

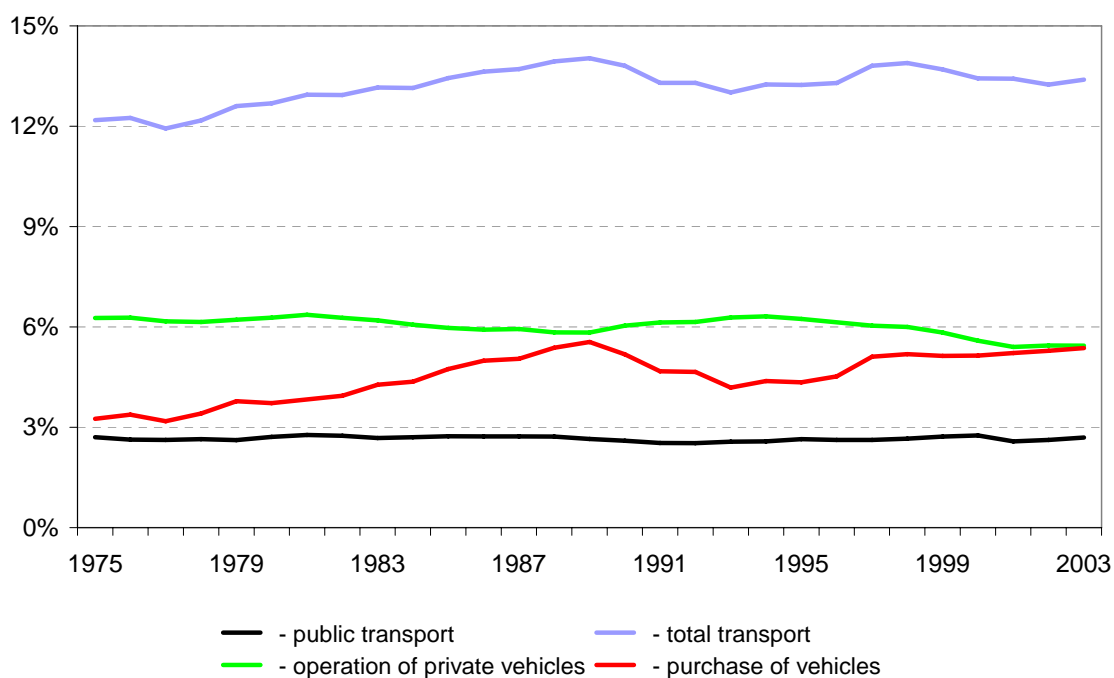
Indicator Fact Sheet

TERM 2005 24 – Expenditures on personal mobility

Indicator code / ID	
Analysis made on (Assessment date)	5 September 2005
EEA contact /fact sheet responsible Name Peder Jensen: Email: peder.jensen@eea.eu.int	Fact Sheet development contact point Name: Eelco den Boer, CE Delft Email: boer@ce.nl

- i The share of household expenditure on transport is roughly stable over time, across countries, and across income groups. This implies that transport prices have a strong regulating effect on transport demand. High income groups consume more transport than do low income groups.**

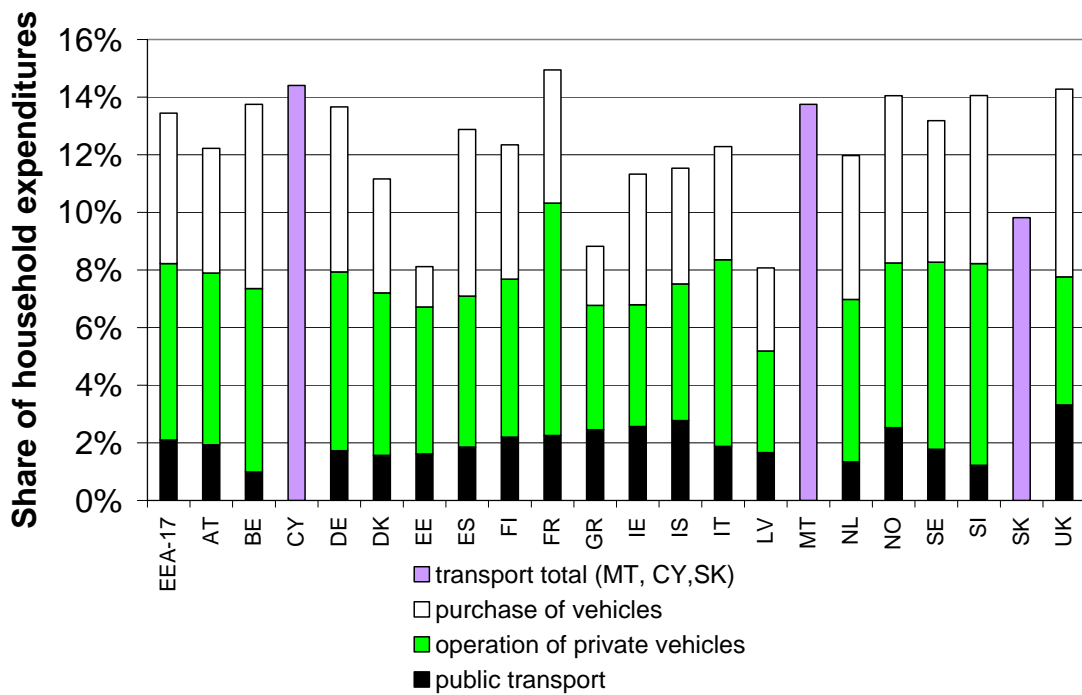
Figure 1: a) Trends in share of household expenditure on transport



