

Economic Decision Making

Money

any item which is generally acceptable as a means of payment.

Functions of money

- **Medium of exchange:** Enable buying and selling
- **Store of value:** Will retain value over time
- **Unit of account:** Something to value other things by
- **Standard of deferred payments:** Allows lending and borrowing with a later payback date

Characteristics of money

- Limited in supply
- Acceptable as a means of payment
- Durable
- Portable
- Divisible
- Easily recognisable

Income: money received in return for works or investments

Disposable income: income after tax has been deducted and state benefits are received.

Discretionary Income: What a household or individual has to invest, spend or save after taxes and necessities have come out.

Influences on household spending:

disposable income
technology
wealth
confidence
rates of interest

Influences on borrowing:

Confidence
Social attitudes
Rates of interest
Availability of credit (loans/overdrafts)

Influences on household saving:

rates of interest
confidence in the economy
wealth
disposable income
Tax treatment of savings
range and quality of financial institutions
Age structure
social attitudes

Savings ratio: proportion of household disposable income that is saved

Banks

Commercial

Central

World

- Accept deposits
- Take money out
- Lend money
- Make payments to other people
- Other services - storing valuables, money exchange

- Banker to government
- Banker to commercial banks
- Manage national debt
- Issue coins and notes
- Implement monetary policy
- Hold reserves of gold and foreign currency

- Maintain price stability in single currency areas, e.g. the European Central Banks
- Fight world poverty, through sustainable loans and grants to LEDC for capital projects, e.g. The World Bank.

Benefits of working

- **Wage factors**
 - Wage rate
 - bonuses
 - commission
 - overtime pay
- **Non-wage factors**
 - Job satisfaction
 - fringe benefits
 - holidays
 - pension provision
 - job security
 - types of work
 - hours of work
 - working conditions
 - career prospects
 - location

What causes supply for labour to change?

- rise/fall in size of labour force
- population changes
- rise or fall in qualifications or training required to do a job
- changes in the non-wage benefits of a job
- changes in the non-wage benefits of other jobs

What causes demand for labour to change?

- Increase/decrease in demand for a product
- Rise/drop in labour productivity
- Rise/drop in the price of capital

Factors influencing differences in earnings:

Demand and supply
sector of the economy a worker is employed in
Bargaining power of worker
skills and qualifications
advances in technology
nature of work
government policy, e.g. sex discrimination.

Specialisation

concentrating on a particular task or product

Advantages:

- lower cost per unit produced
- increased output per worker
- lower training costs
- improved competitiveness

Disadvantages:

- Workers may get bored (less productive)
- reduced quality of product
- increased sickness and days off
- difficult to cover absences
- occupational immobile.

Trade Union

an association which represents the interests of a group of workers

Types:

craft unions - carpenters, plumbers, artists union, actor's union

general unions - GMB

industrial unions - miners union

white collar unions - nurses, teachers, civil servants etc.

Factors that increase the strength of trade unions:

- large number of members
- workers have an important skill that is in limited supply
- legislation promotes the position of trade unions
- economy is in a period of increasing output

Benefits of trade unions

- Can negotiate with employers for better working conditions and pay - collective bargaining
- Represents workers at tribunals etc.
- Can build co-operation between workers and management
- Protects workers against personal discrimination
- Provide additional supports for members, e.g. legal advice, social life, advertising job opportunities etc.

Disadvantages of trade unions

- Unemployment through wages being pushed too high
- Increase labour costs for firms
- Can withhold labour - strikes
- Can reduce labour flexibility for firms
- Costs money to be a member
- Decreasing power in many countries and losing relevance in gig economies.

Firm: Any business that hires factors of production to produce goods and services.

Industry: multiple firms producing the same type of product. (If only one firm makes a particular product, they are the industry.)

Classifying firms

- **Stages of production:** primary/secondary/tertiary/quaternary
- **Ownership:** private/public/mix
- **Size:** no. of employees, value of output/annual sales (turnover/revenue), value of capital employed (balance sheet), market share

Factors that affect size of firm:

Age of the firm, availability of funds, type or organisation (companies with shares have more options than sole traders or partnerships), size of market, barriers to entry of the market (if low, more people join), owner's preference, customers' preference, government support, need to be flexible, the significance of economies/diseconomies of scale, level of specialisation

Types of growth

Internal (organic): increasing output and market share

External: mergers (joining together) and takeovers (one buys up another)

Mergers

Vertical: same product, different stages of production - e.g. clothing producer and retailer

Horizontal: same product, same stage of production - e.g. two clothing retailers

Conglomerate: different product, at any stage of production

Why businesses grow:

Survival, to gain economies of scale, increase profits, increase market share, reduce risk (diversification - moving into new markets etc.)

