INSTITUTE OF ACTUARIAL & QUANTITATIVE STUDIES

Subject : Business Economics – Macro

Chp 2 – Government Intervention

Government Intervention

Government intervention is regulatory action taken by government that seek to change the decisions made by individuals, groups and organisations about social and economic matters.

Government intervention is any action carried out by the government that affects the market with the objective of changing the free market equilibrium / outcome.

Why does Government intervene?

Forms of Government Intervention

Faced with all the problems of the free market, what is a government to do?

There are several policy instruments that a government can use. At one extreme, it can totally replace the market by providing goods and services itself. At the other extreme, it can merely seek to persuade producers, consumers or workers to act differently. Between the two extremes, the government has a number of instruments that it can use to change the way markets operate.

- Forms of Government Intervention
  - Taxes
  - Subsidies
  - Regulatory Bodies – Price Controls
  - Prohibiting and Regulatory laws

1] Indirect Taxes

Today in India, we pay taxes on goods and services in the form of _____.

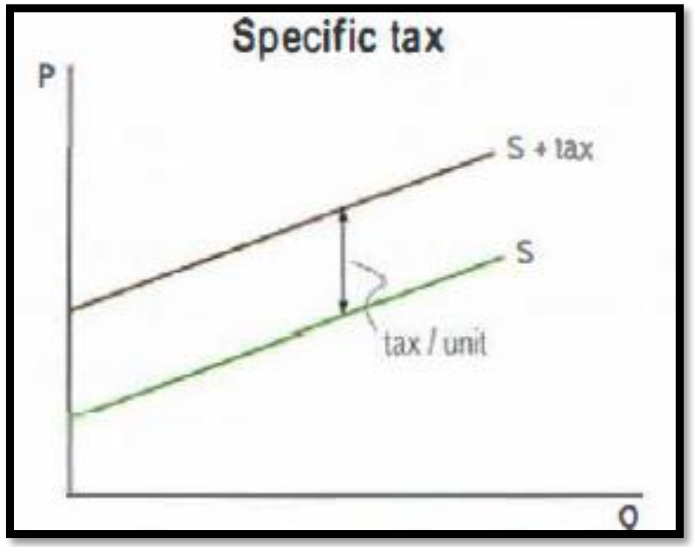
Indirect taxes are taxes on spending to buy particular services, paid indirectly to the government by the seller.

Why governments impose indirect taxes?

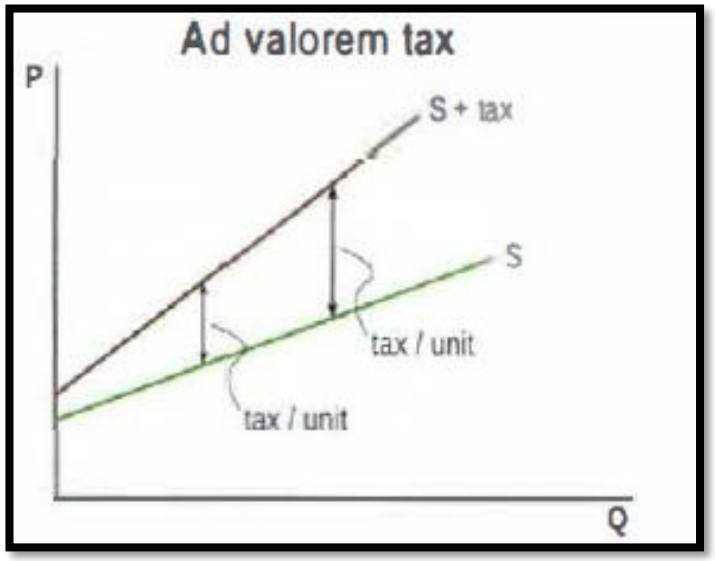
- Indirect taxes provide governments with revenues needed to finance various government expenditures.
- Indirect taxes can be used to improve the allocation of resources when there are negative externalities.
- Indirect taxes on goods that are harmful (ex cigarettes) can be used to decrease consumption of those goods.
- Indirect taxes can be used to reduce the quantity of imports into a country (through tariffs and customs).

Specific Tax & Ad Valorem Tax

- Specific tax = the tax is a specific amount imposed per unit of the good, and results in a parallel shift of the S curve to the left or upward the vertical distance between the initial S curve, S, and the after-tax S curve, "S + tax" is equal to the amount of the tax per unit.



- Ad valorem tax = the tax is a percentage of the price of the good, and results in a new S curve "S + tax" that is steeper than the original S curve. because the amount of tax increases as P increases.



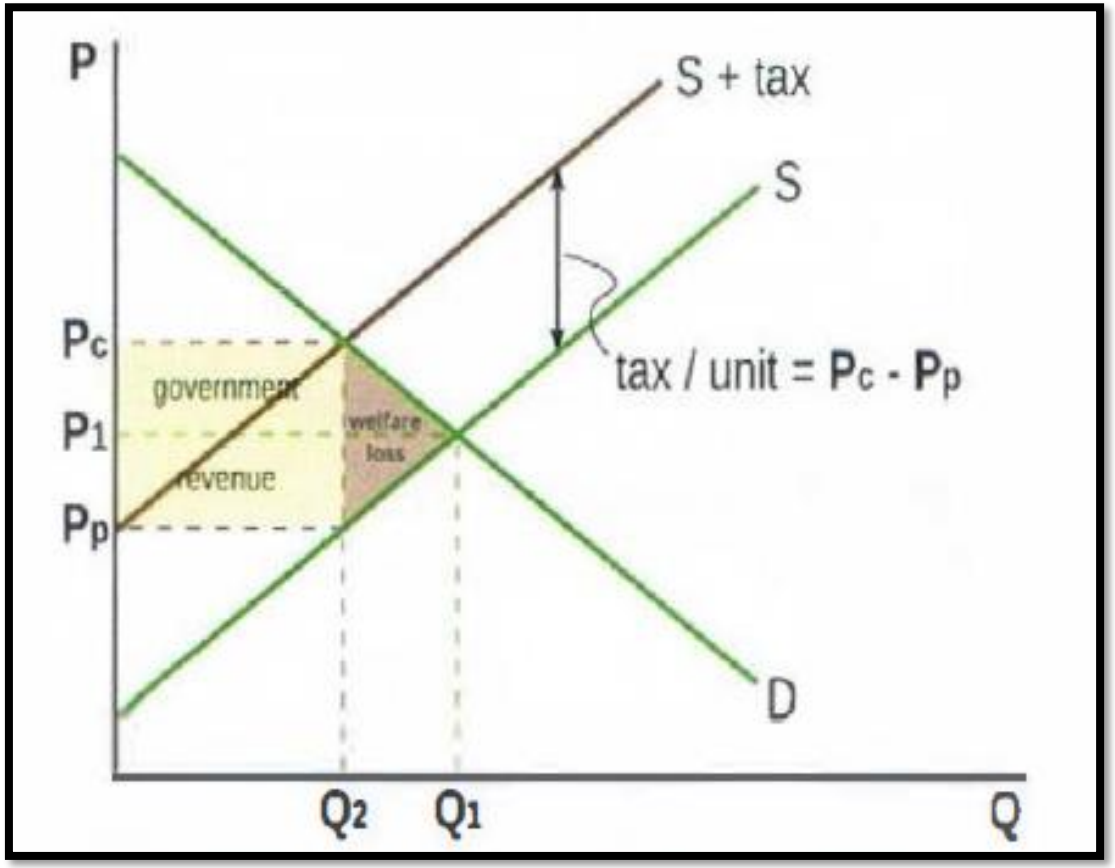
Market Outcomes of Indirect Taxes

When indirect taxes are imposed by the government, the following outcomes are seen on the market.

