

All Diagrams Needed for IB Economics

108 diagrams the IB Economics guide requires (81 SL and HL, 27 HL only), plus 3 extension diagrams, each with step-by-step drawing instructions and an exam tip.

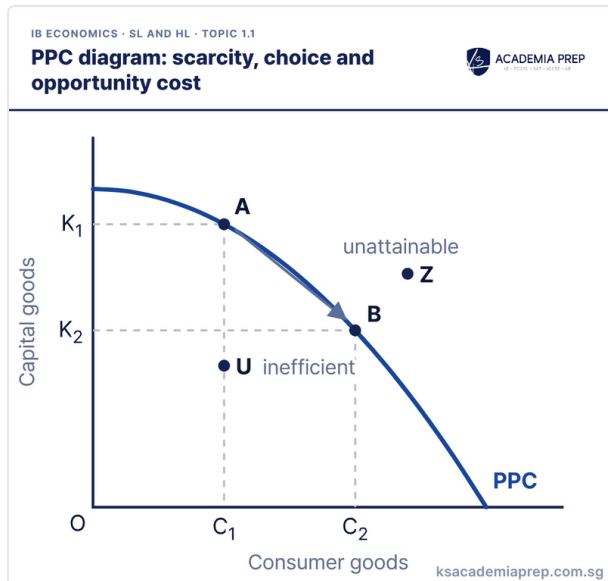
By Kirby Ng, Lead IGCSE Economics Tutor at KS Academia Prep · Updated 6 October 2026

Interactive version, with explanations and an SL-only filter:

ksacademiaprep.com.sg/ib-econs-diagrams/

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UNIT 1: INTRODUCTION TO ECONOMICS



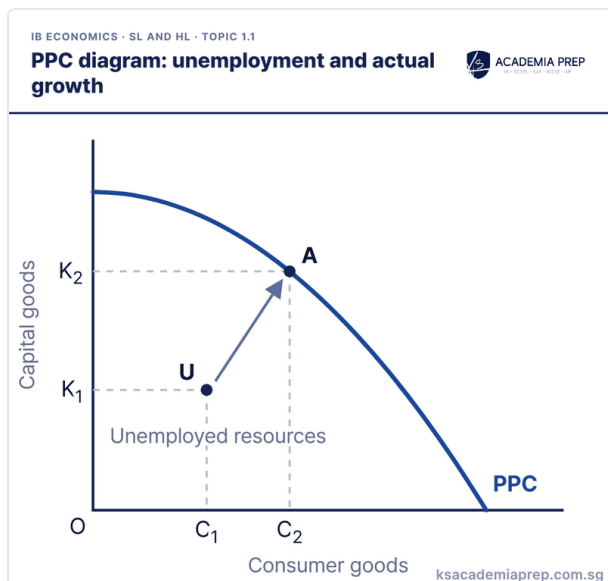
IB 1.1 · SL + HL

PPC diagram: scarcity, choice and opportunity cost

HOW TO DRAW IT

1. Label the vertical axis Capital goods and the horizontal axis Consumer goods, with O at the origin.
2. Draw a concave curve bowed outward from the origin and label it PPC.
3. Mark A and B on the curve, U inside it (inefficient) and Z beyond it (unattainable). Draw dashed lines from A and B to K₁, K₂, C₁ and C₂.

State opportunity cost as the quantity of the other good given up, not as money. Paper 1: use it to open any essay on scarcity and choice, or on the trade-off between consumption now and growth later.



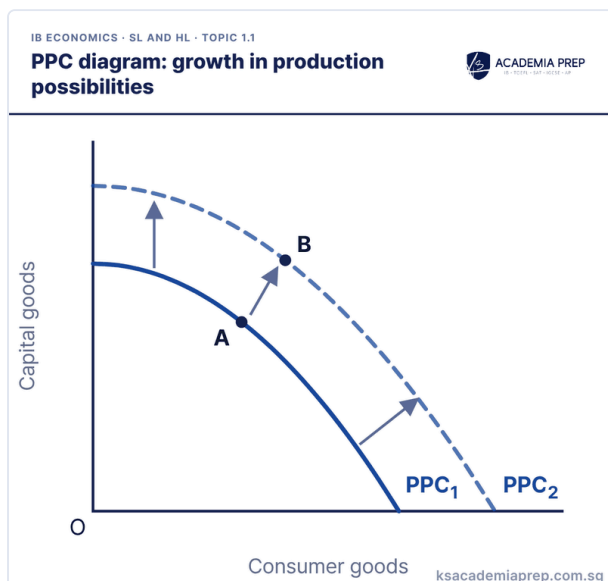
IB 1.1 · SL + HL

PPC diagram: unemployment and actual growth

HOW TO DRAW IT

1. Label the vertical axis Capital goods and the horizontal axis Consumer goods.
2. Draw one concave curve labelled PPC. Mark U inside it, labelled Unemployed resources, and A on the curve up and to the right of U.
3. Draw dashed lines from U to K₁ and C₁ and from A to K₂ and C₂, with an arrow from U to A. Do not shift the PPC.

Do not shift the curve for actual growth; only the point moves. Paper 1: contrast this with an outward shift when asked to distinguish actual from potential growth.



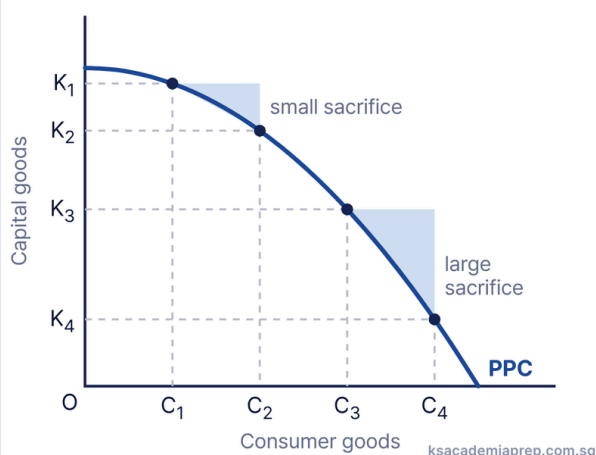
IB 1.1 · SL + HL

PPC diagram: growth in production possibilities

HOW TO DRAW IT

1. Label the vertical axis Capital goods and the horizontal axis Consumer goods.
2. Draw a concave curve labelled PPC₁, then a second concave curve further out labelled PPC₂, with an arrow showing the outward shift.
3. Mark A on PPC₁ and B on PPC₂ up and to the right of A. State the cause of the shift in your answer.

Name the cause of the shift (for example investment in capital goods or education), not just "growth". Paper 1: pair it with the actual growth diagram to separate the two ideas.

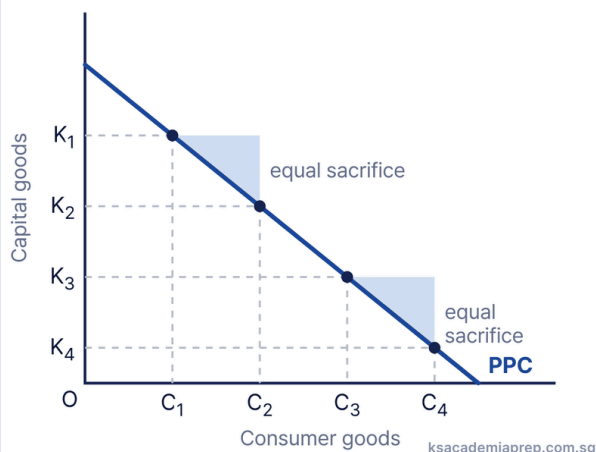
PPC diagram: increasing opportunity cost

IB 1.1 · SL + HL

PPC diagram: increasing opportunity cost**HOW TO DRAW IT**

1. Label the vertical axis Capital goods and the horizontal axis Consumer goods.
2. Draw a concave curve bowed outward from the origin and label it PPC.
3. Mark equal steps C_1 to C_2 and C_3 to C_4 , with dashed lines to the curve and across to K_1 , K_2 , K_3 and K_4 . Label small sacrifice and large sacrifice.

Make the two steps on the horizontal axis equal in width so the growing sacrifice is obvious. Paper 1: explain the concave shape with the idea that factors of production are specialised.

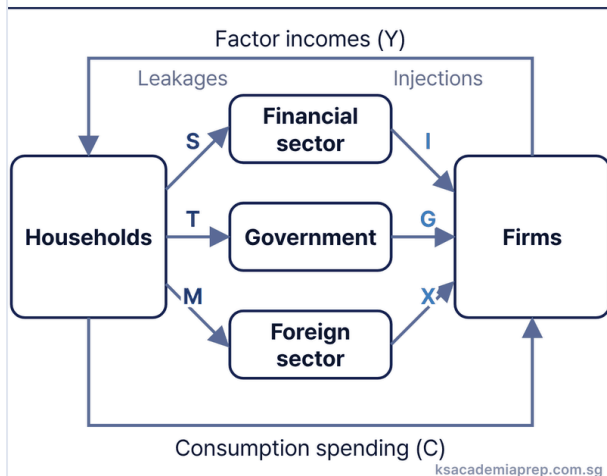
PPC diagram: constant opportunity cost

IB 1.1 · SL + HL

PPC diagram: constant opportunity cost**HOW TO DRAW IT**

1. Label the vertical axis Capital goods and the horizontal axis Consumer goods.
2. Draw a straight line from the vertical axis to the horizontal axis and label it PPC.
3. Mark equal steps C_1 to C_2 and C_3 to C_4 , with dashed lines to the line and across to K_1 , K_2 , K_3 and K_4 . Label both drops equal sacrifice.

The constant slope is the opportunity cost; say so explicitly. Paper 1: use it as the contrast case when explaining why most PPCs are drawn concave.

Circular flow diagram: leakages and injections

IB 1.1 · SL + HL

Circular flow diagram: leakages and injections**HOW TO DRAW IT**

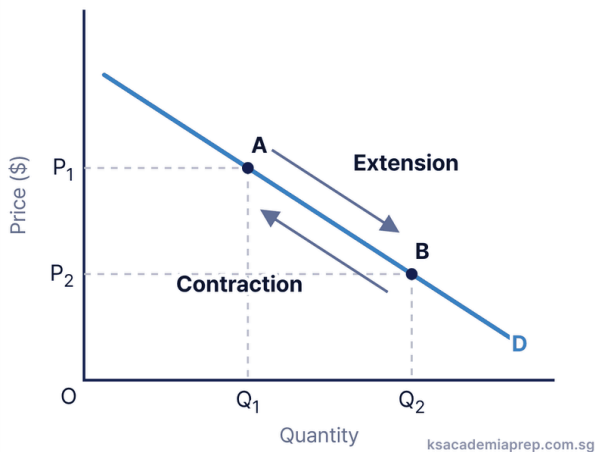
1. Draw two boxes, Households and Firms. Add an arrow of Factor incomes (Y) to households and an arrow of Consumption spending (C) to firms.
2. Draw three sector boxes, Financial sector, Government and Foreign sector, with a Leakages side and an Injections side.
3. Draw leakage arrows S, T and M from the flow into each sector, and injection arrows I, G and X from each sector back into the flow towards firms.

Pair each leakage with its matching injection and sector (S with I, T with G, M with X). Paper 1: use it to explain why a fall in exports or investment reduces national income.

UNIT 2: MICROECONOMICS

IB ECONOMICS · SL AND HL · TOPIC 2.1

Movement along the demand curve diagram



IB 2.1 · SL + HL

Movement along the demand curve diagram

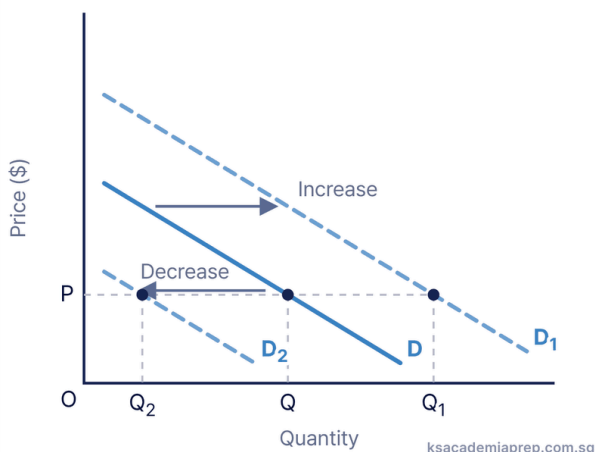
HOW TO DRAW IT

1. Label the vertical axis Price (\$) and the horizontal axis Quantity.
2. Draw one downward-sloping demand curve and label it D.
3. Mark A at P_1, Q_1 and B at P_2, Q_2 with dashed lines to the axes. Label Extension from A to B and Contraction back. Do not shift D.

Say "quantity demanded" for a movement and keep "demand" for a shift of the whole curve. Paper 1: this is the vocabulary examiners check before they read your analysis.

IB ECONOMICS · SL AND HL · TOPIC 2.1

Demand shift diagram: increase and decrease



IB 2.1 · SL + HL

Demand shift diagram: increase and decrease

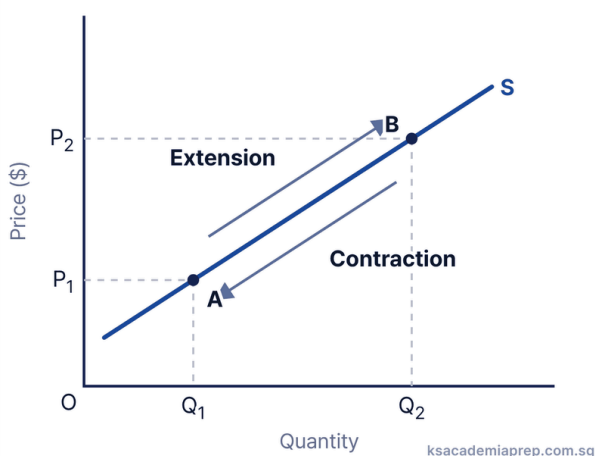
HOW TO DRAW IT

1. Label the vertical axis Price (\$) and the horizontal axis Quantity.
2. Draw the original demand curve D, then D_1 to its right and D_2 to its left, with arrows labelled Increase and Decrease.
3. Draw a dashed line across at price P and drop dashed lines to Q_2, Q and Q_1 where it meets D_2, D and D_1 .

Name the determinant and its direction before you draw the shift. Paper 2: a news extract almost always gives you the determinant, so quote it next to the arrow.

IB ECONOMICS · SL AND HL · TOPIC 2.2

Movement along the supply curve diagram



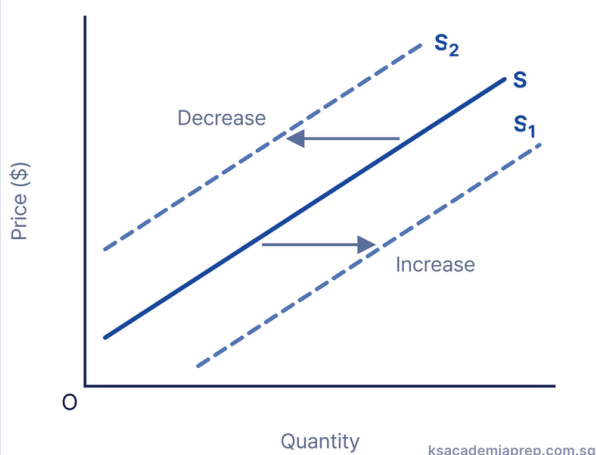
IB 2.2 · SL + HL

Movement along the supply curve diagram

HOW TO DRAW IT

1. Label the vertical axis Price (\$) and the horizontal axis Quantity.
2. Draw one upward-sloping supply curve and label it S.
3. Mark A at P_1, Q_1 and B at P_2, Q_2 with dashed lines to the axes. Label Extension from A to B and Contraction back. Do not shift S.

Do not shift the supply curve when the good's own price changes. Paper 1: link the upward slope to rising marginal cost to show understanding, not just a rule.

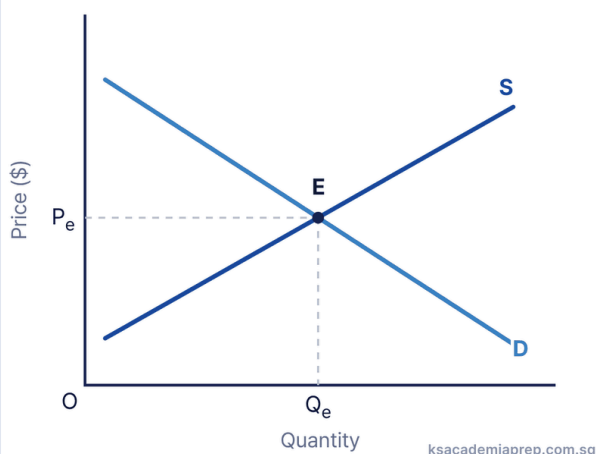
Supply shift diagram: increase and decrease

IB 2.2 · SL + HL

Supply shift diagram: increase and decrease**HOW TO DRAW IT**

1. Label the vertical axis Price (\$) and the horizontal axis Quantity.
2. Draw the original upward-sloping supply curve S, then S₁ to its right and S₂ to its left.
3. Draw horizontal arrows labelled Increase towards S₁ and Decrease towards S₂. An increase in supply sits lower on the diagram, not higher.

An increase in supply is a shift to the right, which on the diagram looks lower, not higher. Paper 2: say which cost changed and draw the arrow horizontally between the curves.

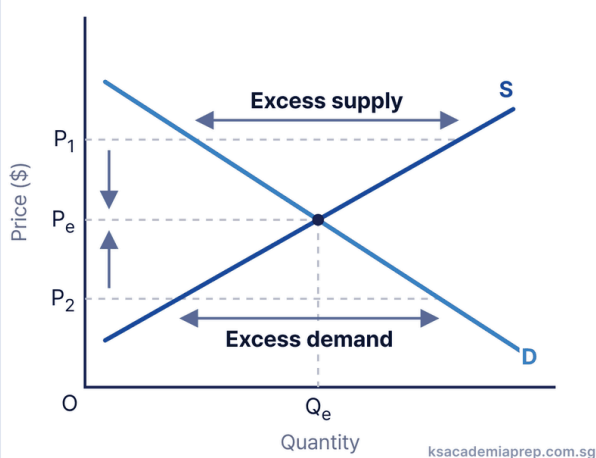
Market equilibrium diagram

IB 2.3 · SL + HL

Market equilibrium diagram**HOW TO DRAW IT**

1. Label the vertical axis Price (\$) and the horizontal axis Quantity, with O at the origin.
2. Draw a downward-sloping D and an upward-sloping S, and label both.
3. Mark the point where they cross as E and draw dashed lines from it to both axes, labelled P_e and Q_e.

Label the axes "Price (\$)" and "Quantity", not "P" and "Q". Paper 1: every microeconomics answer starts from this equilibrium before anything shifts.

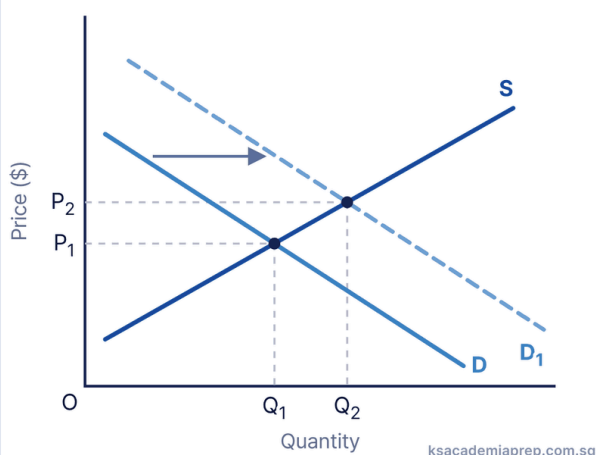
Excess demand and excess supply diagram

IB 2.3 · SL + HL

Excess demand and excess supply diagram**HOW TO DRAW IT**

1. Label the vertical axis Price (\$) and the horizontal axis Quantity. Draw and label D and S, and mark P_e and Q_e.
2. Draw a horizontal line at P₁ above P_e and label the gap between D and S Excess supply.
3. Draw a horizontal line at P₂ below P_e and label the gap between D and S Excess demand. Add arrows showing the price moving back to P_e.

Measure the gap horizontally along the price line, from the demand curve to the supply curve. Paper 1: name all three functions of price (signalling, incentive, rationing) as the price moves back.

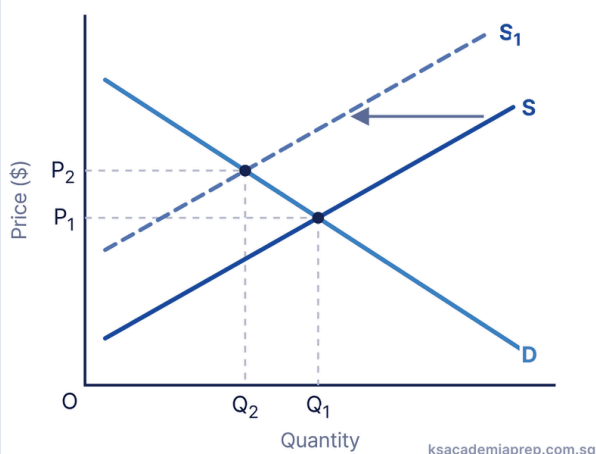
Increase in demand diagram: new equilibrium

IB 2.3 · SL + HL

Increase in demand diagram: new equilibrium**HOW TO DRAW IT**

1. Label the vertical axis Price (\$) and the horizontal axis Quantity. Draw D and S and mark the first equilibrium at P_1 and Q_1 .
2. Draw D_1 to the right of D and add an arrow showing the shift.
3. Mark the new equilibrium where D_1 crosses S, with dashed lines to P_2 and Q_2 . Do not shift S: quantity supplied extends along it.

Show the movement along S as well as the shift of D, and never shift both curves unless both determinants changed. Paper 2: this is the standard answer to “use a diagram to explain the rise in price”.

