A-LEVEL ECONOMICS

Complete Revision Guide

Microeconomics • Macroeconomics

Key Concepts • Diagrams • Formulas • Exam Tips

Good luck on your exam! ■

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SECTION 1: MICROECONOMICS

1.1 Demand, Supply & Market Equilibrium

Law of Demand & Demand Shifters

The Law of Demand states that, *ceteris paribus*, as price rises, quantity demanded falls (inverse relationship). A **movement along** the demand curve is caused by a price change; a **shift** is caused by a non-price factor.

Non-price factors that SHIFT Demand (MRSTIC):

- Money income of consumers
- Related goods prices (substitutes rise → demand rises; complements rise → demand falls)
- Size & structure of population
- Tastes & preferences
- Interest rates (for credit-financed goods)
- Consumer expectations of future prices

Law of Supply & Supply Shifters

The Law of Supply states that, *ceteris paribus*, as price rises, quantity supplied rises (positive relationship). Supply shifts when non-price factors change.

Non-price factors that SHIFT Supply (CTIPS):

- Costs of production (wages, raw materials)
- Technology improvements → supply increases
- Indirect taxes → supply decreases | Subsidies → supply increases
- Prices of jointly supplied goods
- Size of industry / number of firms

[Diagram: Demand & Supply Equilibrium — P* and Q* at intersection]

Draw D and S curves; show effect of a demand increase → new equilibrium at higher P and Q

Consumer & Producer Surplus

Consumer Surplus	Area below demand curve and above price — extra benefit consumers gain.	**Producer Surplus**	Area above supply curve and below price — extra revenue above minimum needed.
Deadweight Loss	Loss of total surplus when output is not at competitive equilibrium.	**Price Ceiling**	Maximum legal price (below equilibrium) → shortage.
Price Floor	Minimum legal price (above equilibrium) → surplus.	**Free Market**	Prices determined by D & S with no government intervention.

1.2 Elasticity

Price Elasticity of Demand (PED)

PED = % change in Quantity Demanded ÷ % change in Price

Interpreting PED:

- |PED| > 1 → Elastic (luxury goods, many substitutes)
- |PED| < 1 → Inelastic (necessities, few substitutes, habit-forming)
- |PED| = 1 → Unit elastic
- |PED| = 0 → Perfectly inelastic | |PED| = ∞ → Perfectly elastic

Determinants of PED: availability of substitutes, proportion of income, necessity vs luxury, time period, breadth of market definition.

Income Elasticity of Demand (YED)

YED = % change in Quantity Demanded ÷ % change in Income

- YED > 0 → Normal good (demand rises with income)
- YED > 1 → Luxury good
- YED < 0 → Inferior good (demand falls as income rises — e.g. bus travel)

Price Elasticity of Supply (PES)

PES = % change in Quantity Supplied ÷ % change in Price

PES > 1 → elastic supply. Determinants: spare capacity, ease of factor substitution, time period, stock levels, mobility of factors of production.

Cross Elasticity of Demand (XED)

XED = % change in QD of Good A ÷ % change in Price of Good B

- XED > 0 → Substitutes (positive relationship)

- XED < 0 → Complements (negative relationship)
- XED = 0 → Unrelated goods

1.3 Market Structures

Feature	Perfect Competition	Monopolistic Competition	Oligopoly	Monopoly
Sellers	Many	Many	Few	One
Product	Homogeneous	Differentiated	Homogeneous/Diff.	Unique
Entry	Free	Free	Barriers	High barriers
Price Maker?	No (price taker)	Some power	Yes	Yes
Long-run profit	Normal only	Normal only	Possible abnormal	Abnormal
Examples	Agricultural markets	Restaurants, clothing	Supermarkets, airlines	Utilities, patents

Profit Maximisation Rule

Profit Maximised where: MC = MR (and MC cuts MR from below)

[Diagram: Monopoly Diagram — AR, MR, AC, MC curves showing abnormal profit]

Shade abnormal profit rectangle between AR and AC at Q where MC=MR

Contestability

A **contestable market** has low barriers to entry and exit (including no sunk costs). Even a monopoly may behave competitively if threatened by potential entrants (hit-and-run entry).

1.4 Market Failure & Government Intervention

Externality	Cost or benefit falling on third parties not in the transaction.	**Negative Externality**	Social cost > private cost; over-production (e.g. pollution).
Positive Externality	Social benefit > private benefit; under-production (e.g. education).	**Public Good**	Non-excludable & non-rival — leads to free-rider problem.
Merit Good	Under-consumed if left to market (e.g. healthcare, education).	**Demerit Good**	Over-consumed if left to market (e.g. cigarettes, alcohol).
Information Failure	Asymmetric or imperfect information leads to misallocation.	**Monopoly Power**	Single seller restricts output and raises price — welfare loss.

