UNIT 8
The pricing of transport activities

By Immanuel Nashivela
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Unit outline

On reading this chapter, you will learn about:

– Price discrimination in the pricing of transport services
– Pricing malpractice, namely predatory pricing, as it has been applied in transport services and price fixing, and thus what constitutes ‘fair’ and ‘unfair’ pricing policies in the pricing of transport services
– A closer examination of private transport services with a particular focus on the pricing of such services.
INTRODUCTION
Pricing is a vital component in the economics of transport services. As we have already seen, not only does the price determine who gets and who doesn’t get a particular service, but also determines the distribution of the ‘rewards’ between the provider and the user of transport services, with imperfect market structures characterised by higher rewards for the providers of such services.

• In this chapter therefore we examine further the issues surrounding the pricing of transport services

• In this chapter we will also consider how people actually pay for their transport services

• In this chapter we will consider the key points surrounding this issue of tax system in transport
PRICING IN PUBLIC TRANSPORT SERVICES

• The price set by public transport operators, particularly if they are operating under conditions of monopoly, will depend on ‘what the market will bear’. The reason for this is that the market does not consist of homogeneous consumers

• As such, individuals undertaking work-related journeys during peak times, with inelastic demand, can be charged a relatively higher fare

• Individuals however for whom the journey time is somewhat less important, and therefore where demand is relatively more elastic, will be charged a lower fare in order to stimulate travel

• price discrimination will therefore be undertaken, in order to maximize revenue

• In terms of local public transport, then, passengers tend to purchase their tickets at the ‘point of use’, that is, at the time of departure and in such a situation it is not possible to segment the market
Price discrimination

Definition - Price discrimination refers to a situation where a company charges particular consumers a higher price than others for the same product for reasons unrelated to cost.

- The basic principle of price discrimination is to increase an operator’s total revenue and earn higher profits, and as a result reduce consumer surplus.
- Consumer surplus refers to the difference between the actual price a consumer pays for a product and what they would be willing to pay.

In order to practise price discrimination and reduce the consumer surplus certain conditions must prevail.

- The seller must possess a degree of market power, although the operator does not have to be a monopolist.
- The seller must be able to divide the market into individual segments and thus separate different customers within a particular market, such as peak and off-peak. Such market dividers are known as inhibitors and prevent trading between different market segments from occurring.
- Each market segment must have differing elasticities of demand.
To undertake this form of price discrimination the seller must know the exact shape of each consumer’s demand curve and perhaps with more difficulty charge each consumer the maximum price they are prepared to pay:

- if the supplier was a profit maximiser then it would charge a price of $P_m$, earning abnormal profit of $bcde$
- consumer obtaining consumer surplus of $abc$.
- If the seller was able to perfectly price discriminate then the consumer willing to pay the highest price would be charged $P_1$
- Having sold that unit the second unit would be sold for a slightly lower price and so on. the seller would charge down the demand curve, which would thus become the marginal revenue curve.
- The operator would continue to sell the product until point $f$ is reached, with a quantity of $Q_1$ sold.

This type of price discrimination is an ideal from the point of view of a transport operator, but for obvious reasons is not very common.
Airline price discrimination
Methods used to achieve higher profits in the long run by operators

• **Predatory pricing**
  Predatory pricing is said to occur when a firm, normally with market power in more than one market, reduces its price below cost in the short run so as to obtain abnormal profit in the long run.

  Predatory pricing is aimed at either achieving or maintaining a monopoly situation, with the price set so as to bankrupt competitors, ‘encourage’ them to merge or in fact collude.

  It comprises barriers to entry, since a failure to prevent new entry would make it difficult for the operator undertaking predatory pricing to raise their prices once an incumbent operator had been removed from the market. In practice it can be very difficult to prove that such an activity has taken place (small firms accusing larger firms of predatory pricing which could be as a result of low operating cost).
• **Price fixing**
Price fixing is one such collusive activity, a situation where firms within a market agree on the price they are going to sell their goods or services at in order to remove price competitiveness and thus increase their profits.

Collusion allows firms to act as a monopolist with the aim of maximising their joint profits.

Formal collusion - whereby all firms in a market are part of a cartel means that they are acting as a single monopoly.

![Cartel based profit maximisation](Image)

Price fixing is a form of collusion which enables organisations to increase their profit levels, but it can be seen to act against the public interest since the organisations are behaving as if they were a monopoly.
Collusion by organisations is more likely to occur if:

- There are only a few organisations operating in the market
- The organisations trust each other, so that the agreement reached is not reneged on
- The organisations have similar costs and as such are likely to agree on the proposed price change
- The organisations provide similar products so there is little scope for competition based on the quality or level of service
- The market is fairly stable in that neither demand nor costs are changing dramatically. If they were, then agreement on the price to charge would be difficult
- There are barriers to entry into the market such that new firms will find it difficult to penetrate the market in order to take advantage of the increased profits.
PRICING OF PRIVATE TRANSPORT SERVICES

The pricing of private transport services, namely, cars, vans, motorcycles and the like, is multi-faceted as being paid through a combination of mechanisms starting with the purchase and licensing of the vehicle, the purchase of fuel; and running costs and also a range of taxes. These prices can be seen placed under various headings

- **Acquisition costs** - Acquisition costs are those incurred when a vehicle is obtained. These refer to the purchase price of the vehicle including VAT. The private motorist will typically ignore these costs when undertaking an individual trip, but they can be substantial particularly when new vehicles are involved.

- **Periodic costs** - These can also be called standing charges and are the basic costs of owning a car for use on the roads network. They refer to charges that have to be paid whether or not the car is used and as such include the annual registration tax (Vehicle Excise Duty) and insurance
• **Fixed costs per trip** - The fixed costs which may be incurred by those undertaking a journey include parking charges whether that be public on street, through pay and display or off-street in public or privately owned car parks. The journey may also involve a river crossing for which a charge or toll is made.

• **Variable costs per trip** - These are costs that are incurred on each trip and which vary in accordance with one or more of the characteristics of the trip. For example, trip length, trip destination, timing of the trip and traffic conditions. The major element of this cost relates to fuel and wear and tear
Price discrimination in two rail markets
Figure above refers to a rail operator that is practising price discrimination, charging a different price to the passengers in market 1 compared to those in market 2. It is assumed that costs are constant, therefore MC = AC.

a) What does the Figure reveal about the type of passengers using the service and their relative elasticities?

b) Calculate the abnormal profit earned by the rail operator by price discriminating.

c) Based on the information presented in the Figure sketch out the diagram for the rail operator if it were not to price discriminate.

d) Are there any beneficiaries from price discrimination and what happens to consumer surplus when price discrimination is practised?

Transport operators in oligopolistic markets practise predatory pricing and price fixing from time to time. Outline what you perceive to be the benefits to transport operators of such practices and the reasons why they are illegal in many countries world-wide.