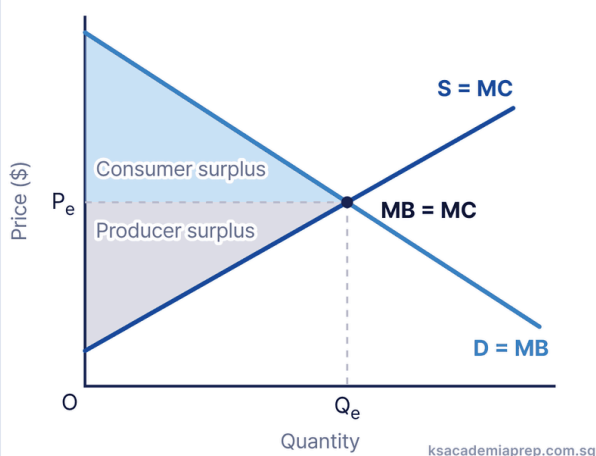
Decrease in supply diagram: new equilibrium

IB 2.3 · SL + HL

Decrease in supply diagram: new equilibrium**HOW TO DRAW IT**

1. Label the vertical axis Price (\$) and the horizontal axis Quantity. Draw D and S and mark the first equilibrium at P_1 and Q_1 .
2. Draw S_1 to the left of S, parallel to it, and add an arrow showing the shift.
3. Mark the new equilibrium where S_1 crosses D, with dashed lines to P_2 and Q_2 . Do not shift D: quantity demanded contracts along it.

Draw the new supply curve parallel to the old one and label both equilibria on the axes. Paper 2: use it for any supply shock in the extract, such as droughts, strikes or oil prices.

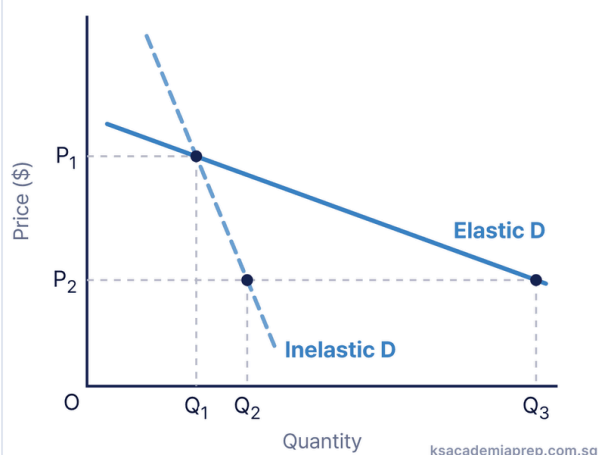
Consumer and producer surplus diagram

IB 2.3 · SL + HL

Consumer and producer surplus diagram**HOW TO DRAW IT**

1. Label the vertical axis Price (\$) and the horizontal axis Quantity.
2. Draw a downward-sloping curve labelled $D = MB$ and an upward-sloping curve labelled $S = MC$, and label where they cross $MB = MC$.
3. Draw dashed lines to P_e and Q_e . Shade Consumer surplus between $D = MB$ and P_e , and Producer surplus between P_e and $S = MC$, both ending at Q_e .

Both surplus areas stop at Q_e and meet along the P_e line. Paper 3: HL students calculate each triangle as $\frac{1}{2} \times Q_e \times$ the vertical distance from P_e to the curve's intercept.

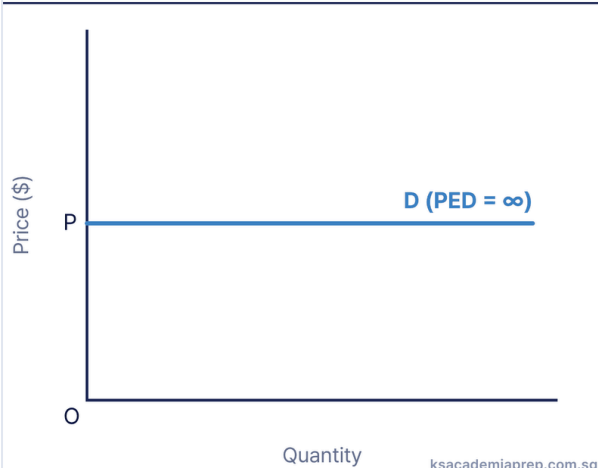
Relatively elastic vs inelastic demand diagram

IB 2.5 · SL + HL

Relatively elastic vs inelastic demand diagram**HOW TO DRAW IT**

1. Label the vertical axis Price (\$) and the horizontal axis Quantity.
2. Draw a steep curve labelled Inelastic D and a flatter curve labelled Elastic D, both passing through one shared point at P_1 and Q_1 .
3. Draw a dashed line at the lower price P_2 and drop dashed lines to Q_2 on Inelastic D and Q_3 on Elastic D.

Draw both curves through one shared point so the comparison is fair, since slope alone is not elasticity. Paper 2: use it to explain why a tax on cigarettes or petrol raises revenue but barely cuts consumption.

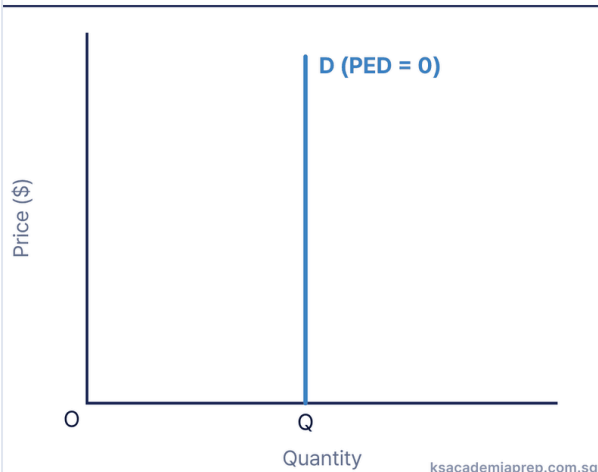
Perfectly elastic demand diagram (PED = ∞)

IB 2.5 · SL + HL

Perfectly elastic demand diagram (PED = ∞)**HOW TO DRAW IT**

1. Label the vertical axis Price (\$) and the horizontal axis Quantity, with O at the origin.
2. Mark P on the price axis and draw a perfectly horizontal line from it.
3. Label the line D (PED = ∞) so it is not mistaken for a price control. Do not tilt the line.

Keep the line perfectly flat and label it with PED = ∞ so it is not confused with a price control. Paper 1: use it as the theoretical limit when evaluating how close real goods come to it.

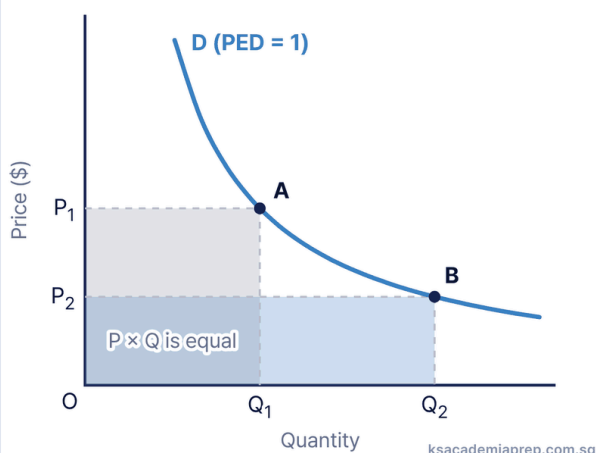
Perfectly inelastic demand diagram (PED = 0)

IB 2.5 · SL + HL

Perfectly inelastic demand diagram (PED = 0)**HOW TO DRAW IT**

1. Label the vertical axis Price (\$) and the horizontal axis Quantity, with O at the origin.
2. Mark Q on the quantity axis and draw a perfectly vertical line up from it.
3. Label the line D (PED = 0). Draw it vertical, not just steep.

Draw the curve vertical, not just steep, and label PED = 0. Paper 1: contrast it with relatively inelastic demand to show that zero is only a theoretical limit.

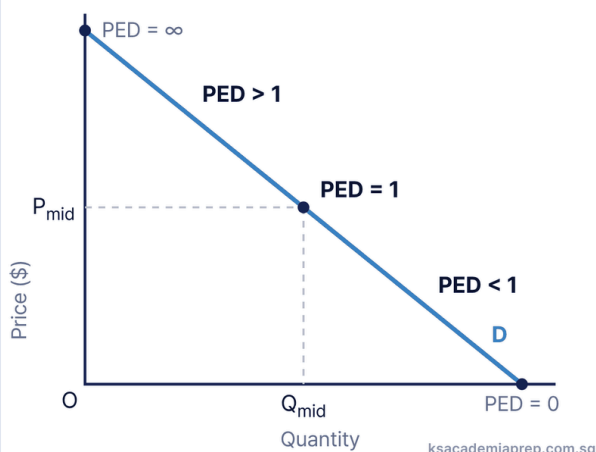
**Unitary elastic demand diagram
(PED = 1)**

IB 2.5 · SL + HL

Unitary elastic demand diagram (PED = 1)**HOW TO DRAW IT**

1. Label the vertical axis Price (\$) and the horizontal axis Quantity.
2. Draw a smooth curve bowed towards the origin that never touches either axis, and label it D (PED = 1).
3. Mark A at P_1, Q_1 and B at P_2, Q_2 on the curve. Draw both revenue rectangles and label them $P \times Q$ is equal.

Draw a smooth curve that never touches either axis, not a straight line. Paper 1: use it to explain why a price change leaves total revenue unchanged when PED = 1.

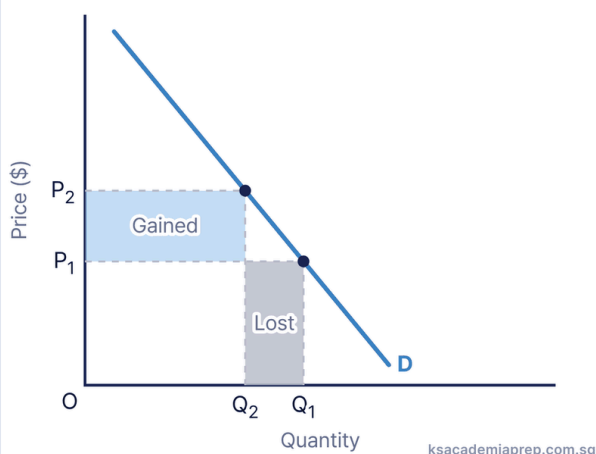
PED along a straight-line demand curve diagram

IB 2.5 · HL ONLY

PED along a straight-line demand curve diagram**HOW TO DRAW IT**

1. Label the vertical axis Price (\$) and the horizontal axis Quantity.
2. Draw a straight downward-sloping line from the price axis to the quantity axis and label it D.
3. Label the midpoint PED = 1, dashed to P_{mid} and Q_{mid} . Add PED > 1 above, PED < 1 below, PED = infinity and PED = 0 at the ends.

Never say a straight-line demand curve has one elasticity just because its slope is constant. Paper 3: calculate PED between two points on the line to show that the value depends on where you measure it.

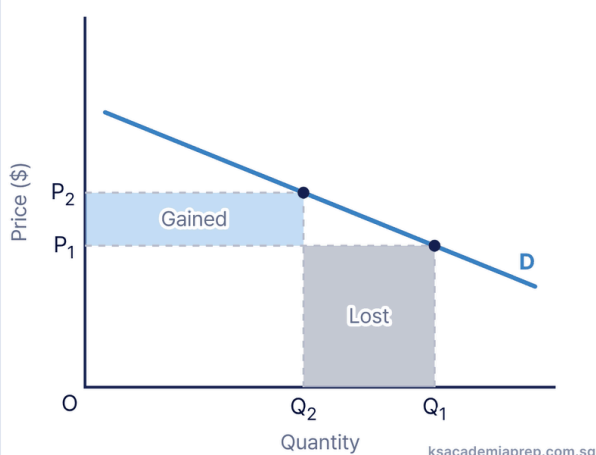
PED and total revenue diagram: inelastic demand

IB 2.5 · SL + HL

PED and total revenue diagram: inelastic demand**HOW TO DRAW IT**

1. Label the vertical axis Price (\$) and the horizontal axis Quantity. Draw a steep downward-sloping curve labelled D.
2. Mark P_1, Q_1 and the higher price P_2 with its smaller quantity Q_2 on D, with dashed lines to both axes.
3. Shade the rectangle between P_1 and P_2 up to Q_2 as Gained, and the rectangle under P_1 between Q_2 and Q_1 as Lost. Gained is larger.

Compare the two rectangles, not the lengths of the price and quantity changes. Paper 3: calculate total revenue before and after ($P \times Q$) and state the change.

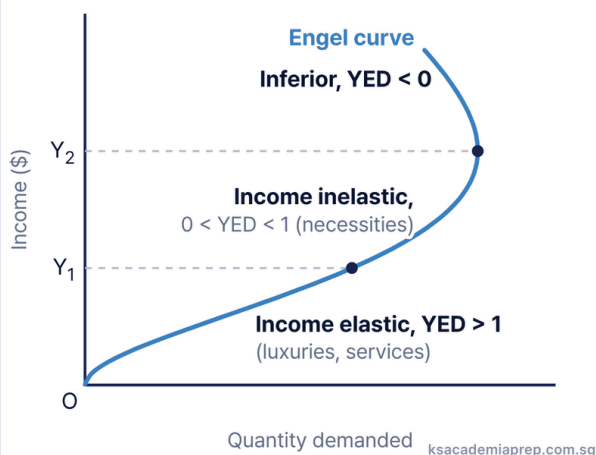
PED and total revenue diagram: elastic demand

IB 2.5 · SL + HL

PED and total revenue diagram: elastic demand**HOW TO DRAW IT**

1. Label the vertical axis Price (\$) and the horizontal axis Quantity. Draw a flat downward-sloping curve labelled D.
2. Mark P_1 , Q_1 and the higher price P_2 with its much smaller quantity Q_2 on D, with dashed lines to both axes.
3. Shade the rectangle between P_1 and P_2 up to Q_2 as Gained, and the rectangle under P_1 between Q_2 and Q_1 as Lost. Lost is larger.

Shade the two rectangles in different tones and say which is bigger. Paper 3: calculate $P_1 \times Q_1$ and $P_2 \times Q_2$ to prove the fall in total revenue.

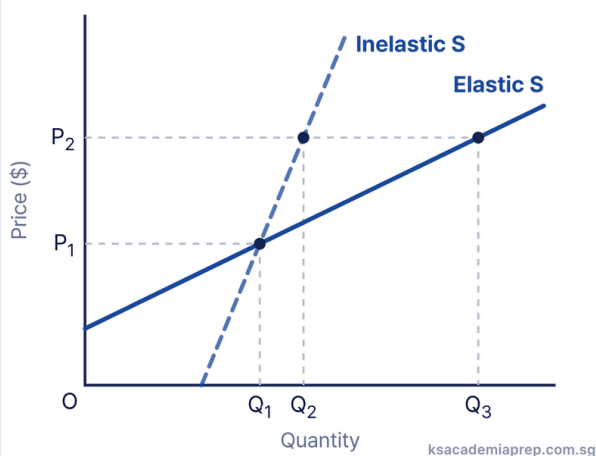
Engel curve diagram

IB 2.5 · SL + HL

Engel curve diagram**HOW TO DRAW IT**

1. Label the vertical axis Income (\$) and the horizontal axis Quantity demanded.
2. Draw the curve rising gently up to Y_1 , then steeply up to Y_2 , then bending back to the left above Y_2 . Label it Engel curve.
3. Mark Y_1 and Y_2 with dashed lines. Label the sections income elastic ($YED > 1$), income inelastic ($0 < YED < 1$) and inferior ($YED < 0$).

Put income on the vertical axis and quantity demanded on the horizontal axis. Paper 1: use it to show how the same good can change category as incomes rise, and why firms and countries care about YED.

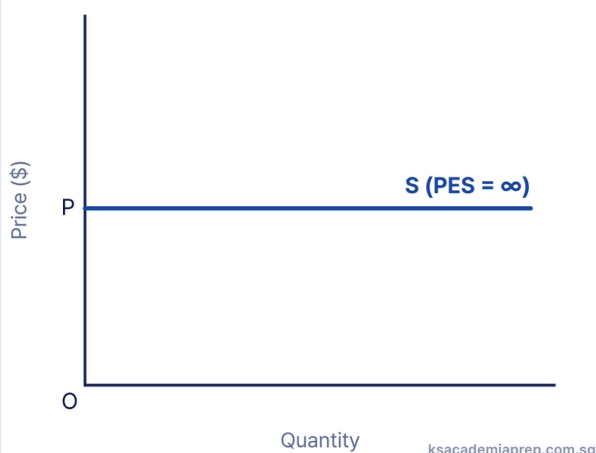
Relatively elastic vs inelastic supply diagram

IB 2.6 · SL + HL

Relatively elastic vs inelastic supply diagram**HOW TO DRAW IT**

1. Label the vertical axis Price (\$) and the horizontal axis Quantity.
2. Draw a steep curve labelled Inelastic S and a flatter curve labelled Elastic S, both passing through one shared point at P_1 and Q_1 .
3. Draw a dashed line at the higher price P_2 and drop dashed lines to Q_2 on Inelastic S and Q_3 on Elastic S.

A straight supply curve starting on the price axis always has $PES > 1$, and one starting on the quantity axis has $PES < 1$. Paper 2: use it to explain why farm prices swing so much when demand changes.

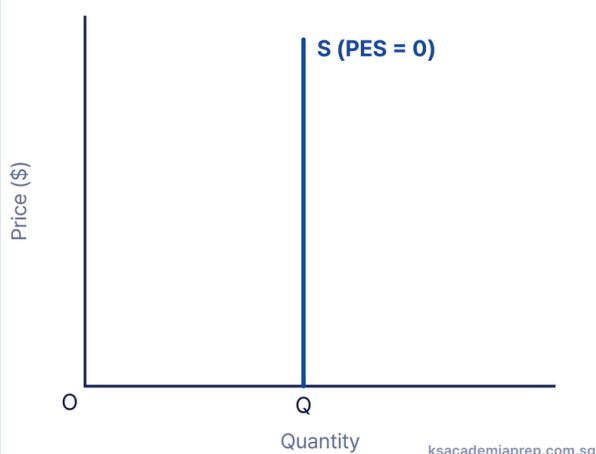
**Perfectly elastic supply diagram
($PES = \infty$)**

IB 2.6 · SL + HL

Perfectly elastic supply diagram ($PES = \infty$)**HOW TO DRAW IT**

1. Label the vertical axis Price (\$) and the horizontal axis Quantity, with O at the origin.
2. Mark P on the price axis and draw a perfectly horizontal line from it.
3. Label the line S ($PES = \infty$) so it is not read as a price floor. Do not tilt the line.

Label it S with $PES = \infty$ so it is not read as a price floor. Paper 1: use it as the benchmark when evaluating how quickly firms can respond to a price rise.

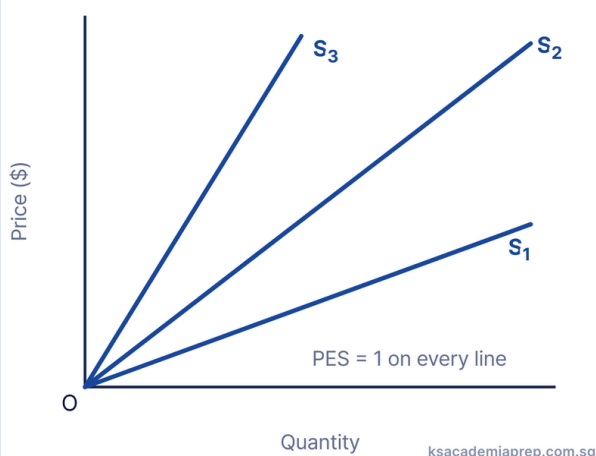
**Perfectly inelastic supply diagram
($PES = 0$)**

IB 2.6 · SL + HL

Perfectly inelastic supply diagram ($PES = 0$)**HOW TO DRAW IT**

1. Label the vertical axis Price (\$) and the horizontal axis Quantity, with O at the origin.
2. Mark Q on the quantity axis and draw a perfectly vertical line up from it.
3. Label the line S ($PES = 0$). Draw it vertical, not just steep.

Draw the curve vertical, not just steep, and label $PES = 0$. Paper 1: use it to show that in the momentary period price is set entirely by demand.

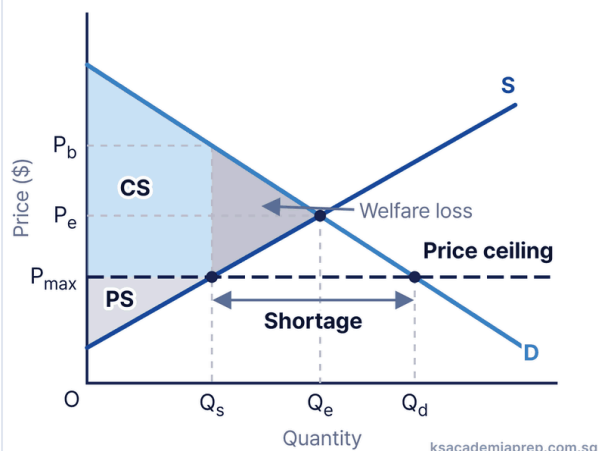
Unitary elastic supply diagram ($PES = 1$)

IB 2.6 · SL + HL

Unitary elastic supply diagram ($PES = 1$)**HOW TO DRAW IT**

1. Label the vertical axis Price (\$) and the horizontal axis Quantity, with O at the origin.
2. Draw three straight upward-sloping lines of different slopes, all starting at O, and label them S_1 , S_2 and S_3 .
3. Add the label $PES = 1$ on every line. Start each line exactly at the origin, not on either axis.

Slope is not elasticity: a steep line through the origin is just as unit elastic as a flat one. Paper 1: use it when explaining why PES depends on where the curve meets the axes.