Note: The chart is based on data from Denmark, Italy, Finland, and United Kingdom. Incomplete time series from many other countries suggest that the chart above is roughly representative for the whole EU. The UK is somewhat unrepresentative for the whole area, see figure 2. Public transport' includes transport by train, bus, taxi, ferries, and aircraft.

Source Eurostat, 2005

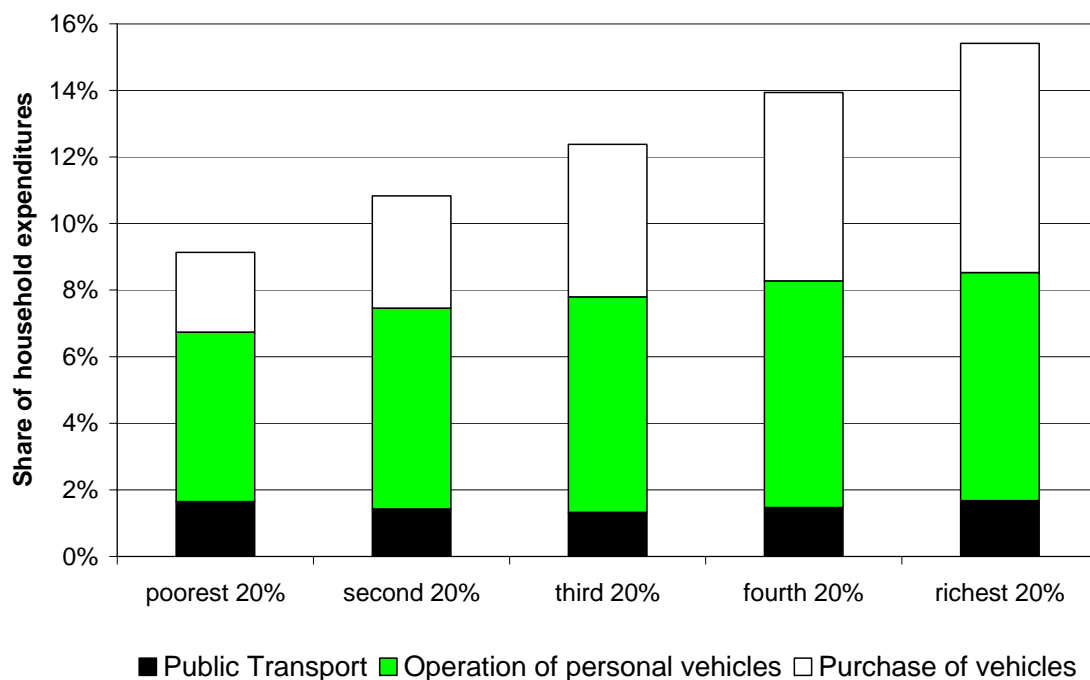
Figure 2 Share of household expenditure on transport across countries



Note: Data are for the year 2001. For country codes, see the 'Meta data' section 2. For Cyprus and Malta, no detailed data was available on transport spending. Public transport' includes transport by train, bus, taxi, ferries, and aircraft.

Source: Eurostat, 2005

Figure 3: Share of household expenditure on transport across income groups



Quintile 1 accounts for the 20 % with lowest incomes, quintile 2 accounts for the next 20 % and so on with quintile 5 accounting for the wealthiest 20 %. 'Public transport' includes transport by train, bus, taxi, ferries, and aircraft.

Source: Eurostat, 2004

Results and assessment

Policy relevance

There are no objectives defined for regulating expenditures on transport.

Policy context:

There is a generally accepted close link between income and transport expenditure (Bureau of Transportation Statistics, 2000). In general people spend a relatively stable share of their income to transport. Seeing this link, higher transport prices will lead to less transport and consequently reduced pressures on the environment. Conversely, price decreases will lead to increased demand for transport. Transport pricing may thus not only be a tool to reduce the environmental pressure of transport, but also an important tool for transport demand regulation.

