Disadvantages

- Comparability problems (using the value of the benefit as assessed by the tax authorities, since this value is likely to vary by country).
- The approach does depend on national tax rules, and it is not quite in line with the stated preference for EU-SILC.

2.2. Valuation on the basis of accrued saving

An alternative approach would be to evaluate the benefit of private use of a company car in terms of *the amount that the recipient would have to pay over the reference period to enjoy the same benefit from the use of their own vehicle.*

Seen in the abovementioned terms, the benefit equals the sum of:

(i) Depreciation over the reference period in the capital value of the car, *plus*

(ii) Coverage by the employer of other costs which would normally fall on the user of his/her own car. The latter may cover car insurance and possibly maintenance and major repair costs, but would normally exclude fuel and other running costs.

The idea is not to collect (i) and (ii) from individual respondents, but to use external sources to construct suitable average schedules for these factors.

Advantages

- The approach is independent of national tax rules.
- Its comparability is affected by national differences in prices for identical vehicles, both as a result of differences in sales taxes and in market conditions (these differences can be considered legitimate, as they reflect actual differences in prices, and hence differences in the value of the derived benefit).

Disadvantages

- The difficulty in constructing a depreciation schedule, i.e. a model of the decline in the market value of the car over time.
- It requires a manual codification of the car's model, make, etc. to compare with external sources.

The depreciation method - how to calculate depreciation schedule

The main requirement is to construct a "depreciation model". The idea is to impute the *amount that the recipient would have to pay over the reference period to enjoy the same benefit from the use of their own vehicle*.

$$Depreciation = \frac{Purchase\ prices - selling\ prices\ at\ X}{X}$$

Where X = 'the average age of a company car'

Note: the selling price could be replaced by the 'residual leasing value at X'.

To calculate the 'purchase price' and the 'selling price', the make, the model, the registration year and other characteristics of the car can be used. As was already mentioned, such characteristics may be more readily collected in the surveys. List prices or manufacturer's recommended retail prices (RRP) are readily available for a wide range of new cars. For instance, DG Competition produces a list of manufacturers' recommended retail prices by the manufacturer, make and model, in all EU countries. If a type of car is not included in the list, the RRP should be available from the manufacturer's website. If an RRP is not available for a particular country, then it could be estimated based on the price of a similar car or the price relative to other cars in a country with a similar pricing structure. The list price should include VAT and vehicle registration tax.

For calculating 'the average age of a company car', external information from enterprises can be used. If this information is not available, an average of 5 should be taken into consideration.

An alternative method

An alternative method for valuing the benefit of private use of company car in terms of *the amount the recipient would have to pay over the reference period to enjoy the same benefit from the use of own vehicle,* could be the amount paid per year of renting a similar car for X years. This amount could be obtained from external sources (renting companies).

In the estimation of the value to be imputed, it is necessary to take into account whether some of the

characteristics (make, model, year, etc.) of the company car, than on the current prices. If information on prices is needed for the purpose of tax assessment, then it may be compiled externally as a function of the physical characteristics.