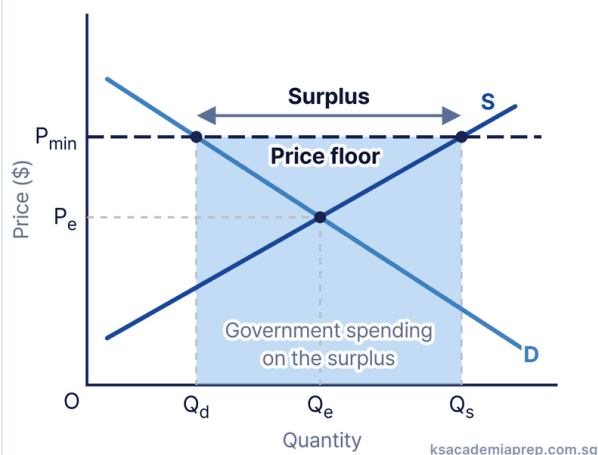
Price ceiling (maximum price) diagram

IB 2.7 · SL + HL

Price ceiling (maximum price) diagram**HOW TO DRAW IT**

1. Label the vertical axis Price (\$) and the horizontal axis Quantity. Draw D and S and mark P_e and Q_e .
2. Draw a horizontal line at P_{max} below P_e and label it Price ceiling. Read off Q_s on S and Q_d on D and label the gap Shortage.
3. Draw a dashed line up from Q_s to D and across to P_b . Shade CS, PS and the Welfare loss triangle between Q_s and Q_e . Do not shift either curve.

Draw the ceiling below equilibrium; a ceiling above P_e has no effect. Paper 3: calculate the shortage ($Q_d - Q_s$) and the welfare loss as $\frac{1}{2} \times (Q_e - Q_s) \times (P_b - P_{max})$.

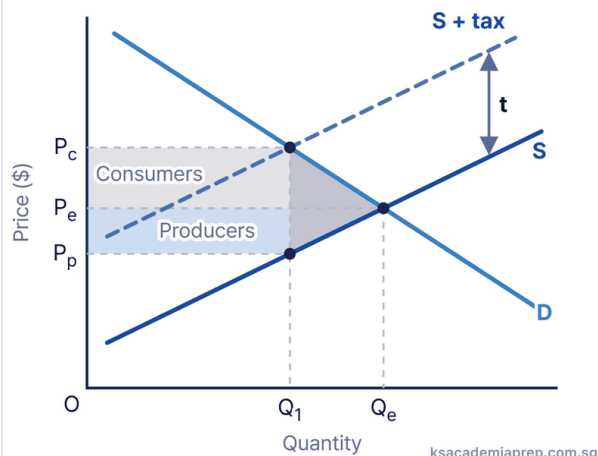
Price floor (minimum price) diagram

IB 2.7 · SL + HL

Price floor (minimum price) diagram**HOW TO DRAW IT**

1. Label the axes Price (\$) and Quantity, then draw D and S and mark P_e and Q_e .
2. Draw a horizontal line above P_e , label it Price floor and P_{min} , and read off Q_d on D and Q_s on S.
3. Label the gap from Q_d to Q_s as the Surplus, and shade the rectangle between Q_d and Q_s from P_{min} down to the quantity axis as government spending. Do not shift either curve.

The government spending rectangle runs from Q_d to Q_s and all the way down to the quantity axis. Paper 3: calculate the cost as $P_{min} \times (Q_s - Q_d)$.

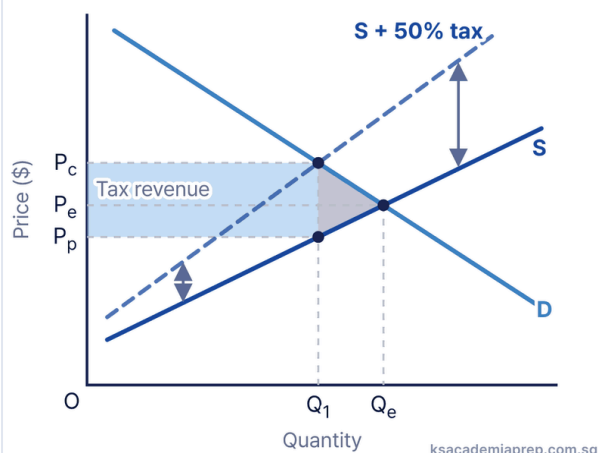
Specific (indirect) tax diagram

IB 2.7 · SL + HL

Specific (indirect) tax diagram**HOW TO DRAW IT**

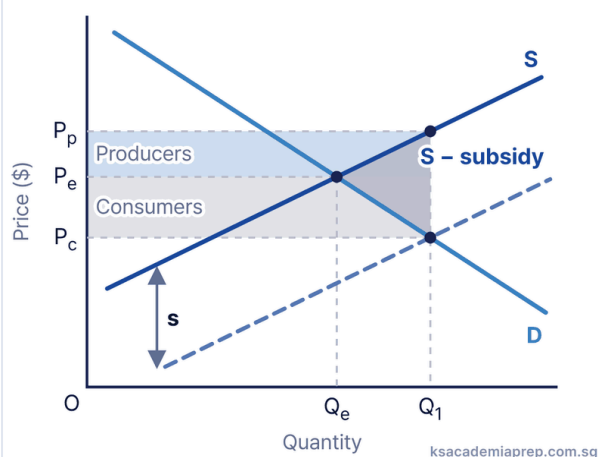
1. Label the axes Price (\$) and Quantity, draw D and S, and mark the first equilibrium at P_e and Q_e .
2. Draw $S + tax$ parallel to and above S, and label the vertical gap between them t , the tax per unit.
3. Mark Q_1 where $S + tax$ meets D, read P_c off D and P_p off S, then shade the consumer and producer shares and the welfare loss.

The price consumers pay rises by less than the tax unless demand is perfectly inelastic or supply is perfectly elastic. Paper 3: calculate revenue as $t \times Q_1$, then split it into the consumer and producer shares.

Ad valorem (percentage) tax diagram**IB 2.7 · EXTENSION****Ad valorem (percentage) tax diagram****HOW TO DRAW IT**

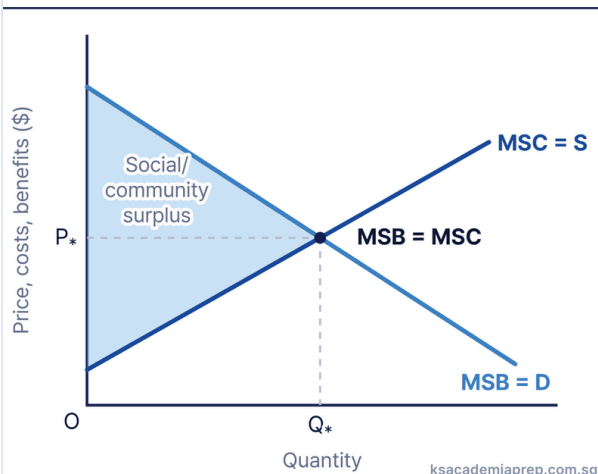
1. Label the axes Price (\$) and Quantity, draw D and S , and mark P_e and Q_e .
2. Draw $S + 50\% \text{ tax}$ pivoting upwards from S , steeper than S , so the vertical gap widens as price rises.
3. Mark Q_1 where $S + 50\% \text{ tax}$ meets D , read off P_c and P_p , and shade the tax revenue and welfare loss. Do not draw a parallel shift.

Draw $S + \text{tax}$ steeper than S so the vertical gap widens as price rises; a parallel shift would be a specific tax. Paper 1: use it to discuss GST, which Singapore levies as a percentage of the price.

Subsidy diagram**IB 2.7 · SL + HL****Subsidy diagram****HOW TO DRAW IT**

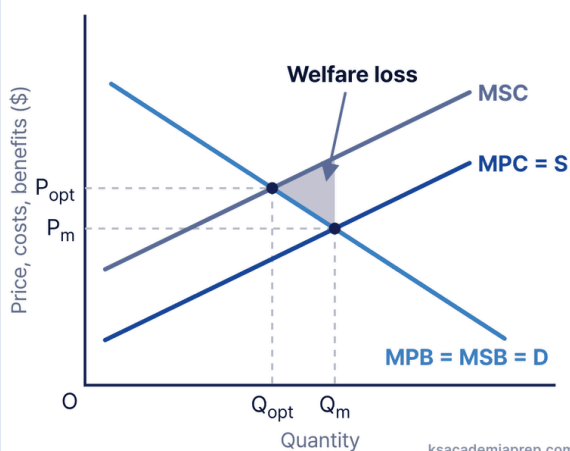
1. Label the axes Price (\$) and Quantity, draw D and S , and mark P_e and Q_e .
2. Draw $S - \text{subsidy}$ parallel to and below S , and label the vertical gap between them s , the subsidy per unit.
3. Mark Q_1 where $S - \text{subsidy}$ meets D , read P_c off D and P_p off S , and shade the government spending rectangle from P_c to P_p .

The price consumers pay falls by less than the subsidy, so draw P_c less than s below P_e . Paper 3: calculate government spending as $s \times Q_1$ and the welfare loss as a triangle.

Allocative efficiency diagram (MSB = MSC)**IB 2.8 · SL + HL****Allocative efficiency diagram (MSB = MSC)****HOW TO DRAW IT**

1. Label the axes Price, costs, benefits (\$) and Quantity.
2. Draw a downward-sloping $MSB = D$ and an upward-sloping $MSC = S$, and label both.
3. Mark the point $MSB = MSC$ with dashed lines to P_* and Q_* , then shade the social/community surplus between the curves up to Q_* .

Say " $MSB = MSC$ " rather than just " $\text{demand} = \text{supply}$ " so the examiner sees you link equilibrium to allocative efficiency. Paper 1: use it as the benchmark before you draw any market failure diagram.

Negative externality of production diagram

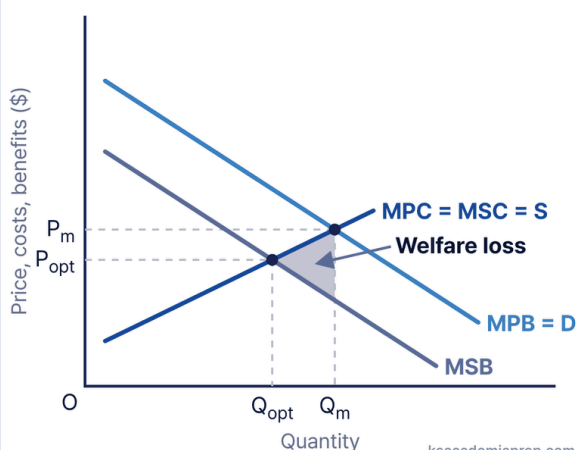
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IB 2.8 · SL + HL

Negative externality of production diagram**HOW TO DRAW IT**

1. Label the axes Price, costs, benefits (\$) and Quantity.
2. Draw $MPB = MSB = D$ sloping down, $MPC = S$ sloping up, and MSC above MPC .
3. Mark P_m and Q_m where $MPC = S$ meets D , and P_{opt} and Q_{opt} where MSC meets D . Shade the welfare loss triangle between Q_{opt} and Q_m .

The welfare loss triangle sits between MSC and MSB , from Q_{opt} to Q_m , with its point at Q_{opt} . Paper 2: this is the diagram behind most pollution and carbon questions.

Negative externality of consumption diagram

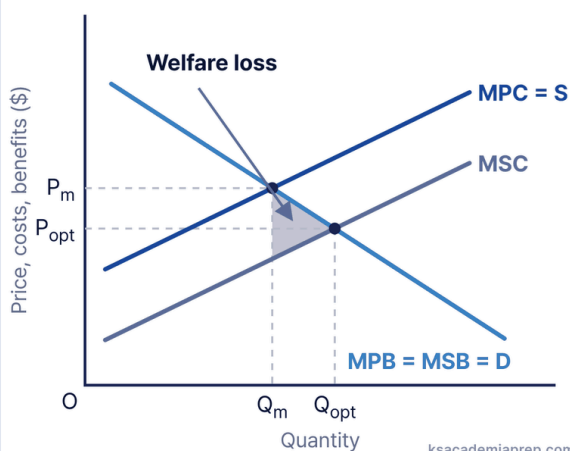
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IB 2.8 · SL + HL

Negative externality of consumption diagram**HOW TO DRAW IT**

1. Label the axes Price, costs, benefits (\$) and Quantity.
2. Draw $MPB = D$ sloping down, MSB below it, and $MPC = MSC = S$ sloping up.
3. Mark P_m and Q_m where $MPB = D$ meets S , and P_{opt} and Q_{opt} where MSB meets S . Shade the welfare loss triangle between Q_{opt} and Q_m .

Shift the benefit curve, not the cost curve: the external cost comes from consumers, so MSB sits below MPB . Paper 2: this is the standard diagram for demerit goods such as cigarettes, alcohol and sugary drinks.

Positive externality of production diagram

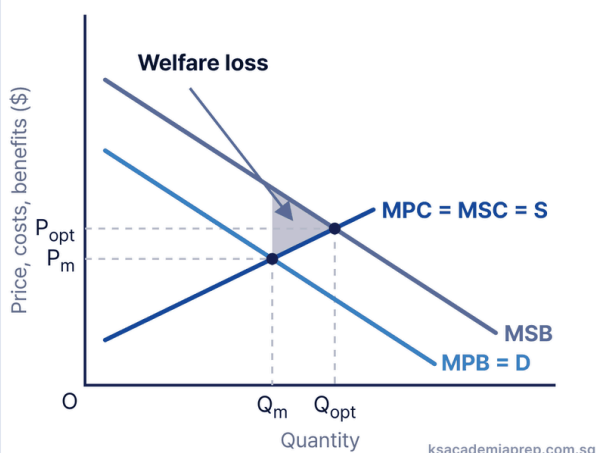
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IB 2.8 · SL + HL

Positive externality of production diagram**HOW TO DRAW IT**

1. Label the axes Price, costs, benefits (\$) and Quantity.
2. Draw $MPB = MSB = D$ sloping down, $MPC = S$ sloping up, and MSC below MPC .
3. Mark P_m and Q_m where $MPC = S$ meets D , and P_{opt} and Q_{opt} where MSC meets D . Shade the welfare loss triangle between Q_m and Q_{opt} .

The welfare loss triangle points right, towards Q_{opt} , because the market produces too little. Paper 1: pair it with a subsidy to producers or government provision as the policy response.

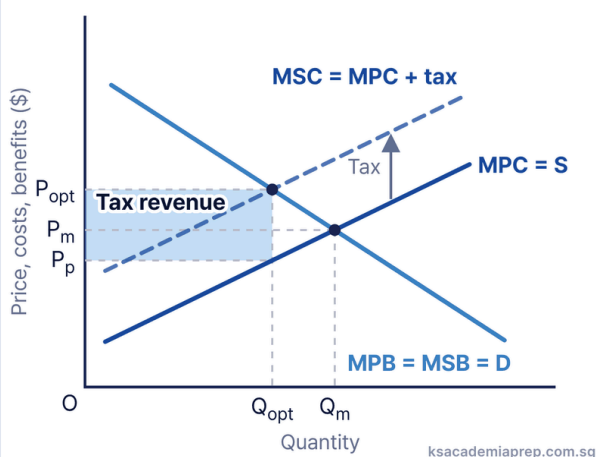
Positive externality of consumption diagram

IB 2.8 · SL + HL

Positive externality of consumption diagram**HOW TO DRAW IT**

1. Label the axes Price, costs, benefits (\$) and Quantity.
2. Draw $MPB = D$ sloping down, MSB parallel above it, and $MPC = MSC = S$ sloping up.
3. Mark P_m and Q_m where $MPB = D$ meets S , and P_{opt} and Q_{opt} where MSB meets S . Shade the welfare loss triangle between Q_m and Q_{opt} .

Keep MPB labelled as demand and draw MSB parallel above it, not pivoting from the axis. Paper 2: this is the diagram behind most education, healthcare and vaccination questions.

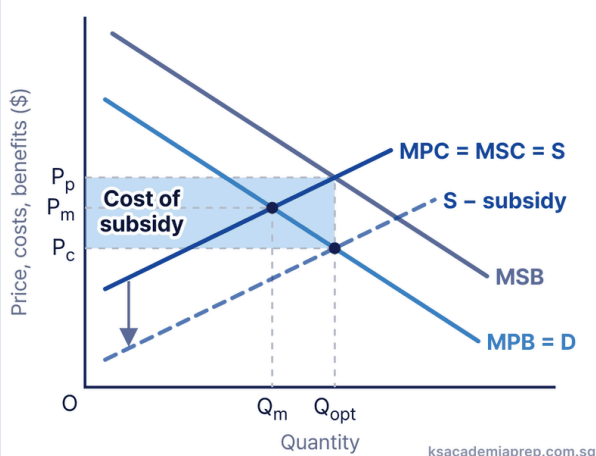
Pigouvian (carbon) tax diagram

IB 2.8 · SL + HL

Pigouvian (carbon) tax diagram**HOW TO DRAW IT**

1. Label the axes Price, costs, benefits (\$) and Quantity.
2. Draw $MPB = MSB = D$ and $MPC = S$, then $MSC = MPC + \text{tax}$ above MPC , labelling the vertical gap Tax.
3. Mark P_m and Q_m at the old equilibrium and P_{opt} and Q_{opt} at the new one. Read P_p off $MPC = S$ at Q_{opt} and shade the tax revenue.

Make the vertical gap between MPC and the new curve equal to the external cost, so the new curve lands exactly on MSC . Paper 3: tax revenue is $(P_{opt} - P_p) \times Q_{opt}$.

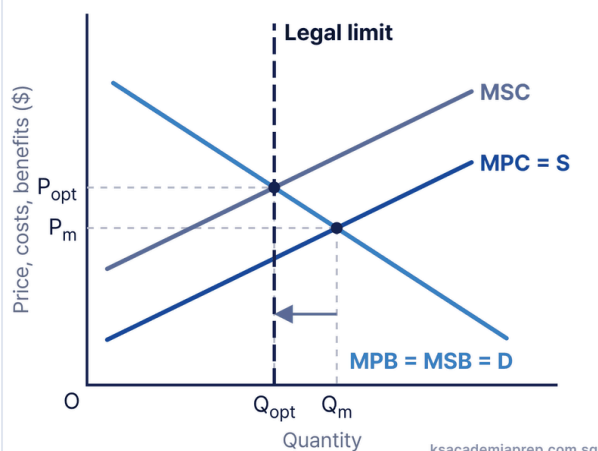
Subsidy diagram: positive consumption externality

IB 2.8 · SL + HL

Subsidy diagram: positive consumption externality**HOW TO DRAW IT**

1. Label the axes Price, costs, benefits (\$) and Quantity.
2. Draw $MPB = D$, MSB parallel above it, $MPC = MSC = S$, and $S - \text{subsidy}$ below S by the gap between MSB and MPB .
3. Mark P_m and Q_m , then Q_{opt} where $S - \text{subsidy}$ meets $MPB = D$. Read P_c off $MPB = D$ and P_p off S , and shade the cost of subsidy.

Shift supply down by exactly the vertical gap between MSB and MPB , so the new equilibrium lands on Q_{opt} . Paper 3: the cost to the government is $(P_p - P_c) \times Q_{opt}$, and there is an opportunity cost to that spending.

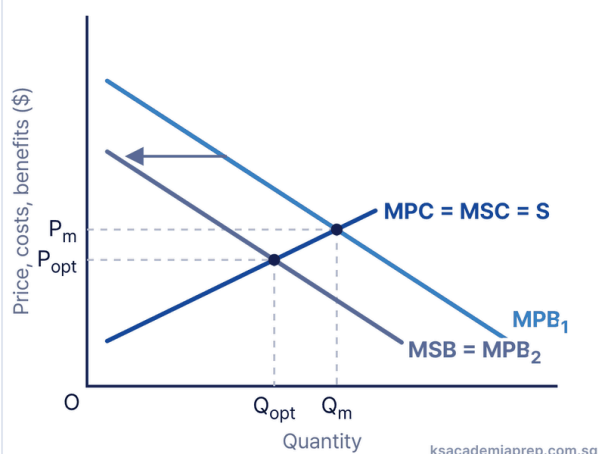
Legislation and regulation diagram

IB 2.8 · SL + HL

Legislation and regulation diagram**HOW TO DRAW IT**

1. Label the axes Price, costs, benefits (\$) and Quantity.
2. Draw $MPB = MSB = D$, $MPC = S$ and MSC above MPC , and mark P_m and Q_m where $MPC = S$ meets D .
3. Draw a vertical line at Q_{opt} , where MSC meets D , and label it Legal limit. Mark P_{opt} and show output falling from Q_m to Q_{opt} .

Evaluate: regulation is simple and certain, but the government must know where Q_{opt} is and pay to monitor firms. Paper 1: compare it with a Pigouvian tax, which raises revenue and gives firms an incentive to cut pollution further.

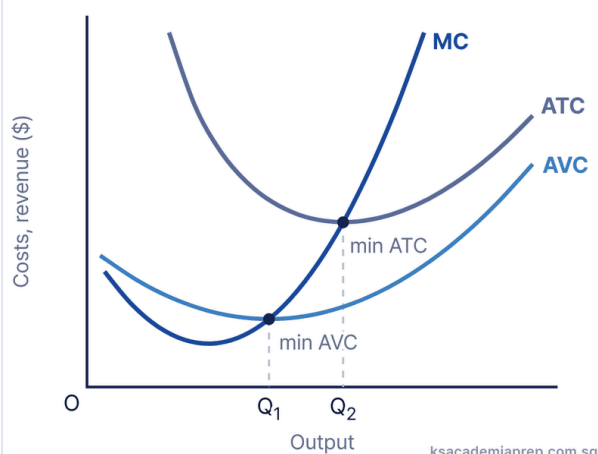
Education and awareness diagram (demerit good)

IB 2.8 · SL + HL

Education and awareness diagram (demerit good)**HOW TO DRAW IT**

1. Label the axes Price, costs, benefits (\$) and Quantity.
2. Draw $MPC = MSC = S$ sloping up and MPB_1 sloping down, and mark P_m and Q_m where they cross.
3. Draw $MSB = MPB_2$ to the left of MPB_1 with an arrow showing the shift, then mark P_{opt} and Q_{opt} . Do not shift the supply curve.