1. New equilibrium Q is lower at Q2.

2. New equilibrium P, which is the P paid by the consumer is higher at Pc.

3. New P received by the producer is lower at Pp.



Effects of Indirect taxes on Stakeholders

Effects on stakeholders are:

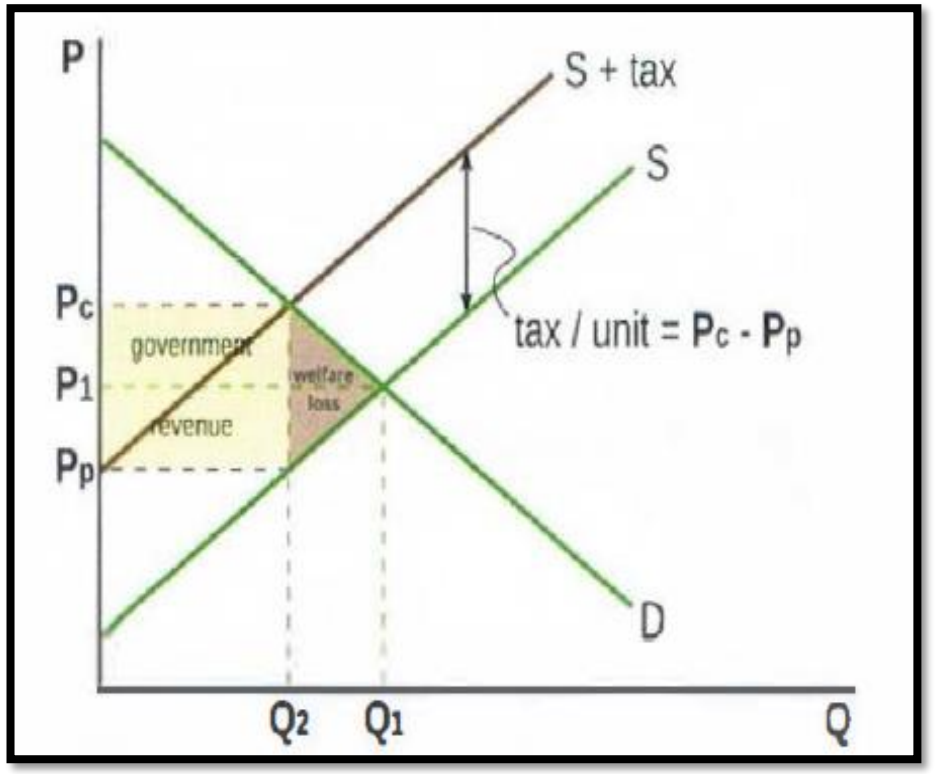
1. consumers lose: they pay a higher price and buy a lower quantity.

2. producers lose: they receive a lower price and sell a lower quantity (their revenues fall from P1 x Q1 to Pp x Q2)

3. workers lose: less is produced, therefore some lose their jobs

4. the government gains tax revenue: = yellow shaded area = tax per unit x Q2 (the new quantity produced and sold)

5. society loses: there is resource misallocation (underallocation and underproduction since Q2 < Q1) and welfare loss = brown triangle



Example!

Transport is prone to market failure as it is a good with significant externalities. For example, driving a car into a city causes congestion and pollution – two negative externalities. Therefore, we get a social inefficient allocation of resources – congestion and time wasted by business and commuters.

To respond to this problem, the government may try to intervene in the economy. For example, it could raise taxes and build a new highway, which travels into the city. In theory, this should reduce congestion and help solve the market failure.

Tax Incidence

Tax incidence = the particular group bearing the burden of a tax, i.e. the group paying all or a portion of tax.

The incidence of indirect taxes is usually shared between consumers and producers; both pay a portion of the tax. However, the share paid by each group is determined by the relative sizes of Price Elasticity of Demand (PED) and Price Elasticity of Supply (PES).

If PED = PES, tax incidence is the same on consumers and producers.

If PED > PES, tax incidence is greater on producers.

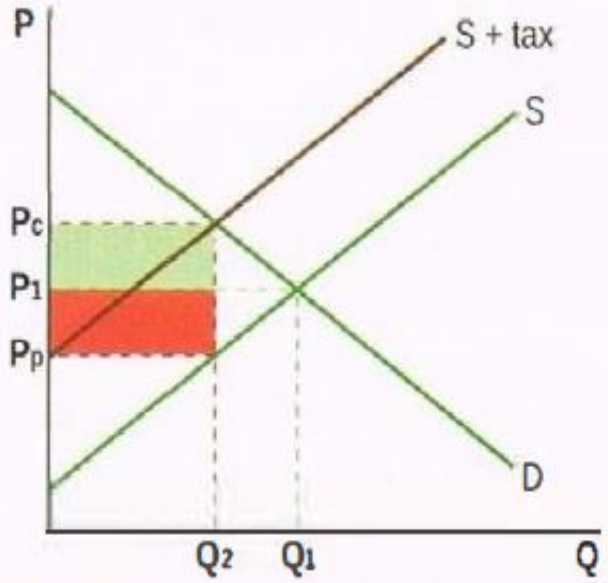
If PED < PES, tax incidence is greater on consumers.

Tax Incidence

PED = PES: same tax incidence

D is equally elastic as S: consumers' incidence = producers' incidence:

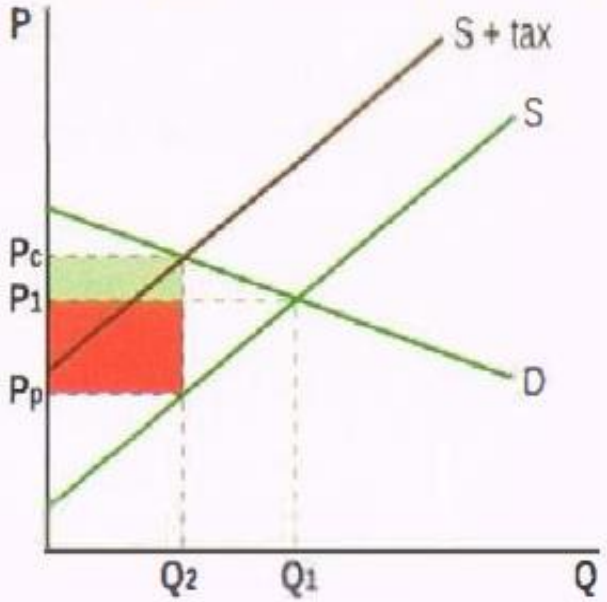
$(Pc - P_1) \times Q_2$ (green) = $(P_1 - Pp) \times Q_2$ (red)



PED > PES: producers pay more

D is more elastic than S: consumers' incidence < producers' incidence:

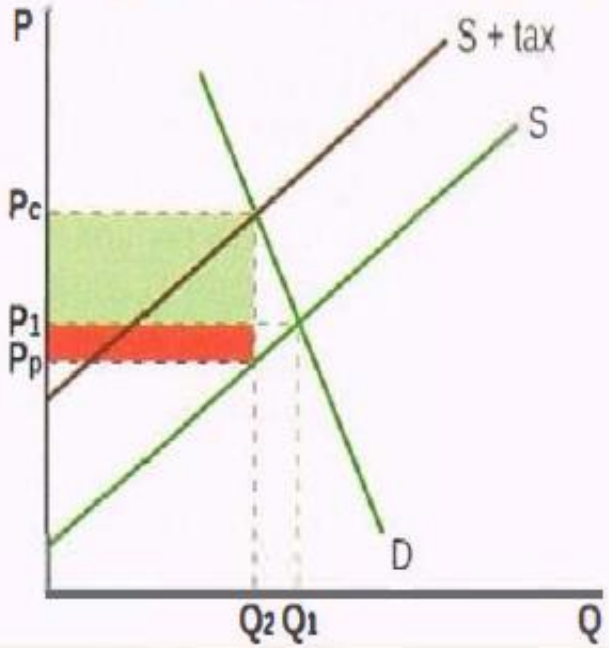
$(Pc - P_1) \times Q_2$ (green) < $(P_1 - Pp) \times Q_2$ (red)



If PED < PES: consumers pay more

D is less elastic than S: consumers' incidence > producers' incidence:

$(Pc - P_1) \times Q_2$ (green) > $(P_1 - Pp) \times Q_2$ (red)



2] Subsidies

Subsidies are payments by the government to firms in order to lower costs and price, and increase supply.