Government Interventions

Correcting Negative Externalities:

- Indirect taxes (Pigouvian tax) — raise private cost toward social cost
- Regulations / legislation — bans, limits on output
- Tradeable pollution permits — cap and trade
- Nudge theory — changing default choices

Correcting Positive Externalities:

- Subsidies to producers or consumers
- Direct provision by government (public sector)
- Advertising / information campaigns
- Legislation — making consumption compulsory (e.g. education)

Government Failure — when intervention worsens resource allocation:

- Unintended consequences (e.g. price ceilings causing black markets)
- Regulatory capture — regulators serving industry interests
- Lack of information — government may not know optimal level
- Short-termism — political cycle < economic planning horizon

1.5 Theory of the Firm — Costs & Revenue

Cost Concepts

Concept	Formula / Definition
Total Cost (TC)	TC = TFC + TVC
Average Cost (AC)	AC = TC ÷ Q
Marginal Cost (MC)	Change in TC from producing one more unit
Average Fixed Cost (AFC)	TFC ÷ Q (always falling)
Average Variable Cost (AVC)	TVC ÷ Q

Economies of Scale: LRAC falls as output rises

Diseconomies of Scale: LRAC rises as output rises

Internal EoS: technical, managerial, financial, marketing, risk-bearing. **External EoS:** industry-wide benefits — skilled labour pool, infrastructure.

Revenue Concepts

TR = P × Q | AR = TR ÷ Q = P | MR = change in TR / change in Q

Under **perfect competition**: AR = MR = Price (horizontal demand curve). Under **imperfect competition**: MR < AR (downward sloping — must cut price to sell more).

SECTION 2: MACROECONOMICS

2.1 National Income & Economic Growth

Measuring National Income

Three Equivalent Approaches:

- **Expenditure:** GDP = C + I + G + (X – M)
- **Income:** Sum of all factor incomes (wages + rent + profit + interest)
- **Output:** Sum of value added at each stage of production

GDP	Gross Domestic Product — total output within a country's borders.	**GNP / GNI**	GDP + net income from abroad (residents' income worldwide).
Real GDP	GDP adjusted for inflation — measures actual volume of output.	**Nominal GDP**	GDP measured at current prices — not adjusted for inflation.
GDP per capita	GDP ÷ population — proxy for average living standards.	**Human Dev. Index**	Composite of GNI per capita, education, life expectancy.

Economic Growth

Short-run growth: using existing spare capacity (rightward shift of AD). **Long-run growth:** increasing productive capacity (rightward shift of LRAS/PPF).

Costs and Benefits of Economic Growth:

- Benefits: higher living standards, lower unemployment, improved public services, innovation
- Costs: inflation, inequality, environmental damage, structural unemployment during transition

2.2 Aggregate Demand & Aggregate Supply

AD = C + I + G + (X – M)

Consumption (C)	Household spending. Influenced by income, wealth, confidence, interest rates.	**Investment (I)**	Firm spending on capital. Influenced by interest rates, profit expectations, accelerator.
Government (G)	Public sector spending on goods and services.	**Net Exports (X-M)**	Exports minus imports. Influenced by exchange rate, relative prices, income.

MPC	Marginal Propensity to Consume = change in C ÷ change in Y.	**Multiplier**	1 ÷ (1 – MPC) or 1 ÷ MPS+MPT+MPM — amplifies initial injection.

[Diagram: AD/AS Diagram — SRAS, LRAS, AD curves; show demand-pull inflation and output gap]

Key: LRAS vertical at Yf; SRAS upward sloping; show recessionary & inflationary gaps

Shifts of AD

- Interest rate cut → C and I rise → AD shifts right
- Tax cut / government spending rise → C and G rise → AD shifts right
- Exchange rate depreciation → X cheaper, M dearer → NX rises → AD shifts right
- Rise in consumer confidence → C rises → AD shifts right

SRAS vs LRAS

SRAS shifts with changes in input costs (wages, raw materials, energy), indirect taxes, productivity, import prices. **LRAS** shifts with changes in productive capacity: technology, labour supply, capital stock, education & training, institutional framework.

2.3 Inflation

Inflation Rate = [(CPI this year – CPI last year) ÷ CPI last year] × 100

Demand-Pull	AD rises faster than AS — 'too much money chasing too few goods'.	**Cost-Push**	SRAS shifts left due to rising input costs — stagflation possible.
Monetary inflation	Excessive money supply growth (MV = PT — Quantity Theory).	**CPI**	Consumer Price Index — weighted basket of goods & services.
RPI	Retail Price Index — includes housing costs; usually higher than CPI.	**Deflation**	Sustained fall in price level — can cause deflationary spiral.
Hyperinflation	Extremely rapid inflation eroding money's store of value.	**Stagflation**	High inflation combined with high unemployment — policy dilemma.

Costs of Inflation:

- Shoe leather costs — cost of minimising cash holdings
- Menu costs — cost of changing prices
- Fiscal drag — bracket creep in taxation
- Uncertainty — discourages investment
- International competitiveness — exports become more expensive
- Redistribution — borrowers gain, savers lose

2.4 Unemployment

Unemployment Rate = (Unemployed ÷ Labour Force) × 100

Frictional	Short-term between jobs; search unemployment — always exists.	**Structural**	Mismatch of skills / location — requires retraining; persistent.
Cyclical / Demand-Deficient	Caused by fall in AD during recession.	**Seasonal**	Demand for labour varies with season (tourism, agriculture).
Classical / Real Wage	Wages held above market-clearing level (e.g. minimum wage).	**Natural Rate (NAIRU)**	Unemployment when labour market in equilibrium — no cyclical unemployment.
Claimant Count	Number claiming unemployment-related benefits — narrower measure.	**ILO Measure**	People without work, available to start and actively seeking — broader.