Internalisation of external cost, a Commission objective from the White Paper (European Commission, 2001) will make people pay for the external cost generated. Initially, this will increase the costs of transport for the user, as the costs of air pollution, climate change and accidents will have to be paid for. In the longer term, the effect on transport prices will be less since pricing policies will reduce the magnitude of external effects through adaptation.

Environmental context:

Transport expenditures offer insight into a driver of transport demand, which may through better transport demand management contribute to a better environment.

Assessment:

The share of household expenditures on transport appears to be relatively stable across time, countries, and income groups, exceptions left aside. Figure 1 does indicate a slight increasing tendency in the 70's and 80's, a development that was pronounced for Italy and the UK, but not for the rest of the countries, and not for later years, as indicated in table 1. Moreover, the increase seems mainly confined to the budget for vehicle purchase.

The share of spending on transport appears to increase with income, but the difference is largely due to greater spending on vehicle purchase. As wealthier people are more inclined to spend on vehicles as luxuries and status symbols, the greater share of spending could therefore better be attributed to these factors rather than purely transport. Consequently, the share of expenditures on transport is roughly the same across income groups, although some increase with income is discernible. In absolute terms, the expenditures on transport increase with growing incomes, reflecting the increased consumption of transport (e.g. fuel). Variations can be found between social groups, retired people for example spend a good bit less on transport, as do unemployed. Travel budgets are also much lower for households without a car, a situation more common in the lower income groups, and may explain the differences among income groups. With the rise in car ownership in recent times, fewer households have no car, and the average share of expenditures spent on (car) transport would be expected to rise, which may alternatively explain the small rise.

If the share of income allocated to transport is constant for the different groups in society, increasing the prices (internalisation) becomes a useful tool for governments to influence transport volumes. When transport prices increase less than incomes, which has been the case in recent years, transport becomes more affordable, and with a stable share of the income allocated to transport, transport volumes increase. However, it is also believed that people not only spend a (roughly) stable share of their budget on transport, but also a stable share of their time (Bureau of Transportation Statistics, 2000¹). As a consequence, travel speed also becomes an important determinant of transport demand, along with costs.

With stable transport prices, the decoupling objective of the European Commission may not be easily achieved. As incomes generally increase about 2 % per year, transport expenditures will increase given a constant share of income devoted to transport, leading to greater transport volumes. This puts the decoupling objective under pressure while also increasing pressure on the environment.

Another important consequence is that policy instruments that reduce the environmental impact of the vehicle while simultaneously reducing the consumer price (e.g. by making cars more fuel-efficient) will sooner or later create a rebound effect: the consumers will 'use up' their constant transport budget by simply driving more. In the long run, consumers will turn the reduced costs into greater opportunities for example by accepting jobs at a greater distance from their home, leading to greater commuting distance.

References

Bureau of Transportation Statistics, 2000. *Regularities in Travel Demand : An International Perspective*, Andreas Schafer in Journal of Transportation and Statistics, Volume 3 Number 3, US Bureau of Transportation Statistics 2000. Journal is available on the web:

http://www.bts.gov/publications/journal_of_transportation_and_statistics/volume_03_number_03/

Eurostat, 2003 *Household Budget Surveys in the EU - Methodology and recommendations for harmonisation – 2003*. Eurostat, 2003, Methods and Nomenclatures collection.

<http://europa.eu.int/comm/eurostat/Public/datashop/print-catalogue/EN?catalogue=Eurostat&product=KS-BF-03-003--N-EN>

Eurostat, 2004 *Structure of consumption expenditure by income quintile (COICOP level 2) (per thousands)*, /theme3/hbs/struc/s_crois/t223, Eurostat, New Cronos, 2004

Eurostat, 2005 *Structure of final consumption expenditure (millions of 1995 Euro) (COICOP)*, Theme 2, National Accounts section. Data set: B_CO3_k, downloaded with 'data explorer' from the website of Eurostat, July 2005

¹ The source reviews much of the literature on regularities in travel demand.