Why do governments grant subsidies?

Why government grants subsidies?

- Subsidies can be used to increase firms' revenues (ex subsidies on agricultural products to support farmers).
- Subsidies can be used to support particular firms or industries (ex firms using or producing clean or green technologies).
- Subsidies can be used to lower the prices of particular goods or services for consumers (ex food prices to help low-income people) and services that are considered to be desirable for society (ex education).
- Subsidies can be used to lower the price of particular goods in order that they sell more in export markets .
- Subsidies can be used to improve the allocation of resources when there are positive externalities.

Market Outcomes

A subsidy results in a parallel shift of the S curve to the right or downward.

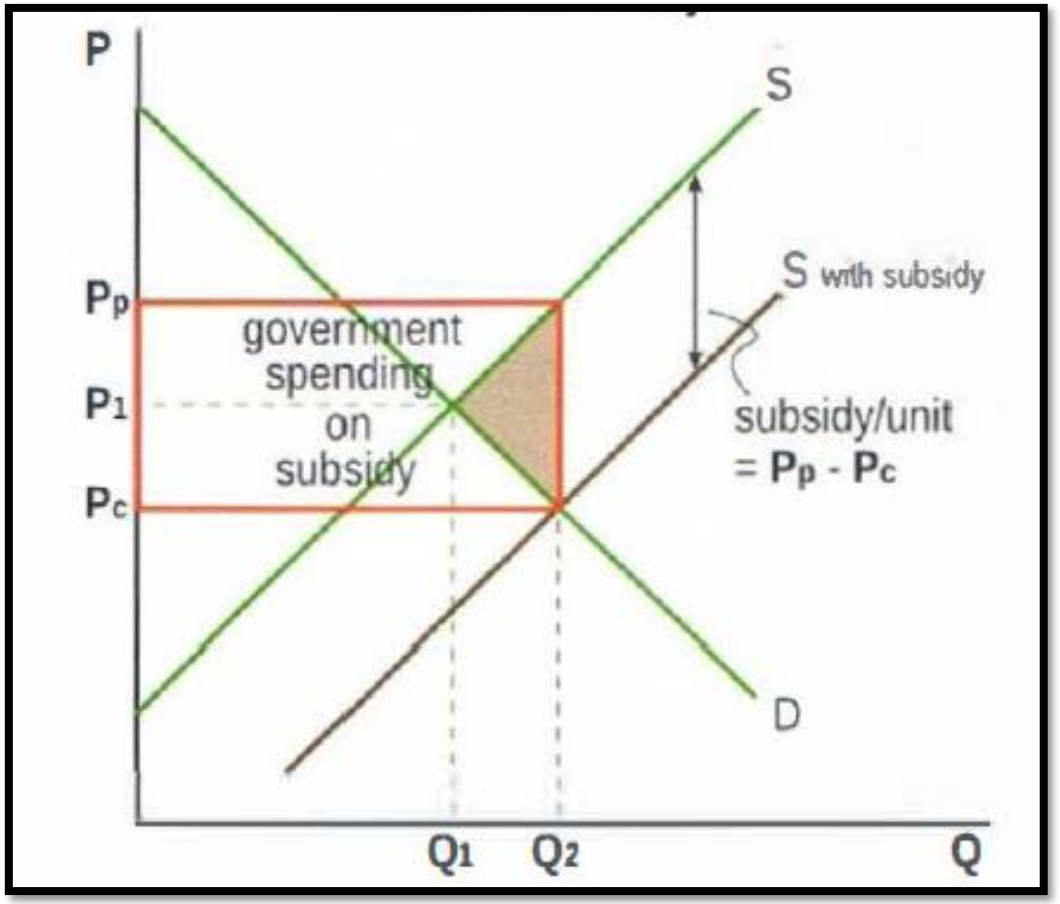
The initial equilibrium (before the subsidy) is at P1 and Q1. After the subsidy:

Market outcomes:

1. New equilibrium Q is higher at Q2

2. New equilibrium P, which is price paid by the consumer, is lower at Pc.

3. New price received by the producer is higher at Pp.



Effects of a subsidy on stakeholders

Effects on stakeholders are:

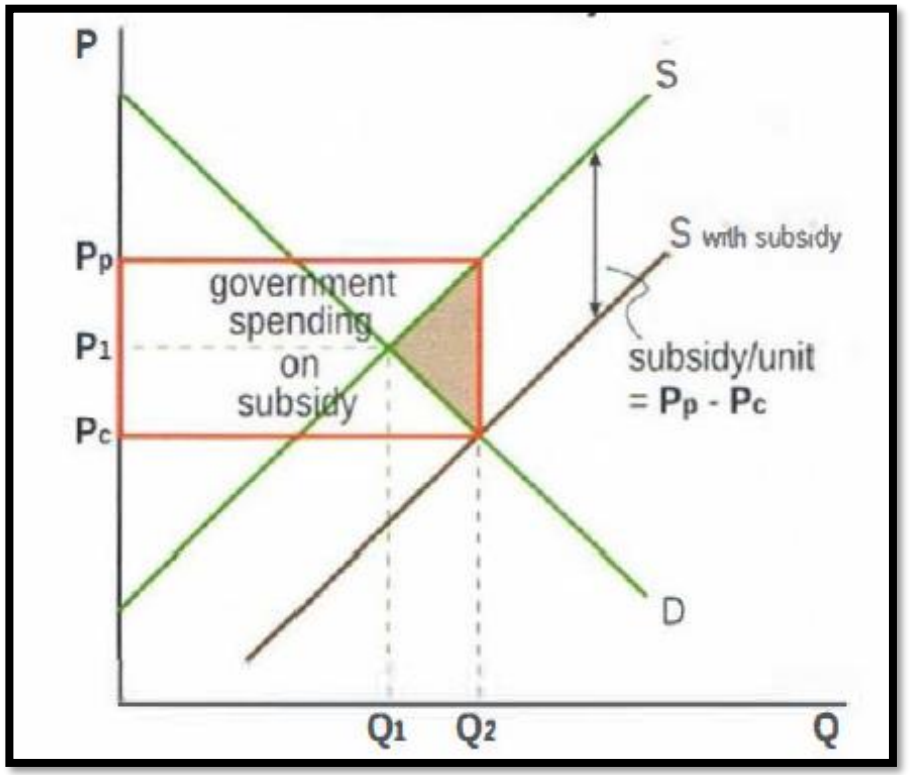
1. consumers gain: they pay a lower price and buy a higher quantity.

2. producers gain: receive a higher price and sell a higher quantity (revenues

3. workers gain: more is produced therefore some unemployed find jobs

4. the government loses: it must pay the subsidy = bold red rectangle = subsidy per unit x 02, with negative effects on the government budget

5. society loses: (i) high-cost producers are protected by the higher price, leading to inefficiency; (ii) government spending on the subsidy has opportunity costs; (iii) there is resource misallocation (overallocation) and over production since Q2 > Q1 and welfare loss = brown triangle



Example!

The government may be worried that if a large steel plant closes down, it will result in unemployment. This unemployment will be a type of market failure as the unemployed steelworkers may struggle to gain employment in new areas. As a result, the government uses public funds to give a subsidy to the steel plant and keep the firm in business

Taxes and Subsidies

- **Advantages**

Economists favour the tax/subsidy solution to market imperfections because it still allows the market to operate. It forces firms to take on board the full social costs and benefits of their actions. Furthermore, once the policy is in place, taxes and subsidies can be adjusted according to the magnitude of the problem.

Moreover, if firms are taxed for polluting, they are encouraged to find cleaner ways of producing. The tax acts as an incentive over the longer run to reduce pollution.

Likewise, by subsidising *good* practices, firms are given the incentive to adopt more good practices.

