Taxation Issues in the Carbon Price Package

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"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 ΔTi and ΔTy. 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

Price per unit

P'

P

a   b c

S + Δ Ti

S

D

Q'   Q

Quantity
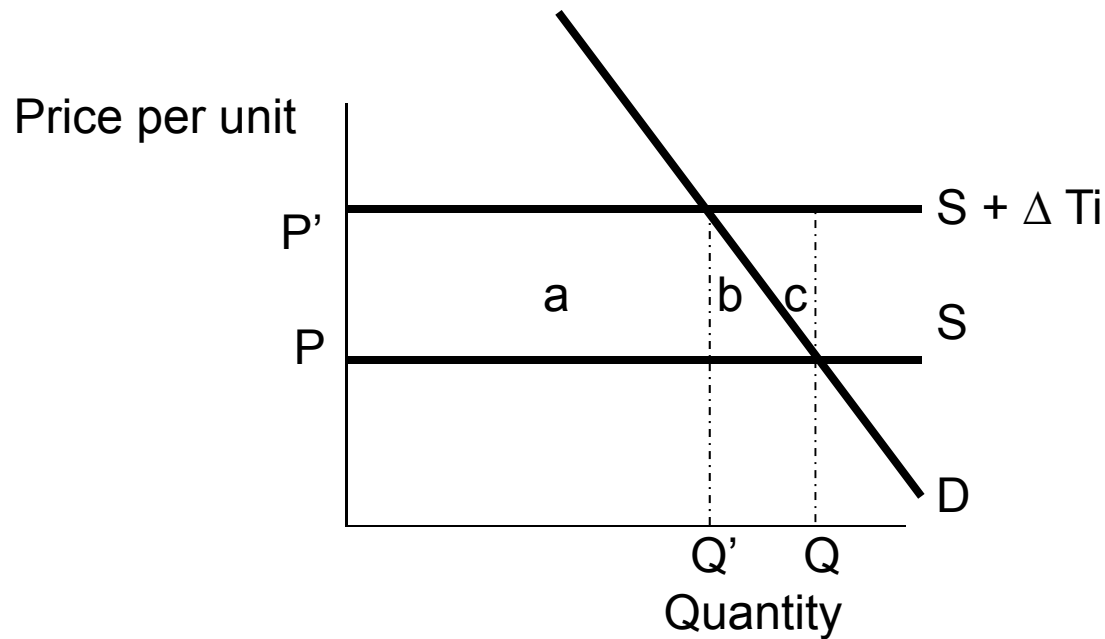
Increase of indirect tax shifts supply upwards.
Government revenue windfall of a. If compensate by CPI indexation
(social security), require a+b+c. If compensate for utility require a+b

"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

Current 2011-12		Proposed 2012-13	
Threshold $/year	EMTR	Threshold $/year	EMTR
<16,000	0%	<20,542	0%
16,001- 30,000	15%	20,543-37,000	19%
30.001-37,000	19%		
37,001-67,500	34%	37,001-66,666	34%
67,001-80,000	30%	66,667-80,000	32.5%
80,001-180,000	37%	80,001-180,000	37%
>180,000	45%	>180,000	45%

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

$$Eii = Eii(c) *dPi + Wi*Eiy*dY$$

- For pollution intensive good (eg electricity), $dPi ≈ 11\%$ and $dY ≈ 1\%$, and consumption falls

- For pollution extensive good (eg clothing), $dPi ≈ 0.1\%$ and $dY ≈ 1\%$, 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