Data

Table 1: Trends in the share of transport in household expenditures (%)

Country	1970	1975	1980	1985	1990	1995	1996	1997	1998	1999	2000	2001	2002	2003
Austria			13,7	12,8	12,9	12,6	12,8	12,4	12,4	12,8	12,5	12,2	12,6	
Belgium						13,6	13,6	13,8	14,4	14,5	14,4	14,1	13,9	
Cyprus						14,6	14,2	14,0	15,2	17,7	14,6	14,4		
Germany						14,2	14,4	14,5	14,8	14,9	13,8	13,6	13,6	
Denmark	13,5	13,2	12,3	15,5	11,8	13,5	13,7	13,8	13,7	13,2	12,0	11,2	11,7	11,1
Estonia						8,1	10,1	9,4	9,2	8,4	7,5	7,9	8,6	
Spain						11,6	11,9	12,4	13,0	13,6	13,1	12,9	12,4	
Finland		16,1	14,1	15,3	15,5	12,7	12,6	13,0	13,5	13,3	12,9	12,2	12,3	13,2
France					15,5	14,6	14,8	14,3	14,6	14,9	14,8	14,9		
Greece						9,0	8,9	9,1	9,2	10,1	8,9	8,9	8,9	
Ireland					11,1	11,3	11,4	11,8	11,9	11,9	12,4	11,2		
Iceland					12,3	11,3	12,3	13,4	13,9	14,8	14,1	11,5	11,2	
Italy	11,1	10,7	11,5	11,4	12,3	12,3	12,1	13,1	13,1	12,8	12,6	12,4	12,2	12,4
Lithuania						7,2								
Latvia						7,0	7,0	7,1	6,9	6,2	6,3			
Malta										14,6	14,4	13,8	13,1	
Netherlands					12,6	12,2	12,1	12,1	12,3	12,6	12,3	12,0	12,3	
Norway			17,0	19,5	14,5	14,4	15,9	15,5	15,5	14,9	14,9			
Poland						10,5								
Romania										65,6				
Sweden						12,6	12,7	13,3	13,5	13,9	13,7	13,1	12,8	
Slovenia					13,7	15,6	15,8	15,5	15,1	15,9	15,1	14,3		
Slovak Republic							7,8	7,6	8,5	9,1	8,7	9,8	9,7	
United Kingdom	12,3	12,9	13,8	15,0	15,3	14,2	14,3	14,6	14,7	14,6	14,3	14,6	14,4	14,5

Note : The percentages cover share of total expenditures on personal transport vehicles, operation of vehicles, and public and private transport services.

Source: Eurostat, 2005

Meta data

Web presentation information

1. Abstract / description / teaser:
Households appear to spend a stable share of their income on transport.
2. Policy issue / question:
How do people spend their money on transport? Do people spend a fixed share of their budget on transport?
3. EEA dissemination themes:
Transport
4. DPSIR: D

Technical information

5. Data source: All data from Eurostat, New Cronos
main: THEME2 Economy and Finance, COICOP3 file:B_CO3_k. The file was obtained with the data explorer from the website of Eurostat.
transport spending by income group: /theme3/hbs/struc/s_crois/t223 Data originate from household budget surveys (HBS).
6. Description of data: Household Budget Survey data measures expenditures in households as opposed to government or workplace expenditures. Expenditures on company cars,

travel compensation paid by employers, etc. is included in the figures Data is broken down according to the COICOP classifications of purpose. For more information, see Eurostat, 2003. The term 'public transport' is not used in the source. The original term is 'transport services' and includes passenger transport by road (mainly buses and taxis), rail, air, and by water, to name the important categories. Here, all expenditures on holiday travel falling under the category 'package holidays' are not included. 'Operation of personal vehicles' includes fuel and maintenance expenditures.

Original measure units: t223: Parts per thousand of total household expenditures.

B_CO3_k is total expenditures in 1995 Euros.

7. Geographical coverage:

B_CO3_K data contain data from most EEA countries plus US and Japan

HBS data cover the fifteen old member states.

Legend for Figure 2: AT Austria; BE Belgium; CY Cyprus;; DE Germany; DK Denmark; ES Spain; EE Estonia;; FR ;France; FI Finland; GR Greece; IT Italy; IE Ireland; ;LT Lithuania; LV Latvia; MT Malta; NL Netherlands;NO Norway; SE Sweden; SI Slovenia; SK Slovak Republic; UK United Kingdom;

8. Temporal coverage: B_CO3_K :1970 – 2004 with partial data for most countries.

HBS: 1988,1994, and (EU aggregate excluding) 1999

9. Methodology and frequency of data collection: HBS: every five years, methodology changes a bit from one round to the other, but the main purpose is to have comparable data across countries. See Eurostat, 2003 for more information

10. Methodology of data manipulation, including making 'early estimates': N/A

Quality information

11. Strength and weakness (at data level): long time series exist only for few countries.

12. Reliability, accuracy, robustness, uncertainty (at data level): 2

13. Overall scoring (give 1 to 3 points: 1=no major problems, 3=major reservations): 2

Relevancy: 3 (no policy has been formulated)

Accuracy: 1

Comparability over time: 2 (methodology has been changed)

Comparability over space: 1

Further work required

Data for new member states and for other EEA countries is desirable for a more complete overview.