Carbon Mitigation Policy

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Views are authors’ alone
Outline (from economist’s perspective)

- Rationale carbon pricing
- Role of other policies
Carbon pricing is the most effective policy

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Regulatory policies are less effective

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## Targeting the right base: electricity tax

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Revenue from deficit reduction options (US)

- Remove all corporate income tax preferences: 0.8%
- Carbon tax: 0.6%
- Remove mortgage interest tax deduction: 0.6%
But fiscal dividend is not a reason to set higher tax rates

- carbon prices should be set to reflect environmental damages, with broader revenue needs from broader instruments (e.g., VAT, personal income taxes).
Carbon Taxes vs. ETS

Important to get the design details right

Comprehensively covering emissions

Exploiting the fiscal dividend

Establishing a significant, credible and rising price trajectory
Obstacles to carbon pricing

Higher energy prices hurt

- Households (low-income)
- Energy-intensive firms (in trade-sensitive sectors)
Households

- Possibilities for scaling back other energy taxes
  -- e.g., excise taxes on electricity consumption, vehicle sales

- Inefficient to hold down energy prices
  -- most benefits leak to higher income groups

- Targeted measures better, e.g.,
  -- targeted tax cuts (Australia), cash transfers
Firms

Competitiveness impacts trickier, but...

- Use some revenues for general reduction in corporate taxes
- Provide transitory support for vulnerable firms
- Border tax adjustments
- Ideally, major trading partners would price carbon together
Role of other Policies
Other policies may not be needed—on climate grounds

- Carbon pricing strikes right (cost-effective) balance between mitigation options
- Combining with another policy may increase total costs for a given emissions reduction
Other policies can have a role

- If a high enough carbon price is not feasible
- If obstacles prevent sufficient investment in cleaner technologies
- But other policies should be carefully designed
Ideally regulatory policies should...

- Target broad set of mitigation opportunities
  -- CO₂ per kWh standard more effective than renewables

- Include credit trading provisions
  -- to lower burdens on firms
Ideally regulatory policies should...

- Include price ceilings to contain costs
  --harmonized across different regulations

- Technology deployment—subsidies may be preferable to mandates
Policy overlaps

- With ETS, other policies
  -- do not affect emissions
  -- lower revenues by lowering the emissions price

- With carbon taxes, other policies
  -- reduce emissions
  -- reduce revenues, but to a much lesser extent
Tax-subsidy variants of regulations

- For example
  - taxes/subsidies on vehicles in proportion to the difference between CO$_2$/km and average
  - taxes/subsidies on generators in proportion to difference between CO$_2$/kWh and average

- These policies
  - handle uncertainty over mitigation costs
  - provide ongoing incentives to reduce emissions
  - cost effective because all firms face same reward for reducing CO$_2$
Conclusion

- Other policies have role to play, but carbon pricing needs to be the centerpiece.
- Getting the design details right (for all policies) important

--- For environmental, economic, and fiscal reasons

--- Enhance prospects that policy sustained and strengthened over time