Problems of growth:

diseconomies of scale; financial risk - too much, too soon; lack of expertise; resistance from shareholders; resistance from customers

Why you might choose to wait to grow: unstable economic environment; raising funds; waiting to see what the market will do.

Small Firms

Pros: Flexibility, can provide a personal service (get feedback from customers more easily), lower wage costs (and other fixed costs), easier communication, extra pressure to innovate, more likely to take risks

Cons: limited resources, hard to get extra funding, new companies and small companies that don't innovate have a high failure rate, don't get same economies of scale so may have higher costs, are vulnerable to take over,

Large Firms

Pros: Economies of scale, market domination, large-scale contracts, government support if large employer

Cons: communication can get very complicated, hierarchy can be complicated, diseconomies of scale, more bureaucracy, coordination and control, poor motivation

Economies of scale: lower long-run average costs resulting from a company or industry's increase in size.

Internal: purchase discounts/space, selling/transport/advertising costs, management and machinery used more efficiently/cheaper loans

External (industry): skilled labour force, good rep (e.g. Sheffield steel), specialist suppliers, services and market places come into being, improved infrastructure.

Diseconomies of scale: higher long-run average costs resulting from a company or industry's increase in size.

Internal: communication problems, control and management problems, labour motivation problems

External: congestion, increased competition for resources, sites and employees

Objectives of a firm

- Survival
- Growth
- Profit maximisation
- Social Welfare

Production: total output

Productivity: output per factor of production (land, labour, capital) per hour

Costs of Production

Total cost (TC): total cost of production

Average total costs: TC / output

Fixed costs (FC): those that do not change with output in the short-run

Average fixed costs: TFC / output

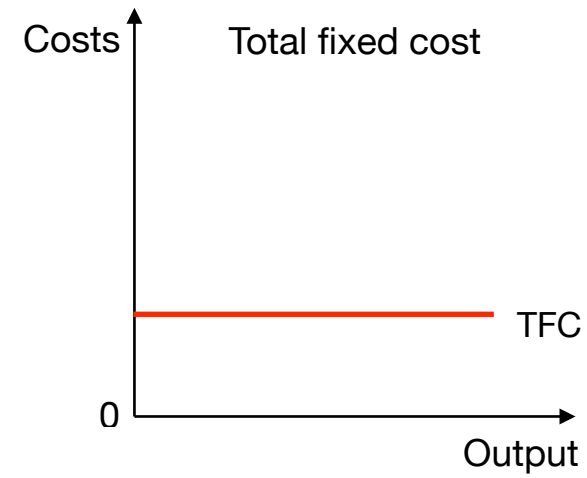
Variable costs (VC): costs that change as output changes

Average variable costs: TVC / output

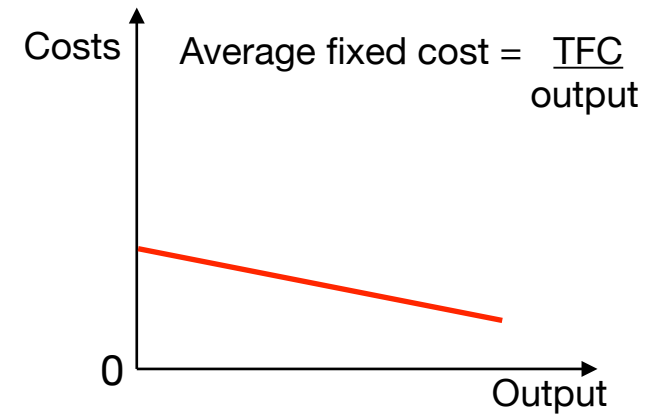
Total revenue (TR): total amount of money received from selling a product

