Taxation Issues in the Carbon Price Package

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ANU, 5 September 2011
“Clean Energy Future” Tax Changes

• Increase in indirect taxation
  – Production base
  – Increases relative prices of carbon intensive products and processes
  – Increase average cost of living by 0.7%
  – Revenue windfall of approx. $8 billion/year

• Personal income tax reductions
  – Via changes to thresholds, rates and LITO
  – Directed to low and middle incomes (<$80K/year)
  – Approx $2.4 billion/year. More recycled as higher social security payments.

• For income tax payers, a tax mix change package. Similarities to 2000 ANTS package
Rationale for Compensating Reductions of Income Tax

• Equity

• Modify the compounding effects of increased indirect tax on distortions of existing taxes (Often called tax interaction effect)

• Modify claims for compensating increases in wages, interest rates, initiating a wages-prices inflationary spiral
Equity Argument for Compensating Income Tax Reductions

- Tyranny of status quo distribution, and its restoration for increased cost of living
- Key ingredient for political acceptability
- Recognise changes in relative prices change product mix consumed.
- Under a aggregate revenue neutral constraint, there will be some winners and losers
Modify Compounding Distortions of Existing Taxes, eg labour decisions

- Tax wedge, $T$, between employer labour cost and employee effective purchasing power
  \[ T = Ty + (1 - Ty) Ti, \]
  where, $Ty$ is income tax rate, $Ti$ is indirect tax rate, including carbon price
- Henry estimated marginal cost of $T$ at 25 cents/$ tax revenue from distortion of work vs leisure decisions
- Carbon price raises $Ti$ by average of 0.7% percentage points
- Use revenue windfall for compensating reduction of $Ty$ so that $T$ unchanged with $\Delta Ti$ and $\Delta Ty$. Tax mix change.
- Still gain efficiency dividend from internalising pollution externality
Macroeconomic Stability Argument for Compensating Income Tax Cuts

- Higher cost of living with carbon price might be compensated with higher than otherwise increases in factor remuneration
- As in 2000 ANTS package (more indirect and less direct tax), one-off increase in cost of living ignored in setting wages, interest rates
- A rising carbon price over time is more challenging than the one-off ANTS example. Require a sequence of tax mix change packages.
Important Implications for Design of Income Tax Reductions

• They need to apply to all income levels and all types of income. Government restriction to low and middle income is not adequate.

• Tax cuts to reduce effective marginal income tax rates. Lump sum will not do.

• Severe restraints if impose approximate aggregate revenue neutral and distribution neutral (next slide)
Revenue and Equity Neutrality

Increase of indirect tax shifts supply upwards.
Government revenue windfall of \( a \). If compensate by CPI indexation (social security), require \( a+b+c \). If compensate for utility require \( a+b \)
“Clean Energy Future” Income Tax Changes

• Stated Objectives
  – Compensate low and middle income for higher cost of living
  – No mention of offsetting compounding existing tax distortions or macroeconomic stability
  – Adopt some of Henry Review proposals
    • Broaden the labour income tax base so all remuneration taxed as wages and salaries
    • More comprehensive and neutral taxation of different categories of savings and investment income
    • Simplify rate schedule by removing tax offsets and Medicare levy

• In reality, only a half attempt at rate simplification for low and middle income earners
## Income Tax Rate Schedule + LITO Comparison

<table>
<thead>
<tr>
<th>Current 2011-12</th>
<th>Proposed 2012-13</th>
</tr>
</thead>
<tbody>
<tr>
<td>Threshold $/year</td>
<td>EMTR</td>
</tr>
<tr>
<td>&lt;16,000</td>
<td>0%</td>
</tr>
<tr>
<td>16,001-30,000</td>
<td>15%</td>
</tr>
<tr>
<td>30,001-37,000</td>
<td>19%</td>
</tr>
<tr>
<td>37,001-67,500</td>
<td>34%</td>
</tr>
<tr>
<td>67,001-80,000</td>
<td>30%</td>
</tr>
<tr>
<td>80,001-180,000</td>
<td>37%</td>
</tr>
<tr>
<td>&gt;180,000</td>
<td>45%</td>
</tr>
</tbody>
</table>

Some observations: as desired, reduces tax on low and middle income; does not achieve much simplification; apart from between $16,000 and $20,542 does not reduce EMTR, and for some increases EMTR.
Tax Mix Change and Desired Changes in Consumption Mix

• Slutsky equation of elasticities
  \[ E_{ii} = E_{ii}(c) * dP_i + W_i * E_{iy} * dY \]

• For pollution intensive good (e.g., electricity), \( dP_i \approx 11\% \) and \( dY \approx 1\% \), and consumption falls

• For pollution extensive good (e.g., clothing), \( dP_i \approx 0.1\% \) and \( dY \approx 1\% \), and consumption rises
Some Conclusions

• The idea of a tax mix change- higher indirect tax to increase relative prices of polluting products and processes, and lower compensating marginal income tax rates- has economic logic

• Government proposal far from first best
  – All income taxpayers should be compensated
  – Attempted free ride on Henry Review proposals unnecessarily complicated the story for no benefit, especially in terms of simplicity and transparency
  – Contrary to claim, very limited reductions in EMTRs