Exercise walk-through

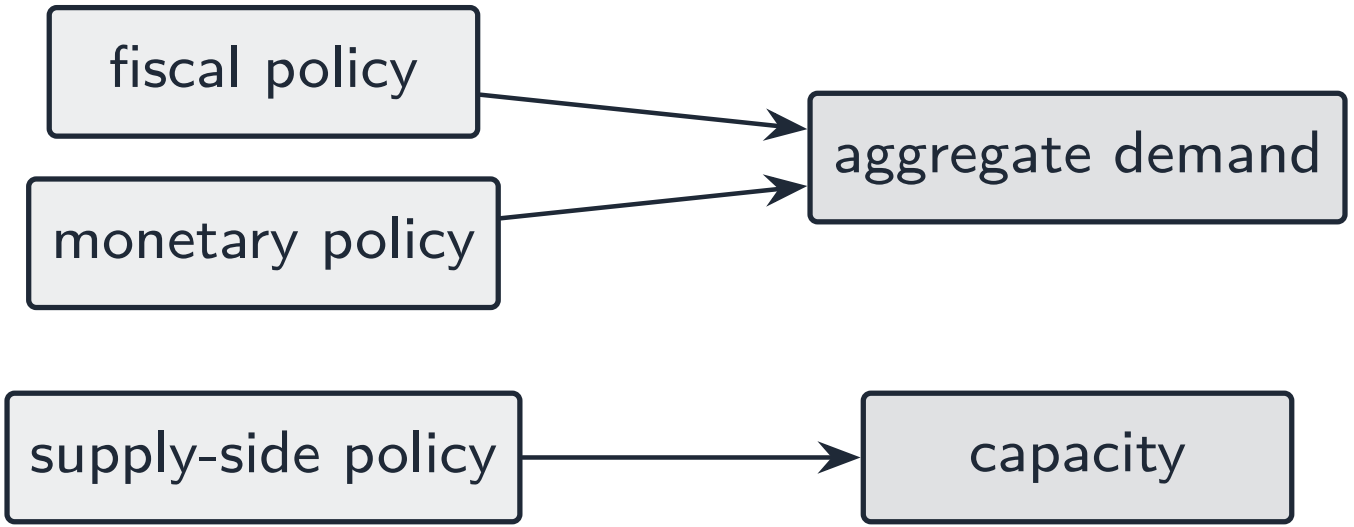
5.2
Aggregate demand, aggregate supply and the business cycle

International Baccalaureate · IB Diploma · Economics · HL

Macroeconomic activity, objectives and policy

- measure economic activity with GDP and other indicators, and describe the **business cycle**;
- use **aggregate demand** and aggregate supply to explain output gaps, and the HL **multiplier**;
- explain the objectives of low unemployment, low and stable inflation, growth and sustainable debt;

Figure: Macroeconomic activity, objectives and policy



- Fiscal and **monetary policy** act on demand; supply-side on capacity
- Match each part of the diagram to the text.

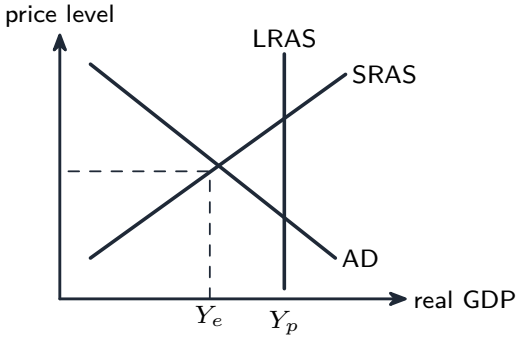
Aggregate demand and aggregate supply

- In the **monetarist** (new classical) view, the **long-run aggregate supply** (LRAS) curve is vertical at **potential output** . In the long run wages adjust, so the economy returns to full employment by itself. Demand changes only move the price level.
- In the **Keynesian** view, the economy can stay stuck below full employment. When there is a lot of spare capacity, AS is flat: more demand raises output without raising prices. Near full capacity, bottlenecks push prices up, and at full employment AS is vertical.
- Equilibrium: $90 - Y/2 = 20 + Y/2$, so $Y = 70$ and $P = 55$.

$$AD = C + I + G + (X - M)$$

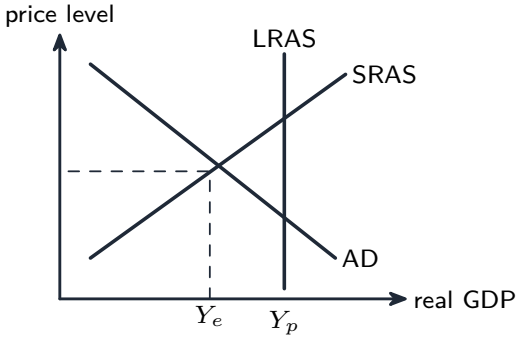
Exercise 2.1

2.1 Define a **recessionary gap**. [2]



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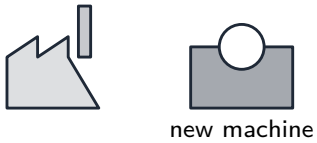


2.1

the difference when real GDP is below potential output; so there is unemployment of resources / cyclical unemployment

