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**Economics Revision Focus: 2004** 

## **AS Economics**

# Public Goods, Merit Goods and Demerit Goods

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#### Revision Focus on Public Goods, Merit Goods and Demerit Goods

#### **AS Syllabus Requirements**

#### **Public Goods**

Candidates should understand that public goods are **non-rival** and **non-excludable** and recognise the significance of these characteristics. Candidates should understand the difference between a **public good** and a **private good**.

#### **Merit and Demerit Goods**

Candidates should understand that the classification of **merit** and **demerit goods** depends upon a **value judgement** and that such products may also be subject to **externalities** 

#### **Private Goods**

A private good or service has three main characteristics:

- 1. Excludability: Consumers of private goods can be excluded from consuming the product if they are not willing or able to pay for it (for example a ticket to the theatre or a meal in a restaurant). Another good example is the increasing use of "pay-per-view" as a means of extracting payment from people wanting to watch exclusive coverage of sporting events on television. Or the use of subscription-based services on the internet. Some newspapers provide the bulk of their news stories on the internet as a "quasi public good", others are developing an alternative business model where users can only access premium services through password protected parts of a web site
- 2. Rivalry: With a private good, one person's consumption of a product reduces the amount left for others to consume because scarce resources are used up in producing and supplying the good or service. If you order and then enjoy a pizza from Pizza Hut, that pizza is no longer available to someone else. Likewise driving your car on a road uses up road space that is no longer available at that time to another motorist.
- 3. **Rejectability:** Private goods and services can be rejected if you don't like the soup on the college or school menu, you can use your money to buy something else! You can choose not to travel on Virgin Rail on a journey to the North West or you can choose not to buy a season ticket for a soccer club.

#### **Characteristics of Public Goods**

The characteristics of pure public goods are the opposite of private goods:

- Non-excludability: The benefits derived from the provision of pure public goods cannot be confined to only those who have paid for it. In this sense, non-payers can enjoy the benefits of consumption for no financial cost – this is known as the "free-rider"
- 2. **Non-rivalry in consumption:** Consumption of a public good by one person does not reduce the availability of a good to others we all consume the same amount of public goods even though our tastes and preferences for these goods (and therefore our valuation of the benefit we derive from them) might differ

#### **Examples of Public Goods**

Examples of public goods include **flood control systems**, **public water supplies**, **street lighting** for roads and motorways, **lighthouse protection** and also **national defence services**.

#### Policing - a public good?

Some (but not all) aspects of policing might qualify as public goods. The general protection that the police services provide in deterring crime and investigating criminal acts serves as a public good. But resources used up in providing specific police services mean that fewer resources are available elsewhere. For example the use of police at sporting events or demonstrations and protests means that police resources have to be diverted from other policing duties.

Private protection services (including private security guards and detectives) are private goods – the service is excludable, rejectable and rival in consumption and people and businesses are often prepared to pay a high price for such exclusive services. A good recent example of this has been the use of private security firms in post-war Iraq where up to 15,000 workers are said to have been working for private businesses protecting installations, coalition buildings and convoy protection.

#### Public goods and market failure



Pure public goods are **not normally provided at all by the private sector** because they would be unable to supply them for a profit. It is up to the Government to decide what output of public goods is appropriate for society.

To do this, it must **estimate the social benefit** from the consumption of public goods. Putting a monetary value on the benefit derived from street lighting and defence systems is problematic.

The electoral system provides an opportunity to see the public choices of voters but elections are rarely won and lost purely on the grounds of government spending plans.

#### The air waves – a public good?

The airwaves used by mobile phone companies, radio stations and television companies are essentially owned by the government of a particular country.

Do they count as a pure public good? Normally the answer would be yes. One person's use of the airwaves rarely reduces the extent to which other people can benefit from utilising them. But when demand for mobile phone services is high at peak times, the airwaves become crowded and access to the networks can become slow. In this sense the airwaves can be treated a crowded non-pure public good.

The government controls the issue of licences needed to operate mobile phone services using the airwaves in the UK. In 2000, they auctioned off

five licences for 3rd generation mobile phone services and raised £22 billion in doing so. The government was using the **auction** to **ration the airwaves** through a licence system. Although the government has

monopoly control in the sense that it controls the issue of licences, it did not set the market price. This was determined by the auction process, and the fact that at the end of a bidding war, the major mobile phone companies were prepared to pay such a high price for a licence to allow them to operate in the market, is evidence of the private benefit (anticipated future profit) that the companies expected to make from selling 3rd generation contracts to customers.

#### **Quasi-Public Goods**

A quasi-public good is a near-public good i.e. it has many but not all the characteristics of a public good. Quasi public goods are:

- 1. **Semi-non-rival:** up to a point extra consumers using a park, beach or road do not reduce the amount of the product available to other consumers. Eventually additional consumers reduce the benefits to other users.
- Semi-non-excludable: it is possible but often difficult or expensive to exclude non-paying
  consumers. E.g. fencing a park or beach and charging an entrance fee; building toll booths to
  charge for road usage on congested routes

#### **Merit Goods**

Merit goods are those goods and services that the government feels that people will **under-consume**, and which ought to be subsidised or provided free at the point of use.

Both the public and private sector provide merit goods & services. Consumption of merit goods is widely believed to generate **positive externality effects** - where the **social benefit** from consumption **exceeds** the private benefit.