Label the shifted curve MPB_2 , not MSB alone, to show it is consumer behaviour that changes. Paper 1: evaluate that campaigns are slow, cost government money, and rarely shift MPB all the way to MSB .

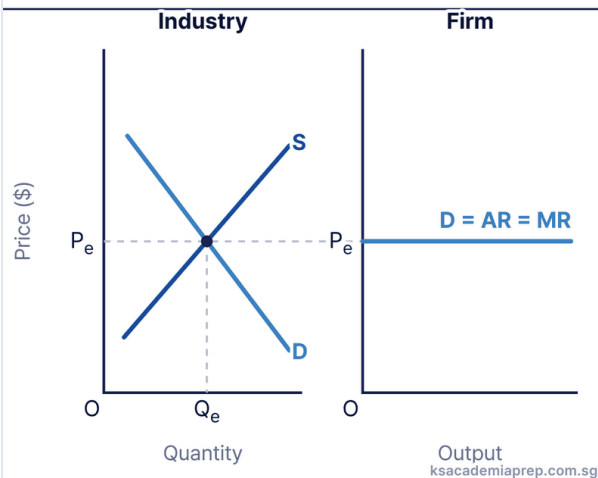
Cost curves diagram: MC, AVC and ATC

IB 2.11 · HL ONLY · EXTENSION

Cost curves diagram: MC, AVC and ATC**HOW TO DRAW IT**

1. Label the axes Costs, revenue (\$) and Output.
2. Draw U-shaped AVC and ATC , with ATC above AVC and the gap narrowing as output rises, then draw MC falling then rising.
3. Make MC cut AVC at min AVC (Q_1) and ATC at min ATC (Q_2), so Q_2 lies to the right of Q_1 .

The most common error is letting MC cross ATC or AVC away from their lowest points. Paper 1: draw this carefully first, because every market structure diagram is built on it.

Perfectly competitive firm as price taker diagram

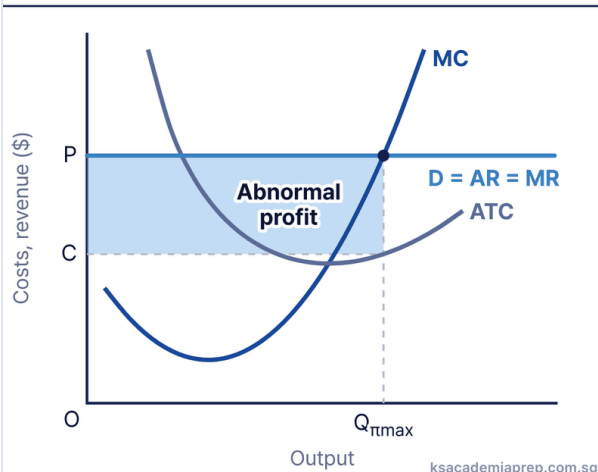
IB 2.11 · HL ONLY

Perfectly competitive firm as price taker diagram

HOW TO DRAW IT

1. Draw two panels side by side: Industry with axes Price (\$) and Quantity, and Firm with axes Price (\$) and Output.
2. In the Industry panel draw D and S, and mark P_e and Q_e where they cross.
3. Extend a horizontal dashed line from P_e into the Firm panel and label the firm's demand curve $D = AR = MR$.

Draw the two panels side by side with the price line running straight across, and label the firm's axis with output, not quantity. Paper 1: start every perfect competition answer from this diagram.

Perfect competition abnormal profit diagram

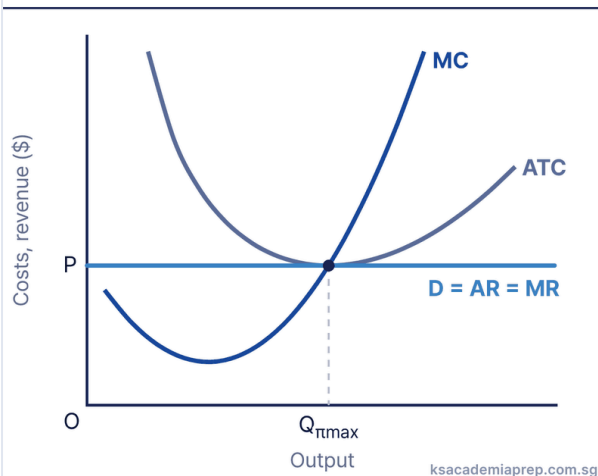
IB 2.11 · HL ONLY

Perfect competition abnormal profit diagram

HOW TO DRAW IT

1. Label the axes Costs, revenue (\$) and Output.
2. Draw a U-shaped ATC, MC cutting ATC at its minimum, and a horizontal $D = AR = MR$ at P above minimum ATC.
3. Mark $Q_{\pi\max}$ where MC cuts $D = AR = MR$ on its rising section, read C off ATC, and shade the abnormal profit between P and C .

Put the firm's output where MC cuts the price line on its rising section, not where it cuts ATC. Paper 3: abnormal profit is $(P - C) \times Q_{\pi\max}$.

Perfect competition normal profit diagram

IB 2.11 · HL ONLY

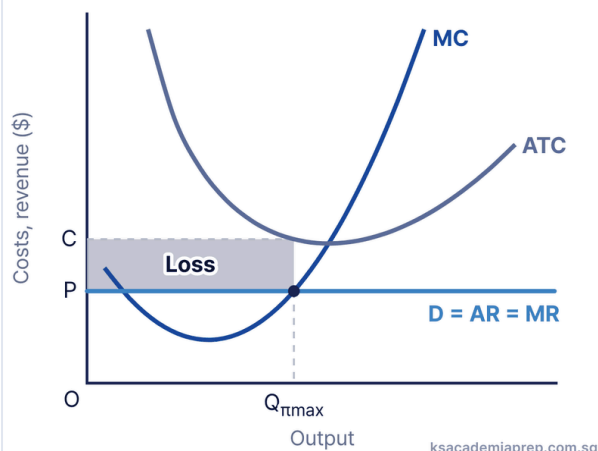
Perfect competition normal profit diagram

HOW TO DRAW IT

1. Label the axes Costs, revenue (\$) and Output.
2. Draw a U-shaped ATC and an MC curve that cuts ATC at its minimum point.
3. Draw $D = AR = MR$ as a horizontal line at P touching the minimum of ATC, and drop a dashed line from that point to $Q_{\pi\max}$.

The price line must touch ATC at its lowest point, and MC must pass through that same point. Paper 1: use it to explain why perfect competition is efficient in the long run.

Perfect competition losses diagram



IB 2.11 · HL ONLY

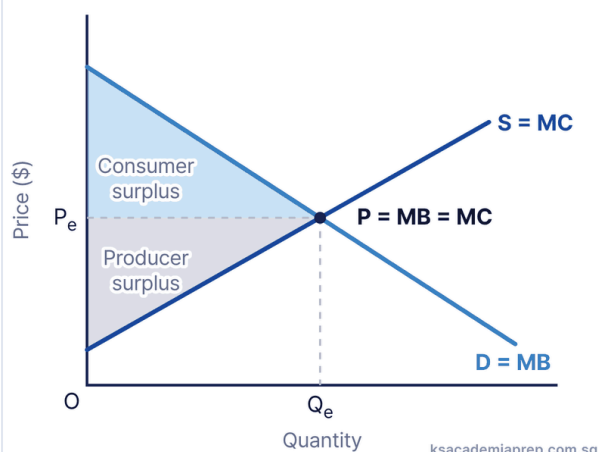
Perfect competition losses diagram

HOW TO DRAW IT

1. Label the axes Costs, revenue (\$) and Output.
2. Draw a U-shaped ATC, MC cutting ATC at its minimum, and a horizontal $D = AR = MR$ at P below minimum ATC.
3. Mark $Q_{\pi\max}$ where MC cuts $D = AR = MR$ on its rising section, read C off ATC above P , and shade the loss between C and P .

Read the cost C off ATC at the $MC = MR$ output, not at the lowest point of ATC.
 Paper 3: the loss is $(C - P) \times Q_{\pi\max}$.

Perfect competition allocative efficiency diagram



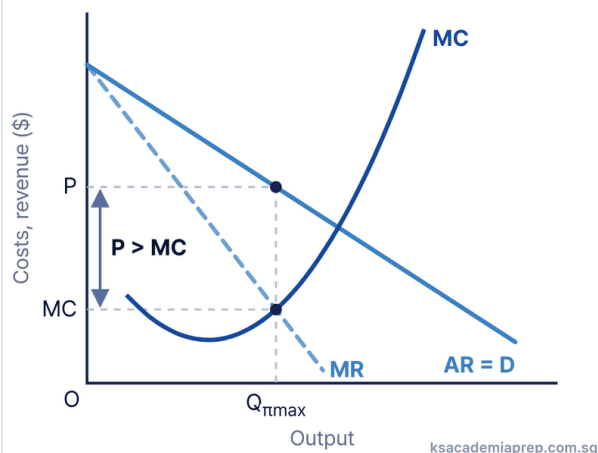
IB 2.11 · HL ONLY

Perfect competition allocative efficiency diagram

HOW TO DRAW IT

1. Label the axes Price (\$) and Quantity, with the price axis starting at O.
2. Draw a downward-sloping $D = MB$ and an upward-sloping $S = MC$, and label both.
3. Mark $P = MB = MC$ where they cross, with dashed lines to P_e and Q_e , then shade consumer surplus above P_e and producer surplus below it.

Label supply as MC and demand as MB, otherwise the $P = MC$ point is not visible to the examiner. Paper 1: use it as the benchmark to show the welfare loss of monopoly.

Market power diagram ($AR > MC$)

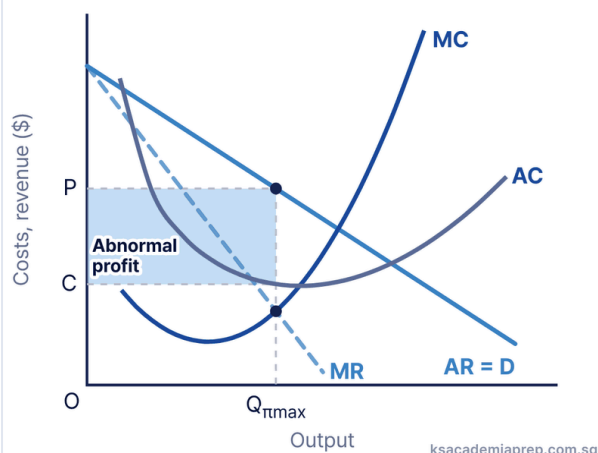
IB 2.11 · HL ONLY

Market power diagram ($AR > MC$)

HOW TO DRAW IT

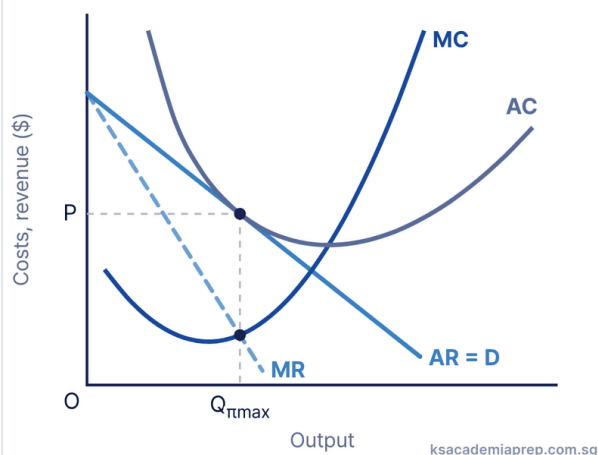
1. Label the axes Costs, revenue (\$) and Output.
2. Draw a downward-sloping $AR = D$, MR below it and twice as steep, and an MC curve that cuts MR from below.
3. Mark $Q_{\pi\max}$ where $MC = MR$, go up to AR to find P , and label the vertical gap between P and MC as $P > MC$.

Mark the vertical gap between P and MC at $Q_{\pi\max}$; that gap is the whole point of the diagram. Paper 2: use it for any news story about a dominant firm raising prices.

Monopoly abnormal profit diagram**IB 2.11 · HL ONLY****Monopoly abnormal profit diagram****HOW TO DRAW IT**

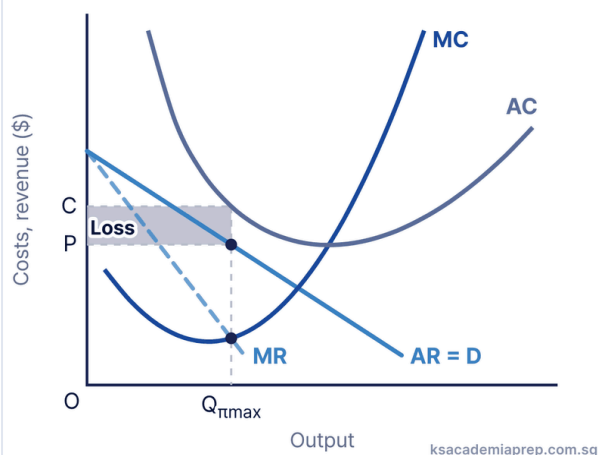
1. Label the axes Costs, revenue (\$) and Output.
2. Draw AR = D sloping down, MR twice as steep, and a U-shaped AC with MC cutting it at its lowest point.
3. Mark $Q_{\pi\max}$ where MC cuts MR from below, read P off AR and C off AC, and shade the abnormal profit between P and C.

Draw MR twice as steep as AR, and make MC cut AC at AC's lowest point. Paper 3: you may be asked to calculate the profit rectangle, $(P - C) \times Q$.

Monopoly normal profit diagram**IB 2.11 · HL ONLY****Monopoly normal profit diagram****HOW TO DRAW IT**

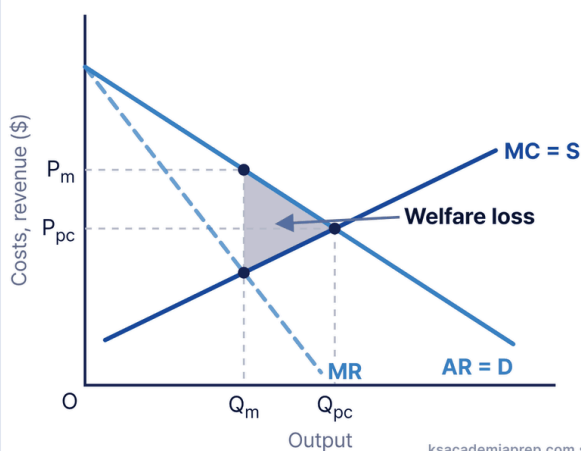
1. Label the axes Costs, revenue (\$) and Output.
2. Draw AR = D sloping down, MR twice as steep, and a U-shaped AC with MC cutting it at its lowest point.
3. Mark $Q_{\pi\max}$ where MC = MR, and draw AR just touching AC directly above it, on the falling part of AC, so P equals average cost.

AR must touch AC exactly above the MC = MR point, on the falling part of AC. Paper 1: use it to show that a monopoly does not always earn abnormal profit.

Monopoly losses diagram**IB 2.11 · HL ONLY****Monopoly losses diagram****HOW TO DRAW IT**

1. Label the axes Costs, revenue (\$) and Output.
2. Draw a U-shaped AC with MC cutting it at its lowest point, then AR = D below AC at every output, and MR twice as steep.
3. Mark $Q_{\pi\max}$ where MC = MR, read P off AR and C off AC, and shade the loss between C and P. Never read price off MR.

Take P from AR and C from AC, both directly above $Q_{\pi\max}$; never read price off MR. Paper 1: useful when evaluating that monopoly power does not guarantee profit.

Monopoly vs perfect competition diagram

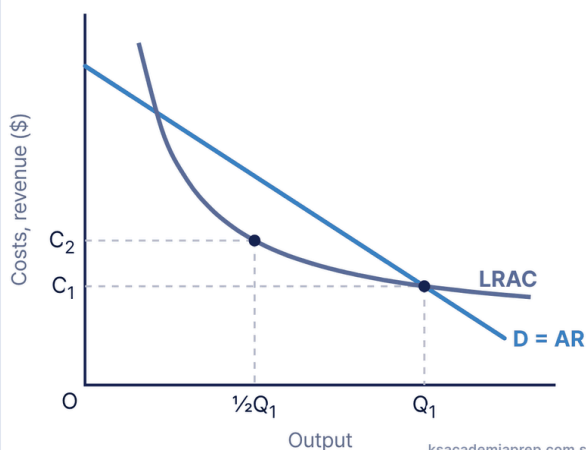
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Monopoly vs perfect competition diagram**HOW TO DRAW IT**

1. Label the axes Costs, revenue (\$) and Output.
2. Draw AR = D sloping down, MR twice as steep, and an upward-sloping MC = S.
3. Mark P_m and Q_m where MC = S meets AR = D, then Q_{pc} where MC = MR and P_m on AR. Shade the welfare loss from Q_m to Q_{pc} .

State the assumption that costs are the same in both structures; economies of scale could make a monopoly cheaper. Paper 3: the welfare loss is $\frac{1}{2} \times (Q_{pc} - Q_m) \times (P_m - MC \text{ at } Q_m)$.

Natural monopoly diagram

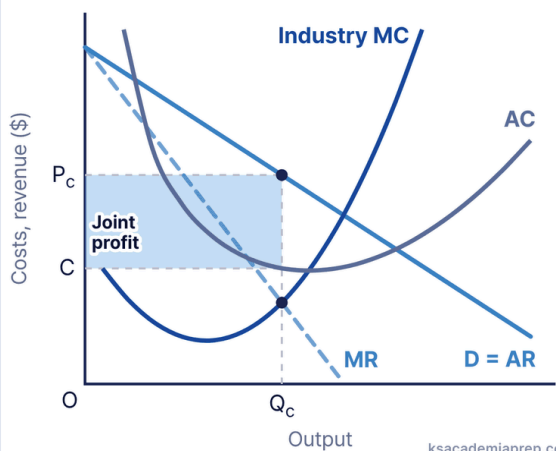
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Natural monopoly diagram**HOW TO DRAW IT**

1. Label the axes Costs, revenue (\$) and Output.
2. Draw a downward-sloping D = AR and an LRAC curve that is still falling where it crosses D.
3. Mark Q_1 and C_1 where LRAC meets D, then mark $\frac{1}{2}Q_1$ and read off the higher cost C_2 on LRAC above it.

Make LRAC slope down all the way past the demand curve; if it turns up before meeting demand it is not a natural monopoly. Paper 2: use it for utility and infrastructure news stories.

Collusive oligopoly (cartel) diagram

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Collusive oligopoly (cartel) diagram**HOW TO DRAW IT**

1. Label the axes Costs, revenue (\$) and Output.
2. Draw the industry D = AR, MR twice as steep, a U-shaped AC, and Industry MC cutting AC at its lowest point.
3. Mark Q_c where Industry MC = MR, read P_c off D = AR and C off AC, and shade the joint profit between P_c and C.

Draw the industry demand curve, not one firm's, because the cartel acts as a single monopolist; the members' quotas add up to Q_c . Paper 2: use it for OPEC or price-fixing cases, and note that collusion is illegal in most countries.

Game theory payoff matrix

		Firm B	
		High price	Low price
Firm A	High price	A: \$10m B: \$10m Collusion	A: \$3m B: \$12m
	Low price	A: \$12m B: \$3m	A: \$5m B: \$5m Equilibrium

Low price is the dominant strategy for both firms, so they end up at \$5m each instead of \$10m.

Each gains \$2m by cheating on a high price.

IB 2.11 · HL ONLY · EXTENSION

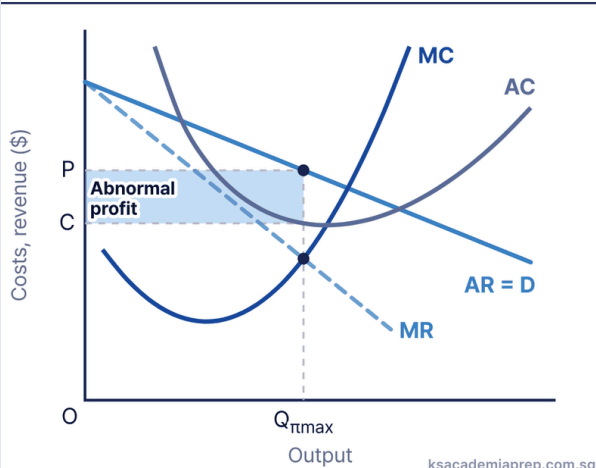
Game theory payoff matrix

HOW TO DRAW IT

1. Draw a two-by-two grid, with Firm B's High price and Low price across the top and Firm A's down the side.
2. Fill each cell with both profits: \$10m each if both price high, \$5m each if both price low, otherwise \$12m to the low pricer and \$3m to the other.
3. Label the high-high cell Collusion and the low-low cell Equilibrium, then compare each firm's payoffs with the rival's choice held fixed.

Always compare one firm's payoffs down a column or along a row, holding the rival's choice fixed. Paper 1: use it to explain why oligopolists are interdependent and why collusive agreements tend to break down.

