Unit 10
Transport regulation and ownership

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TEC711S
INTRODUCTION

• The forms of regulation of transport services and the rationale for and drawbacks of regulatory measures

• The reasons behind public ownership and control of transport operations and the management of transport assets

• The main motivations behind a general movement towards reform of public ownership in transport services

• The models under which the public and private sectors combine to produce transport services and facilities
Government control of transport markets - two measures

1. transport authority can own the assets and the means of production
   – In this case the market is brought into the public sector and thus it does not have to operate along market principles

2. the authority could exhibit its control through direct command, i.e. by telling operators what to do (regulation)
FORMS OF TRANSPORT REGULATION

1. Qualitative Regulation
2. Quantitative Regulation
Qualitative Regulation

• Qualitative regulation is where the regulatory authority intervenes in the market in order to stipulate minimum criteria that regulate behaviour within the market.
• This tends to come in the form of direct legislative measures that lay down the laws to be followed by users of the transport system.
• Such actions need to be enforced and breach of any of rules penalised, either through financial penalties or by the withdrawal of the right to use the system.
• Thus speed restrictions for example are a form of qualitative regulation, as these regulate the speed of vehicles on the roads, with different speed limits applying to different types of roads.
• Breach of those rules will normally result in the imposition of financial penalty, whilst a continuous breach of speed limits leads to the withdrawal of the driver’s licence.
Quantitative (Economic) regulation

• regulatory bodies intervene in the market in order to place economic controls on the operation of the market.
• This is either in terms of restrictions with regard to the price or restrictions or minimum specifications with regard to the supply.
Forms of price regulation

1. Specify the price to be charged

- In the figure, the free market price is given where supply equals demand, hence PFM.
- The transport authority however sets a maximum price below the equilibrium price at PRM. Note it only makes sense to set a regulated maximum price below the equilibrium price, otherwise it would have absolutely no impact on the market.
• As can also be seen from the Figure above a price at the regulated fare will create excess demand, i.e. there will be more wanting to use the service than is being supplied to the market.

• The authority would therefore have to address this problem. By ensuring that the supply curve moved to the right.

• This can be done in several ways:
  – to pay the operator a subsidy.
  – the whole rationale for imposing a maximum fare may be to motivate the operator to lower its cost. Hence the supply curve would shift to the right thereby eradicating the excess demand.
  – In practice this has normally been done over time by regulating price increases.
2. **Specify the maximum increase in price allowed** - Rather than state a specific price, the authority limits the extent to which the operator can increase its prices over time. (‘RPI-X%’ formula)
   - Hence in theory prices should rise at lower than the rate of inflation, thereby falling in real terms. Hence if the rate of inflation is 3 per cent, and X is set at 2 per cent, then the maximum fares can rise by is 1 percent. In real terms, therefore, this would be a 2 per cent cut in the fare.

3. **Regulate the (final) price through the tax charged on the good or service**
   - Varying tax levels can be used to regulate the price in the market, and these can be specified either as a percentage or set at a specific value. (‘Pigouvian’ tax)
   - If the government wished to limit car usage, it could do so by increasing fuel duty, thus increasing the price
4. **Specify the rate of return (profit) to be gained** –
   - Prices charged by transport operators can be regulated based upon the level of profit to be gained. Hence a ‘reasonable’ rate of return may be set and then prices regulated accordingly to achieve that rate of return.
   - This will normally take place where the level of demand can be estimated to a very high level of accuracy, and hence the only real variation in total revenue will be as a result of the price charged.

5. **Through introducing yardstick competition** - Yardstick competition exists where direct competition in the market is not feasible but is introduced indirectly through regulation, and is normally used to control price levels.
   - This is achieved by linking the performance of different firms in different markets to each other. If it was conceived today, therefore, ‘yardstick’ competition would probably be termed ‘benchmark’ competition, as effectively the performance of each firm in the industry is benchmarked against one another.
   - If two firms A and B faced similar cost and market conditions
     - The price that A could charge would be dependent upon the level of costs in firm B.
     - Thus if B was to lower its costs, the result would be that under the regulatory system A would be forced into charging a lower price in its market and vice-versa.
The other main forms through which regulations are controlled are:

- **Specify a minimum frequency** - In the simple case, the authority specifies the minimum level of frequency to be provided. This will normally be in the form of actual frequencies and operating hours; however, it can take other forms such as total vehicle kilometres supplied.

![Diagram](Simple(quantity(regulation)))
In the figure the free market position is shown by supply curve S and demand curve D. In this case no market would exist for this transport service as the highest price that consumers are willing to pay, as shown by the demand curve, is below the lowest price that suppliers would be willing to provide a service, as shown by the supply curve.

There is no market equilibrium and thus no transport service is provided. In this case, the transport authority specifies a minimum service frequency in order to create a regulated market where none existed before. This is set at level QR.

Note however that such action taken on its own would be entirely pointless; even if an operator did, for whatever unwise reason, enter the market it would quickly go out of business as the level of demand would be insufficient to support the level of supply.

