

# Public Transport International

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Where there is  
mobility there is  
social inclusion

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Map of metro systems around the world inside





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## Social fares in urban public transport in Europe



*Cities in Poland (Krakow pictured here) have some of the highest public transport fares in Europe, but they also give the most generous discounts*

*Lower fares for members of defined social groups seem to be a universal feature of urban public transport in Europe. In a study of 66 large European cities<sup>1</sup> from nine countries, all but one offered discounts on the urban public transport system for children; all but ten offered discounts for students/young people; and all but ten offered discounts for elderly people in 2004.*

If anything, these figures understate the prevalence of social fares. Some social fares, funded by higher-level public authorities, may not have shown up in the data source used (operator and city websites); and there is a general impression that the use of social fares has been growing since these data were gathered.

This article will give an overview of the discounts offered and attempt to assess the part they play in social and commercial strategies for urban public transport.

These systems offered an average of eight different discounted tickets for these three social groups: 3.4 tickets for children, 2.4 for students/young people and 2.2 for elderly people. The most attractively priced of these tickets carried,

on average, a discount of 45% compared to the full-price equivalent (49% for children, 39% for students/young people and 46% for elderly people).

As the figure at the top of the next page shows, the use of social fares varied substantially between countries. Cities in the Czech Republic, Poland and the UK had the most types of discounted ticket and the highest discounts. One Czech city, for example, offered ten discounted tickets: discounts for children (up to the age of 15) on singles, dailies, weeklies, monthlies and quarterlies; discounts for students (up to the age of 26) on monthlies, quarterlies and 5-month tickets; and discounts for elderly people on monthlies and quarterlies. The maximum discounts were 62% on

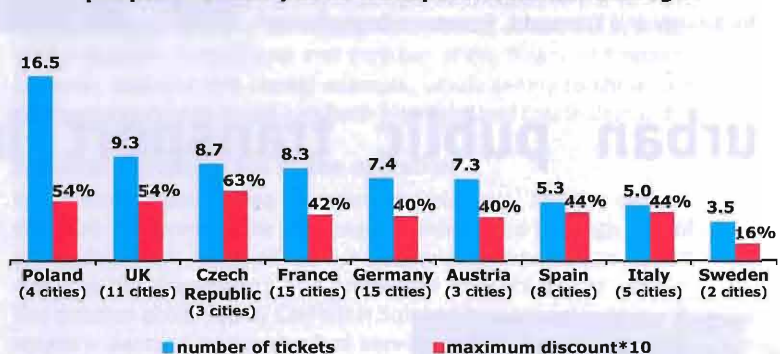
the children's weekly; 50% on the students' monthly; and 35% on the elderly people's monthly.

Cities in Sweden had few discounted tickets and low discounts. Austria, France, Germany, Italy and Spain formed an intermediate group.

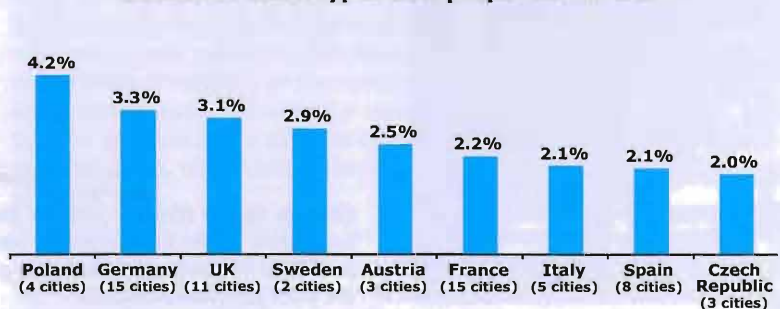
Social pricing for children was particularly well-developed (with above-average numbers of ticket types and above-average maximum discounts) in Austria, the Czech Republic, Germany and the UK. It was relatively poorly developed in Italy and Spain.

Social pricing for students/young people was particularly well-developed in France and Poland, and relatively poorly developed in Austria, Spain, Sweden and the UK.