Monopolistic competition abnormal profit diagram



IB 2.11 · HL ONLY

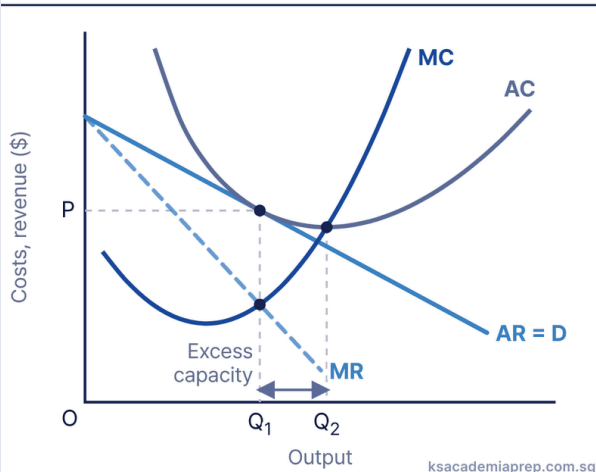
Monopolistic competition abnormal profit diagram

HOW TO DRAW IT

1. Label the axes Costs, revenue (\$) and Output.
2. Draw a fairly elastic AR = D, flatter than for a monopoly, MR twice as steep, and a U-shaped AC with MC cutting it at its lowest point.
3. Mark $Q_{\pi \max}$ where MC = MR, read P off AR and C off AC, and shade the abnormal profit between P and C.

Draw AR flatter than in a monopoly diagram to show the many close substitutes. Paper 1: follow it with the long-run diagram to show new entrants competing the profit away.

Monopolistic competition: long-run normal profit diagram



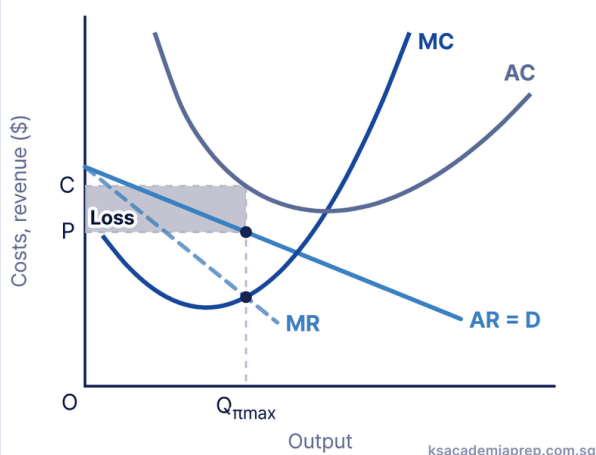
IB 2.11 · HL ONLY

Monopolistic competition: long-run normal profit diagram

HOW TO DRAW IT

1. Label the vertical axis Costs, revenue (\$) and the horizontal axis Output, with O at the origin.
2. Draw a U-shaped AC, an MC cutting AC at its lowest point, a downward-sloping AR = D, and a steeper MR below it.
3. Make AR touch the falling part of AC directly above MC = MR at Q_1 , mark P, then mark Q_2 at minimum AC and label the gap Excess capacity.

The tangency must be on the falling part of AC, directly above the MC = MR point, never at the minimum of AC. Paper 1: use excess capacity and $P > MC$ to evaluate this market structure.

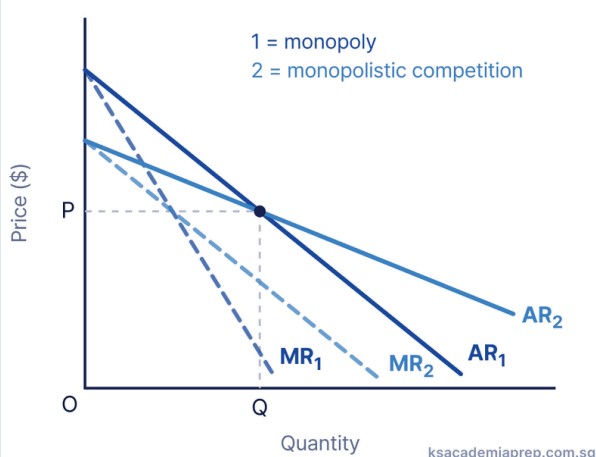
Monopolistic competition: losses diagram

IB 2.11 · HL ONLY

Monopolistic competition: losses diagram**HOW TO DRAW IT**

1. Label the vertical axis Costs, revenue (\$) and the horizontal axis Output, with O at the origin.
2. Draw U-shaped AC and MC, then a fairly flat AR = D with MR below it, keeping AR below AC at every output.
3. Drop a dashed line from MC = MR to $Q_{\pi\max}$, read across to C on AC and P on AR, and shade the Loss rectangle between C and P.

Keep AR flatter than in monopoly and make sure it lies below AC at every output. Paper 1: use it with the long-run diagram to explain exit and adjustment.

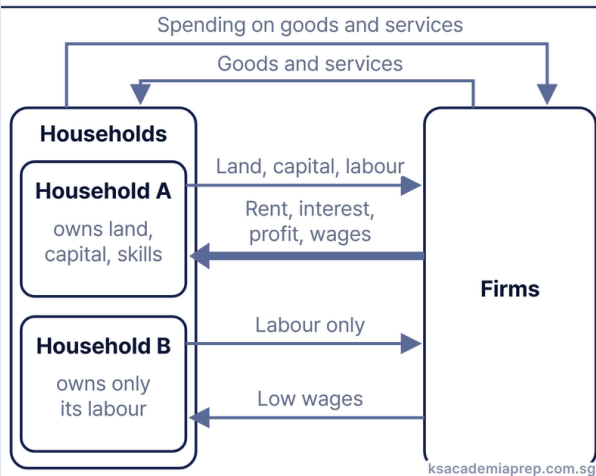
Monopolistic competition vs monopoly demand diagram

IB 2.11 · HL ONLY

Monopolistic competition vs monopoly demand diagram**HOW TO DRAW IT**

1. Label the vertical axis Price (\$) and the horizontal axis Quantity, with O at the origin.
2. Draw a steep AR₁ and a flatter AR₂ crossing at one point, each with its MR (MR₁, MR₂) twice as steep below it.
3. Dash from the crossing point to P and Q, and add the key: 1 = monopoly, 2 = monopolistic competition.

Draw the two demand curves crossing at one point so the difference in elasticity is clear at the same price. Paper 1: use it to compare the market power of the two structures.

Circular flow diagram: why markets create inequality

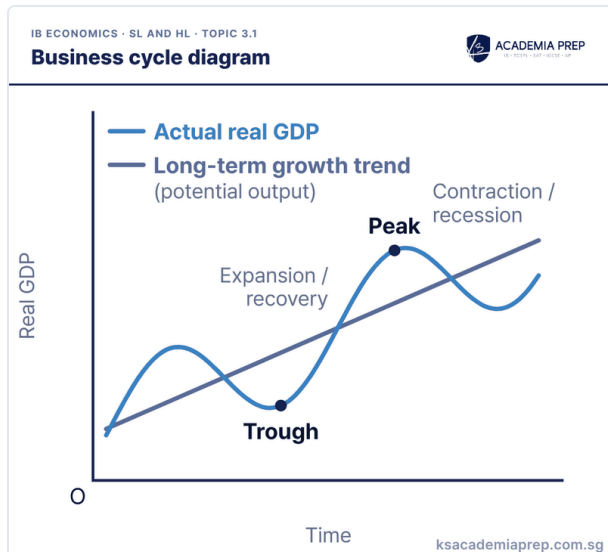
IB 2.12 · HL ONLY

Circular flow diagram: why markets create inequality**HOW TO DRAW IT**

1. Draw a Households box and a Firms box, and show Household A and Household B inside Households.
2. Add the outer loop: Spending on goods and services flowing from Households to Firms, and Goods and services flowing back.
3. From Household A, draw Land, capital, labour to Firms with Rent, interest, profit, wages returning; from Household B, draw Labour only with Low wages returning.

Name all four factor incomes and link each to the factor that earns it. Paper 1: use it to open an essay on why governments redistribute income.

UNIT 3: MACROECONOMICS



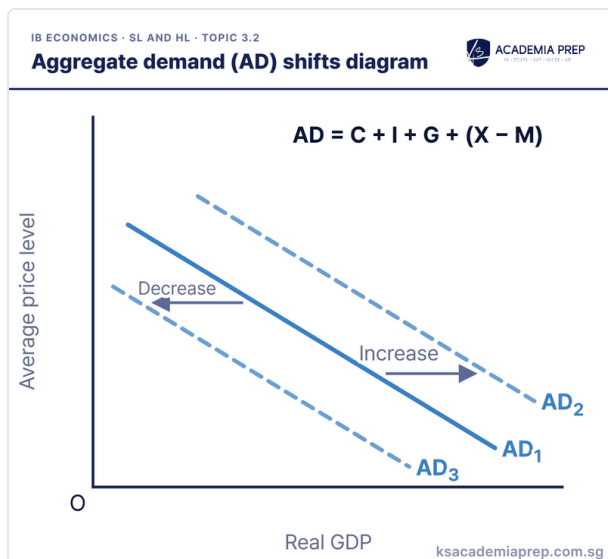
IB 3.1 · SL + HL

Business cycle diagram

HOW TO DRAW IT

1. Label the vertical axis Real GDP and the horizontal axis Time, with O at the origin; use real, not nominal, GDP.
2. Draw a straight, upward-sloping Long-term growth trend (potential output), then a wavy Actual real GDP line rising and falling around it.
3. Mark a Peak at the top of a wave and a Trough at the bottom, labelling the falls Contraction / recession and the rises Expansion / recovery.

Put real GDP (not nominal GDP) on the vertical axis and time on the horizontal axis, and draw the trend line rising. Paper 2: use it to say which phase an economy is in from the growth figures in the data.



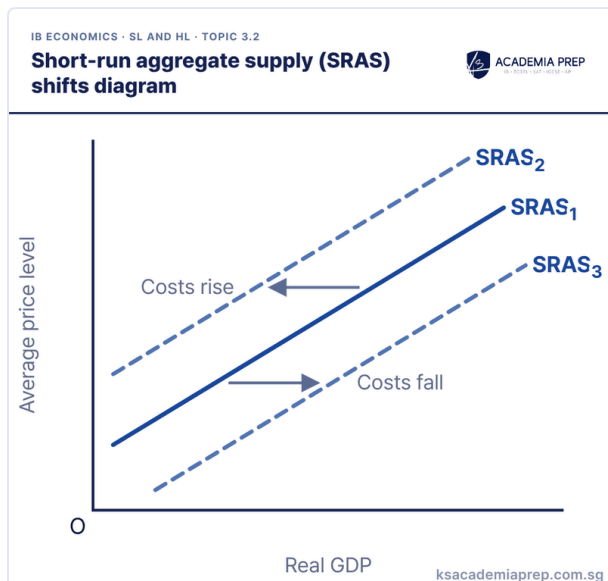
IB 3.2 · SL + HL

Aggregate demand (AD) shifts diagram

HOW TO DRAW IT

1. Label the vertical axis Average price level and the horizontal axis Real GDP, not price and quantity.
2. Draw a downward-sloping AD₁, then AD₂ to its right and AD₃ to its left.
3. Add an Increase arrow towards AD₂ and a Decrease arrow towards AD₃, and write $AD = C + I + G + (X - M)$.

A change in the price level moves along AD; only a change in C, I, G or (X - M) for another reason shifts it. Paper 2: name the component that changed (for example investment after an interest rate cut) before shifting the curve.



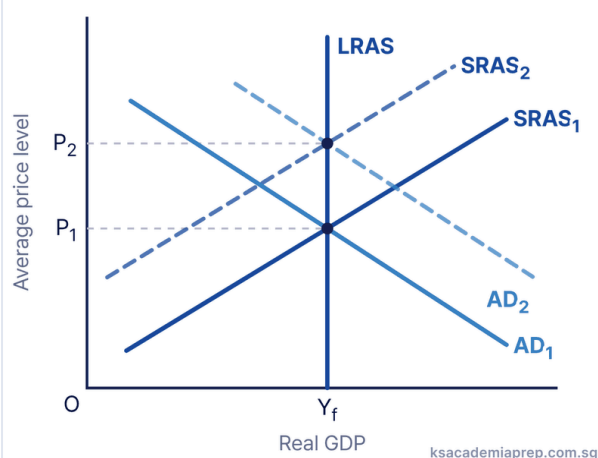
IB 3.2 · SL + HL

Short-run aggregate supply (SRAS) shifts diagram

HOW TO DRAW IT

1. Label the vertical axis Average price level and the horizontal axis Real GDP, with O at the origin.
2. Draw an upward-sloping SRAS₁, then SRAS₂ to its left and SRAS₃ to its right.
3. Add a Costs rise arrow towards SRAS₂ and a Costs fall arrow towards SRAS₃; a change in the price level moves along SRAS, it does not shift it.

Only changes in costs shift SRAS; a change in the price level moves along it. Paper 2: a rise in oil prices or the minimum wage in the text is your cue to shift SRAS left.

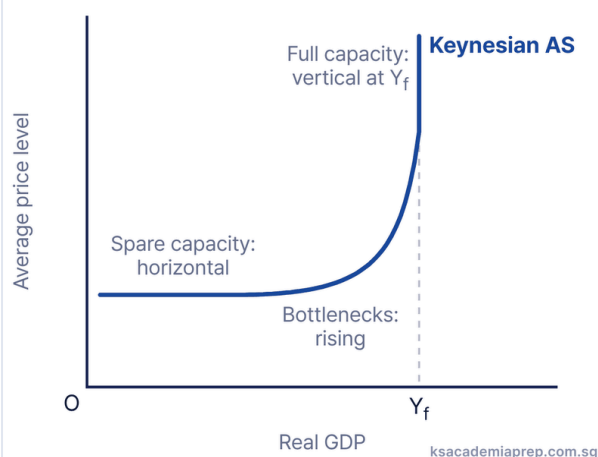
Monetarist/new classical LRAS diagram

IB 3.2 · SL + HL

Monetarist/new classical LRAS diagram**HOW TO DRAW IT**

1. Label the vertical axis Average price level and the horizontal axis Real GDP, with O at the origin.
2. Draw a vertical LRAS at Y_f , then AD_1 and $SRAS_1$ crossing on it, with AD_2 to the right and $SRAS_2$ to the left.
3. Mark P_1 where AD_1 and $SRAS_1$ meet on LRAS and P_2 where AD_2 and $SRAS_2$ meet on LRAS, dashing both across to the price axis.

Draw LRAS vertical at Y_f and make every long-run equilibrium sit on it. Paper 1: use it to argue that demand-side policy cannot raise output above Y_f in the long run.

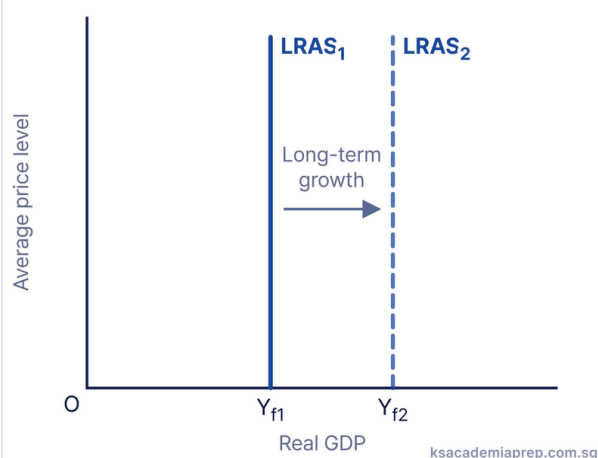
Keynesian AS diagram

IB 3.2 · SL + HL

Keynesian AS diagram**HOW TO DRAW IT**

1. Label the vertical axis Average price level and the horizontal axis Real GDP, with O at the origin.
2. Draw Keynesian AS as one curve: horizontal at a low price level, then rising more and more steeply, then vertical at Y_f .
3. Label the sections Spare capacity: horizontal, Bottlenecks: rising and Full capacity: vertical at Y_f , bending smoothly into the vertical part.

Keep the horizontal section low and make the curve bend smoothly into the vertical section at Y_f . Paper 1: use the section AD cuts to argue whether a rise in AD raises output, prices or both.

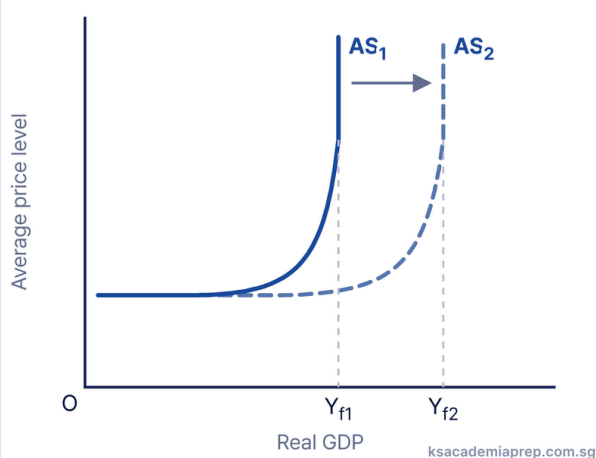
LRAS shift diagram: long-term growth

IB 3.2 · SL + HL

LRAS shift diagram: long-term growth**HOW TO DRAW IT**

1. Label the vertical axis Average price level and the horizontal axis Real GDP, with O at the origin.
2. Draw a vertical $LRAS_1$ at Y_{f1} and a second vertical $LRAS_2$ further right at Y_{f2} .
3. Add a rightward arrow labelled Long-term growth between them, and mark both Y_{f1} and Y_{f2} on the Real GDP axis.

Shift the whole vertical line and label the new full employment output, not just the curve. Paper 1: link each supply-side policy to the factor it improves before you shift LRAS.

Keynesian AS shift diagram: long-term growth

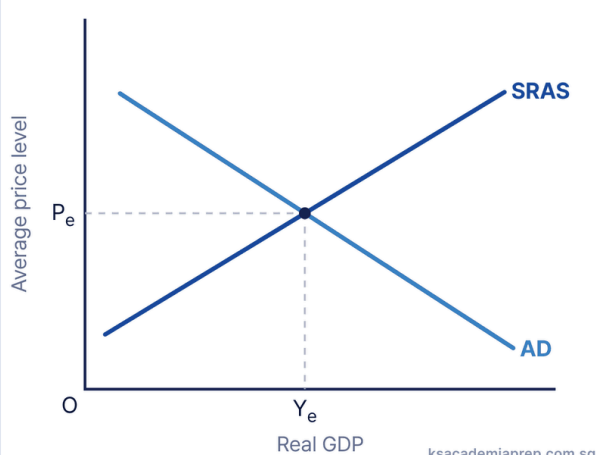
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IB 3.2 · SL + HL

Keynesian AS shift diagram: long-term growth**HOW TO DRAW IT**

1. Label the vertical axis Average price level and the horizontal axis Real GDP, with O at the origin.
2. Draw AS_1 as a Keynesian AS curve, then AS_2 with the same horizontal section but its rising and vertical sections further right.
3. Mark Y_{f1} below the vertical part of AS_1 and Y_{f2} below the vertical part of AS_2 , and add an arrow showing the rightward shift.

Shift the rising and vertical sections together, and keep the horizontal section at the same price level. Paper 1: pair this with the monetarist LRAS shift to show both schools agree on how growth happens.

Short-run macroeconomic equilibrium diagram

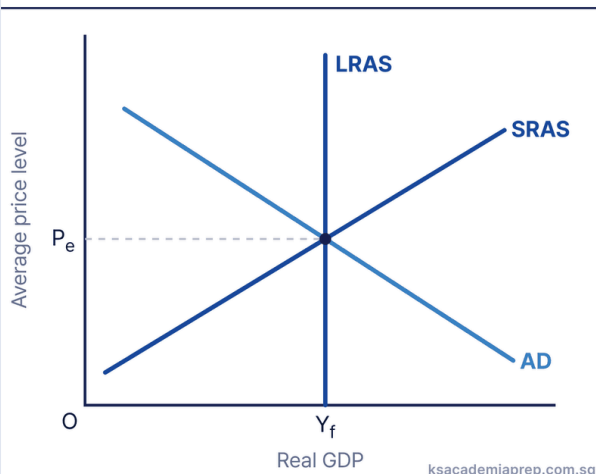
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IB 3.2 · SL + HL

Short-run macroeconomic equilibrium diagram**HOW TO DRAW IT**

1. Label the vertical axis Average price level and the horizontal axis Real GDP, not price and quantity.
2. Draw an upward-sloping SRAS and a downward-sloping AD, and label both.
3. From the point where AD and SRAS cross, draw dashed lines to both axes and label them P_e and Y_e .

Label the axes average price level and real GDP, not price and quantity. Paper 2: start every AD/AS answer from this equilibrium, then shift one curve at a time.

Long-run equilibrium at full employment diagram

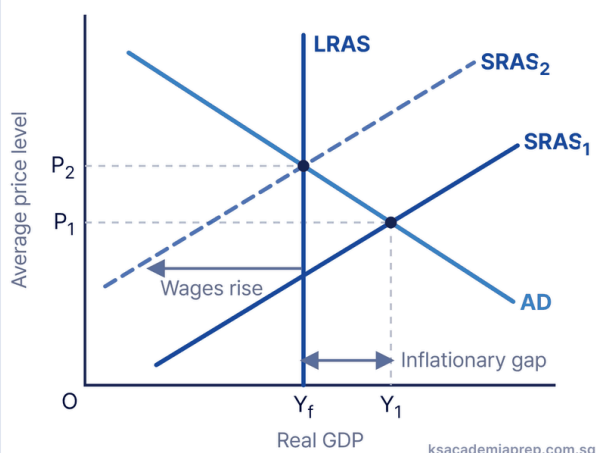
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IB 3.2 · SL + HL

Long-run equilibrium at full employment diagram**HOW TO DRAW IT**

1. Label the vertical axis Average price level and the horizontal axis Real GDP, with O at the origin.
2. Draw a vertical LRAS, then an upward-sloping SRAS and a downward-sloping AD that cross exactly on it.
3. From the point where all three curves meet, draw dashed lines to both axes and label them P_e and Y_f .

Full employment does not mean zero unemployment; say unemployment equals the natural rate. Paper 1: use it as the benchmark that inflationary and deflationary gaps are measured from.

