Government microeconomic intervention (A Level)

Policies to correct market failure and improve efficiency (taxes, subsidies, regulation, privatisation, competition policy, cost–benefit analysis), equity and redistribution of income and wealth, and labour market forces with government intervention.

8.1 Government policies to achieve efficient resource allocation and correct market failure

Taxes and subsidies

A **tax equal to the marginal external cost** (a **Pigouvian tax**) **internalises** the externality, moving output to the **social optimum**. A **subsidy** to a good with **positive externalities** (education, vaccination) **raises output** towards the optimum. **Problems: measuring** the externality, **accurate rates**, **evasion**, **regressive** effects, and **cost** of subsidies.

Regulation and property rights

- **Regulation: maximum emissions**, safety standards, **minimum quality**, **age restrictions**. This includes **prohibitions** (an outright **ban**, for example on a dangerous chemical) and **licences** (a **permit** needed to carry out an activity, such as fishing or running a business, which can **limit the number of firms** or amount of activity).
- **Tradable pollution permits:** a **cap** on total pollution; firms **trade permits**, so cuts happen where they are **cheapest**.
- **Property rights: assigning ownership** so that owners bear costs; **Coase** argued bargaining can solve externalities when **rights are clear** and **costs are low**.

Provision of public and merit goods

Public goods are provided by the **state** (non-rival, non-excludable). **Merit goods** may be **provided directly**, **subsidised** or **made compulsory**; **demerit goods** are **taxed** or **banned**. **Information failure** is tackled by **labelling**, **education**, **advertising**.

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Privatisation and nationalisation

Privatisation: selling state assets; may raise **efficiency** (profit motive), **revenue** and **competition**, but risks **private monopoly**, **neglect** of social aims and **short-termism**. **Nationalisation: taking industries into public ownership**, to protect **natural monopolies**, **strategic** industries and **social** aims, but may bring **inefficiency**, **political interference** and **losses**.

Competition policy and regulation of monopoly

Competition policy prevents anti-competitive behaviour: **cartels**, **mergers** that harm consumers, **abuse of dominance**. **Regulators** use **price caps (RPI − X)** to control **monopoly prices** while giving firms an **incentive to cut costs**; **rate-of-return regulation** limits profit; **windfall taxes**; **breaking up** monopolies; **promoting contestability**.

> **Price cap: the regulator sets a maximum price rise (for example inflation minus X%), forcing the firm to become more efficient to protect profit.**

Cost–benefit analysis (CBA)

CBA assesses a **project** by **valuing all social costs and benefits**, including **externalities**, and **discounting** future values to present values. A project is worthwhile if **social benefits exceed social costs** (positive **net present value**).

Limitations: hard to value intangible items (environment, life), **choice of discount rate**, **uncertainty** and **distribution** effects (who gains and loses).

Government failure

Intervention may **fail**: **information gaps**, **unintended consequences**, **administrative costs**, **regulatory capture**, **short-term political motives**, and **inefficient** state provision. The **balance** between market and state is a **value judgement**.

> **TRY IT**
>
> A government taxes a polluting good by the full marginal external cost. What happens to output?
>
> It **falls** to the **socially optimal** level where **MSB = MSC**, and the **price** the consumer pays **rises**.

Other measures: specific and ad valorem indirect taxes correct negative externalities (a specific tax is a fixed amount per unit; ad valorem a percentage), **production quotas** limit output of harmful goods, **deregulation** removes rules to **increase competition** and cut costs (but may reduce protection), and

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behavioural insights ("nudge" theory) change **choices without banning them**: **default** options (automatic pension enrolment), **placing healthy food** at eye level and **clear labels** work with **how people actually behave** (not always rationally). These are often **cheap**, but their effects can be **small** and **hard to measure**.

8.2 Equity and redistribution of income and wealth

Equity is **fairness**; **horizontal equity** is equal treatment of equals, **vertical equity** is **unequal treatment of unequals** (taxing those with more ability to pay).