A merit good is a product that **society values** and judges that everyone should have regardless of whether an individual wants them. In this sense, the government (or state) is acting **paternally** in providing merit goods and services. They believe that individuals may not act in their own best interests in part because of **imperfect information** about the benefits that can be derived.

#### **Examples of merit goods**

Good examples of merit goods include health services, education, work training programmes, public libraries, Citizen's Advice Bureaux and inoculations for children and students.

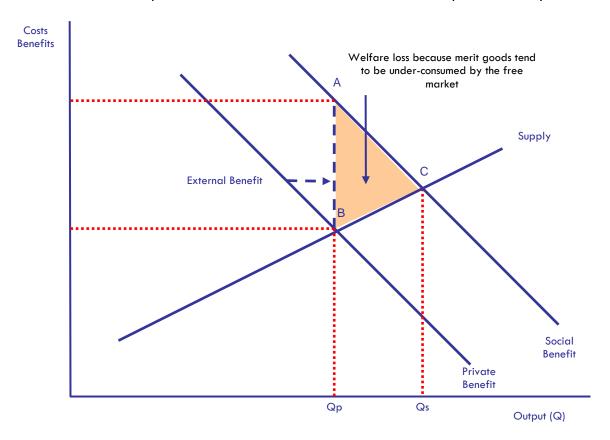
#### Financing merit goods

The government often provides merit goods "free at the point of use", financed through taxation. Examples include primary health care available to people through the National Health Service, and books borrowed from local authority libraries.

When defining what constitutes a merit good we are inevitably use **value judgements**. Free market economists argue views are on what is 'good' or 'bad' for consumers and producers involves value judgements and a hefty slice of state (government) paternalism. Others argue that only the government has sufficient information to place an accurate and complete value on socially desirable (beneficial) goods such as health and education

#### Merit goods and market failure

Merit goods provide positive externalities but if left wholly to the private sector, it is likely that merit goods will be under-consumed because individuals do not understand or appreciate the social benefits that can result from consumption of education and health services to name just two examples.



The argument concerning imperfect information is an important one. Parents with relatively poor educational qualifications may be unaware of the full longer-term benefits that their children might derive from a proper education. Because the knowledge of these private benefits is an ongoing learning process, children themselves will tend to underestimate the long term gains from a proper education.

Education is a long-term investment decision. The private costs must be paid now but the private benefits (including higher earnings potential over one's working life) take time to emerge.

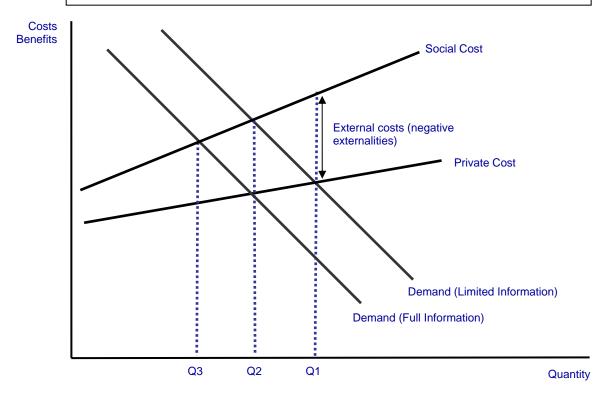
Education should provide a number of external benefits that might not be taken into account by the free market. These include rising incomes and productivity for current and future generations; an increase in the occupational mobility of the labour force which should help to reduce unemployment and therefore reduce welfare spending.

Increased spending on education should also provide a stimulus for higher-level research which can add to the economy's potential output and long run trend rate of growth. Other external benefits might include the encouragement of a more enlightened and cultured society, less prone to political instabilities and one which manages to achieve a greater degree of social as well as economic cohesion. Providing that the education system provides a sufficiently good education across all regions and sections of society, increased education and training spending should also open up a higher level of equality of opportunity.

#### **Demerit goods**

De-merit goods are thought to be 'bad' for you. Examples include alcohol, cigarettes and various drugs together with the social effects of addiction to gambling. The consumption of de-merit goods can lead to **negative externalities** which causes a fall in social welfare. The government normally seeks to **reduce consumption of de-merit goods**. Consumers may be unaware of the negative externalities that these goods create – they have imperfect information.

Market failure with demerit goods – the free market may fail to take into account the negative externalities of consumption (social cost > private cost). Consumers too may experience imperfect information about the long term costs to themselves of consuming products deemed to be de-merit goods.



The social optimal level of consumption would be Q3 – an output that takes into account the information failure of consumers and also the negative externalities.

#### Demerit goods and market failure



The government may decide to **intervene in the market** for demerit goods and impose taxes on producers and / or consumers. Taxation and regulation are often the most frequently used method of government intervention.

Higher taxes cause prices to rise and should lead to a fall in demand. (See the revision notes in the previous section on applications of price theory). But many economists argue that taxation is an **ineffective** and **inequitable** way of curbing consumption of drugs and gambling.

What of harder drugs? Should they be prohibited at all costs by the government in a bid to control demand by restricting supply? Regulation has been the route chosen by most governments in developed countries over recent years — but economists are once again divided on the issue. Some believe that legalisation and taxation of harder class drugs is a more appropriate policy to pursue, arguing that regulation is both ineffective and also costly. Another approach would be to divert resources away from regulation towards giving **better information** to drug users about the longer term health implications of their consumption decisions.