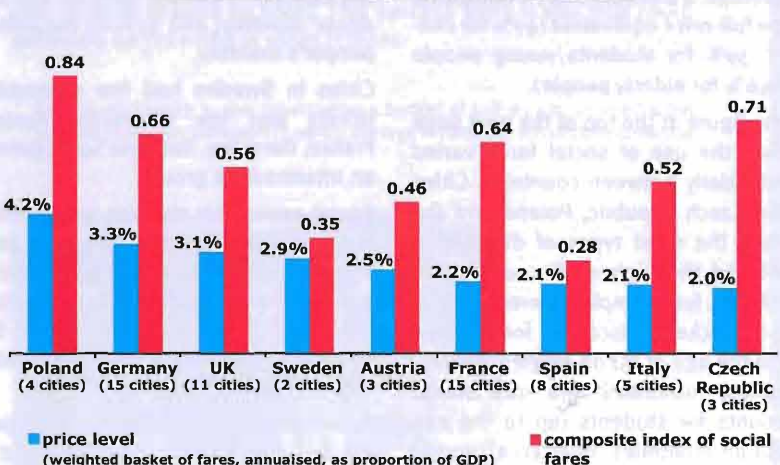
**Reduced fares for children, students/young people and elderly people in urban public transport: national averages**



**Price levels of urban public transport - annualised cost of a basket of ticket types as a proportion of GDP**



**Price levels and index of social discounts**



Social pricing for elderly people was particularly well-developed in Poland and the UK, and relatively poorly developed in France, Germany, Italy and Sweden.

It is interesting to look at the relationship between social fares and general (undiscounted) price levels.

For each city, a 'price level' was calculated based on a basket of ticket types<sup>2</sup> and compared, on an annual basis, with national Gross Domestic Product. As the figure shows, there was substantial national variation in average price levels, from 2.0% of GDP in the Czech Republic to 4.2% in Poland.

These price levels can be compared with a composite index of social fares (giving equal weight to the number of tickets and the maximum discount, and to each social group). As the figure shows, different combinations tended to prevail in different countries. For example, cities in Poland and Germany combined high fares with generous discounts; cities in Spain combined low fares with low discounts; while cities in France and the Czech Republic combined low fares with generous discounts.

Urban public transport operators are not free agents in deciding the fares they charge. In every case, public authorities also play a role. This role varies from country to country; naturally, it influences the availability of social fares. For example, although bus operators in the UK (except Belfast and London) are free to fix most fares; but public authorities have the power to impose lower fares for two specific groups: children and elderly people. This may explain why, in British cities, discounts for those groups are more generous than those for students and young people.

Moreover, whoever it is that fixes fares, commercial as well as social objectives need to be taken into account. Even if an urban public transport system is not run to make a profit, it will still be subject to some kind of financial constraint. In this context it is interesting to note that reduced fares for particular social groups need not necessarily be seen solely as a means to fulfil social objectives. Price discrimination ('airline-style pricing') is a well-known method of setting prices to maximise income. To implement price discrimination, companies need to segment their market; segmentation by social groups is one obvious way to do this. Private companies without explicit social objectives often set lower prices

for children or elderly people (think of hairdressers offering 'pensioners' discounts' on weekdays); it is not to be excluded that social fares in public transport perform, at least in part, the same income-maximising function.

This view is supported by the fact that it is rare for an operator to offer the same rate of discount across its whole ticket range. Polish cities were the main exception, often offering children or elderly people half price access to all ticket types. But more typical was the approach taken by the Czech city mentioned above, where elderly people, for example, received a 25% discount on quarterly tickets compared to a 35% discount on monthlies. This suggests that social fare levels are the result of some sort of weighing of social and commercial factors.