Policies to Reduce Unemployment:

- Cyclical: expansionary fiscal / monetary policy to boost AD
- Structural: retraining schemes, education investment, regional policy
- Frictional: job centres, better information, reducing search costs
- Classical: lower minimum wage or increase labour market flexibility

2.5 Monetary & Fiscal Policy

Monetary Policy

Tools of Monetary Policy (controlled by Central Bank):

- Interest rate changes — main tool; lower rates → cheaper borrowing → C and I rise

- Quantitative Easing (QE) — central bank creates money to buy assets → increase money supply
- Forward guidance — communication of future policy to influence expectations
- Reserve requirements / open market operations

Fiscal Policy

Tools of Fiscal Policy (controlled by Government):

- Government spending (G) — direct injection into circular flow
- Taxation — affects disposable income (C) and business costs (I)
- Automatic stabilisers — benefits rise, tax receipts fall automatically in recession
- Discretionary fiscal policy — deliberate changes to G or T

Budget Deficit	G > T — government spending exceeds tax revenue in a year.	**Budget Surplus**	G < T — tax revenue exceeds government spending.
National Debt	Accumulated stock of past government borrowing (deficits).	**Austerity**	Policies to reduce deficit — spending cuts and/or tax rises.
Crowding Out	Government borrowing pushes up interest rates, reducing private investment.	**Laffer Curve**	Shows relationship between tax rate and tax revenue; optimal rate exists.

Conflicts between macroeconomic objectives:

- Low inflation vs low unemployment (Phillips Curve short-run trade-off)
- Economic growth vs inflation (rapid growth can be inflationary)
- Current account balance vs growth (growth sucks in imports)
- Equity vs efficiency — redistribution may reduce incentives

2.6 Balance of Payments & Exchange Rates

Current Account	Trade in goods + services + income + current transfers.	**Capital Account**	Transfers of capital assets (debt forgiveness etc.).
Financial Account	FDI, portfolio investment, reserve assets flows.	**Current A/C Deficit**	Imports of G&S exceed exports — net outflow of money.

Current A/C Surplus	Exports of G&S exceed imports — net inflow of money.	**Marshall-Lerner**	Depreciation improves current account if sum of PED for X+M > 1.
J-Curve Effect	Current account worsens before improving after depreciation.	**FDI**	Foreign Direct Investment — long-term investment in productive assets abroad.

Exchange Rate Systems

Floating Exchange Rate:

- Determined purely by D&S in forex market
- Automatically adjusts to correct BoP imbalances
- Uncertainty can deter trade and investment

Fixed / Managed Exchange Rate:

- Government or central bank intervenes to maintain target rate
- Reduces exchange rate uncertainty — good for trade
- Requires large foreign currency reserves; loses monetary policy independence

Exchange Rate Depreciation → Exports cheaper (X rises), Imports dearer (M falls) → AD rises

Exchange Rate Appreciation → Exports dearer (X falls), Imports cheaper (M rises) → AD falls

QUICK-REFERENCE FORMULA SHEET

Formula	Expression
PED	% ΔQD ÷ % ΔP
YED	% ΔQD ÷ % ΔY
XED	% ΔQD(A) ÷ % ΔP(B)
PES	% ΔQS ÷ % ΔP
Multiplier	1 ÷ (1 – MPC) or 1 ÷ (MPS + MPT + MPM)
AD	C + I + G + (X – M)
Real GDP Growth	[(GDP■ – GDP■) ÷ GDP■] × 100
Inflation (CPI)	[(CPI■ – CPI■) ÷ CPI■] × 100
Unemployment Rate	(Unemployed ÷ Labour Force) × 100
Profit	Total Revenue – Total Cost
Average Cost (AC)	TC ÷ Q
Marginal Cost (MC)	ΔTC ÷ ΔQ
Total Revenue (TR)	Price × Quantity
Average Revenue (AR)	TR ÷ Q = Price
Profit Max Condition	MC = MR
Budget Balance	Tax Revenue – Government Spending
Real Value	Nominal Value ÷ Price Index × 100

TOP EXAM TIPS

1. Always use diagrams — label axes, curves, equilibrium points and any shifts.

2. Define key terms at the start of every answer.

3. Use the PEEL structure: Point → Evidence → Explanation → Link back.

4. Evaluate! Consider limitations, conflicts, short-run vs long-run, stakeholders.

5. Context matters — apply theory to the real-world examples given in questions.

6. For 25-mark essays: intro, 3-4 developed analysis points, balanced evaluation, conclusion.

7. Remember ceteris paribus — state assumptions when applying economic theory.

8. Check for command words: 'analyse' needs chains of reasoning; 'evaluate' needs judgement.