Average revenue: $TR / \text{quantity}$, i.e. price

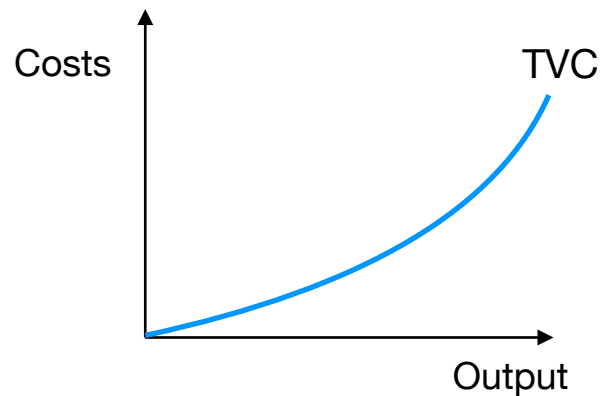
Profit: revenue — cost



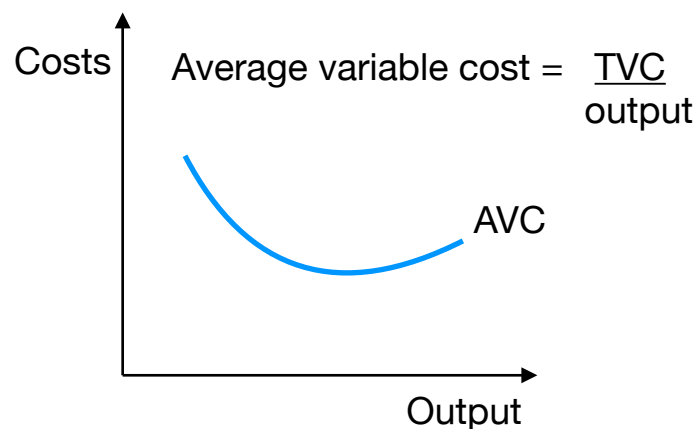
Output	TFC
1	10
2	10
3	10
4	10
5	10
6	10



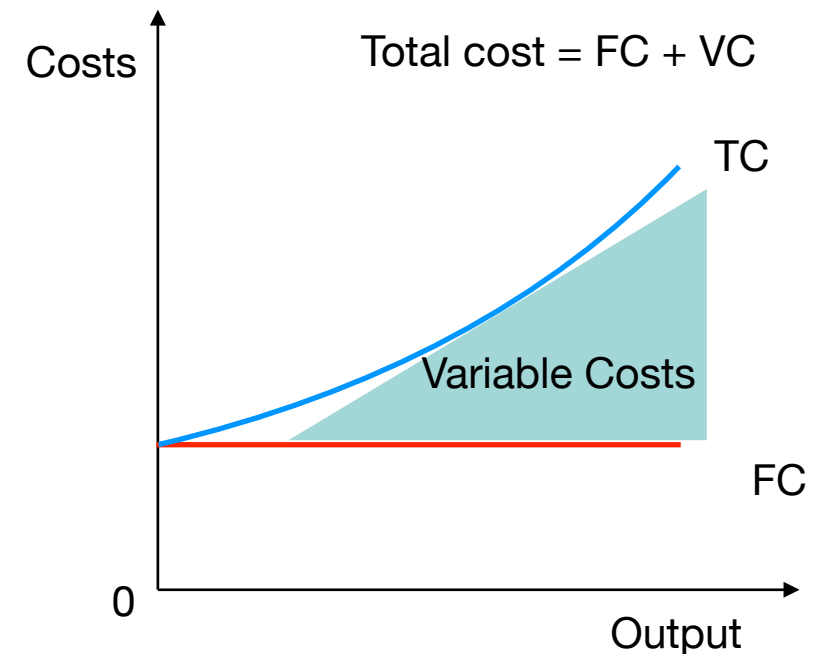
Output	TFC	AFC
1	10	10
2	10	5
3	10	3.3
4	10	2.5
5	10	2
6	10	1.7



Total variable cost
Curved due to slower increases in productivity the more that is made.



Output	TVC	AVC
1	10	10
2	15	7.5
3	17	5.7
4	22	5.5
5	28	5.6
6	35	5.8
7	45	6.4
8	55	6.9



Market structure: the characteristics of a market, e.g. competitive or monopoly.

Competitive market: where a number of firms compete with each other.

Characteristics of a competitive market

- Each firm has a small share of the market.
- Change in output of one firm has little effect on price.
- Consumers can buy from more than one rival firm.
- There is pressure on firms to keep prices low.
- There is an ease of entry and exit to the market.

Monopoly: a market with a sole supplier. (Not always 100% of market. Can be as low as 25% and still count as a monopoly)

Natural Monopoly: an industry where a single firm can produce at a lower average cost than two or more firms because of the existence of significant economies of scale.

Barriers to entry: anything that makes it difficult for a firm to enter into the market.

Barriers to exit: anything that makes it difficult for a firm to exit a market, e.g. too much invested to turn back.

Government and the Macroeconomy

Roles of government: provide public goods and services
acts as an employer
helps private industries

Provides public services if:

- they are necessary and a natural monopoly
- they are things that the private sector may under-produce (not economically worthwhile/difficult to charge for, e.g. flood defences)

Employs:

- 16.5% of UK work force (Sept 2018)
- NHS England is the UK's biggest employer with 1.4m employees

Helps private industries and individual companies both operating in this country and/or competing internationally if:

- they are **strategic industries** - important for economic development
- they are **national champions** - have the potential to be world leaders

Companies and industries are also helped through:

- **Subsidies/grants** - often to small companies
- **Grants** - particularly for R&D
- **Financial incentives to start up in certain areas**
- **Trade blocs (regional)/World Trade Organisation**
- **Protectionism** - tariffs, quotas, subsidies, administrative restrictions (standards/regulation), exchange controls, boycotts/bans/embargoes.