- **Disadvantage**

Infeasibility of using different tax and subsidy rates. Each firm produces different levels and types of externality and operates under different degrees of imperfect competition. It would be administratively very difficult and expensive to charge every offending firm its own particular tax rate.

Lack of knowledge. Even if a government did decide to charge a tax equal to each offending firm's marginal external costs, it would still have the problem of measuring those costs and apportioning blame. The damage to lakes and forests from acid rain has been a major concern. But just how serious is that damage? What is its current monetary cost? How long lasting is the damage? These questions cannot be answered precisely. It is thus impossible to fix the 'correct' pollution tax on, say, a particular coal-fired power station.

3] Regulatory Bodies

A more subtle approach than banning or restricting various activities involves the use of regulatory bodies.

Having identified possible cases where action might be required (e.g. potential cases of pollution or the abuse of monopoly power), the regulatory body would probably conduct an investigation and then prepare a report containing its findings and recommendations. It might also have the power to enforce its decisions, or this might be up to some higher authority.

The advantage of this approach is that a case-by-case method can be used and, as a result, the most appropriate solution adopted. However, investigations may be expensive and time-consuming.

Price Controls

Price controls are government interventions in the market involving the setting of **price ceilings (maximum prices)** or **price floors (minimum prices)**, thus preventing the market from reaching a market-clearing equilibrium price.

Price Ceilings

Price ceiling is a maximum price on a good set b the government that is below the equilibrium price of the market, resulting in a **shortage.**

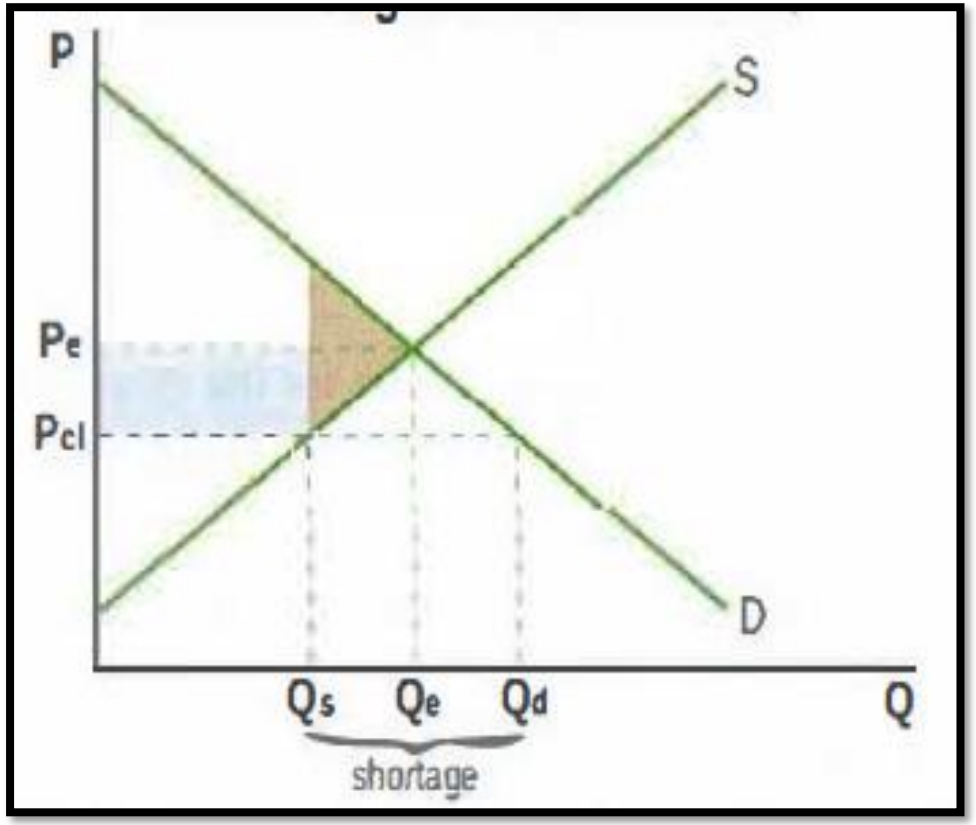
Why governments impose price ceilings?

The maximum P that can be legally charged, Pcl is below equilibrium Pe (it is set by governments to make some necessities affordable to poor people).

Example

- **food price controls** (ceilings) for particular food products (bread, milk, wheat, rice and other staples).

- **rent controls** (ceilings), which specify a maximum rent that can be charged for specific housing.



Market Outcomes

Consequences of price ceilings for the market and the economy:

- **Shortages (excess demand):** The price ceiling does not let price to adjust to its equilibrium value, Pe, and results in a shortage (= excess demand), since at Pcl, Q demanded > Q supplied
- **Non-price rationing mechanisms:** Since price no longer fulfils its signalling and incentive functions, methods other than price are needed to ration (= distribute) the good to buyers, such as waiting lines, first-come first-served, favouritism (ex selling the good to friends).
- **Underground/parallel markets:** Since there are unsatisfied buyers at Pcl, some people buy the good at Pcl and illegally re-sell it at a higher price.
- **Inefficient resource allocation:** Underallocation of resources since less is produced than Q.
- **Welfare losses for society:** There is welfare loss, since only Qs of the good is produced and consumed, rather than Qe.

Consequences of price ceilings for stakeholders

- **Consumers:** Consumers who buy the good at the lower P gain: those who want to buy it but cannot due to the shortage lose. This can be seen from the welfare analysis, which shows the gain by consumers of a portion of producer surplus due to the lower P paid, and the loss of a portion of consumer surplus due to welfare loss.
- **Producers:** Producers lose because they sell a lower Q (Qs) rather than Qd, and because they receive a lower P (Pcl) rather than P. This can be seen from the welfare analysis, showing the loss of producer surplus to consumers, and the loss of a portion of producer surplus due to welfare loss.
- **Government:** There are no economic gains nor losses, but the government may gain political from increased popularity.
- **Workers:** Some workers lose their jobs due to lower output produced.

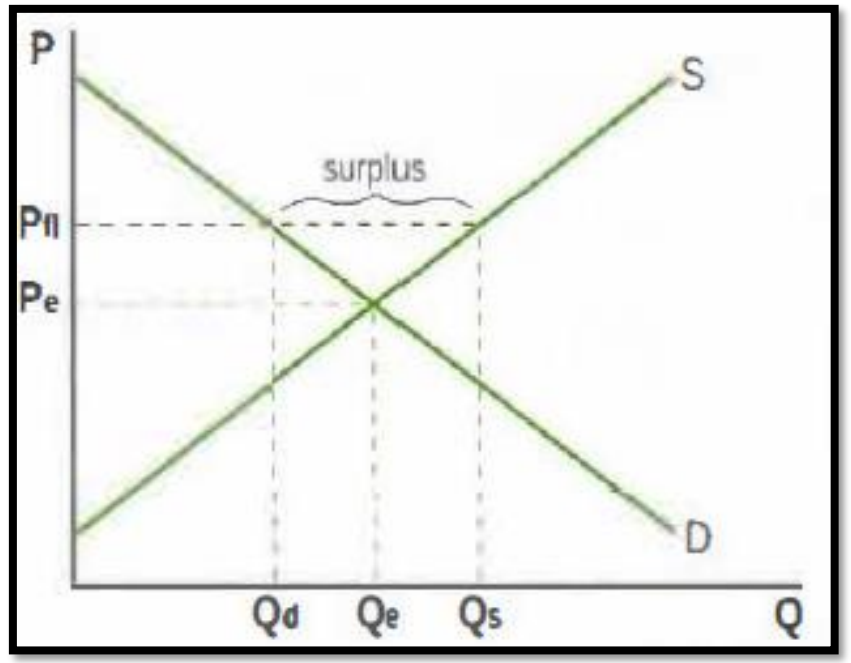
Price Floors

Price floor is a minimum price on a good set by the government that is above the equilibrium price of the market, resulting in a **surplus.**

Why governments impose price floors?