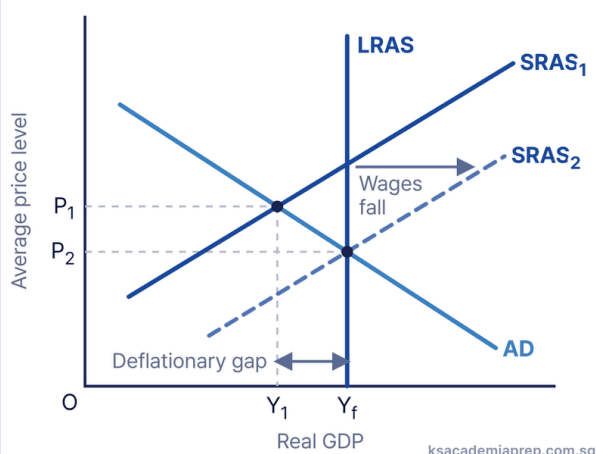
Inflationary gap diagram: automatic adjustment

IB 3.2 · SL + HL

Inflationary gap diagram: automatic adjustment**HOW TO DRAW IT**

1. Label the vertical axis Average price level and the horizontal axis Real GDP, with O at the origin.
2. Draw a vertical LRAS at Y_f , then AD crossing $SRAS_1$ to the right of LRAS, and $SRAS_2$ to the left of $SRAS_1$.
3. Mark P_1 and Y_1 where AD meets $SRAS_1$, label Y_f to Y_1 the Inflationary gap, add a Wages rise arrow, and mark P_2 on LRAS.

The gap is measured along the real GDP axis, from Y_f to Y_1 , not as a vertical distance. Paper 1: use the automatic adjustment to argue that policy intervention may be unnecessary in the long run.

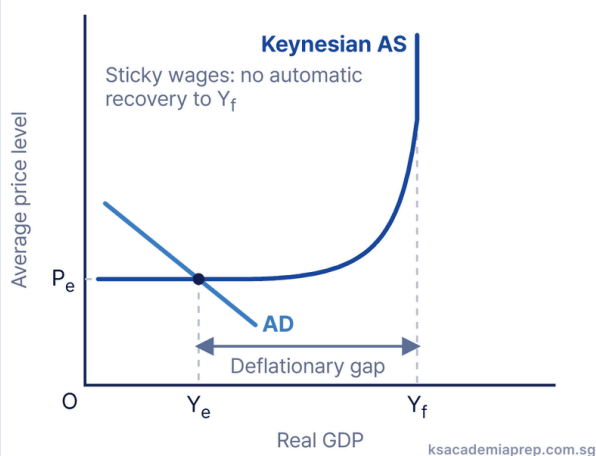
Deflationary (recessionary) gap adjustment diagram

IB 3.2 · SL + HL

Deflationary (recessionary) gap adjustment diagram**HOW TO DRAW IT**

1. Label the vertical axis Average price level and the horizontal axis Real GDP, with O at the origin.
2. Draw a vertical LRAS at Y_f , then AD crossing $SRAS_1$ to the left of LRAS, and $SRAS_2$ to the right of $SRAS_1$.
3. Mark P_1 and Y_1 where AD meets $SRAS_1$, label Y_1 to Y_f the Deflationary gap, add a Wages fall arrow, and mark P_2 on LRAS.

Say why SRAS shifts (wages and other costs fall), not just that it does. Paper 1: contrast this self-correction with the Keynesian view that the gap can persist.

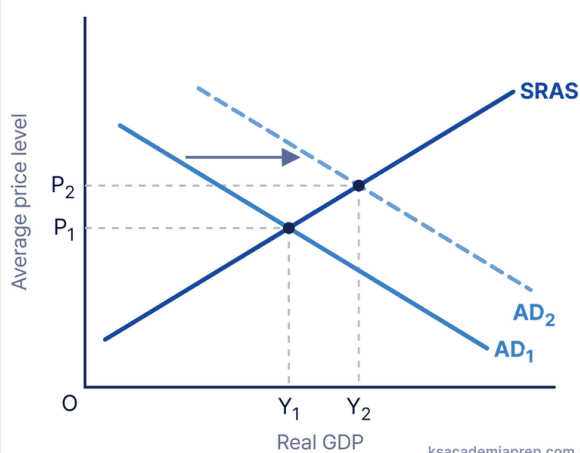
Keynesian persistent deflationary gap diagram

IB 3.2 · SL + HL

Keynesian persistent deflationary gap diagram**HOW TO DRAW IT**

1. Label the vertical axis Average price level and the horizontal axis Real GDP, with O at the origin.
2. Draw Keynesian AS with a long horizontal section, then a low AD cutting that flat section, not the vertical one.
3. Dash from the crossing to P_e and Y_e , mark Y_f below the vertical section, and label Y_e to Y_f the Deflationary gap.

Draw AD cutting the flat section, not the vertical one, and label the gap from Y_e to Y_f . Paper 1: this is the diagram to justify expansionary fiscal policy in a recession.

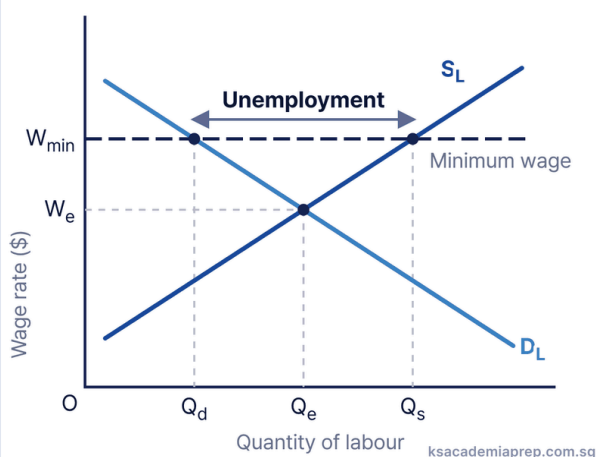
AD increase diagram: short-term growth

IB 3.3 · SL + HL

AD increase diagram: short-term growth**HOW TO DRAW IT**

1. Label the vertical axis Average price level and the horizontal axis Real GDP, with O at the origin.
2. Draw an upward-sloping SRAS, then AD₁ and AD₂ to its right, with an arrow showing the shift.
3. Mark P₁ and Y₁ at the first equilibrium and P₂ and Y₂ at the second. Both are higher than before.

Short-term growth is a rise in actual output from an AD shift; long-term growth needs LRAS to shift. Paper 2: say which component of AD caused the shift, using a figure from the text.

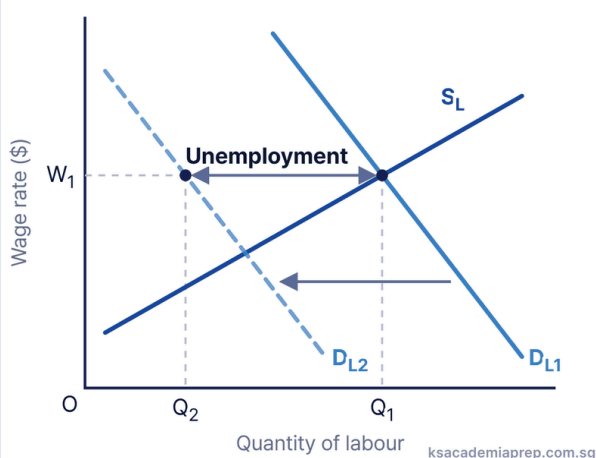
Minimum wage diagram: unemployment

IB 3.3 · SL + HL

Minimum wage diagram: unemployment**HOW TO DRAW IT**

1. Label the vertical axis Wage rate (\$) and the horizontal axis Quantity of labour, with O at the origin.
2. Draw a downward-sloping DL and an upward-sloping SL, and mark W_e and Q_e where they cross.
3. Draw a horizontal Minimum wage line at W_{min} above W_e, mark Q_d on DL and Q_s on SL, and label Q_d to Q_s Unemployment, not Q_d to Q_e.

The unemployment is the horizontal gap between Q_d and Q_s at W_{min}, not Q_d to Q_e. Paper 2: weigh this against higher incomes for the workers who keep their jobs.

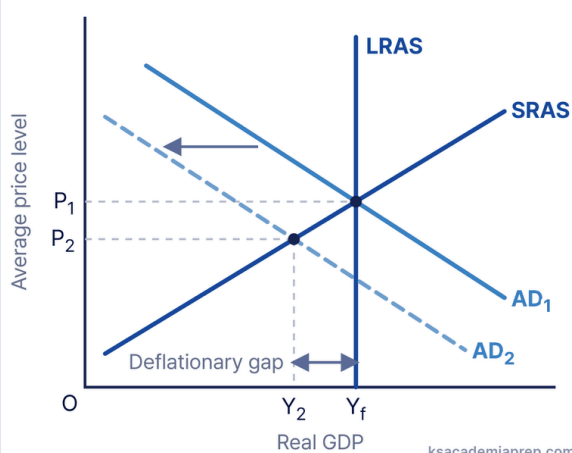
Structural unemployment diagram

IB 3.3 · SL + HL

Structural unemployment diagram**HOW TO DRAW IT**

1. Label the vertical axis Wage rate (\$) and the horizontal axis Quantity of labour, with O at the origin.
2. Draw an upward-sloping SL and a downward-sloping DL₁, then DL₂ to the left of DL₁.
3. Mark W₁ and Q₁ where DL₁ meets SL, keep the wage at W₁, mark Q₂ on DL₂, and label Q₂ to Q₁ Unemployment.

Explain why the workers cannot simply move to other jobs: a mismatch of skills or location. Paper 2: tie this to a named industry or region in the text, then suggest retraining or relocation support.

Cyclical (demand-deficient) unemployment diagram

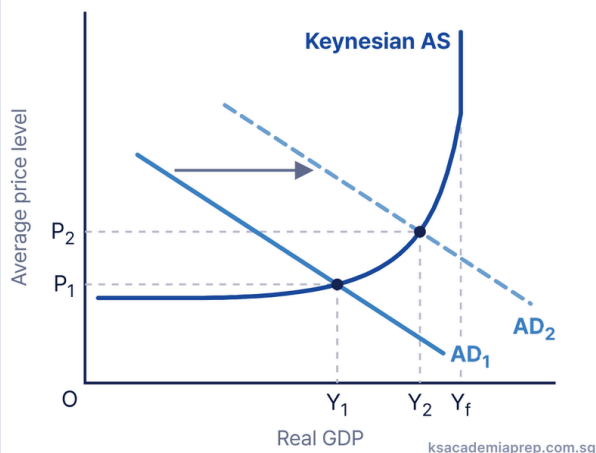
IB 3.3 · SL + HL

Cyclical (demand-deficient) unemployment diagram

HOW TO DRAW IT

1. Label the vertical axis Average price level and the horizontal axis Real GDP, with O at the origin.
2. Draw a vertical LRAS and an upward-sloping SRAS, with AD_1 crossing both at Y_f and AD_2 to the left of AD_1 .
3. Mark P_1 and Y_f at the first equilibrium, P_2 and Y_2 where AD_2 meets SRAS, and label Y_2 to Y_f the Deflationary gap.

Link the output gap to jobs: labour is a derived demand, so less output means fewer workers. Paper 2: use it for recession data where unemployment rises as GDP growth turns negative.

AD/AS diagram: demand-pull inflation

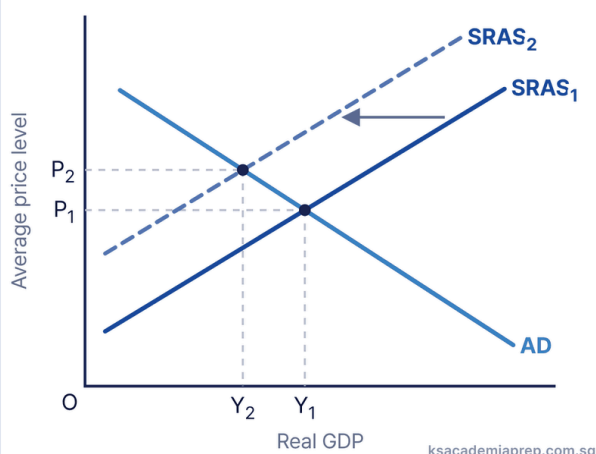
IB 3.3 · SL + HL

AD/AS diagram: demand-pull inflation

HOW TO DRAW IT

1. Label the vertical axis Average price level and the horizontal axis Real GDP, with O at the origin.
2. Draw a Keynesian AS curve that turns vertical at Y_f , then AD_1 and AD_2 both cutting its rising section.
3. Mark P_1 and Y_1 for AD_1 and P_2 and Y_2 for AD_2 , keeping Y_2 below Y_f so both the price level and real GDP rise.

Draw the shift into the rising section so both the price level and real GDP change. Paper 2: back it up with evidence of strong spending growth, such as rising consumer credit or a housing boom.

AD/AS diagram: cost-push inflation

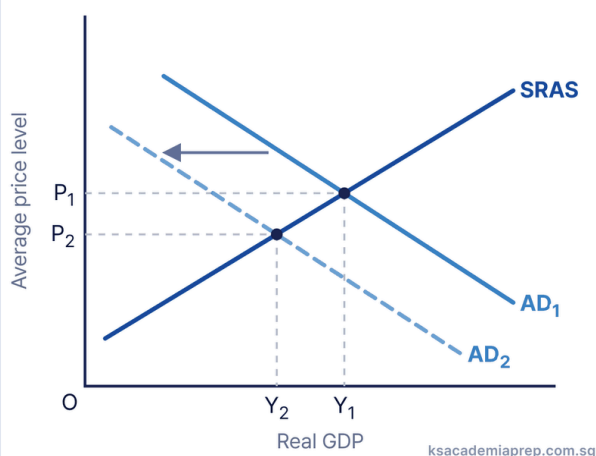
IB 3.3 · SL + HL

AD/AS diagram: cost-push inflation

HOW TO DRAW IT

1. Label the vertical axis Average price level and the horizontal axis Real GDP, with O at the origin.
2. Draw a downward-sloping AD and an upward-sloping $SRAS_1$, then $SRAS_2$ to the left of $SRAS_1$.
3. Mark P_1 and Y_1 at the first equilibrium and P_2 and Y_2 at the second, showing Y_2 below Y_1 because output falls as prices rise.

Show output falling as well as prices rising; that is what separates cost-push from demand-pull. Paper 2: an oil or food price shock in the text is your cue, and note that raising interest rates would deepen the fall in output.

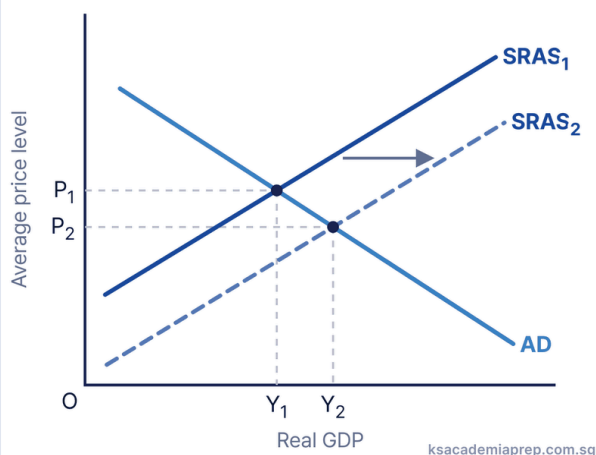
Deflation diagram: fall in AD

IB 3.3 · SL + HL

Deflation diagram: fall in AD**HOW TO DRAW IT**

1. Label the vertical axis Average price level and the horizontal axis Real GDP, with O at the origin.
2. Draw an upward-sloping SRAS, then AD₁ and AD₂ to its left, with an arrow showing the shift.
3. Mark P₁ and Y₁ at the first equilibrium and P₂ and Y₂ at the second. Both are lower than before.

Deflation is a fall in the price level, not a fall in the inflation rate (that is disinflation). Paper 1: contrast this with deflation from a rise in AS to show that not all deflation is harmful.

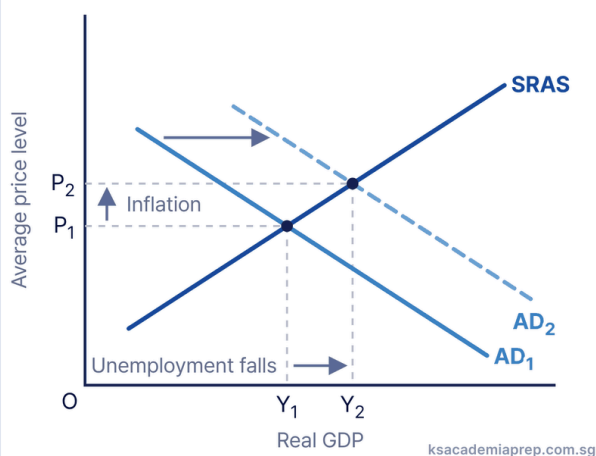
Deflation diagram: rise in AS

IB 3.3 · SL + HL

Deflation diagram: rise in AS**HOW TO DRAW IT**

1. Label the vertical axis Average price level and the horizontal axis Real GDP, with O at the origin.
2. Draw a downward-sloping AD and an upward-sloping SRAS₁, then SRAS₂ to the right of SRAS₁.
3. Mark P₁ and Y₁ at the first equilibrium and P₂ and Y₂ at the second; P₂ is lower than P₁ but Y₂ is higher than Y₁.

Show real GDP rising; if it falls you have drawn deflation from a fall in AD instead. Paper 1: use it to evaluate whether deflation is always a problem.

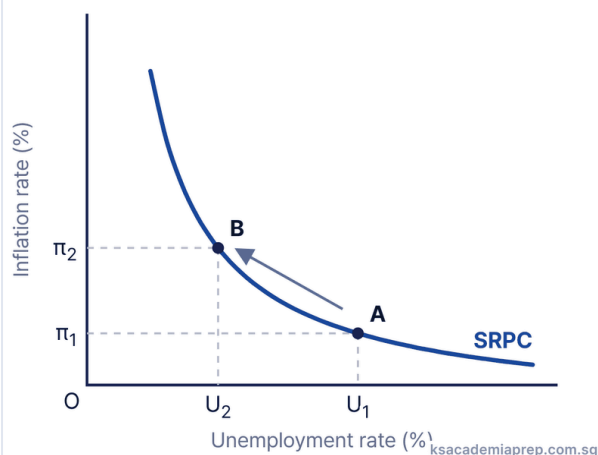
AD/AS diagram: inflation and unemployment trade-off

IB 3.3 · HL ONLY

AD/AS diagram: inflation and unemployment trade-off**HOW TO DRAW IT**

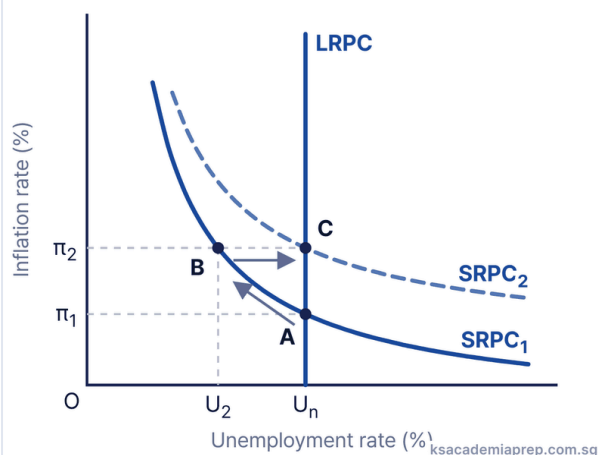
1. Label the vertical axis Average price level and the horizontal axis Real GDP, with O at the origin.
2. Draw an upward-sloping SRAS, then AD₁ and AD₂ to its right, with an arrow showing the shift.
3. Mark P₁, Y₁, P₂ and Y₂, then label the rise in real GDP Unemployment falls and the rise in the price level Inflation.

Connect the two axes explicitly: higher real GDP means lower unemployment, higher price level means inflation. Paper 1: pair it with the short-run Phillips curve to show the same trade-off two ways.

Short-run Phillips curve diagram**IB 3.3 · HL ONLY****Short-run Phillips curve diagram****HOW TO DRAW IT**

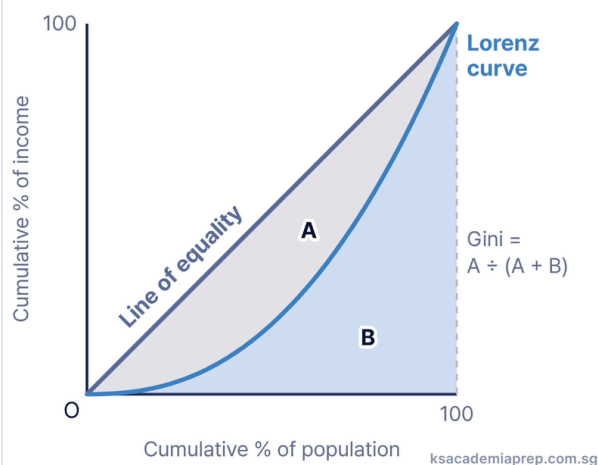
1. Label the vertical axis Inflation rate (%) and the horizontal axis Unemployment rate (%); do not swap them.
2. Draw a downward-sloping, convex SRPC that is steep at low unemployment and flatter at high unemployment.
3. Mark A at U_1 and π_1 and B at U_2 and π_2 , with dashed lines to both axes and U_2 to the left of U_1 .

Put inflation on the vertical axis and unemployment on the horizontal axis; swapping them is a common slip. Paper 1: stagflation (both rising) shows the SRPC shifting, so the trade-off is not stable.

