Carbon Taxation in Canada: Impact of Revenue Recycling

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Context

• Highly carbon-intensive economy
  • 19 tonnes CO$_2$eq/person/yr
  • Growing emissions from fossil fuels exports

• Decentralized federation
  • Provinces own the fossil fuels
Provincial Per Capita GHG Emissions, t/yr
British Columbia’s Carbon Tax

- All combustion emissions, except flights
- $10/tonne (2008) to $30/tonne (2012)
- Frozen 2012-2018, now $40/tonne

- Initially revenue-neutral
  - Reduction in business and individual income tax rates
  - Low income tax credit
- >$30/tonne hypothecated
British Columbia: Did Tax Cuts build support?

- Business: Yes
  - Revenue-neutral was condition of acceptance
- Voters: No
  - Opposition emerged in rural communities
  - “Axe the tax” campaign by legislative opposition
  - Popularity plummeted
  - Tax cuts didn’t overcome:
    - Low visibility
    - Doesn’t feel like a gift if still paying taxes
- Government reelected despite carbon tax
- Support rebounded after 3 yrs
Alberta Carbon Tax

- 2007 intensity-based carbon price for industry
- 2017 carbon tax extended to households:
  - $30/tonne in 2018
  - Concern for climate, but also for industry reputation
- Revenues
  - Low income dividends
  - Green spending
  - General revenues
Alberta Carbon Tax

• Defeat of government 2019
  • Unpopular tax
  • Reunited right

• Bill 1: Repeal of “Job-Killing Carbon Tax”

• Revenue return probably small impact
Pan-Canadian Carbon Pricing

• 2016: Provincial choice (ETS or tax), federal backstop
  • $20/tonne CO$_2$ in 2019, to $50/tonne in 2022

• Carbon pricing patchwork
  • 5 provincial plans: 2 ETS, 3 taxes
  • 4 provinces with federal tax
  • + AB in 2020?

• Revenue-neutral federal carbon tax
  • Output based subsidies for EITE sectors
  • 90% dividend for households, same province
  • Progressive: >80% households get more back than they pay

• LOTS of conflict, including current election!
Panel Survey (Mildenberger, Lachapelle, Harrison)

- 5 provinces
  - 2 provincial carbon taxes: BC, AB
  - 1 own ETS: QC
  - 2 fed carbon tax: SK, ON

- 4 waves:
  - After announcement (February)
  - After fed tax applied (April)
  - After dividends received (June)
  - After election (to come in November)
% who know whether fed/prov tax

<table>
<thead>
<tr>
<th></th>
<th>Wave 1</th>
<th>Wave 2</th>
<th>Wave 3</th>
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<tbody>
<tr>
<td>Provincial price (BC, QC)</td>
<td>41%</td>
<td>46%</td>
<td>47%</td>
</tr>
<tr>
<td>Fed price (SK, ON)</td>
<td>43%</td>
<td>67%</td>
<td>67%</td>
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<tr>
<td>Alberta</td>
<td>64%</td>
<td>73%</td>
<td>41%</td>
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Provincial carbon pricing support by wave

Wave 1

Wave 2

Wave 3

BC

AB

SK

ON

QC
## Support for Carbon Pricing (wave 3)

<table>
<thead>
<tr>
<th></th>
<th>Saskatchewan</th>
<th>Ontario</th>
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<tbody>
<tr>
<td>Conservative</td>
<td>11%</td>
<td>21%</td>
</tr>
<tr>
<td>Liberal</td>
<td>57%</td>
<td>77%</td>
</tr>
<tr>
<td>NDP</td>
<td>50%</td>
<td>51%</td>
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<tr>
<td>Unlikely to vote</td>
<td>18%</td>
<td>27%</td>
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Inattentive Voters Underestimate Tax Credits

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<tr>
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</thead>
<tbody>
<tr>
<td>Mean reported household dividend (all respondents)</td>
<td>$268</td>
<td>$149</td>
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<tr>
<td>Mean reported household dividend (aware of dividend)</td>
<td>$314</td>
<td>$198</td>
</tr>
<tr>
<td>Estimated mean household dividend</td>
<td>~$530</td>
<td>~$270</td>
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</table>
Findings from Canadian Cases

• BC income tax cuts mattered for industry, probably not voters
• AB: blowing into a hurricane
• Canada
  • Voters are not well informed
  • In that context, partisan messages prevail (even over economic interest)
  • Household dividend seems to have had modest impact
    • Low visibility in income tax return
  • BUT no decline (as in BC)
  • If tax survives, dividend may lock-in