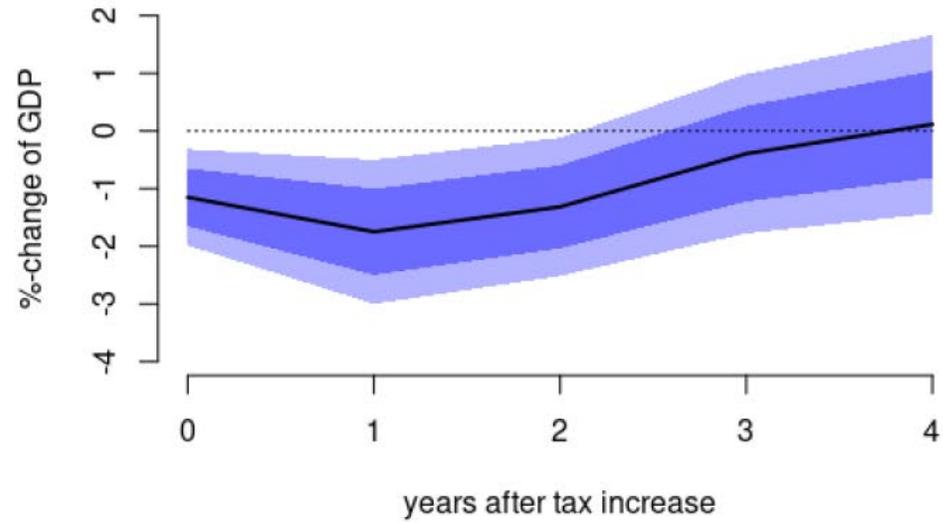
- Climate interests, which depend on government investment rather than government consumption, synergistic with macro interests.
- But problematic Political Economy
- Case for Golden Rule type of fiscal rules - Green Fiscal Rule debate

If raising taxes, which ones?

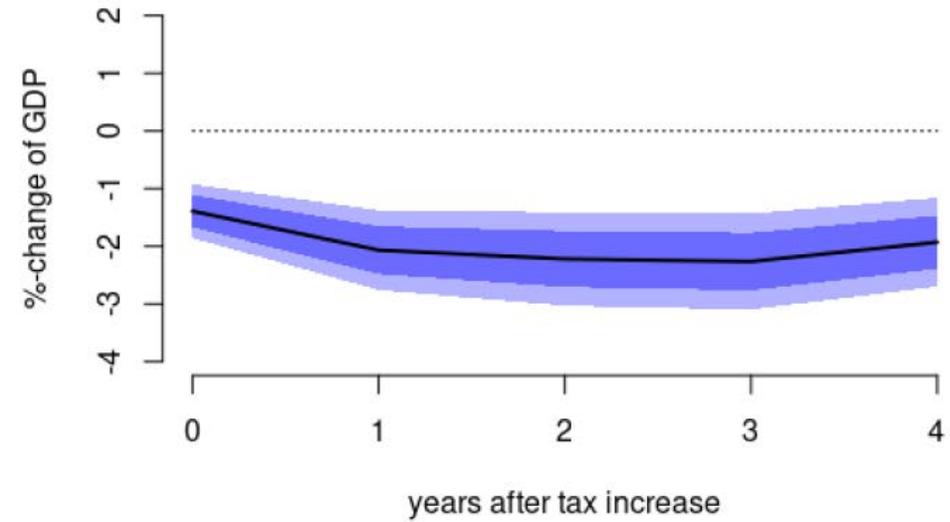
“Environmental vs conventional taxes” after 30 years’ debate

- A tested strategy: previous major environmental tax reforms directly after large macro crises
 - Sweden 1991, Slovenia 1998, Germany 2001, Turkey 2001, British Columbia 2008
 - Ex-post evaluations find reforms helped improve growth, while reducing emissions
- Recent model-based studies finding environmental taxes generally better for output and employment than conventional direct taxes
 - European Commission (2013), OECD (2018)
 - World Bank DEC/MTI 2021: Timilsina et al (Cote d’Ivoire), Burns et al (Pakistan)
 - Recent academic breakthroughs identify channels for positive effects
 - More robust against tax evasion (Liu 2013)
 - More robust against informality (Bento et al 2018)
 - Structural effects for equity (Goulder et al 2019)
 - Health effects of reduced air pollution (Scovronick et al 2019; Markandya et al 2019)
 - Taxes rents rather than profits/effort (Carson et al 2021)
 - Induces firm-level innovation (Metcalf et al 2021)