Gov't macroeconomic aims:

- Low unemployment (usually interpreted as full employment - 4% in UK.)
- price stability (inflation) - needed for international competitiveness
- redistribution of income - taxes, subsidies, welfare, benefits
- balance of payments stability (X&M), avoid debt from long term current account deficit
- Economic growth - an increase in the output of an economy and, in the long run, an increase in the economy's productive potential.

Current account balance: a record of the income received and expenditure made by a country in its dealings with other countries.

Economic Growth

Benefits of economic growth:

- improve living standards - more choice available
- increases life expectancy
- allows better health, education and housing
- 'feel good' impact which allows other macroeconomic aims to be achieved, such as employment

Taxes

Direct: on income and wealth (generally progressive) income, corporation, inheritance, capital gains, property

Indirect: on spending (generally regressive) VAT, excise duty, import tax, licence fee, airport tax

Progressive: takes proportionally more from the rich

Regressive: takes proportionally more from the poor

Proportional: takes proportionally the same from everyone (flat tax)

- don't have one in uk

Principles of taxation (that gov't should follow):

- equity (fairness)
- economy (economical to collect)
- convenience (easy to pay and easy to collect)
- certainty (clarity in who pays what, when and how)

Tax and Government Spending

Reasons for spending:

- influencing economy to meet economic aims
- reduce market failure - public goods/merit goods/regulating markets
- promote equality
- pay interest on national debt

Reasons for tax:

- fund gov't spending
- influencing economy to meet economic aims
- discourage use of demerit goods
- reduce income inequality between rich and poor
- protect domestic industries from unfair competition and cheaper imports

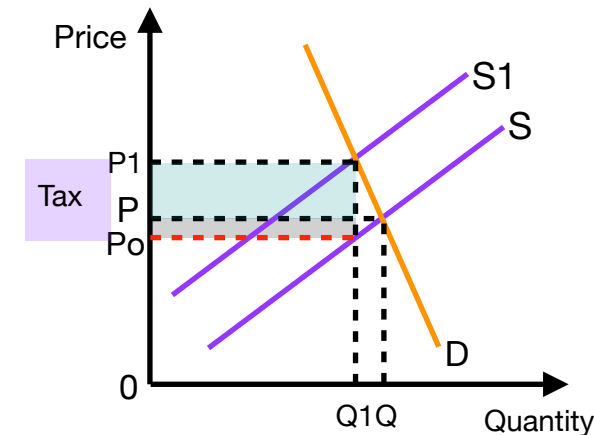
Gov't budgets

Deficit budget: spend more than revenue

Surplus budget: spend less than revenue

Balanced budget: spending = revenue

Indirect Tax: Supply and Demand Curves



Shift in supply curve as $S + \text{tax} = S1$, so revenue kept by the company stays in line with S at the given quantity sold, with the extra revenue going to the tax collector. Who bears the majority of the weight of that tax depends on how demand elastic the product is.

Inelastic demand:

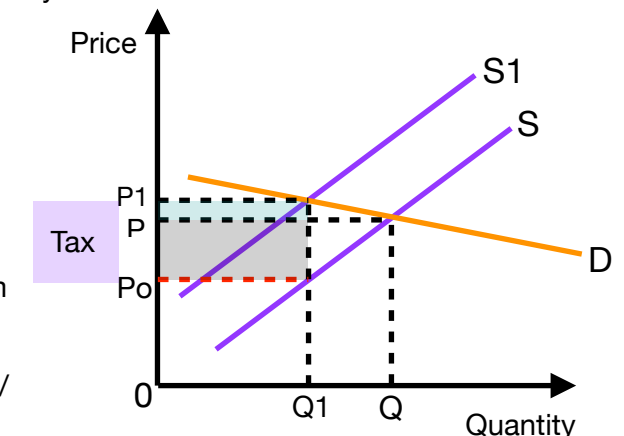
Tax borne by producers
Tax borne by consumer

Elastic demand:

Tax borne by producers
Tax borne by consumer

Impact of direct tax

- **income tax:** may discourage some from working harder
- **corporation tax:** may discourage some entrepreneurs investing in new ventures/ updating machinery etc.



Demand-side Policies

Controlling the economy through controlling total (aggregate) demand.

Fiscal policy - government spending and taxation

Expansionary fiscal policy - raise spending and/or cut tax to increase total demand

aim: increase economic growth and employment

Contractionary fiscal policy - cut spending and/or raise tax to decrease total demand

aim: reduce inflationary pressure; reduce balance of payments deficit ($M > X$)

Supply-side Policies

Controlling the economy through controlling total (aggregate) Supply.

Supply-side policy: measures designed to **increase** aggregate supply.

Aim: increase growth, output and employment; improve balance of payments position, BUT without increase in inflation.