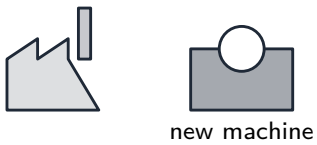
Exercise 2.2

2.2 State **two** determinants of investment. [2]



Exercise 2.2

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2.2

any two: interest rates; business confidence / expected demand; technology; business taxes

Exercise 2.3

2.3 Using an AD/AS diagram, explain the effect of a large rise in world oil prices on an oil-importing economy. [4]



[[drawlines:4]]

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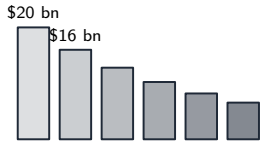
[[drawlines:4]]

2.3

oil is a key input, so firms' costs rise; SRAS shifts left; the price level rises and real GDP falls: stagflation / cost-push inflation and higher unemployment; correctly labelled diagram showing $\text{SRAS}_1 \rightarrow \text{SRAS}_2$, higher P, lower Y

Exercises 2.4·2.5

2.4 The marginal propensity to consume is 0.8. Calculate the multiplier and the change in real GDP after a \$20 billion rise in government spending. [3]

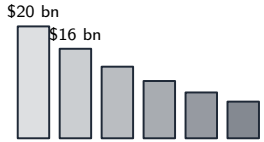


2.5 In another economy MPS = 0.1, MPT = 0.15 and MPM = 0.25. Calculate the multiplier and explain why it is smaller than in the previous question. [3]



Exercises 2.4·2.5

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2.4

$k = 1 \div (1 - 0.8) =$ **5**; change in GDP $= 5 \times 20 =$ $**100** bn

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2.5

$k = 1 \div (0.1 + 0.15 + 0.25) =$ **2**; more of each extra dollar of income leaks out as saving, taxes and imports; so each round of spending is smaller and the total effect on GDP is smaller

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Exercise 3.1 (a)

3.1 An economy is in a deep recession: unemployment is 12% and prices are stable.

(a) Draw a Keynesian AS curve and label its three sections. [2]

[[drawlines:3]]

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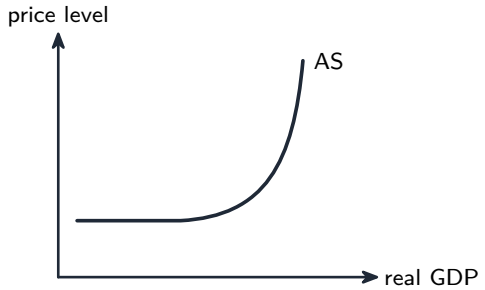
[[drawlines:3]]

(a) AS horizontal at low output, upward-sloping, then vertical at full employment output; all three sections and axes labelled

Exercise 3.1 (b)

3.1 An economy is in a deep recession: unemployment is 12% and prices are stable.

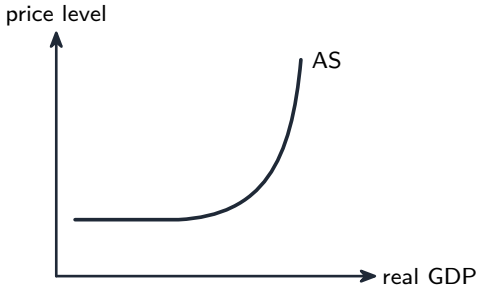
(b) Using your diagram, explain why a rise in AD may raise output without causing inflation. [6]



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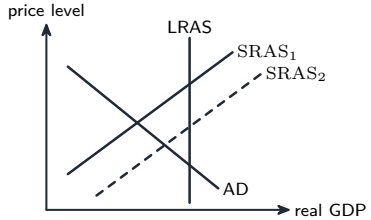
(b) Using your diagram, explain why a rise in AD may raise output without causing inflation. [6]



(b) in a deep recession there are many unemployed resources / spare capacity; firms can raise output without bidding up wages or costs; so AD shifts right along the flat section of AS; real GDP rises and the price level stays about the same; as the economy nears full employment, costs rise, and further AD increases cause more inflation; diagram: $AD_1 \rightarrow AD_2$ in the flat section, higher Y, same P

Exercise 3.2

3.2 Monetarist economists believe that an economy in a recession will return to potential output on its own.

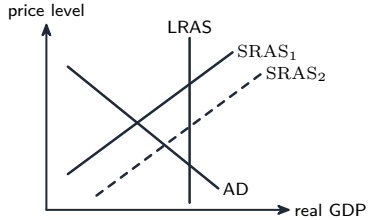


Using a diagram, explain this view and evaluate it. [8]

[[drawlines:9]]

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[[drawlines:9]]

3.2

award up to [8]: diagram: vertical LRAS at Y_p; AD falls, short-run equilibrium below Y_p; with high unemployment, wages and other costs fall over time; SRAS shifts right until the economy is back at Y_p at a lower price level; so no government action is needed in the long run; evaluation: wages are sticky downwards (contracts, minimum wages, unions), so this can take years; falling prices (deflation) can delay spending and raise real debt burdens, deepening the recession; Keynesians argue for government action to close the gap faster