economics

Week 1

What is Economics?

Economics is the study of how individuals, businesses and governments make choices when resources are scarce.
Known as the science of choice.
Focuses on allocating limited resources to satisfy unlimited wants.
Economists analyse choices and their consequences.
Economics is data-driven and aims to improve welfare.

Scarcity, Choice & Opportunity Cost

Scarcity = Unlimited wants + Limited resources.
Scarcity forces individuals, firms and governments to make choices.
Every choice involves a trade-off.
Opportunity Cost = the NEXT BEST alternative forgone.
Examples: studying vs working, saving vs spending, leisure vs overtime.
Decision making compares benefits against opportunity costs.

Rationality

Consumers aim to maximise utility (satisfaction).
Businesses aim to maximise profits.
Governments aim to maximise social welfare.
Economic decisions are assumed to be rational, even if real life isn't always perfect.

Micro vs Macroeconomics

Microeconomics	Macroeconomics
Individual consumers & firms	Whole economy
Coffee prices	Inflation
Housing market	GDP
Business decisions	Unemployment
Supply & demand	Interest rates

Positive vs Normative Economics

Positive economics = objective facts that can be tested.
Normative economics = opinions or value judgements.
Positive example: 'Higher prices reduce demand.'
Normative example: 'The government should reduce taxes.'

Markets & Voluntary Exchange

A market is where buyers and sellers exchange goods or services.
Exchange is voluntary because both parties expect to benefit.
Markets exist because of scarcity and specialisation.
Adam Smith introduced the Invisible Hand: self-interest and competition improve efficiency.
Competitive markets have many buyers/sellers, similar products, free entry and good information.

Comparative Advantage & PPF

Week 5

Profit, revenue and opportunity cost

Accounting profit = TR - explicit costs
Economic profit (EP) = TR - explicit costs (EC) - implicit costs (IC)
Total revenue (TR) = P x Q, where P is price per unit and Q is quantity sold.
Explicit costs are direct payments to others: wages, rent paid, inventory, utilities and packaging.
Implicit costs are opportunity costs of owner-supplied inputs: forgone salary, forgone rent on an owned building, or forgone return on invested funds.
Accounting profit can be positive while economic profit is zero or negative. If economic profit is positive, accounting profit must be positive.
Zero economic profit means all opportunity costs, including normal returns to the owner's labour and assets, have been covered. It does not mean the owner earns nothing.

Worked example: Mr X's takeaway restaurant

TR = $100 per hour. Chef = $15 and utilities = $30, so EC = $45.
Accounting profit = $100 - $45 = $55 per hour.
If Mr X could earn $55 elsewhere (including returns from his house and labour), IC = $55.
Economic profit = $100 - $45 - $55 = $0. He is indifferent on financial grounds because the restaurant covers his full opportunity cost.

Revenue measures

Average revenue (AR) = TR / Q. Since TR = P x Q, AR = P in all market structures.
Marginal revenue (MR) = change in TR / change in Q. It is the extra revenue from selling additional output.
Perfect competition: P = AR = MR. The firm cannot influence price.
Imperfect competition: P = AR > MR because lowering price to sell more units reduces revenue earned on earlier units.
Quick calculation: If TR rises from $105 to $120 as Q rises from 70 to 80, MR = ($120 - $105) / (80 - 70) = $1.50 per unit.

Production costs

Fixed cost (FC): does not change with output in the short run, e.g. building, equipment, term lease.
Variable cost (VC): changes with output, e.g. raw materials, packaging and temporary labour.
Total cost (TC) = FC + VC
Average fixed cost (AFC) = FC / Q; average variable cost (AVC) = VC / Q
Average total cost (ATC or AC) = TC / Q = AFC + AVC. Therefore, the gap between ATC and AVC equals AFC.
Marginal cost (MC) = change in TC / change in Q. If TC rises from $450 to $500 for the third unit, MC of that unit = $50.
Profit-maximising rule for every firm: expand output while MR > MC and stop where MR = MC. Output beyond this point has MC > MR and reduces profit.

Competitive-market adjustment after demand rises

Short run: market demand shifts right, raising price and quantity. Existing firms increase output along MC and may earn positive economic profit because P > ATC.
Long run: profit attracts entry. Market supply shifts right, price falls and entry stops when P returns to minimum ATC and economic profit is zero.
If demand falls, the reverse occurs: short-run losses encourage exit, market supply shifts left and the remaining firms return to zero economic profit.

account surplus.
If Australia runs a current-account surplus, it receives more foreign currency than it spends on current transactions. The excess is used to acquire foreign assets or reduce liabilities, producing an offsetting capital/financial-account deficit.
Current-account deficit <-> capital and financial-account surplus
Current-account surplus <-> capital and financial-account deficit
Core logic: The foreign-exchange market balances total purchases and sales of goods, services and assets. A deficit is not missing money; it has an offsetting financing entry.