Long-run Phillips curve diagram**IB 3.3 · HL ONLY****Long-run Phillips curve diagram****HOW TO DRAW IT**

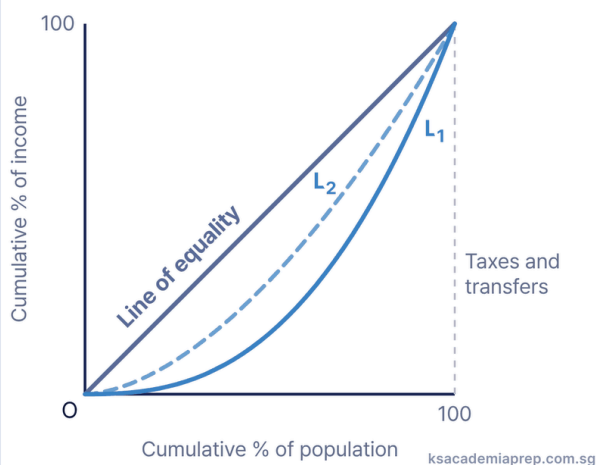
1. Label the vertical axis Inflation rate (%) and the horizontal axis Unemployment rate (%); do not swap them.
2. Draw a vertical LRPC at U_n , then a downward-sloping $SRPC_1$ through it and a parallel $SRPC_2$ higher up.
3. Mark A on $SRPC_1$ at U_n and π_1 , B on $SRPC_1$ at U_2 and π_2 , and C on $SRPC_2$ at U_n and π_2 , directly above A.

Label the curves $SRPC_1$ and $SRPC_2$, state the expected inflation rate each one assumes, and make C sit directly above A on the LRPC. Paper 1: use it to argue that demand-side policy cannot keep unemployment below the natural rate in the long run.

Lorenz curve and Gini coefficient diagram**IB 3.4 · SL + HL****Lorenz curve and Gini coefficient diagram****HOW TO DRAW IT**

1. Draw a square plot, labelling the vertical axis Cumulative % of income and the horizontal axis Cumulative % of population, both to 100.
2. Draw a straight Line of equality from O to the top corner, then a Lorenz curve sagging below it between the same two points.
3. Label the area between the two lines A and the area under the Lorenz curve B, then write $Gini = A \div (A + B)$.

Draw the plot square, run both lines from O to (100, 100) and label both axes as cumulative percentages. Paper 1: compare two countries by drawing both curves; the one further from the diagonal has the higher Gini coefficient.

**Lorenz curve diagram
(redistribution of income)**

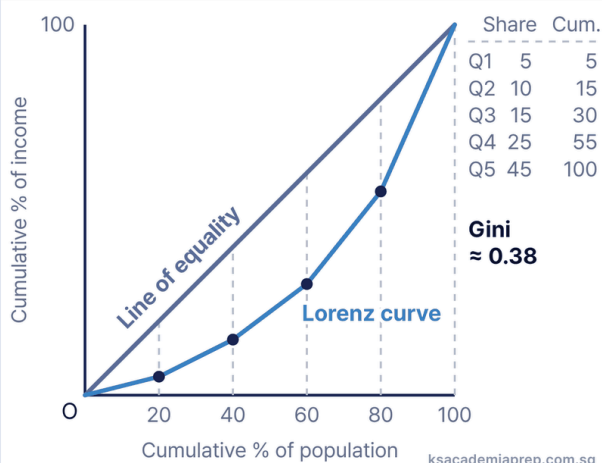
IB 3.4 · SL + HL

Lorenz curve diagram (redistribution of income)

HOW TO DRAW IT

1. Label the axes Cumulative % of income and Cumulative % of population, both from 0 to 100.
2. Draw the Line of equality as a straight diagonal from O to (100, 100), then draw L_1 sagging well below it.
3. Draw L_2 between L_1 and the Line of equality and label the change Taxes and transfers. Keep both curves starting at O and ending at (100, 100).

The new curve must stay below the line of equality and still start at O and end at (100, 100). Paper 2: use it to show the effect of a redistribution policy named in the text, then evaluate its cost to incentives.

**Lorenz curve diagram
(from quintile data)**

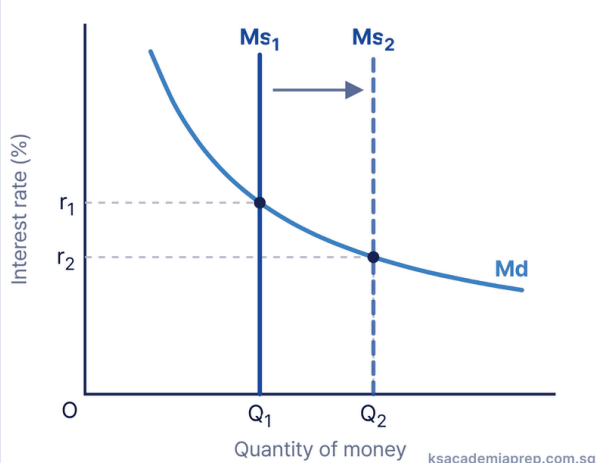
IB 3.4 · HL ONLY

Lorenz curve diagram (from quintile data)

HOW TO DRAW IT

1. Label the axes Cumulative % of income and Cumulative % of population, and mark 20, 40, 60, 80 and 100 on the population axis.
2. Add up the quintile shares to get cumulative values 5, 15, 30, 55 and 100, and draw the Line of equality from O to (100, 100).
3. Plot each cumulative point against its population share and join them from O as the Lorenz curve. Do not plot the raw quintile shares.

Plot cumulative shares, not the raw quintile shares, and join the points from O. Paper 3: you may be asked to plot the curve from a table and use it to compare inequality before and after a policy.

**Money market diagram
(equilibrium interest rate)**

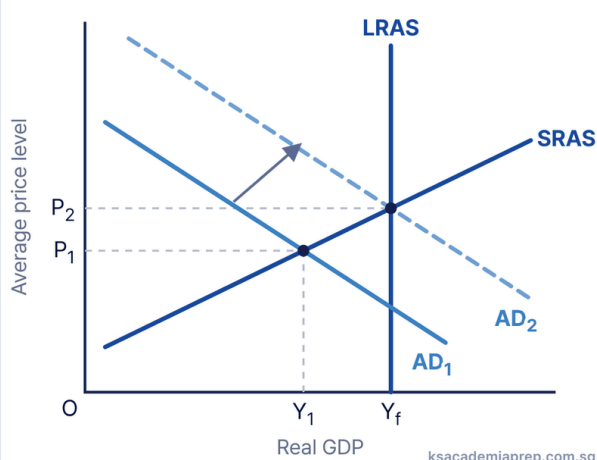
IB 3.5 · HL ONLY

Money market diagram (equilibrium interest rate)

HOW TO DRAW IT

1. Label the axes Interest rate (%) and Quantity of money.
2. Draw M_d sloping downwards and M_{s1} as a vertical line, because the central bank sets the money supply.
3. Mark r_1 and Q_1 with dashed lines, then draw M_{s2} to the right and mark the lower rate r_2 and Q_2 . Never draw M_s upward sloping.

Draw M_s vertical, not upward sloping, because it does not depend on the interest rate. Paper 1: use it to explain how open market operations change the interest rate before moving to the AD/AS diagram.

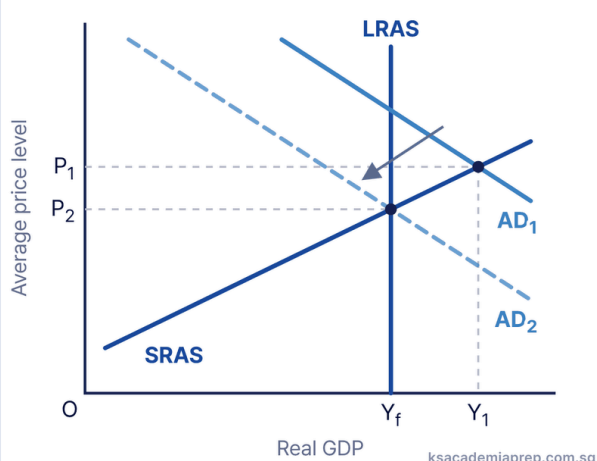
Expansionary monetary policy diagram (deflationary gap)

IB 3.5 · SL + HL

Expansionary monetary policy diagram (deflationary gap)**HOW TO DRAW IT**

1. Label the axes Average price level and Real GDP.
2. Draw a vertical LRAS at Y_f , an upward-sloping SRAS, and AD_1 crossing SRAS to the left of LRAS at Y_1 and P_1 .
3. Draw AD_2 to the right with an arrow, meeting SRAS on LRAS. Mark P_2 and Y_f with dashed lines to show the gap closed.

Name the transmission route (lower interest rates, then higher C and I) before shifting AD. Paper 2: link the diagram to a rate cut in the text, then evaluate time lags and low business confidence.

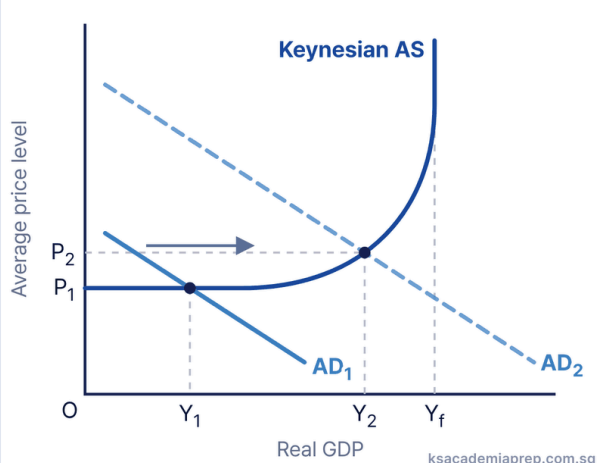
Contractionary monetary policy diagram (inflationary gap)

IB 3.5 · SL + HL

Contractionary monetary policy diagram (inflationary gap)**HOW TO DRAW IT**

1. Label the axes Average price level and Real GDP.
2. Draw a vertical LRAS at Y_f , an upward-sloping SRAS, and AD_1 crossing SRAS to the right of LRAS at Y_1 and P_1 .
3. Draw AD_2 to the left with an arrow, meeting SRAS on LRAS. Mark the lower price level P_2 and Y_f with dashed lines.

Show the starting point to the right of LRAS so the gap is clearly inflationary. Paper 2: use it for questions on central banks raising rates to meet an inflation target.

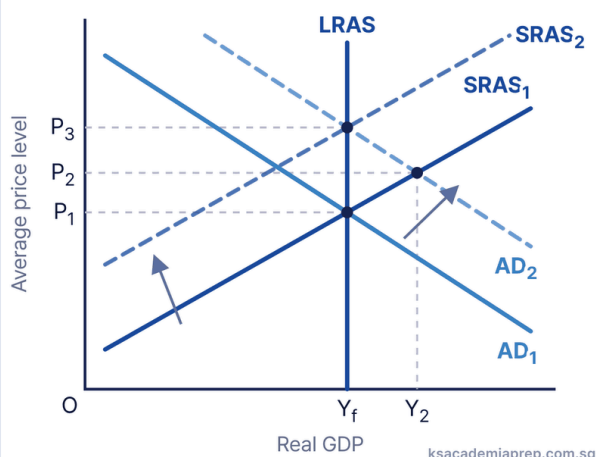
Expansionary fiscal policy diagram (Keynesian)

IB 3.6 · SL + HL

Expansionary fiscal policy diagram (Keynesian)**HOW TO DRAW IT**

1. Label the axes Average price level and Real GDP.
2. Draw Keynesian AS with a horizontal section, an upward-curving section and a vertical section at Y_f .
3. Draw AD_1 and AD_2 crossing the flat or early curving part, then mark P_1 , P_2 , Y_1 and Y_2 with dashed lines. Keep AD_2 left of the vertical section.

Keep AD_2 to the left of the vertical section, or the diagram shows inflation not growth. Paper 1: use it to argue that fiscal policy works best in a deep recession, and at HL add the multiplier to show the final rise in real GDP.

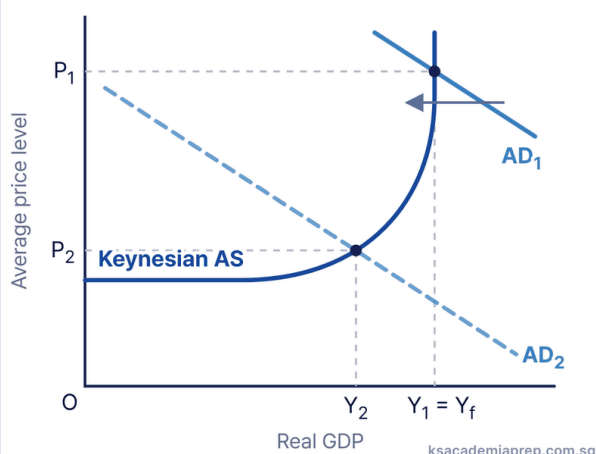
Expansionary fiscal policy diagram (monetarist)

IB 3.6 · SL + HL

Expansionary fiscal policy diagram (monetarist)**HOW TO DRAW IT**

1. Label the axes Average price level and Real GDP. Draw a vertical LRAS at Y_f .
2. Draw $SRAS_1$ and AD_1 meeting on LRAS at P_1 , then shift AD to AD_2 and mark the short-run point Y_2 and P_2 .
3. Draw $SRAS_2$ to the left so it meets AD_2 on LRAS, and mark P_3 . Show both stages, not just the final point.

Show both stages: the short-run move along $SRAS_1$, then the SRAS shift back to LRAS. Paper 1: contrast it with the Keynesian model to evaluate whether fiscal stimulus raises output for long.

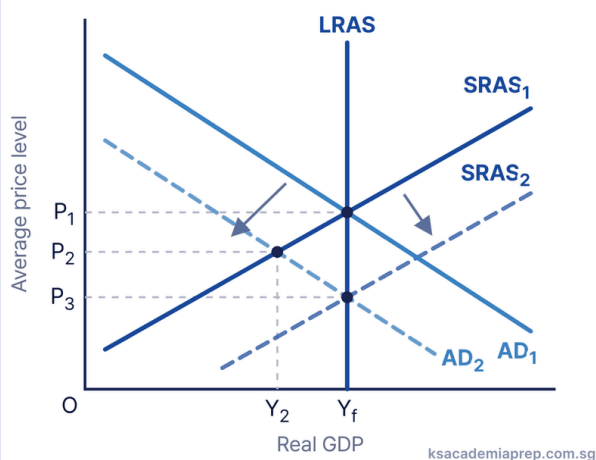
Contractionary fiscal policy diagram (Keynesian)

IB 3.6 · SL + HL

Contractionary fiscal policy diagram (Keynesian)**HOW TO DRAW IT**

1. Label the axes Average price level and Real GDP.
2. Draw Keynesian AS with horizontal, curving and vertical sections, and draw AD_1 meeting the vertical section at P_1 and $Y_1 = Y_f$.
3. Draw AD_2 to the left with an arrow, meeting the steep part of AS. Mark P_2 well below P_1 and Y_2 just below Y_f .

Start AD_1 in the steep or vertical section; a cut in AD in the horizontal section only causes lost output. Paper 1: use it to evaluate austerity, since the output cost rises the further the economy is from Y_f .

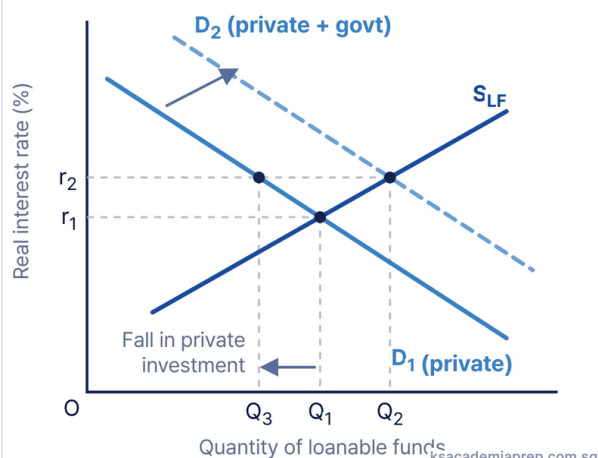
Contractionary fiscal policy diagram (monetarist)

IB 3.6 · SL + HL

Contractionary fiscal policy diagram (monetarist)**HOW TO DRAW IT**

1. Label the axes Average price level and Real GDP. Draw a vertical LRAS at Y_f .
2. Draw $SRAS_1$ and AD_1 meeting on LRAS at P_1 , then shift AD to AD_2 and mark the short-run point Y_2 and P_2 .
3. Draw $SRAS_2$ to the right so LRAS, AD_2 and $SRAS_2$ meet at one point, and mark the lower price level P_3 .

Make the long-run equilibrium lie on LRAS, AD_2 and $SRAS_2$ at the same point. Paper 1: use it to argue that the output cost of austerity is temporary if wages are flexible.

Crowding out diagram (loanable funds)

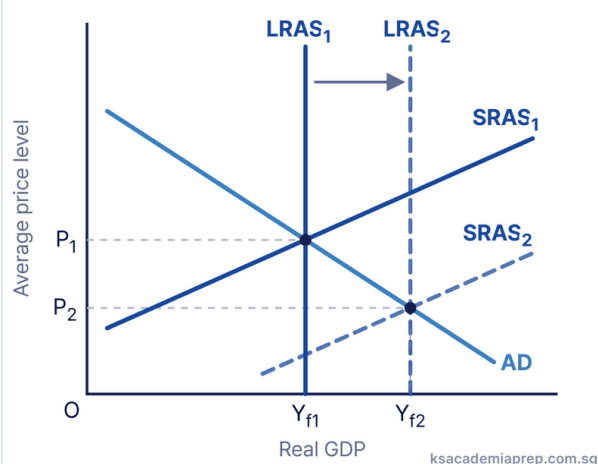
IB 3.6 · HL ONLY

Crowding out diagram (loanable funds)

HOW TO DRAW IT

1. Label the axes Real interest rate (%) and Quantity of loanable funds.
2. Draw S_{LF} sloping upwards, D_1 (private) sloping downwards, and D_2 (private + govt) to the right of D_1 .
3. Mark r_1 and Q_1 , then r_2 and Q_2 with dashed lines. Read Q_3 off D_1 at r_2 and label Q_1Q_3 as Fall in private investment.

Label the fall in private borrowing on the original demand curve, not the new one.
Paper 1: use it to evaluate expansionary fiscal policy, noting crowding out is weaker when the economy has spare capacity.

Supply-side policy diagram (LRAS shift)

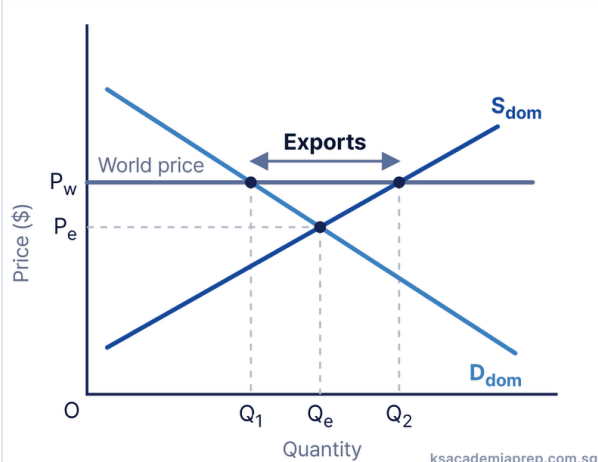
IB 3.7 · SL + HL

Supply-side policy diagram (LRAS shift)

HOW TO DRAW IT

1. Label the axes Average price level and Real GDP.
2. Draw vertical $LRAS_1$ at Y_{f1} , $SRAS_1$ and AD meeting on $LRAS_1$ at P_1 , then draw $LRAS_2$ at Y_{f2} and $SRAS_2$ to the right.
3. Mark the new equilibrium on $LRAS_2$ at the lower price level P_2 with dashed lines. Shift LRAS itself, not only SRAS.

Shift LRAS itself, not only SRAS, because supply-side policy raises potential output.
Paper 2: say which policy type the text describes and evaluate the long time lag before LRAS moves.

UNIT 4: THE GLOBAL ECONOMY**Free trade diagram (exports)**

IB 4.1 · SL + HL

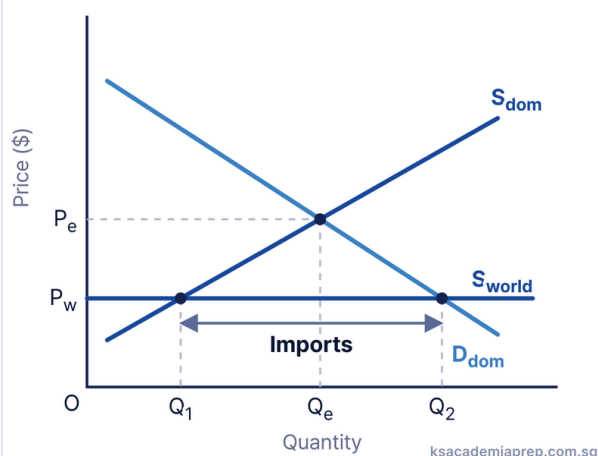
Free trade diagram (exports)

HOW TO DRAW IT

1. Label the vertical axis Price (\$) and the horizontal axis Quantity.
2. Draw D_{dom} and S_{dom} meeting at P_e and Q_e , then draw a horizontal World price line at P_w above P_e .
3. Mark Q_1 where P_w meets D_{dom} and Q_2 where it meets S_{dom} , with dashed lines, and label the gap Q_1Q_2 as Exports.

The world price line is horizontal because a small country is a price taker. Paper 2: use it to show who gains and who loses when a country opens up to trade in its export good.