Subsidies
Privatisation
Tax rate and Benefits reduction
Education & training
Labour market reforms
Deregulation

Supply Policies That Bring Ever-Lasting Demand

End Effect:

Increase quality and quantity of resources
Increase productive potential and efficiency

Monetary policy - money supply, interest rates and exchange rates

Money supply:

- print more, quantitative easing, in/de-crease gold/foreign currency reserves

Interest rates (main policy used):

- up - lowers spending/increases savings, will encourage foreign savers and can push up exchange rate
- down - increases spending/increases borrowing/lowers saving, will discourage foreign savers and can push down exchange rate
- same - creates certainty, making for easier planning

Exchange rates:

- down - currency is cheaper, so country's goods are cheaper to foreign buyers, exports up. Foreign currency dearer, imports down (**can be a problem for raw materials**)
- up - currency more expensive, goods are more expensive to foreign buyers, exports down. Foreign currency cheaper, imports up.

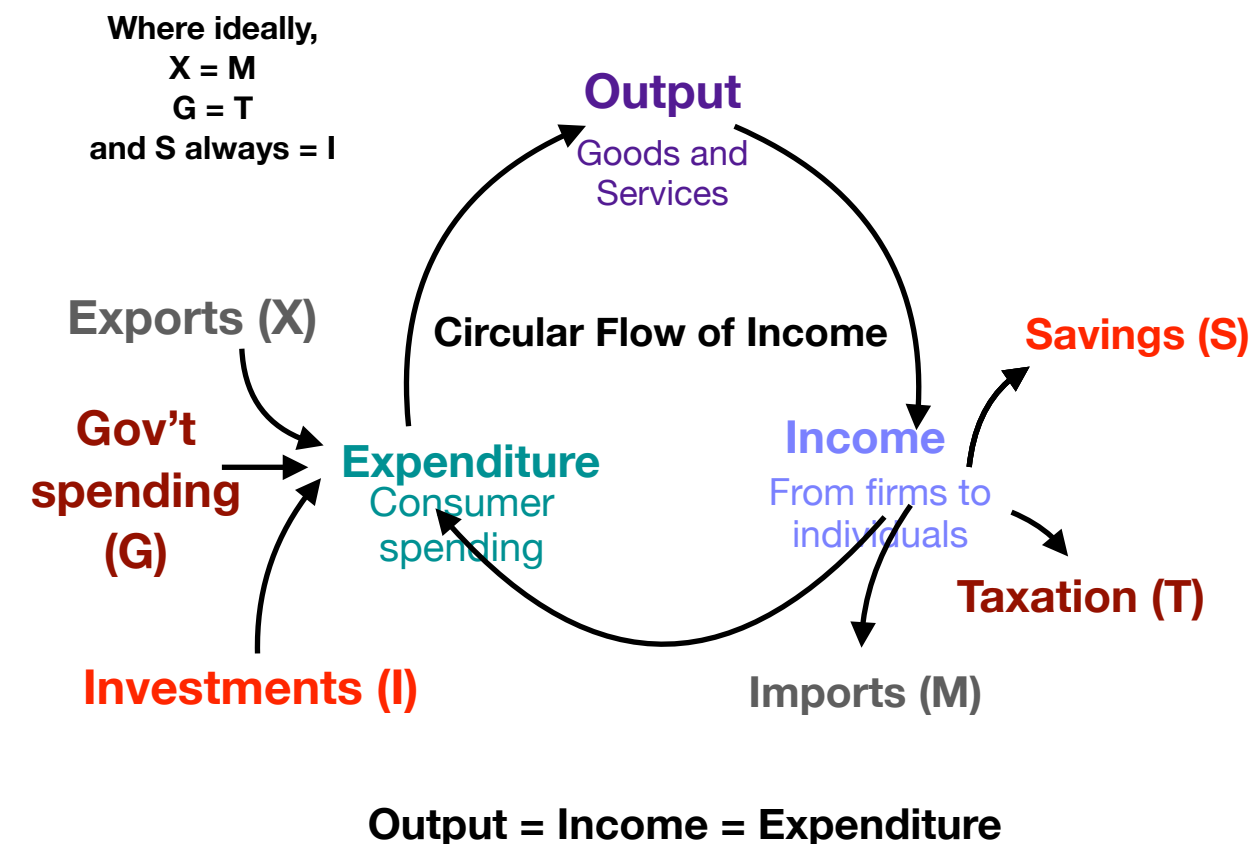
Expansionary monetary policy - increase money supply and/or reduce interest rates

Aim: increase economic growth and employment

Contractionary monetary policy - reduce money supply and/or raise interest rates

Aim: reduce inflationary pressure; reduce balance of payments deficit

Gross Domestic Product (GDP): The total output of a country



Nominal GDP: Doesn't take into account inflation.