Output effects of environmental vs labor taxes

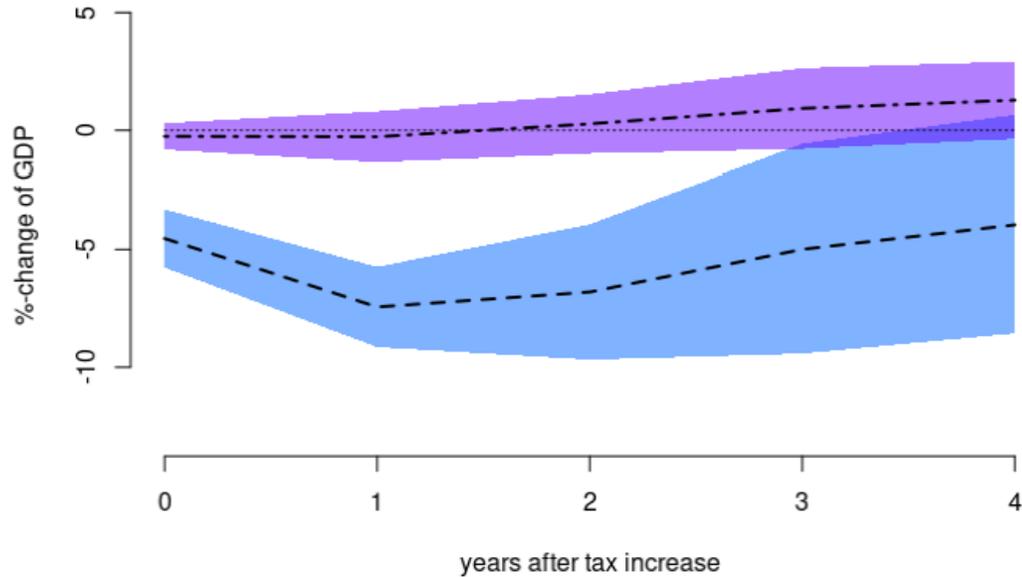


Output effects transitory

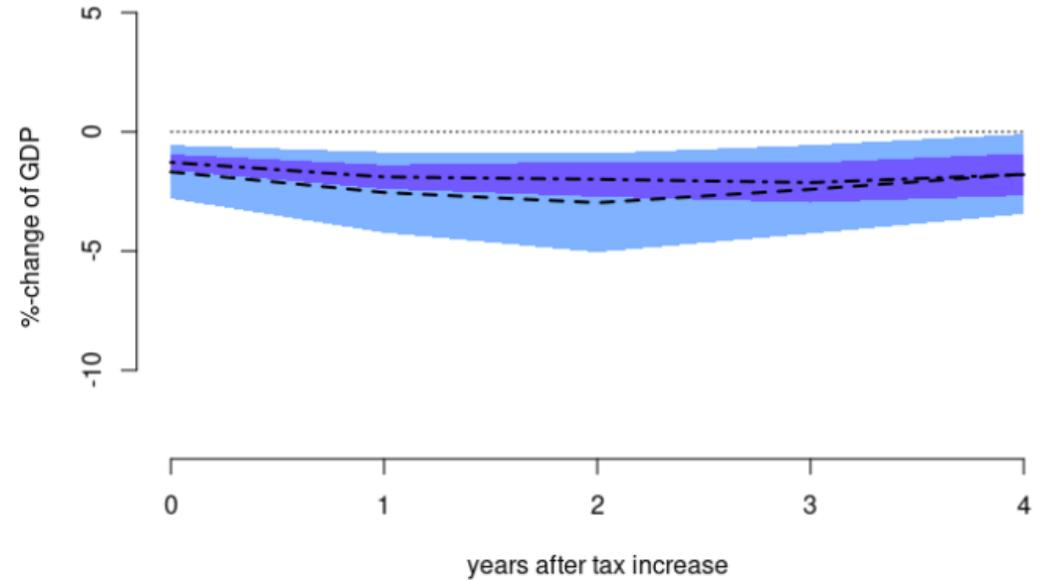


Persistent contraction

Output effects of environmental vs labor taxes – along the cycle

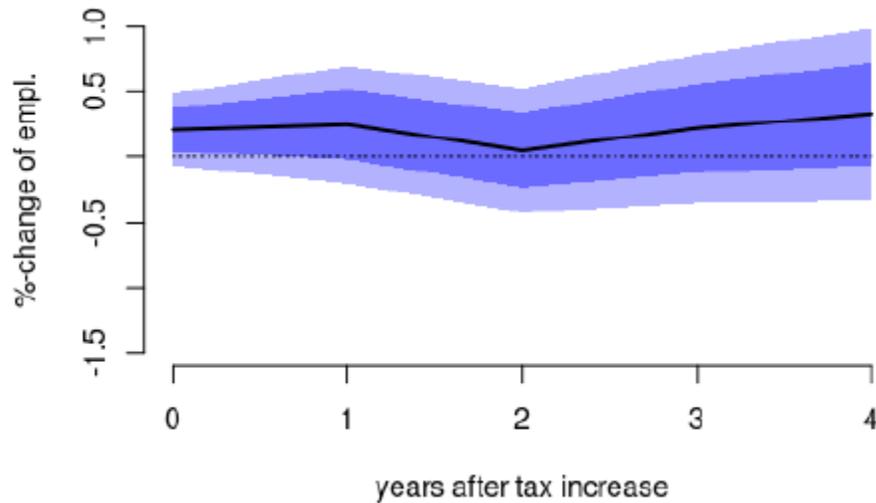


Bad to introduce **during recession**,
best time to introduce is during **recovery/expansion**

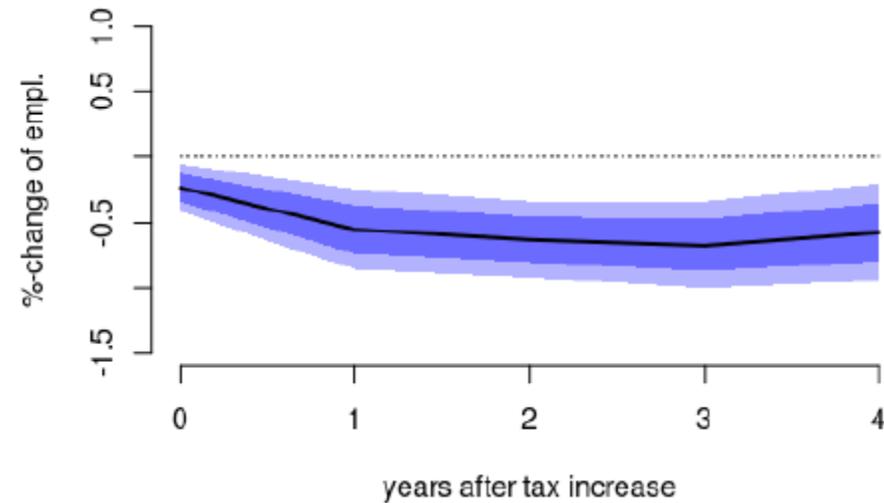


Equally bad, no-matter business cycle stage

Employment effects of environmental vs labor taxes



Positive employment effects, likely due to decarbonization-induced increase in labor intensity



Persistent contraction

Raising and freeing up revenues

- Carbon taxes consistent with Paris Agreement would raise ~2% in GDP
- Additionally, they reduce the financing need for decarbonization
 1. Efficiency gains from factoring carbon cost into economic decision-making
 2. Raising private-sector incentives to shoulder decarbonization costs

Conclusion

- Fiscal stimulus packages should combine short-term stabilization with long-term structural change, including on climate.
- Budget consolidation efforts should consider that in many countries, fiscal multipliers for tax increases are smaller than for expenditure cuts.
- If cutting expenditures, focus on government consumption, safeguarding public investments which have more lasting mid-term growth effects and can (if geared at structural change) lay the foundation for sustainable long-term growth.
- If raising taxes, focus on environmental taxes which contract output and employment by less than labor taxes, especially during the recovery/expansion.
- Environmental taxes not only raise new revenue but also reduce financing pressure on public revenues for climate targets.