Taxation

System	Meaning
Progressive	**average rate rises** as income rises
Regressive	**average rate falls** as income rises
Proportional	**same rate** at all incomes

Direct taxes (income, corporation, wealth, inheritance) are **usually progressive** (corporation tax is often a **flat rate**) and help **redistribute**; **indirect taxes** (VAT, excise) are often **regressive**. **Principles of a good tax: equity**, **certainty**, **convenience**, **efficiency**, **flexibility**.

Effects of taxes

- **Incentives:** a **high marginal rate** may **reduce work effort and risk-taking**; a **lower rate** may **raise revenue** if incentive effects are strong (**Laffer curve** idea).
- **Tax burden** between **consumers and producers** depends on **elasticity**.

Redistribution policies

Transfer payments (benefits, pensions), **subsidised or free public services**, **minimum wage**, **progressive tax**, **wealth taxes**, **education and training** to raise **earning power**. **Means-tested** benefits target the poor but create a **poverty trap** (higher earnings reduce benefits); **universal** benefits cost more but are simple and carry no stigma.

Poverty: absolute (below a basic needs line) and **relative** (below a share of median income). **Measurement: Lorenz curve** and **Gini coefficient**.

Trade-off between equity and efficiency: high taxes and generous benefits may **reduce incentives** and growth, but **extreme inequality** wastes **human potential** and harms **stability**; **choices depend on values**.

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A **negative income tax** (see AS notes) is one policy toward **equity and equality**; others include **progressive taxes**, **state provision**, a **minimum wage** and **targeted benefits**.

8.3 Labour market forces and government intervention

Demand for labour

The **demand for labour is derived**: it depends on the demand for the **product** and **labour productivity**. The **marginal revenue product (MRP)** of labour is **the extra revenue from employing one more worker** (marginal physical product × marginal revenue); the **MRP curve is the demand curve** for labour. Firms hire until **MRP = wage (marginal cost of labour)**.

Shifts in demand: product demand, **productivity**, **prices of other factors** (capital), **technology**.

Supply of labour

The **supply curve slopes up**: **higher wages** attract more workers. **Determinants: wage rates**, **non-wage benefits**, **population and migration**, **education and skills**, **taxes and benefits**, **labour market flexibility**, **hours** and **leisure preferences**. **Elasticity of labour supply** is greater for **unskilled** work and in the **long run**; **mobility** of labour (**occupational** and **geographical**) matters.

Wage determination

Competitive labour market: wage where **demand equals supply**. **Differences in wages** reflect **skills**, **risk**, **productivity**, **compensating differentials** (unpleasant jobs paying more), **bargaining power** and **discrimination**.

Trade unions and the minimum wage

Trade unions raise **wages** by **collective bargaining**; **union power** can **raise wages above the equilibrium** but may **reduce employment**. A **monopsony** (a **single buyer of labour**) pays **below the competitive wage** and employs **fewer** workers; a **minimum wage** in a monopsony can **raise both wages and employment**.

A **minimum wage** set **above equilibrium** in a competitive market creates **excess supply of labour** (unemployment) but **raises the incomes** of those in work. **Evaluation:** effects depend on the **elasticity of demand for labour**, the **size** of the minimum relative to the **average wage** and **market structure**; also **reduced poverty**, **motivation** and **inflation** effects.

> **MRP = marginal physical product × marginal revenue. A worker adds 10 units, each sold for**

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> **$8: MRP = $80. A firm hires while MRP ≥ wage.**

Other interventions: anti-discrimination law, **education and training subsidies**, **benefits** (affecting the **incentive to work**), **limits on working hours**, **flexibility measures**.

Transfer earnings are the **minimum payment needed to keep a factor in its current use** (what it could earn in its next best use). **Economic rent** is the **payment above transfer earnings**: for a very talented footballer paid $500,000 who could earn $50,000 in the next best job, the transfer earnings are $50,000 and the economic rent is $450,000. Factors with **inelastic supply** earn **high economic rent**; with **perfectly inelastic supply** (such as a unique piece of land), **all earnings are economic rent**.

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