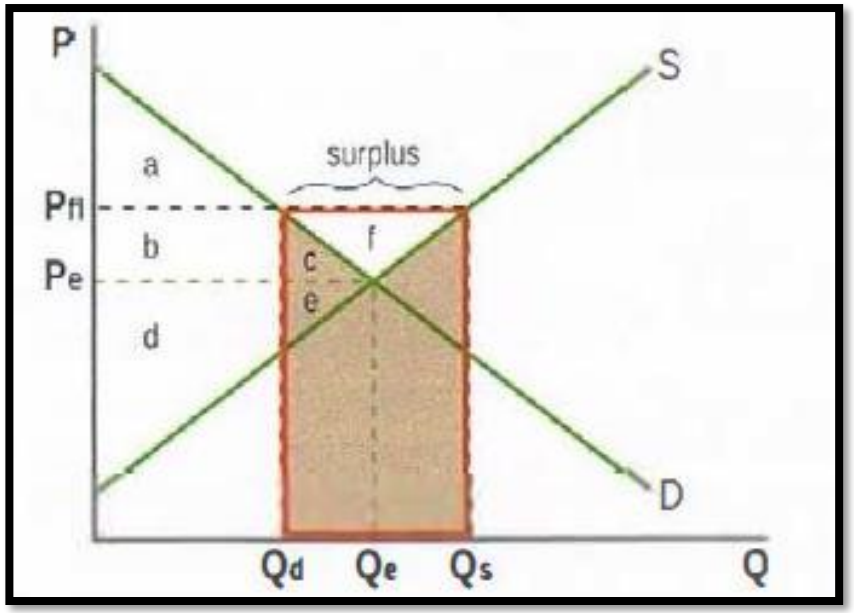
The minimum P that can be legally charged, the price floor which is above the equilibrium P. This is done by governments to:

- **support farmers**' incomes by increasing the price they receive for their products
- **support the wages of low-skilled workers** by increasing them above their market equilibrium level.



Consequences for the economy

- **Surpluses** (excess supply): The price floor does not let P adjust to its equilibrium value, and results in a surplus (= excess supply), since at price floor, Q demanded < Q supplied.
- **Inefficient resource allocation** More is produced than consumers want, so there is resource overallocation.
- **Governments buy the surplus**, as this is the only way the price floor can be maintained at the higher than equilibrium price; this involves budget expenditures with opportunity costs.
- **Welfare losses for society** is shown by the shaded area. After the price floor is imposed, consumer surplus is reduced and producer surplus increases. Social surplus appears to have increased, however from this total it is necessary to subtract government spending to buy the excess supply, equal to the rectangle. The net welfare loss is the green shaded area.



Consequences for stakeholders

- **Consumers** lose as they pay a higher price for a lower quantity purchased.
- **Producers** gain because they receive a higher price and sell a larger quantity.
- **Workers** gain because more output is produced therefore there will be an increase in employment.
- **The government** loses as it must pay for the purchase of the surplus out of its budget, and may additionally have to pay storage costs or subsidies on exports of the surplus quantity.
- **Stakeholders** in **other countries** lose if the excess supply is exported, leading to increased global supply and hence lower global prices, hurting farmers in countries where there are no price floors

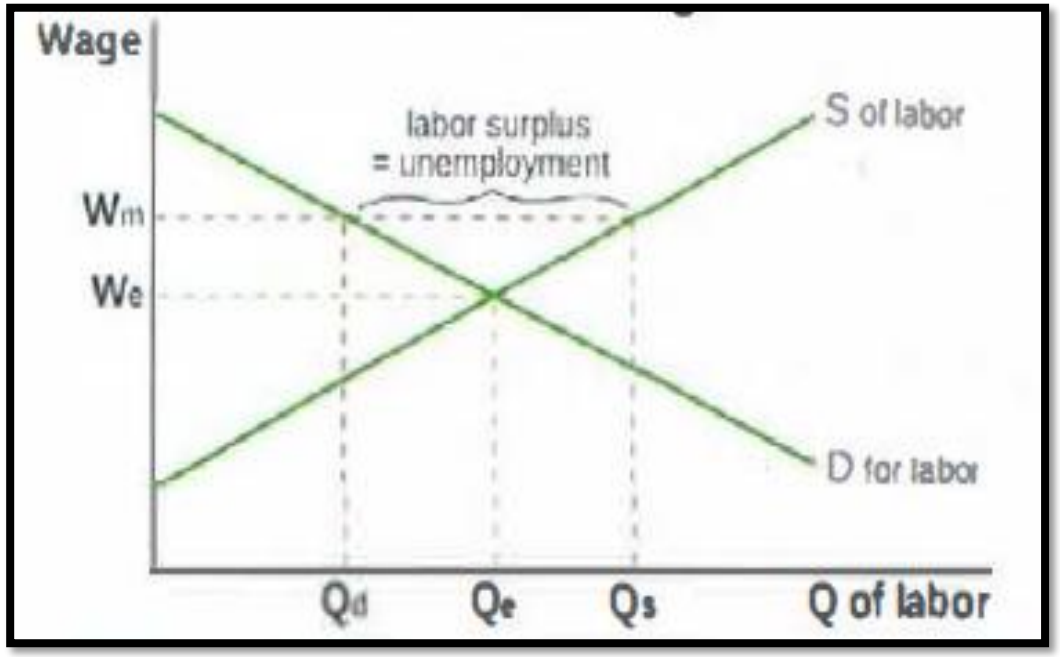
INTERNALIZATION OF EXTERNALITIES

- Internalizing an externality results in changes in prices to reflect full marginal social cost or benefit of a good.
- Internalization of externalities requires identification of the individuals involved and measurement of the monetary value of the marginal external benefit or cost.
- A corrective tax is designed to adjust the marginal private cost of a good or service in such a way as to internalize the externality. The tax must equal the marginal external cost per unit of output to achieve this objective

Minimum wages

Minimum wage = a minimum price of labour usually set by the government to protect **low-skilled workers** and ensure they can achieve a minimum standard of consumption; it is an application of a minimum price in the labour market.

The wage is the price of labour. The D curve shows the demand for labour by firms, and the S curve shows the supply of labour by workers. The minimum wage, Wm, does not allow the price of labour to adjust to its equilibrium value, We, and results in a surplus of labour (excess supply), since at Wm, Q of labour demanded< Q of labour supplied (Qd < Qs). This excess supply of labour is unemployed labour.



Consequences of minimum wages

For the Economy

- Illegal workers – Some workers may accept to work for wages below the legal minimum.
- Misallocation of resources in the labour market – The price of labour works as a signal and incentive in the labour market; the minimum wage may prevent the efficient allocation of labour resources.
- Misallocation of resources in product markets – Firms using unskilled labour have higher production costs due to the minimum wage: this may affect resource allocation in the product market.

For the Stakeholders

- Workers – Those who receive the minimum wage benefit, however those who become unemployed due to the minimum wage lose.
- Firms – Firms hiring unskilled labour and paying the minimum wage may be worse off due to higher costs of production.
- Consumers – Higher costs of production of firms that pay the minimum wage mean a leftward shift of the S curves of their products, resulting in a higher P and lower Q produced, therefore consumers are worse off.

4] Laws prohibiting or regulating undesirable structures or behaviour

Laws are frequently used to correct market imperfections. We examine three of the most common cases.

1] Laws prohibiting or regulating behaviour that imposes external costs – Laws can be applied both to individuals and to firms. In the case of individuals, it is illegal to drive when drunk. Drunk driving imposes costs on others in the form of accidents and death.

In the case of firms, various polluting activities could be banned or restricted; safety standards could be imposed in the place of work; building houses or factories could be prohibited in green-belt areas.