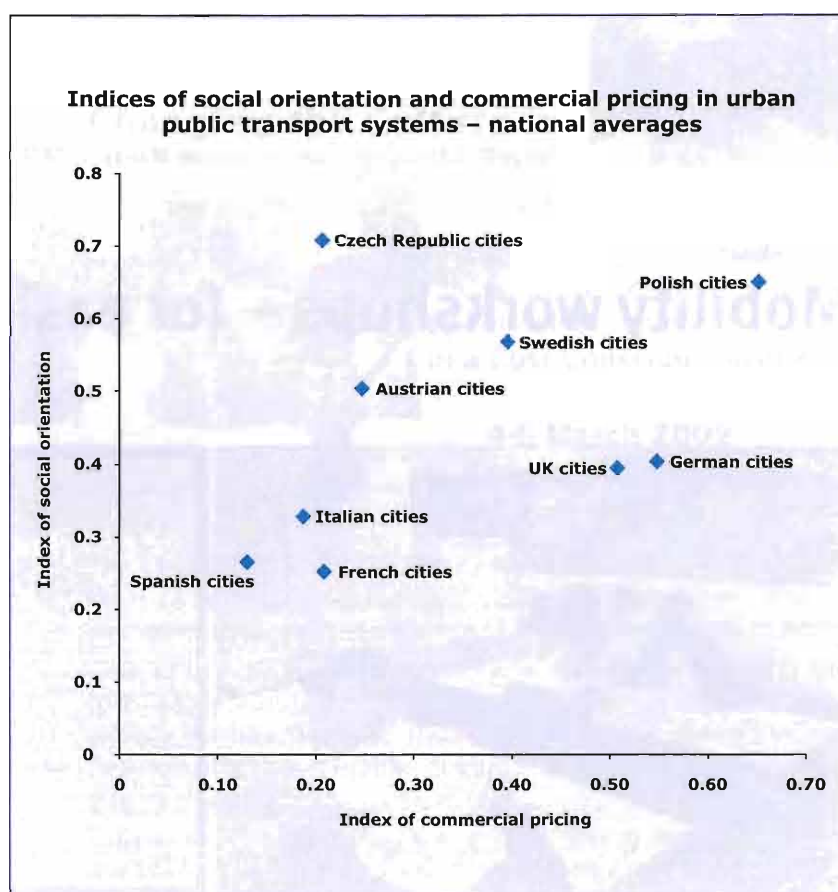
A study of the relationship between social and commercial objectives in this group of urban public transport operators<sup>3</sup> supported this view.

The study identified two indicators of commercial pricing – high overall fare levels and high levels of price discrimination (such as differentiation on the basis of distance, time of travel or ticket type used). It also identified four indicators of social orientation – high overall service levels; a low disparity between peak and off-peak service levels; dispersal of services over a large number of routes; and high social discounts for children and elderly people.

The study showed a correlation between the two indicators of commercial pricing. High fares tended to be associated with high levels of price discrimination, and low fares tended to be associated with low levels of price discrimination.

By contrast, there was no particular association between the different indicators of social orientation. Cities with a high score on one indicator – such as overall service levels – were not especially likely to have a high score on another – such as social discounts.

Finally, the indicators were combined to create a single index of commercial pricing and a single index of social orientation. Perhaps counter-intuitively, there was a significant positive correlation between these two indices. That is, the cities that invested most in high overall service levels, high coverage of services in time and space, and generous discounts for children and elderly people, were, in general, also likely to have a more commercial approach to their gen-



eral pricing structure, with high overall fares, distance-related pricing and off-peak discounts.

The chart above illustrates this relationship at the level of countries.

More work is needed to analyse these data. The relationships are complex and many other factors need to be taken into account before firm conclusions are drawn. However, the data certainly suggest that the causes and effects of social pricing in urban public transport are more complex than they may at first appear.

\* The author writes in a personal capacity and his views do not necessarily reflect those of the European Commission.

<sup>1</sup> Population 200 000 or more.

<sup>2</sup> The basket gave equal weights to the cheapest single ticket; 'journey count' ticket (return or carnet); and set of 'time count' tickets (season tickets, abonnements). The set of 'time count' tickets gave equal weights to the cheapest weekly, monthly and annual ticket. If one of the mentioned tickets was not available or was more expensive, the price of the cheapest earlier-mentioned ticket was substituted. Prices were calculated on the basis of journeys of 5km and (for time count tickets) of 10 journeys per week.

<sup>3</sup> Paul Hodson, "Social and commercial factors in urban public transport timetables and fares", paper delivered to Association of European Transport, Strasbourg, 2006.

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