Company Car Taxation
– Subsidies, welfare and environment

Helge Sigurd Næss-Schmidt | Brussels 28th February 2011
Purpose of the study

- Assess economic/environmental effects of the taxation of company cars
- In particular:
  - Are fringe benefits (car services) taxed at a too low level relative to cash remuneration?
  - Is it possible to provide some ball park EU wide estimates of social welfare losses and effect on CO2-emissions etc.?
Main conclusions

- Under taxation of company cars the norm in EU…
- …though with wide variation

- Results
  > Significant tax losses at EU level (two digit € billions)
  > …distortion of consumer choice (two digit € billions)
  > Sizeable additional emissions of CO2 as well as increased adverse local environmental impact

- Estimates need improvement…

- …more about that later
Tax neutrality the aim

- Character of remuneration of employees should not affect employees spending choice
  > Public versus privat transportation
  > Buying a new TV set as opposed to buy a more flashy car

- What to look for:
  > Taxation at company level (depreciation rules, VAT treatment)
    > Our study suggest that this is mainly a non-issue
  > Low effective taxation of fringe benefits at employee level
    > Main focus of our study
Fringe benefits: taxing costs at employee level

- **Cost components to look for**
  - Investments costs (financing the investment, depreciation)
  - Fuel costs
  - Other running costs (insurance, maintenance, repair)

- **Firm cost principle**
  - Tax base equal to costs facing employer

- **Opportunity cost principle**
  - Tax base equal to the costs the employee would have faced
Company car taxes in practice

- The actual costs for employer/employee not known...
- ...compliance costs associated with getting it high
- (Hence) tax rules are indeed very mechanistic
  > All investment and running costs approximated as a percentage of the value of the car
  > Marginal fuel use not taxed as rule

<table>
<thead>
<tr>
<th>Concept</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>List price</td>
<td>Price that the employee would obtain when buying privately (opportunity cost approach)</td>
</tr>
<tr>
<td>Acquisition cost</td>
<td>Price paid by the company, typically less than list price (firm cost approach)</td>
</tr>
<tr>
<td>(Fair) market value or replacement cost</td>
<td>An amount estimated following a specific methodology of the tax authority.</td>
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Subsidy estimates high

Subsidies to private use of company cars measured as percentage gap in imputed tax base (high milage)

<table>
<thead>
<tr>
<th>Group A: Subsidy up to 10%</th>
<th>Segment Small</th>
<th>Segment Medium</th>
<th>Segment Large</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Finland, Poland</td>
<td>Poland</td>
<td>United Kingdom</td>
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</table>

<table>
<thead>
<tr>
<th>Group B: Subsidy 11%-20%</th>
<th>Segment Small</th>
<th>Segment Medium</th>
<th>Segment Large</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Denmark, Sweden</td>
<td>France, Luxembourg, Finland, France, Netherlands, Sweden, United Kingdom</td>
<td>Denmark, Finland, France, Netherlands, Poland, Sweden</td>
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</table>

<table>
<thead>
<tr>
<th>Group C: Subsidy 21%-30%</th>
<th>Segment Small</th>
<th>Segment Medium</th>
<th>Segment Large</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>France, Luxembourg, Netherlands, Spain</td>
<td>Austria, Luxembourg, Slovenia, Spain</td>
<td>Czech R., Germany, Italy, Luxembourg, Slovenia, Spain</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Group D: Subsidy more than 30%</th>
<th>Segment Small</th>
<th>Segment Medium</th>
<th>Segment Large</th>
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</thead>
<tbody>
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<td>Belgium, Czech Republic, Germany, Greece, Hungary, Italy, Portugal, Slovakia</td>
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</table>
Some intuition behind results

- Depreciation costs alone is over 20 per cent per year for a new car
  >2/3 of original car value lost after three years

- Yet imputation rates, meant to cover all investment and running costs but fuel, below 20 per cent in 11 countries

- …while private fuel use is largely untaxed
Does it matter, yes company cars are important

- Structure of registrations by segment in 18 EU countries, 2008, millions of cars registered (volume)
**Potential large direct fiscal losses**

- **Caveats on calculations**
  > We may well over estimate the number of cars used by employees for commuting or leisure purposes (data issue)
  > ...but we have been forced to use tax rates for calculating tax losses that often do not include social security contributions
  > Do not include dynamic effects (less and smaller company cars means less revenue from fuel taxes etc)

- **However, losses must run into billions of €**

<table>
<thead>
<tr>
<th>Rates for imputing tax base</th>
<th>Average marginal taxes rates, in percent</th>
<th>Purchases of company car as percent of GDP</th>
<th>Loss, percent of GDP</th>
<th>Loss, billion €</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-15 percent</td>
<td>56</td>
<td>1.9</td>
<td>0.8</td>
<td>25</td>
</tr>
<tr>
<td>15-24 percent</td>
<td>52</td>
<td>1.2</td>
<td>0.4</td>
<td>8</td>
</tr>
<tr>
<td>Above 24 percent</td>
<td>55</td>
<td>1.3</td>
<td>0.4</td>
<td>16</td>
</tr>
<tr>
<td>Countries with other systems</td>
<td>58</td>
<td>1.3</td>
<td>0.6</td>
<td>5</td>
</tr>
<tr>
<td>Total (weighted average)</td>
<td>55</td>
<td>1.4</td>
<td>0.5</td>
<td>54</td>
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</table>
Heroic estimates of effects

Study effects are based on:
- Behavioural effects from Dutch studies on company cars
- Scaling up to EU level by looking at EU tax rules and stock of company cars

And the numbers are:
- **Total stock of cars up 8 to 21 million cars**
- **Average value of EU company car up € 4000 to € 8000**
- **fuel consumption up 4 to 8 percent**
Arguments for lower end estimates

- Implicit/explicit price elasticities in Dutch studies substantially higher than standard effects in literature:
  > Effect of user costs on price and number of cars

- Be cautious in extrapolating results from one country to all other countries in EU

- Polk data base overestimates the number of company owned cars being used for employee travel
Arguments for higher end estimates

- Structure of Dutch economy (prosperity, tax rules, share of company cars) close to the EU15 average

- Dutch studies focus on taxation company cars while our “control” elasticities are drawn from macro studies

- Effect on fuels use may even be underestimated in Dutch studies:
  > Disregard the effect that subsidised cars may increase commuting distances
  > Fuel use effects when larger and more company cars are sold in secondary market
Policy implications

- Much more neutral taxation rules needed
  > Higher imputation rates needed
  > Fringe benefits to be subjected to social security contributions
  > Deal with untaxed marginal use of fuel
- Think about objectives
  > If mobility is a concern, then aim for “fixed” support per kilometre
  > Not a transport subsidy depending on price of car
- Secondary issues
  > Should energy efficiency be built into company car taxation rules?
  > Do we need different marginal incentives for company cars than other cars?
  > Important to put in place overall effective system for taxing cars…
  > … not too much tinkering at the margin
Obvious limitations in this study

- We have relied on two main sources of data
  - Polk data on car registrations which do include cars used exclusively for business purpose
  - KPMG data for taxation of company cars which does not allow to assess the precise tax treatment at employee level

- Use of company cars
  - We have some knowledge from Dutch and Belgian studies
    - Do suggest that commuting and leisure travel is very important relative to work-place to work-place travel, but further research is needed

- Effects of too low taxation
  - Extensive use of two Dutch studies calls for cautious approach