In the case of common resources, restrictions could be placed on their use. For example, in the case of fishing grounds, governments could limit the size of fleets, impose quotas on catches or specify the types of net to be used

Laws prohibiting or regulating undesirable structures or behaviour

2] Laws to prevent or regulate monopolies and oligopolies – Governments often introduce laws that prohibit various types of collusive activities, the misuse of market power by a dominant firm and mergers or takeovers that would result in a substantial lessening of competition.

3] Laws to prevent firms from exploiting people's ignorance – Given that consumers have imperfect information, consumer protection laws can make it illegal for firms to sell shoddy or dangerous goods, or to make false or misleading claims about their products. The problem is that the firms most likely to exploit the consumer are often the ones that are most elusive when it comes to prosecuting them.

Coase Theorem

One cause of market failure is the limited nature of property rights. Property rights define who owns property, to what uses it can be put, the rights other people have over it and how it may be transferred. By extending these rights, individuals may be able to prevent other people from imposing costs on them or charge them for doing so.

The socially efficient level of charge would be one that was equal to the marginal external cost.

Coase theorem – When there are well-defined property rights and zero bargaining costs, then negotiations between the party creating the externality and the party affected by the externality can bring about the socially efficient market quantity. *(Video: https://mru.org/courses/principles-economics-microeconomics/coase-theorem-example)*

The extension of private property rights becomes more practical where the parties involved are few in number, are easily identifiable and where the costs are clearly defined.

Provision of information

When imperfect information is a reason for market failure, the direct provision of information by the government or one of its agencies may help to correct that failure.

An example is the information on jobs provided by job centres to those looking for work. This will speed up the 'matching process' between the unemployed and employers. It helps the labour market to work better and increases the elasticity of supply of labour.

The direct provision of goods and services

In the case of public goods and services, such as streets, pavements, national defence, etc the market may completely fail to provide the socially efficient amount because of free-riding. Government may have to finance the optimal provision of the public good by requiring compulsory payments from members of society. One way of obtaining the compulsory payments is through the central/local tax system.

Once the compulsory payments have been collected, the central government, local government or some other government agency could then manage the production of the goods or services directly.

There are four reasons why such things are provided free or well below cost. They are social justice, large positive externalities, dependants, imperfect information.

Four reasons

The government provides goods and services directly which are *not* public goods. Examples include health and education. There are four reasons why such things are provided free or well below cost

- **Social justice**. Society may feel that these things should not be provided according to ability to pay. Rather, as merit goods, they should be provided according to need.
- **Large positive externalities**. People other than the consumer may benefit substantially. If a person decides to get treatment for an infectious disease, other people benefit by not being infected. A free health service thus helps to combat the spread of disease.
- **Dependants**. If education were not free, and if the quality of education depended on the amount spent, and if parents could choose how much or how little to buy, then the quality of children's education would depend not just on their parents' income, but also on how much they cared. A government may choose to provide such things free in order to protect children from 'bad' or 'foolish' parents.
- **Imperfect information.** Consumers may not realise how much they will benefit. If they had to pay, they might choose (unwisely) to go without. Providing health care free may persuade people to consult their doctors before a complaint becomes serious.

Fixing the market failures

How do we fix the various market failures that arise?

- Externalities
  - Government command approaches – government authority to make decisions
  - Market-based policies such as indirect taxes and subsidies
- Common access resources
  - Legislation and regulations – Ex Carbon taxes
  - Funding for clean technologies – Subsidies
- Public Goods
  - Direct provision of public goods by the government
- Monopoly powers
  - Legislation may include anti-monopoly laws
  - Trade liberalization – removal of barriers to trade

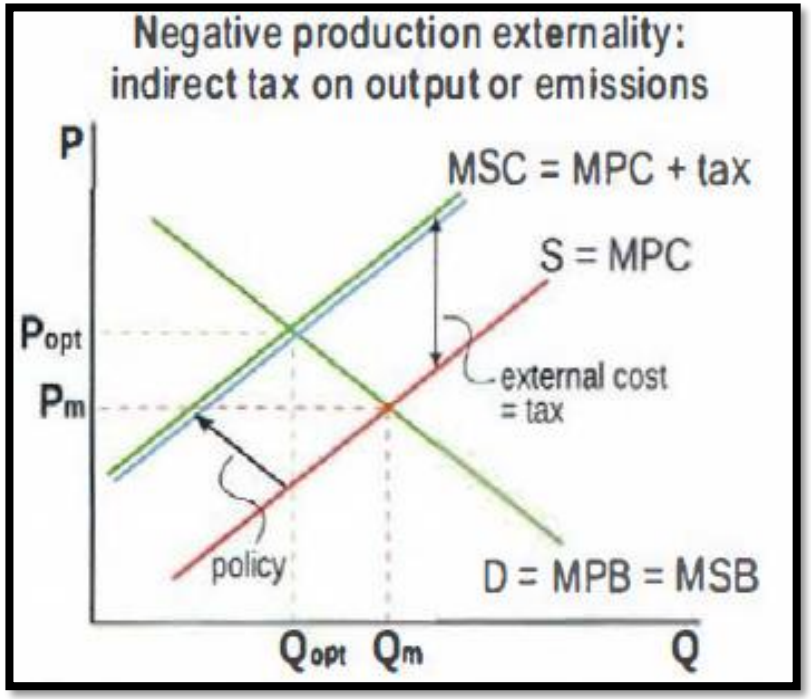
Fixing – Negative Production Externality

Command approaches include legislation, regulations and advertising that aim at directly reducing emissions and/or environmental damage:

Ex: Impose restrictions on emissions, Limit the amount of output produced, Force firms to install non-polluting technologies, Ban dangerous substances (ex Asbestos), Negative advertising to influence consumers to avoid purchasing products of highly polluting firms.

Market-based policies change the price incentives faced by firms:

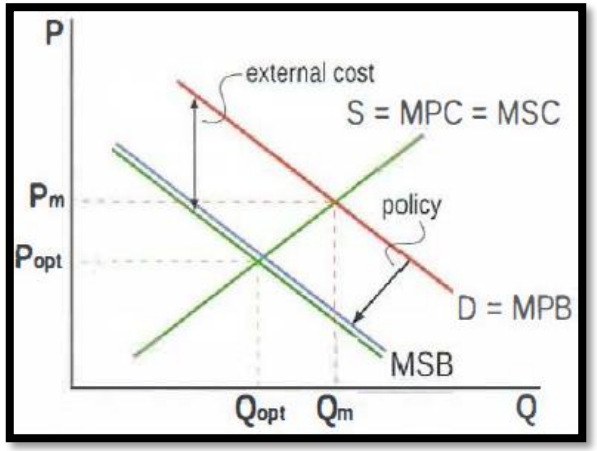
An indirect tax on emissions (pollutants) causes the supply curve to shift from MPC toward MSC, leading to Qopt and Popt; this works by creating incentives for firms to reduce emissions and shift to clean technologies(= technologies that reduce negative environmental effects) in order to avoid paying the tax. The more the pollutants emitted, the greater the tax, therefore the greater the incentives to switch to clean technologies. Ex the carbon tax = tax on carbon emissions of fossil fuels.



Fixing – Negative Consumption Externality

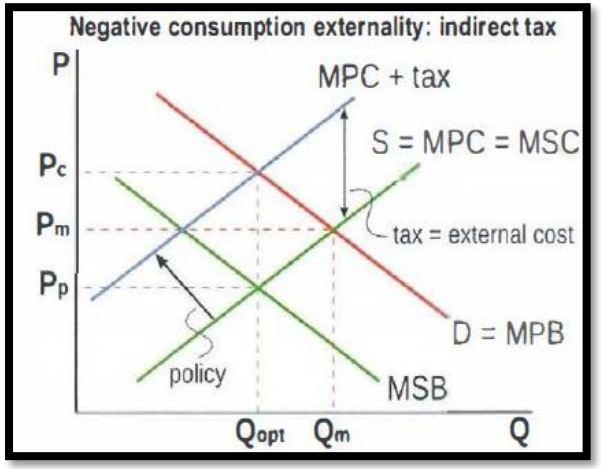
Command approaches include legislation, advertising and educating the public in order to influence the behaviour of consumers and reduce demand so that the **MPB** curve shifts toward **MSB,** leading to Qopt and Popt:

Ex Legislation, ex no smoking in public places; no drinking and driving, Education of consumers, ex encouraging the use of public transportation rather than cars (to reduce fossil fuel emissions).



