Should CBA’s include a correction for the marginal excess burden of taxation?

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1. Introduction

• Why should CBA include a correction for the marginal excess burden of taxation?

  – Taxes are distortionary, drive a wedge between public and private returns to economic activity
  – Simple example:
    › a wage tax with marginal rate 50%
    › labourelasticity 0.2
    › higher tax, lower labour supply, more leisure time
    › welfare loss equal to taxes foregone due to lower labour supply
    › So, every extra euro of public expenditure financed by wage tax leads to 0.25 euro loss of welfare
But different recommendations & CBA practices

- CBA’s on transport in Europe:
  - Yes: Denmark and Slovenia +20%, Zweden + 30%, Greece + (?%)
  - No: all other EU-countries
- USA: yes: OMB Circular A94, + 25%
- Heckman et al. (2010) on preschool program: + 50%
- CBA-textbooks: Boardman et al.: yes; Mishan and Qah (2005): no
- Many CBA-guidelines do not mention the issue at all!: OECD, World Bank, Asian Development Bank

- Also debate in the Netherlands; Dutch government asked for advise
2. Economic theory on costs of taxation

• Benefits of public goods must exceed the direct costs by an amount sufficient to outweigh the distortionary cost of taxation; Pigou (1928), Stiglitz and Dasgupta (1971), Atkinson and Stern (1974), Browning (1976), Feldstein (1997)

• Taxes often distort the economy by driving a wedge between private and public returns to economic activities. The size of the distortion is different for different taxes:
  – some may even reduce distortions by internalizing negative externalities;
  – lump sum taxes do not distort;
  – taxes on wages and property income distort supply of labour and personal saving and investment decisions.
Taxes also about distribution

• Why choose distortionary income taxes instead of lump sum taxes?
  – Distortion of income tax is the price of its redistributive effect
3. A general framework for CBA

<table>
<thead>
<tr>
<th>Benefits of policy measure (direct, indirect)</th>
<th>Mln euro’s</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Including: labour market effects of policy measure</strong></td>
<td>B + L</td>
</tr>
<tr>
<td>Cost of policy measure</td>
<td>C</td>
</tr>
<tr>
<td>Net benefits in Dutch CBA practice (cf Hicks-Kaldor criterion)</td>
<td>S = B − C</td>
</tr>
<tr>
<td>Costs of taxation (due to the marginal excess burden of taxation)</td>
<td>E</td>
</tr>
<tr>
<td>Benefits of income redistribution by taxation</td>
<td>F</td>
</tr>
<tr>
<td>Benefits of income redistribution by the policy measure</td>
<td>M</td>
</tr>
<tr>
<td>Net benefits incl. costs of taxation &amp; benefits of redistribution</td>
<td>W = S − E + F + M</td>
</tr>
</tbody>
</table>

Two key-questions: 1. MCPF = 1: Is E equal to F?
2. How about M? Also in CBA-balancing item? Distributional weighting instead of Hicks-Kaldor criterion?
4. $E = F$? Is the marginal cost of public funds 1?

- Two theoretical perspectives:
  - Distributional neutral financing;
  - Optimal tax policy

- Distribution neutral taxation, Kaplow (1996, 2004): Taxes could mimic user charges. Taxes could be raised in such a way to overcome distortionary and redistributive effects of a policy measure:
  - New bridge for all, assuming identical people: lump sum taxation
  - More police with benefit increasing with income: proportional income taxation
  - But distributional neutral financing often not possible.
• Optimal tax policy:

  – In optimal tax system (second-best world with heterogeneous agents, cf Mirrlees, 1971) marginal excess burden of taxes is equal to marginal distributional benefits of taxes. So, then no correction is needed for marginal excess burden of taxation (Jacobs, de Mooij en Armstrong, (2009):

  – But: what outside the optimum and in case of political economy?
• MCPF = 1 as a neutral and pragmatic assumption:

  – Consistent with current tax policy and its underlying trade offs between equity and efficiency.
  – In case of change in aversion for inequality, first change tax system
  – Including only correction for costs of taxation is unbalanced
  – Including estimates of costs of taxation and benefits of distribution no alternative, because they are uncertain and depend on aversion against equality
5. Hicks-Kaldor and benefits of redistribution

- How about M, benefits of redistribution of the policy measure?
  - Net benefits following Hicks-Kaldor criterion (1 euro is 1 euro irrespective of who gains or looses) not neutral: no actual compensation and compensation often also not possible

- First step: show effects of policy measure by income groups when substantially unequal and relevant for policy

- Second step: Distributional weighting, but
  - Makes CBA even more complex
  - Different methods, standardization can only partly solve this; so, invites permanent discussion about weights
  - Creates confusion in division of tasks between politics and CBA
  - Little and Mirrlees (1974) at Worldbank no success
6. Conclusions & advice for Dutch government

• MCPF = 1, no correction for the marginal excess burden of taxation

• Different ways of financing should analyzed separately

• Show distributional effects of policy measure when relevant and substantial, e.g. by income group

• Do not use distributional weighting