As with simple price regulation, therefore, such regulatory action cannot be taken on its own. The regulatory authority would need to have some belief that supply will increase and result in a shift of the supply curve from S to S1.

Thus it may again pay a subsidy or alternatively ‘package’ the non-existent service with other more profitable routes and put these out to tender to the highest bidder.
• **Limit market entry** - This is where the regulatory authority will set clear limits on those operating in the market and thereby directly restrict supply

• Taxi services in most locations are a good example of this form of regulation, where the regulating authority sets a limit on the number of licences issued.
The rationale / reasons for the regulation of transport services

• **To overcome the market failure of imperfect/dissymmetry of information** - These are imposed in order to regulate user behaviour and to impose minimum standards on the operation of the transport system.

• **The market can no longer regulate itself** - If the market can no longer regulate itself, then external regulation is required to ensure that economic efficiency is achieved.

• Why this occurs is because most transport industries tend towards anti-competitive market structures, namely monopoly and oligopoly. Hence regulation is required to attempt to minimise the disadvantages associated with such market structures.

• **To correct for externalities** - due to the high level of externalities present in transport markets, hence all decisions are based on private costs and benefits and do not take into consideration the wider implications of these decisions.

• **To ensure the quality of the service provided** – agreements between the local authority and the bus operators, where the local authority can limit entry to the market to only those bus companies that meet the vehicle standards specified in the agreement.

• Regulation may also be used to ensure the quality of service in the longer term. For example market entry may be restricted in order to provide market protection and hence maintain the profitability of those already in the market.
• **To provide a transport service where none existed before** – Transport authorities may decide to package routes in order to ensure that all necessary services are provided. It may therefore restrict entry on certain (profitable) routes in exchange for the protected operator providing services on unprofitable routes.

• This is known as cross subsidisation, where the revenue earned from profitable services is used to fund the losses incurred on unprofitable routes.

• **To improve efficiency within the industry** – regulatory framework can be used in an attempt to bring about efficiency improvements within the industry, normally through restraining price increases.

• Regulating authorities main aim is to achieve lower consumer prices rather than achieve a substantial dividends for shareholders. With the use of the (RPI – X%) formula in Britain, she has been able to improve her efficiency.
The drawbacks of economic regulation

- **Limits free enterprise** - This is related to the free market ideology of consumer sovereignty, where those that profit most are those that are able to give the consumer what they want

- **Inefficient, second best solution** - The problem with an external regulatory body is that this leads to added costs in the operation of the market, as the administrative burden of the regulatory mechanism adds to the overall cost of providing services

- **Asymmetry of information** - In order to regulate efficiently, the regulator needs a high level of information in order to plan and control operations. Whilst sounding obvious, the major drawback with this is that the regulator will undoubtedly be the authority and not the operator, and hence the operator, unsurprisingly, knows more about their own business than the regulator does.

  - It may however be in the interests of the operator to
  - withhold important information from the regulator if they believe this may be used against them.
• **The issue of regulatory capture** - The issue of regulatory capture is where the regulator, who is supposed to oversee and control the industry on the grounds of the public interest, is in effect not as ‘tough’ on the industry as they perhaps should be in the public interest. The consequences are that the regulator better serves the interests of the industry than the interests of the consumer.

• **Cumbersome regulatory procedures make avoidance of regulatory measures Possible** - This is because regulatory measures are by their very nature cumbersome processes that can be avoided or ignored by those they are designed to affect. As a result, the expected outcomes are not achieved
Reasons for the public ownership of transport assets

This view is best exemplified with what eventually developed into the ‘Morrisonian model’ of public ownership, named after Herbert Morrison. In the early 1930s

- **Eradicate wasteful competition** - One way that this can be eradicated is to bring competing services under the control of a single operator (public ownership)

- **Military significance** - The industry is seen to have important military applications, meaning it cannot be simply left in private hands

- **Public goods** - If left to the market certain types of beneficial goods, would not be provided as no single firm could make a profit out of doing so

- **A large employer** - where firms were major employers and thus their potential collapse could not be contemplated in unemployment terms e.g. British Leyland (1975)

- **Key industry** - A key industry is different from an essential industry to the economy as it is one that is seen to be of vital importance to the country. e.g. Rolls-Royce was nationalised in 1971
• **High project development costs** – A privately owned company may run into major cash flow problems over the development of a researched product in order to cut cost or promote efficiency thus ultimately forced it into liquidation

**Reasons for reform**
under the direct control of public ownership it is necessary for reforms to take place:

• **Increasing discontent with the model of public ownership** - where such organisations are perceived to suffer from *x-inefficiency* argument and also financial constraints

• **Changing macroeconomic environment combined with social change** - The economic power of governments and their ability to influence markets has been considerably reduced due to the rise of multinational and transnational companies. less people are now reliant on public transport services.

• **The desire to introduce competition into the provision of transport services** - *Choice* is more a part of today’s society than it has been in the past, hence introducing competition into the market gives the consumer more viable choices.