Market-based policies change price incentives of firms and consumers:

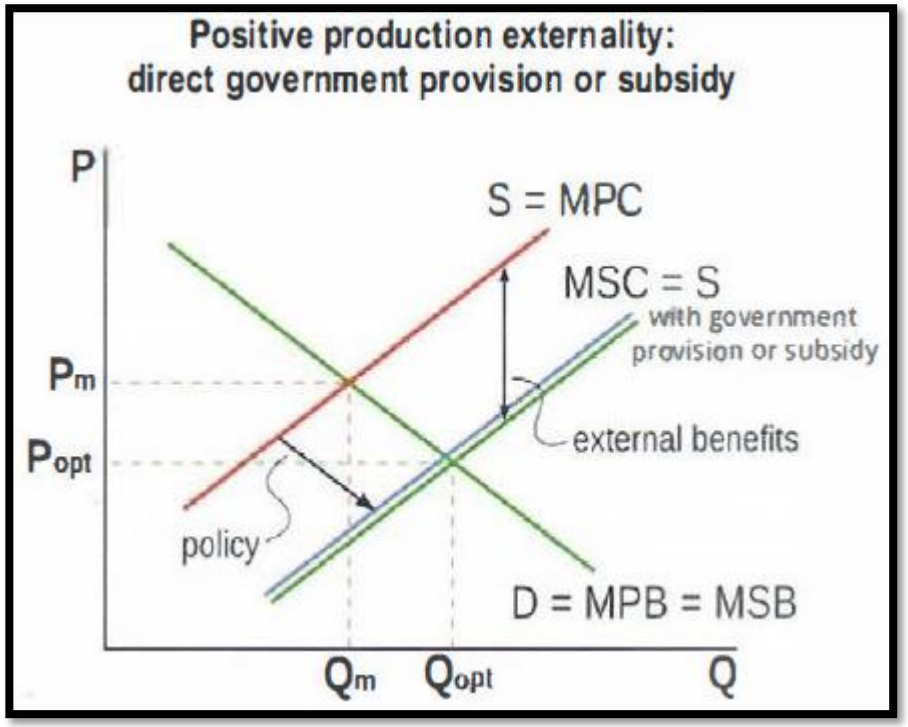
Ex. An indirect tax on the good causing the negative externality causes the supply curve to shift from MPC to MPC+tax, causing P to increase and Q to fall. If the tax is exactly equal to the value of the external cost, "MPC + tax' will intersect MPS at the level of Qopt; the externality and welfare loss are eliminated, and a higher price, Pc is charged.



Fixing – Positive Production Externality

Command approaches aim at directly increasing provision: Direct government provision, such as in the case of research and development (R&D) for the development of new scientific knowledge new technologies, new products; this has the effect of shifting the MPC curve toward the MSC curve(= "S with government provision or subsidy"), reaching the socially optimum quantity Qopt and price Popt

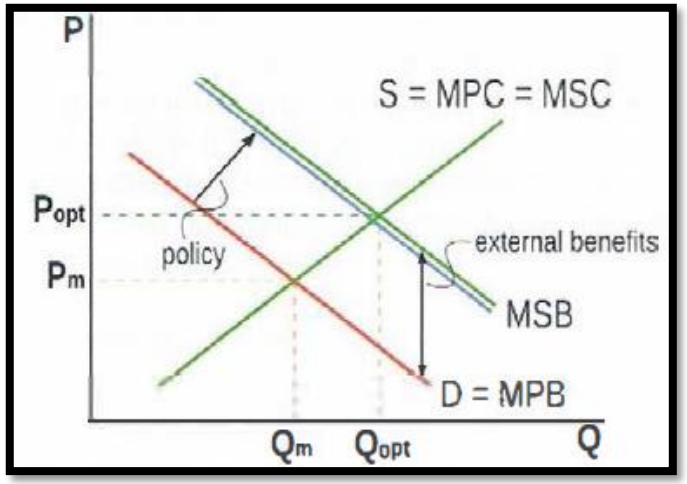
Market-based policies change incentives faced by producers: Provision of subsidies by the government to private firms, universities and other organizations involved with research and development (R&D); this also has the effect of shifting the MPC curve toward the MSC curve(= "S with government provision or subsidy") and the socially optimum quantity Qopt.



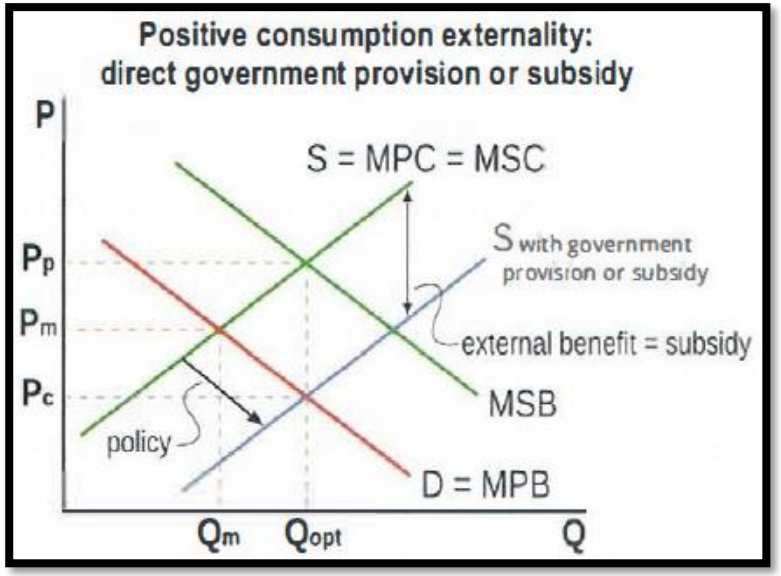
Fixing – Positive Consumption Externality

Command approaches include legislation, advertising and education that aim at influencing the behaviour of consumers to increase demand so that the MPB curve shifts toward MSB, reaching Qopt and Popt:

Ex. Legislation forcing increased consumption, ex making primary school education compulsory for all children, Direct government provision, ex education, health care, infrastructure (clean water supplies, sewerage systems).



Market-based policies change price incentives of firms and consumers: Ex. Provision of subsidies by the government, with the effect of shifting the S curve to "S with government provision or subsidy", resulting in the socially optimum quantity Qopt and the lower price, Pc for consumers.



Direct provision of public goods by the government

Since the market fails to allocate any resources to the production of public goods, and since public goods are socially desirable, they are directly provided by the government and financed (paid for) by government tax revenues. In view of the opportunity costs of government spending, and the many competing uses of government funds, governments face the difficulties of deciding what particular public goods to provide and in what quantities. Political pressures on the government may also come into play, resulting in choices made on political rather than (or in addition to) economic grounds.

Government responses to monopoly power

- **Legislation** may include anti-monopoly laws intended to prevent the formation of monopolies or to break up monopolies, thus encouraging competitive behaviour.
- **Government regulation** often used in the case of natural monopolies to bring about an outcome that is more favourable to consumers, meaning lower prices and higher quantities than would result in a private unregulated monopoly.
- **Nationalization =** the transfer of ownership from the private to the public sector (the opposite of privatization, as an alternative to regulation of natural monopolies.
- **Trade liberalization** = removal of barriers to trade, resulting in larger quantities of imports entering a country, which create competition for existing firms that must now compete with products from abroad.