Real GDP: GDP adjusted for inflation.

GDP per head: GDP divided by population. Gives a greater indication of the standard of living in a country.

GDP does not take into account

- **Informal economy:** size of which is affected by - what is deemed as an illegal activity, penalties for tax evasion, gov't regulations, tax rates
If there is a large informal economy, tax will be below what could be collected and the rate of inflation may be overestimated (informal economies have a slower rate of inflation than the formal economy).
- **Non-marketed goods and services:** subsistence farming, home-makers, care work, volunteering etc.

Recession: A reduction in real GDP over two or more consecutive quarters (six months or more).

Depression: A deep and long-lasting period of negative economic growth, with output falling for at least two years and GDP falling by over 10%.

Causes

- **Fall in aggregate demand:** global economic shock (e.g. 2008)
cut in gov't spending to tackle inflation
exchange rate rise = fall in exports
rise in cost of debt
- **Fall in aggregate supply** rise in price of fuel and raw materials

Consequences

- Lower output
- Lower employment
- Lower living standards
- Lower foreign investment
- Decline in tax revenue
- Increase in social benefits (increase budget deficit)

Causes of Economic Growth

Short-term: demand up or increase in output

Long-term: Increase in quantity of productive resources (e.g. mass migration)

increase in quality of productive resources (e.g. investment in training)

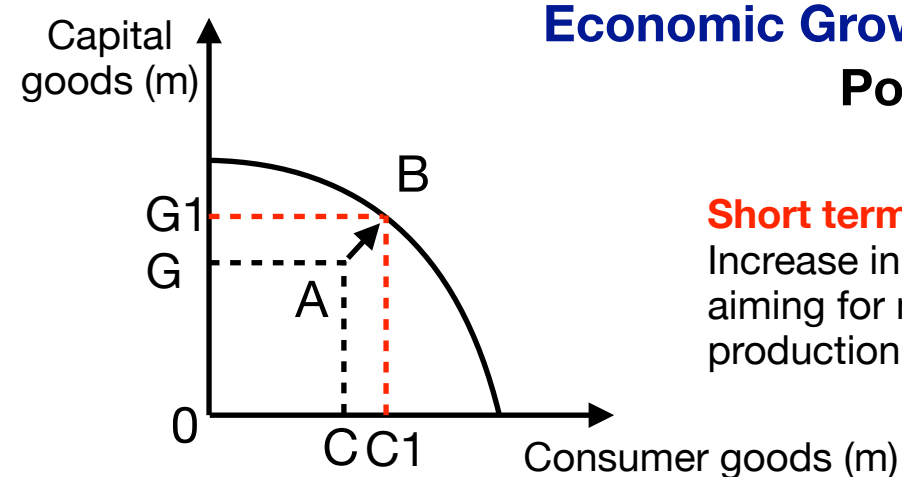
Benefits of economic growth

- Improved living standards - more G&S, Gov't fund merit goods - health care and education, improved infrastructure - roads, water, electricity
- Reduced poverty
- Increased life expectancy

Costs of economic growth

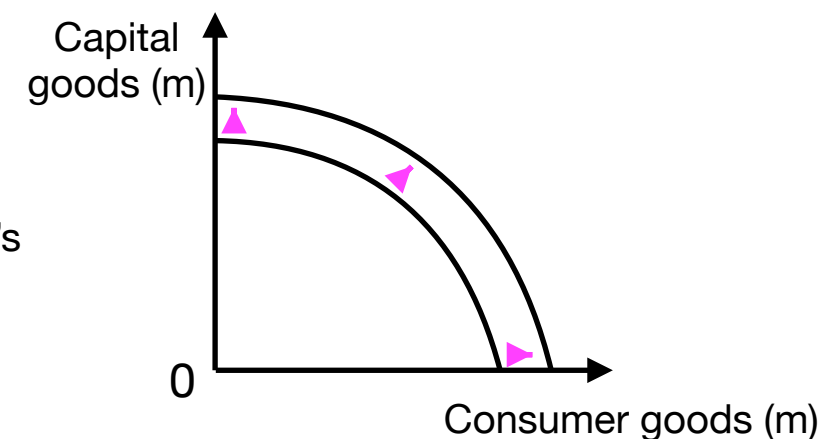
- Increased pollution
- Depletion of natural resources
- Destruction of wildlife
- Increased strain and stress of everyday life - long hours in poor working conditions
- Widening poverty gap.