Worked classification and exam method

Classifying common transactions
Australian firm exports wine: current-account credit; the overseas buyer demands AUD.
Australian household imports a Swiss watch: current-account debit; the Australian buyer supplies AUD for foreign currency.
Foreign investor buys Australian shares: financial-account credit/capital inflow; demand for AUD rises.
Australian investor buys UK shares: financial-account debit/capital outflow; supply of AUD rises.
Australian resident receives investment income from overseas: primary-income credit in the current account.
Australia sends a current transfer overseas: secondary-income debit in the current account.

Worked BoP identity

Suppose the current account is -AUD 40 billion and the capital account is +AUD 2 billion. Let FA be the financial-account balance.
$-40 + FA + 2 = 0$, so $FA = +38$ billion
The positive financial-account balance offsets the net current and capital outflow. Keep the signs in the identity rather than trying to memorise whether a balancing figure is “added” or “subtracted”.

Week 6 indicator recap used in Seminar 7

$Y = C + I + G + NX$
GDP: used-car resales are excluded; paid market services enter GDP even if the same unpaid household work was previously omitted. Real GDP removes price changes using base-year prices.
CPI and inflation: CPI measures the consumer price level; inflation is the persistent percentage rise in that level. Basket weights matter because heavily purchased goods influence CPI more.
Real income index = nominal income / CPI x 100
Example: nominal monthly income rises from AUD 2,000 to AUD 2,100 while CPI rises from 100 to 110. Real income falls from 2,000 to 2,100 / 110 x 100 = AUD 1,909.09 in base-year purchasing power, a fall of about 4.5% (approximately 5%).
Unemployment: labour force = employed + unemployed; unemployment rate = unemployed / labour force x 100. A new graduate actively seeking work enters the labour force as unemployed, so participation rises and unemployment may rise.

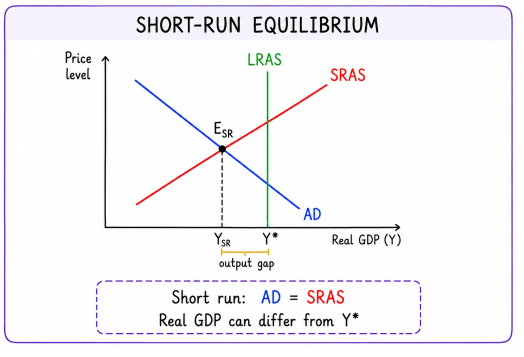
Reliable graph-answer sequence

Step 1: write the quotation for E and identify the market for AUD.
Step 2: decide whether the event changes demand for AUD or supply of AUD. Explain which international transaction causes it.
Step 3: shift only the relevant curve, mark the new equilibrium and state whether E rises or falls.
Step 4: translate the movement into appreciation or depreciation, then explain effects on exporters, importers or investors if asked.

Final memory chain

Short-run aggregate supply: SRAS

Shape: SRAS slopes upward because some wages, prices and expectations adjust slowly. A higher selling price can temporarily raise production before all costs catch up.
Misperceptions: A producer may mistake an economy-wide price increase for an increase in the relative price of its own product and temporarily expand output.
Sticky wages: Product prices may rise before wages written into contracts. Firms' profit margins temporarily increase, encouraging production and employment.
Sticky prices: Some firms change prices slowly because repricing has menu costs, customers view frequent changes as unfair, or contracts and administration delay adjustment.
Transitory nature: Misperceptions, sticky wages and sticky prices fade as information, contracts and expectations adjust. This is why the long-run curve is vertical even though SRAS slopes upward.



What shifts SRAS?

SRAS shifts right or down: Expected prices or wages fall, input costs fall, productivity improves, or productive capacity increases. At each price level, firms are willing to produce more.
SRAS shifts left or up: Expected prices or wages rise, energy or imported-input costs rise, supply chains are disrupted, or productive capacity decreases. At each price level, firms produce less.
Expectations rule: A change in the current price level causes movement along SRAS. A change in the price level that workers and firms expect shifts SRAS.

Quick classification practice

Higher government purchases: AD right. A temporary oil-price rise: SRAS left. New productivity-enhancing technology: SRAS right and LRAS right. Lower expected inflation: SRAS right. A stronger Australian dollar: NX falls, so AD left, all else equal.

Equilibrium and demand-side fluctuations

Short-run equilibrium: AD $=$ SRAS. The intersection determines the current price level and real GDP, but real GDP may be above or below potential output.
Long-run equilibrium: AD $=$ SRAS $=$ LRAS at Y^*. The economy is at potential output and unemployment is at its natural rate.
Recessionary gap: $Y < Y^*$. Output is below potential and unemployment is above its natural rate.
Expansionary gap: $Y > Y^*$. Output is above its sustainable level and unemployment is below its natural rate. Upward pressure on wages and costs develops.

Negative aggregate-demand shock

Trigger: Fear of recession or future unemployment can reduce household consumption. The fall in C shifts AD left and may reinforce pessimism.
Short-run result: The new AD-SRAS intersection has lower real GDP and a lower price level. Employment falls and unemployment rises. LRAS does not move because productive capacity has not changed.
Long-run adjustment: Weak demand and higher unemployment put downward pressure on wages and