Free trade diagram (imports)



IB 4.1 · SL + HL

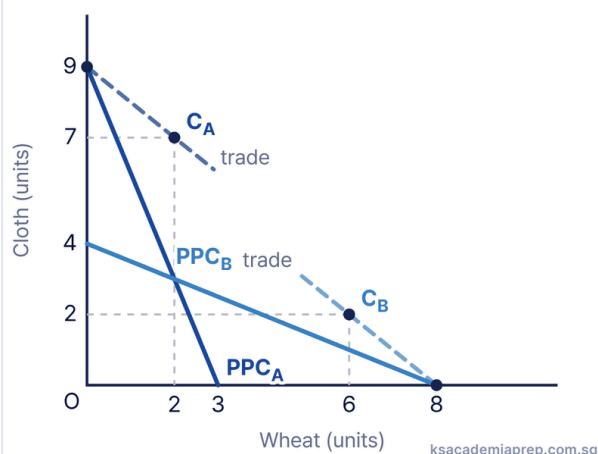
Free trade diagram (imports)

HOW TO DRAW IT

1. Label the vertical axis Price (\$) and the horizontal axis Quantity.
2. Draw D_{dom} and S_{dom} meeting at P_e and Q_e , then draw S_{world} as a horizontal line at P_w below P_e .
3. Mark Q_1 where P_w meets S_{dom} and Q_2 where it meets D_{dom} , with dashed lines, and label the gap Q_1Q_2 as Imports.

Draw S_{world} as a horizontal line below P_e : world supply is perfectly elastic at P_w .
 Paper 2: this is the starting diagram for every tariff, quota and subsidy question.

Comparative advantage diagram (linear PPCs)



IB 4.1 · HL ONLY

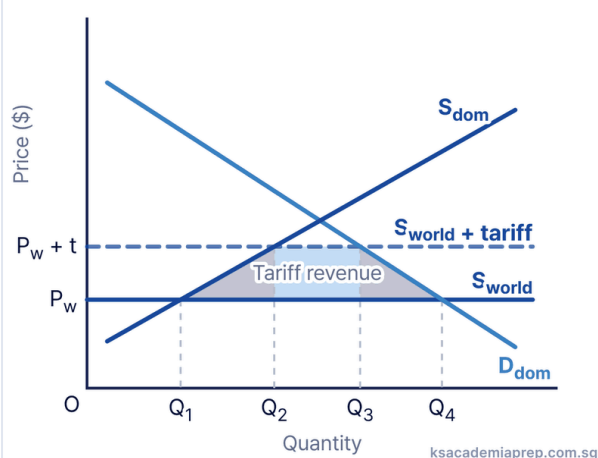
Comparative advantage diagram (linear PPCs)

HOW TO DRAW IT

1. Label the axes Cloth (units) and Wheat (units).
2. Draw PPC_A as a straight line from 9 cloth to 3 wheat, and PPC_B from 4 cloth to 8 wheat.
3. Show the trade at 1 wheat for 1 cloth and mark CA (2 wheat, 7 cloth) and CB (6 wheat, 2 cloth), both outside their own PPCs.

Show the terms of trade lying between the two opportunity costs, or there are no gains. Paper 3: calculate each country's opportunity cost from the PPC intercepts and the gain in consumption from trade.

Tariff diagram



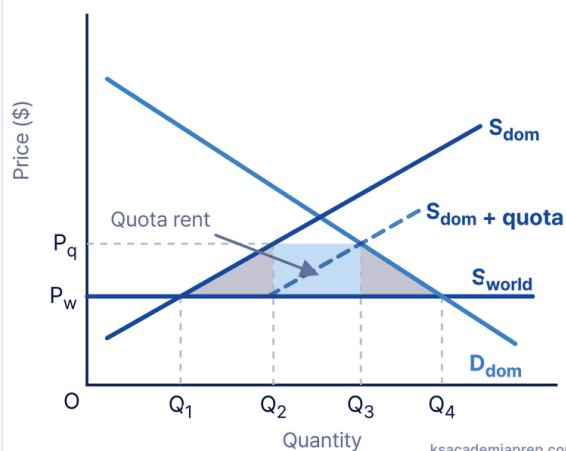
IB 4.2 · SL + HL

Tariff diagram

HOW TO DRAW IT

1. Label the vertical axis Price (\$) and the horizontal axis Quantity.
2. Draw D_{dom} and S_{dom} , then S_{world} as a horizontal line at P_w and $S_{world} + tariff$ as a horizontal line at $P_w + t$.
3. Mark Q_1 to Q_4 with dashed lines, shade the Tariff revenue rectangle between Q_2 and Q_3 , and shade the two welfare loss triangles.

Label imports before and after the tariff. Paper 3: calculate revenue as $t \times (Q_3 - Q_2)$ and each welfare-loss triangle as $\frac{1}{2} \times \text{base} \times \text{height}$.

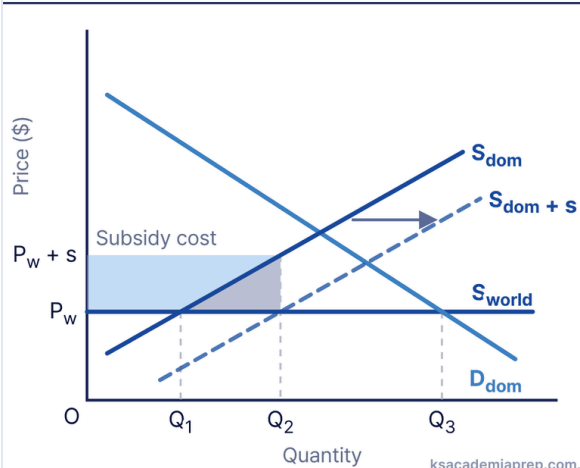
Import quota diagram

IB 4.2 · SL + HL

Import quota diagram**HOW TO DRAW IT**

1. Label the vertical axis Price (\$) and the horizontal axis Quantity.
2. Draw D_{dom} , S_{dom} and S_{world} at P_w . Draw $S_{dom} + quota$ parallel to S_{dom} , starting at P_w , the quota's width to the right.
3. Mark P_q where $S_{dom} + quota$ meets D_{dom} , mark Q_1 to Q_4 , shade the Quota rent rectangle and the two welfare loss triangles.

Start $S_{dom} + quota$ at P_w , the quota's width to the right of S_{dom} , and keep it parallel.
 Paper 3: compare with a tariff: the same rectangle is government revenue under a tariff but quota rent under a quota.

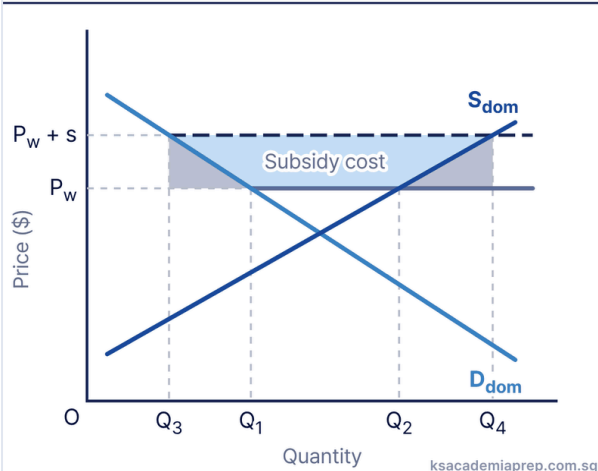
Production subsidy diagram (import market)

IB 4.2 · SL + HL

Production subsidy diagram (import market)**HOW TO DRAW IT**

1. Label the vertical axis Price (\$) and the horizontal axis Quantity.
2. Draw D_{dom} , S_{dom} and S_{world} at P_w , then draw $S_{dom} + s$ to the right of S_{dom} by the subsidy per unit.
3. Mark Q_1 , Q_2 and Q_3 , shade the Subsidy cost rectangle between P_w and $P_w + s$ up to Q_2 , and shade one welfare loss triangle.

Consumption does not change, so there is only one welfare-loss triangle, unlike a tariff. Paper 3: calculate the subsidy cost as $s \times Q_2$ and the fall in imports as $Q_2 - Q_1$.

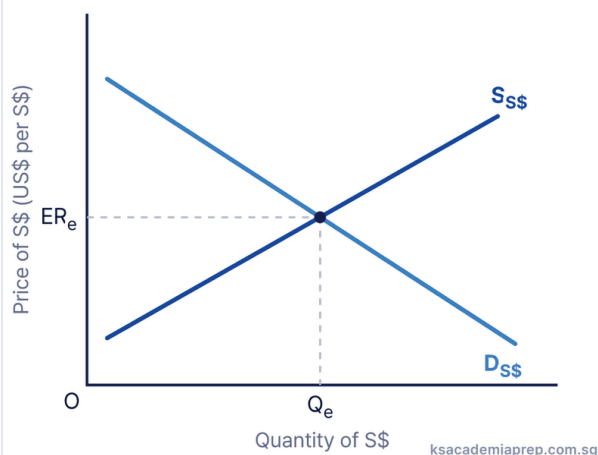
Export subsidy diagram

IB 4.2 · SL + HL

Export subsidy diagram**HOW TO DRAW IT**

1. Label the vertical axis Price (\$) and the horizontal axis Quantity.
2. Draw D_{dom} and S_{dom} , then horizontal lines at P_w and at the higher price $P_w + s$.
3. Mark Q_1 and Q_2 at P_w , then Q_3 and Q_4 at $P_w + s$. Shade the Subsidy cost rectangle over Q_3Q_4 and the two welfare loss triangles.

Domestic consumers lose here because they pay more, which students often miss.
 Paper 3: calculate the subsidy cost as $s \times (Q_4 - Q_3)$ and the welfare loss as the two triangles.

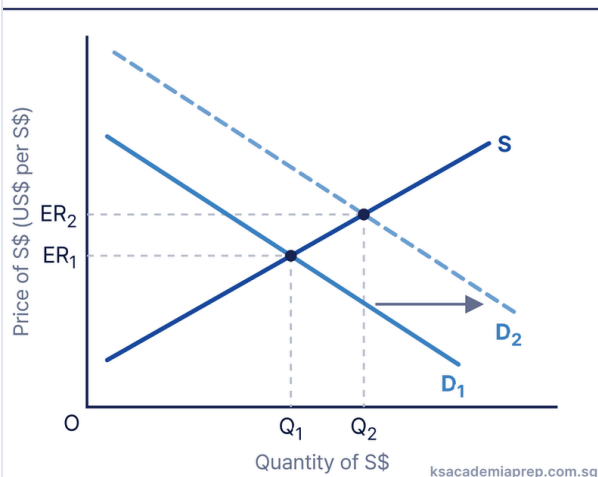
Floating exchange rate diagram

IB 4.5 · SL + HL

Floating exchange rate diagram**HOW TO DRAW IT**

1. Label the axes Price of S\$ (US\$ per S\$) and Quantity of S\$.
2. Draw $D_{S\$}$ sloping downwards and $S_{S\$}$ sloping upwards, and label both.
3. Mark the equilibrium exchange rate ER_e and quantity Q_e with dashed lines.

Label the axes with the price of one currency in terms of the other, not just "price".
Paper 1: list the sources of demand and supply before shifting either curve.

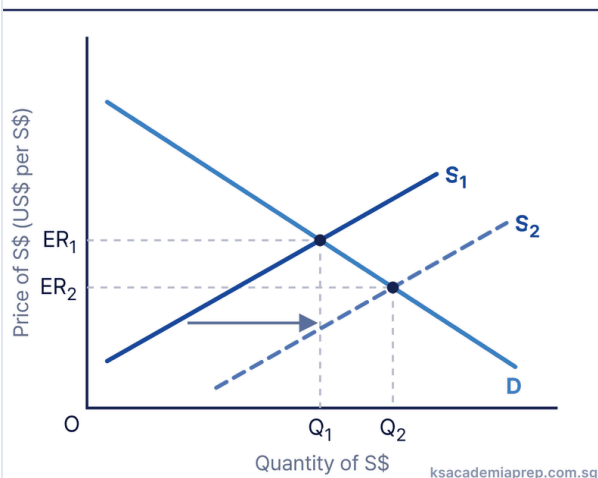
Exchange rate appreciation diagram

IB 4.5 · SL + HL

Exchange rate appreciation diagram**HOW TO DRAW IT**

1. Draw D_1 and S for S\$ on axes labelled Price of S\$ (US\$ per S\$) and Quantity of S\$, then mark ER_1 and Q_1 .
2. Draw D_2 to the right of D_1 with an arrow.
3. Mark the new equilibrium ER_2 and Q_2 , above and to the right of ER_1 and Q_1 . The S\$ has appreciated.

Name the specific cause of the shift and say which curve moves. Paper 2: link the stronger S\$ to cheaper imports and lower imported inflation.

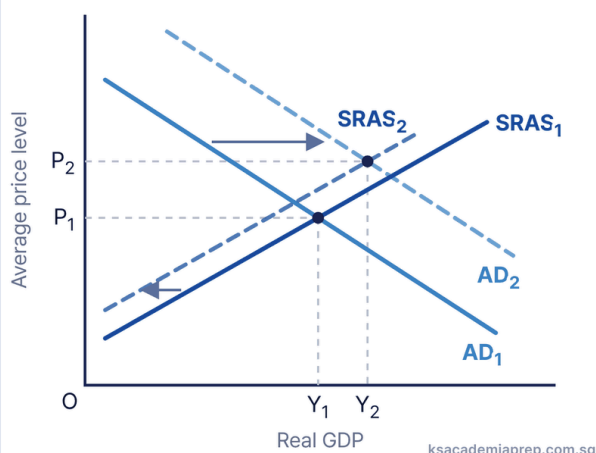
Exchange rate depreciation diagram

IB 4.5 · SL + HL

Exchange rate depreciation diagram**HOW TO DRAW IT**

1. Draw D and S_1 for S\$ on axes labelled Price of S\$ (US\$ per S\$) and Quantity of S\$, then mark ER_1 and Q_1 .
2. Draw S_2 to the right of S_1 with an arrow. Do not shift it left.
3. Mark the new equilibrium ER_2 , below ER_1 , and Q_2 with dashed lines. The S\$ has depreciated.

A rightward supply shift lowers the exchange rate; students often shift it the wrong way. Paper 2: follow through to dearer imports and more competitive exports.

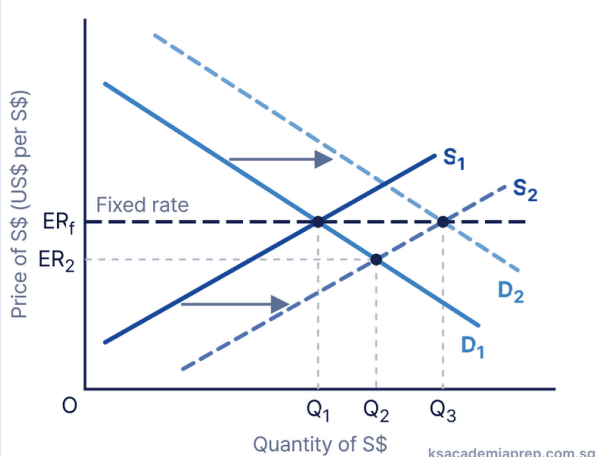
**AD/AS diagram
(effects of a depreciation)**

IB 4.5 · SL + HL

AD/AS diagram (effects of a depreciation)**HOW TO DRAW IT**

1. Label the axes Average price level and Real GDP.
2. Draw AD_1 and $SRAS_1$ meeting at P_1 and Y_1 , then draw AD_2 to the right and $SRAS_2$ a smaller distance to the left.
3. Mark the new equilibrium P_2 and Y_2 with dashed lines. P_2 is above P_1 either way; Y_2 exceeds Y_1 only if the AD shift is larger.

Say that the output effect depends on which shift is larger, but inflation rises either way. Paper 1: use it to evaluate a deliberate depreciation for a country that imports most of its raw materials.

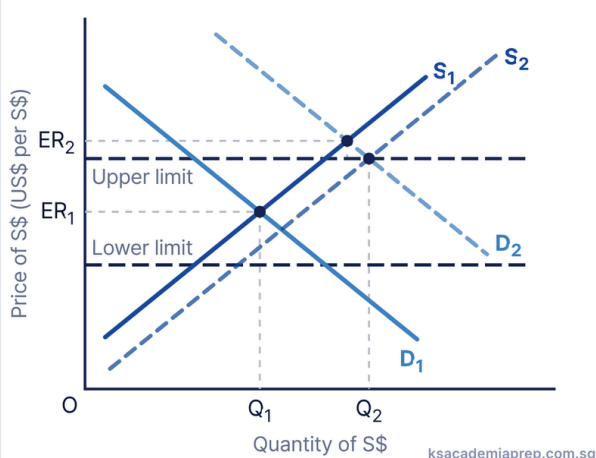
**Fixed exchange rate diagram
(maintaining the peg)**

IB 4.5 · SL + HL

Fixed exchange rate diagram (maintaining the peg)**HOW TO DRAW IT**

1. Label the axes Price of S\$ (US\$ per S\$) and Quantity of S\$. Draw the Fixed rate as a horizontal line at ER_f .
2. Draw D_1 and S_1 meeting at ER_f and Q_1 , then draw S_2 to the right and mark the pressure point ER_2 and Q_2 .
3. Draw D_2 to the right so it meets S_2 at ER_f , and mark Q_3 . This shows the central bank buying its own currency.

Show the pressure point ER_2 and then the intervention that cancels it. Paper 1: evaluate the peg by noting that reserves run out and higher interest rates hurt domestic growth.

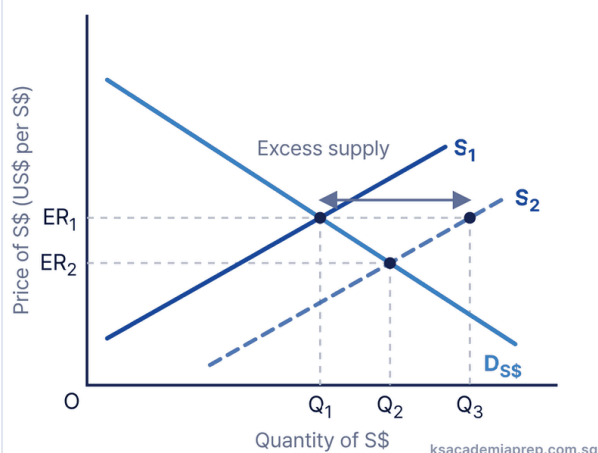
Managed exchange rate diagram

IB 4.5 · SL + HL

Managed exchange rate diagram**HOW TO DRAW IT**

1. Label the axes Price of S\$ (US\$ per S\$) and Quantity of S\$. Draw the Upper limit and Lower limit as horizontal lines.
2. Draw D_1 and S_1 meeting at ER_1 and Q_1 inside the band, then draw D_2 to the right and mark ER_2 above the Upper limit.
3. Draw S_2 to the right so it meets D_2 on the Upper limit, and mark Q_2 . Only intervene when a limit is breached.

Draw both limits as horizontal lines and only intervene when a limit is breached. Paper 2: Singapore's MAS manages the S\$ within an undisclosed band, a good real-world example.

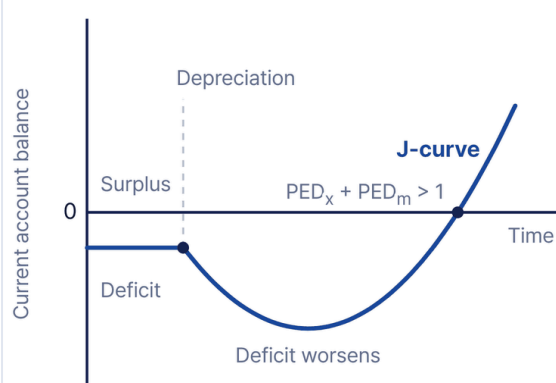
Current account deficit and exchange rate diagram

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IB 4.6 · HL ONLY**Current account deficit and exchange rate diagram****HOW TO DRAW IT**

1. Label the axes Price of S\$ (US\$ per S\$) and Quantity of S\$.
2. Draw $D_{S\$}$ and S_1 meeting at ER_1 and Q_1 , then draw S_2 to the right with an arrow.
3. Mark Q_3 on S_2 at ER_1 and label Q_1Q_3 as Excess supply, then mark the new equilibrium ER_2 and Q_2 with dashed lines.

Tie the current account to the currency market: imports supply the currency, exports demand it. Paper 1: use it to explain why a persistent deficit puts downward pressure on the exchange rate.

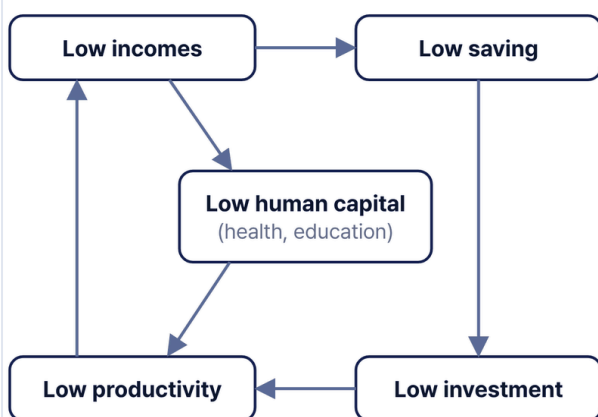
J-curve diagram (Marshall-Lerner condition)

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IB 4.6 · HL ONLY**J-curve diagram (Marshall-Lerner condition)****HOW TO DRAW IT**

1. Label the vertical axis Current account balance and the horizontal axis Time, with 0 in the middle, Surplus above and Deficit below.
2. Mark the point of Depreciation on the curve, then draw the curve dipping down first and label the dip Deficit worsens.
3. Draw the curve rising, crossing 0 into surplus, and label $PED_x + PED_m > 1$ and J-curve. Do not put the exchange rate on the horizontal axis.

Put time, not the exchange rate, on the horizontal axis and start the dip at the depreciation. Paper 1: use it to evaluate depreciation as a cure for a deficit, since the short run makes it worse.

Poverty cycle diagram

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IB 4.9 · SL + HL**Poverty cycle diagram****HOW TO DRAW IT**

1. Write Low incomes, Low saving, Low investment and Low productivity around a circle, in that order.
2. Join them with arrows so Low productivity leads back to Low incomes and the loop is closed.
3. Add Low human capital (health, education) as a branch from Low incomes to Low productivity.

Show the loop as a closed circle and say where a policy breaks it, such as aid, microcredit or spending on education. Paper 1: use it to explain why poverty persists without outside intervention.