Economic Growth: Production Possibility Curves



Short term: Increase in output, aiming for maximum production

Long term: Increase in economy's productive potential



Policies to promote economic growth

• Demand side

Monetary: Expansionary - cut interest rates, quantitative easing
cost of borrowing down (borrowing up, savings down,
spending up)

exchange rate down (exports up)

Money supply up (spending up)

Fiscal: Expansionary - cut tax rates, gov't spending up

gov't spending up (spending)

taxes down (in short term) (spending)

budget deficit (spending and no income)

• Supply-side

Subsidies

Privatisation

Tax rate and **B**enefit reduction

Education & training

Labour market reforms

Deregulation

Raise labour productivity and increase productive capacity.

Employment: Being involved in a productive activity for which a payment is received.

Unemployment: Being without a job while being willing and able to work.

Patterns of employment change over time

- **Structural change** (primary-secondary-tertiary sectors)
- **Women in the work force** (changing social and cultural attitudes)
- **Private and public sector proportions** (privatisation)
- **Full/part-time work** (dependent on work available as well as social and cultural factors and attitudes)
- **Self-employed** (higher in less economically developed countries)
- **Formal/informal economies** (informal does not have same rights and benefits)
- **Quality of employment** (higher quality work in more developed economies)
- **Flexible workforce** (global competition puts on pressure for more flexible work forces - numerical flexibility/occupational and geographical mobility)

Unemployment measures

Claimant count: unemployment benefit receipts

Labour Force Survey Measure: numbers actively looking for a job

Types of unemployment

Frictional - in-between jobs, looking for work:

Search

Casual workers

Seasonal workers

Structural - decline in industries or occupations:

Technological unemployment

Regional unemployment

Cyclical - lack of aggregate demand:

Recession

Depression

Unemployment rate:

$\frac{\text{unemployment population}}{\text{labour force}} \times 100\%$

Consequences of unemployment:

Individual: loss of earnings = lower living stds; higher chance of family break up; lower physical and mental health; can't afford to improve life chances for off-spring; reduces chances of getting a new job; low prices if prolonged period of high unemployment

Firms: downward pressure on wages, more flexible workforce, BUT lower earnings reduces aggregate demand and prices are kept low

Economy: opportunity cost (not all resources being used), lower tax rev, higher benefit payments

Policies to reduce unemployment

- **Demand side** - to tackle **cyclical** unemployment by growing economy

Monetary: Expansionary - cut interest rates, quantitative easing
cost of borrowing down (spending up)
exchange rate down (exports up)
Money supply up

Fiscal: Expansionary - cut tax rates, gov't spending up
spending up
taxes down (in short term)
budget deficit

- **Supply-side**

Subsidies - relocation packages/grants/allowances (**structural**)
for firms willing to set up in new places (**structural**)

Privatisation (**structural**)

Tax rate and **B**enefit reduction - reduce benefits (**frictional**)
cut in income tax rate (**frictional**)

Education & training - training = occupationally mobility (**structural**)
better info on job vacancies (**frictional**)

Labour market reforms (**cyclical**)

Deregulation (**structural**)

Inflation: A rise in the price of goods and services over time and a fall in the purchasing power of money.

Deflation: A sustained fall in the price of goods and services and a rise in the purchasing power of money.

Disflation: A drop in the rate of inflation.

Consumer Price Index (CPI)

- **Base year:** given index of 100, other years measured in relation to it
- **Basket:** average household spending, weighted toward proportion of income spent on items
- **Price changes:** monitored monthly
- **Construct index:** % price change by category multiplied by category weighting, then all categories added together.

Causes of inflation

- **Cost-push** - higher **costs** of production **pushes** up prices
- **Demand-pull** - price levels **pulled** up by increases in **demand**

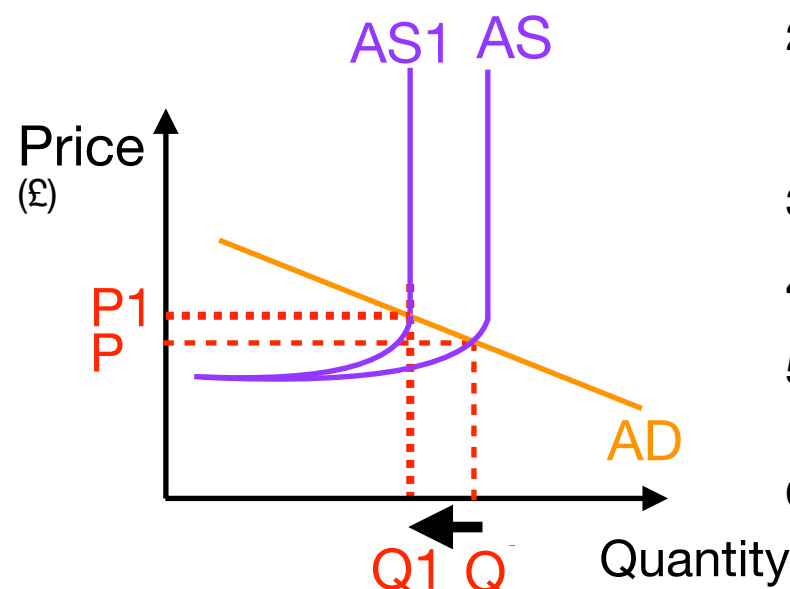
Causes of deflation

- **Falling aggregate demand**
- **External shock** - e.g. world economic crash
- **Consumers postponing purchases**