Drawbacks of government intervention

- **Shortages and surpluses**. If the government intervenes by fixing prices at levels other than the equilibrium, this will create either shortages or surpluses. If the price is fixed below the equilibrium, there will be a Shortage. If the price is fixed above the equilibrium price, there will be a surplus. Such surpluses are wasteful, and high prices may protect inefficient producers

- **Poor information**. The government may not know the full costs and benefits of its policies. It may genuinely wish to pursue the interests of consumers or any other group, and yet may be unaware of people's wishes or misinterpret their behaviour.

- **Bureaucracy and inefficiency**. Government intervention involves administrative costs. The more wide-reaching and detailed the intervention, the greater the number of people and material resources that will be involved. These resources may be used wastefully and the effect on welfare may not be an improvement on the free-market situation.

- **Lack of market incentives.** If government intervention removes market forces or reduces their effect it may remove certain useful incentives. Ex. Subsidies may allow inefficient firms to survive.

Drawbacks of government intervention

- **Shifts in government policy**. Industrial performance may suffer if government intervention changes too frequently. It makes it difficult for firms to plan if they cannot predict tax rates, subsidies, wage controls, etc. Shifts in policy are also likely to involve costs for both business and public-sector providers. This may result in wasted resources.

- **Lack of freedom for the individual**. Government intervention may involve a loss of freedom for individuals to make economic choices. The argument is not just that the pursuit of individual gain is seen to lead to the social good, but that it is desirable in itself that individuals should be as free as possible to pursue their own interests with the minimum of government interference, and with that minimum being largely confined to the maintenance of laws consistent with the protection of life, liberty and property.

Advantages of the free market

Although markets in the real world are not perfect, even imperfect markets can be argued to have positive advantages over government provision or even government regulation.

- **Automatic adjustments**. Government intervention requires administration. A free-market economy, on the other hand, leads to the automatic, albeit imperfect, adjustment to demand and supply changes.
- **Dynamic advantages of the free market**. The chances of making high monopoly/oligopoly profits will encourage capitalists to invest in new products and new techniques. Prices may be high initially, but new firms will sooner or later break into the market and competition will ensue.
- **A high degree of competition even under monopoly/oligopoly**. Even though an industry at first sight may seem to be highly monopolistic, competitive forces may still work for the following reasons: to attempt to break into the industry. Competition from closely related. The threat of foreign competition. Countervailing powers, etc.

The Final Question

Should there be more or less intervention in the market?

No firm conclusions can be drawn in the debate between those who favour more and those who favour less government intervention, for the following reasons:

- The debate involves normative issues that cannot be settled by economic analysis. For example, it could be argued that freedom to set up in business and freedom from government regulation are desirable *for their own sake.*
- In principle, the issue of whether a government ought to intervene in any situation could be settled by weighing up the costs and benefits of that intervention. Such costs and benefits, however, even if they could be identified, are extremely difficult, if not impossible, to measure, especially when the costs are borne by different people from those who receive the benefits and when externalities are involved.
- Often the effect of more or less intervention simply cannot be predicted: there are too many uncertainties.

Competition Policy

Most markets in the real world are imperfect, with firms having varying degrees of market power. But will this **power be against the public interest?**

This question has been addressed by successive governments in framing legislation to deal with monopolies and oligopolies.

A lack of competition removes the incentive to become more efficient. Competition policy could ban various structures.

Even if firms make large supernormal profits, they may still charge **a lower price than more competitive sectors** of the industry because of their economies of scale. Finally, they may **use profits for research and development and for capital investment.** The consumer might then benefit from **new or improved products at lower prices.**

The targets of competition policy

There are three possible targets of competition policy.

1] Abuse of the existing power of monopolies and oligopolies:

Monopoly policy – Monopoly policy seeks to prevent firms from abusing a dominant market position: i.e. misusing their economic power. Although it is referred to as 'monopoly' policy, it also applies to large oligopolists facing very limited competition.

Exploitative abuse – A business practice that directly harms the customer. Examples include high prices and poor quality.

Exclusionary abuses – Business practices that limit or prevent effective competition from either actual or potential rivals. More frequently cited examples of exclusionary abuses in competition cases include: **Predatory pricing, Tying (**Where a firm is only prepared to sell a first product (the tying good) on the condition that its consumers buy a second product from it (the tied good), **Margin squeeze (**Where a vertically integrated firm with a dominant position in an upstream market deliberately charges high prices for an input required by firms in a downstream market to drive them out of business), **Vertical restraints (**Conditions imposed by one firm on another which is either its supplier or its customer.)

The targets of competition policy

2] The growth of power through mergers and acquisitions: merger policy – The aim of merger policy is to have **oversight of prospective mergers**. The authorities will weigh up gains and losses to the public and the impact on the broader economy, and prevent or modify those that are considered to be against the public interest.

There are **various benefits and cost savings that apply to all types of merger**: horizontal, vertical and conglomerate. Central services such as finance and human resources (HR) can be merged and rationalised.

However, **mergers inevitably lead to a greater concentration of economic power,** which could be used against the consumer's interests.

In deciding how tough to be with mergers, the government must consider how this will affect firms' behaviour. Government policy towards corporate control will need to ensure that potential mergers encourage competition rather than reduce it.

The targets of competition policy

3) Oligopolistic collusion: restrictive practice policy – **Restrictive practices** Where two or more firms agree to adopt common practices to restrict competition. These are also prohibitive. There is a much smaller chance that agreements to restrict, limit or prevent competition will ever be in the interests of society. The most likely outcome is higher joint profits for the firms and higher prices for the customer.

Examples of restrictive practices that are commonly cited in competition cases include

- **Horizontal price fixing.** These are direct or indirect agreements between rival firms to fix prices above competitive levels.
- **Market sharing**. These are agreements on how to distribute markets or customers between the firms.
- **Limit production**. Firms agree quotas on how much each should produce.
- **Bid rigging**. In response to a call for tenders, firms agree to discuss bids with one another rather than submitting them independently.
- **Information sharing**. Firms share sensitive information with one another, such as future plans on pricing, product design and output.

HOMEWORK

(i) Draw a diagram showing the demand D and supply S curves for a good. Show the equilibrium price by P1 and the equilibrium level of sales by Q1. [1]

(ii) On your diagram draw the line ST to show the new supply curve after an excise tax of T is imposed on the good. Denote the new equilibrium price and quantity by 2 P and 2 Q . [2]

(iii) Show clearly on your diagram consumer and producer surplus before and after the tax, the government revenue and the excess burden (ie net welfare loss) from the tax. [3] [Total 6]

This question is Subject CT7, September 2010, Question 32.

(i), (ii), (iii) ***The diagram***

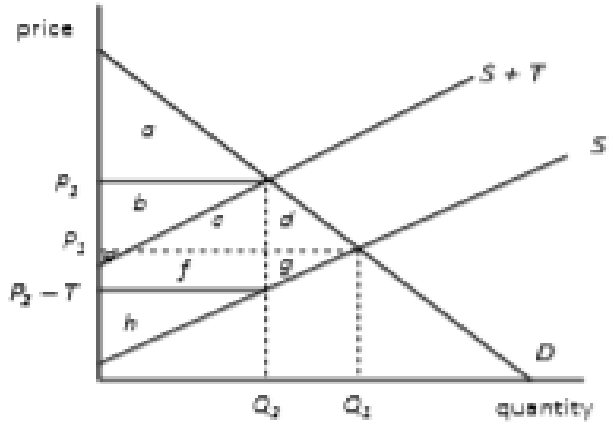
The following diagram illustrates all three parts of the question. *Note that the tax shifts the supply curve vertically upwards by the amount of the tax per unit.*

Prior to the introduction of the tax:

- the consumer surplus = $a+b+c+d$
- the producer surplus = $e+f+g+h$

After the imposition of the tax:

- the consumer surplus = a
- the producer surplus = h
- government revenue = $b+c+e+f$
- excess burden of tax = $d+g$



[6 for diagram]

Good time Reading!

https://www.khanacademy.org/economics-finance-domain/microeconomics/consumer-producer-surplus/deadweight-loss-tutorial/a/price-ceilings-and-price-floors-cnx