- **Cost-push** - higher **costs** of production **pushes** up prices
 - Increase in labour costs
 - increase in raw materials
 - increase in cost of imports
 - increase in indirect taxes

Cost-Push Inflation

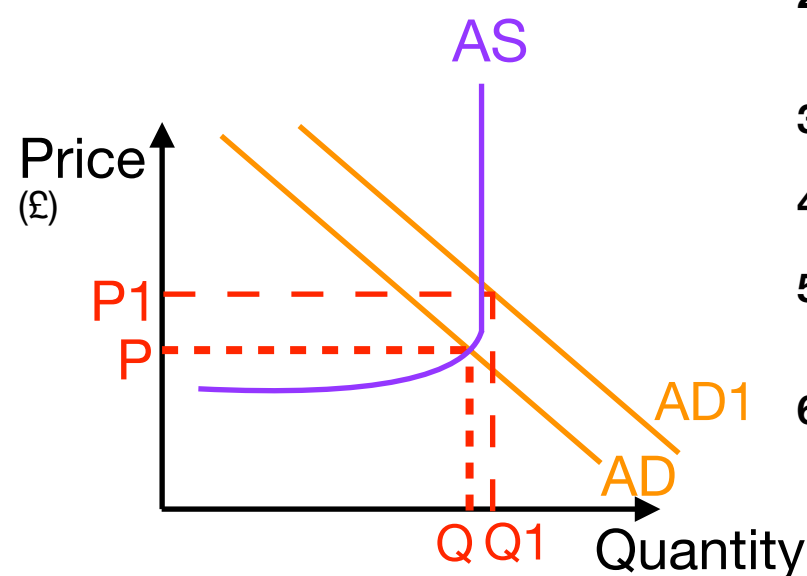
1. Price of raw materials increase.
2. **Shift** in supply curve - unable to supply same amount at same prices.
3. **Excess** in demand
4. **Prices** increases
5. **Contraction** on demand curve
6. New equilibrium



- **Demand-pull** - price levels **pulled** up by increases in **demand**
 - Increase in consumer spending
 - Increase in investments by firms
 - Increase in demand for exports
 - Increase in gov't spending

Demand-Pull Inflation

1. Demand increase.
2. **Shift** in aggregate demand curve.
3. **Excess** in demand
4. **Prices** increases
5. **Extension** on supply curve
6. New equilibrium



Consequences of inflation

- **fall in value of money**, reduces purchasing power of money
- **savings & debt lose value** (particularly if interest < inflation rate)
- **costs to businesses** - menu costs / shoe leather costs
- **future economic uncertainty** - depending on level
- **Products less competitive on the international market (cost-pull inflation)** = sell less exports and rise in import expenditure - harm balance of payments position and possibly create unemployment.
- **Fiscal drag** - wages rise in line with inflation but tax brackets remain the same, so less real disposable income.
- **gov't have to spend more on benefits**, pensions and wages
- demand-pull inflation might encourage **firms to expand**
- firms become more competitive by **controlling costs** (mild inflation)
- can **reduce real value of wage bill**

Consequences of deflation

- Increase in unemployment
- Weak business confidence
- Firms reluctant to invest/increase investments

Policies to control inflation

- **Demand side** - to tackle demand-pull inflation

Monetary: contractionary - interest rates up, money supply down
cost of borrowing up (spending down)
exchange rate up (exports down)
Money supply down

Fiscal: contractionary - increase taxation, gov't spending down
spending down
taxes up
budget surplus

Impact: increased unemployment
less economic growth

- **Supply-side** - to tackle cost-push inflation

No **Subsidies**

Privatisation

No **Tax rate** and **Benefit reduction**

Education & training - workers are more productive

Labour market reforms - reduce TUs power

Deregulation

Policies to control deflation

- **Demand side**

Monetary: expansionary - low or negative interest rates, increase money supply

cost of borrowing down (spending up)

exchange rate down (exports up)

Money supply up

Fiscal: expansionary - decrease taxation, gov't spending up (helicopter money - giving money to individuals)

spending up

Conflict between macroeconomic aims:

Full employment / Stable prices

(increases demand for goods, pushes up price of labour and so production, increases prices)

Economic growth / balance of payments

(need raw materials from other countries to increase total supply of goods and services)

Full employment / balance of payments

(demand up, more foreign goods imported)