

Exercise walk-through

3.2

Aggregate demand and aggregate supply (2.3.2-2.3.3)

Pearson Edexcel · International A-Level · Economics

1. Topic 3 at a glance

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WEC12 macro first half: spec sections 2.3.1 to 2.3.5 in full - measures of economic performance (four rows), aggregate demand (five rows), aggregate supply (three rows), national income (four rows) and economic growth (four rows), 66 objectives.

Must-know: real GDP = nominal divided by deflator times 100; per capita divides by population; CPI = weighted sum of price relatives; $AD = C + I + G + (X - M)$; multiplier $k = 1/(1-MPC) = 1/MPW$ with $MPW = MPS + MPT + MPM$; SAM anchor $k = 2$ turning a 30 billion injection into 60.

2. Measures of economic performance

Measures of economic performance

Real versus nominal, total versus per capita, value versus volume; GNI adds net income from abroad; PPP rates equalise basket prices for fair comparisons; recession = two consecutive negative quarters; GDP misses distribution, the shadow economy and the environment, so wellbeing indicators complement it. Nominal 112 with deflator 108 gives real 103.7; over population 102, per capita 101.7.

Inflation: $\text{CPI} = 0.5 \times 110 + 0.3 \times 100 + 0.2 \times 120 = 109$, so 9 percent; disinflation means a slower RISE (the SAM India chart: 12 to 9, 11 to 6 - never negative); causes are demand-pull, cost-push and money-supply growth. Unemployment by the ILO definition with five causes; underemployment is distinct; the current account trades goods, services and income.

4. Aggregate supply

Aggregate supply

SRAS shifts with raw material and energy costs, exchange rates and taxes. The long run comes in two shapes: Keynesian - flat with spare capacity, curving up to vertical at capacity - and classical - vertical at full employment, the economy tending back there.

LRAS shifts with technology, productivity, education and skills, regulation and tax, demography and migration, and competition policy. The shape chosen determines whether a demand shift mainly moves output (Keynesian short run) or prices (classical long run).

Exercises 2.1·2.3

2.1 Write the AD equation. With $C = 60$, $I = 20$, $G = 20$, $X = 25$ and $M = 25$, calculate AD. [2]

2.2 For each event, state whether it moves the economy along AD or shifts AD (and in which direction): (a) the price level rises; (b) consumer confidence collapses. [2]

2.3 Name any four of the six influences on consumption. [2]

Exercises 2.1·2.3

2.1 Write the AD equation. With $C = 60$, $I = 20$, $G = 20$, $X = 25$ and $M = 25$, calculate AD. [2]

2.1 $AD = C + I + G + (X - M) = 60 + 20 + 20 + (25 - 25) = 100.$

2.2 For each event, state whether it moves the economy along AD or shifts AD (and in which direction): (a) the price level rises; (b) consumer confidence collapses. [2]

2.2 (a) A movement ALONG the AD curve (a higher price level lowers real spending).
(b) A shift of AD LEFT – less consumption at every price level.

2.3 Name any four of the six influences on consumption. [2]

2.3 Any four of: disposable income, interest rates, consumer confidence, welfare payments, wealth effects, availability of credit.

Exercises 2.4·2.6

2.4 Distinguish gross investment from net investment. [2]

2.5 The world oil price rises. Which curve shifts, in which direction, and why? [2]

2.6 With heavy spare capacity, what does the Keynesian LRAS imply about the price effect of a rise in AD? [2]

Exercises 2.4·2.6

2.4 Distinguish gross investment from net investment. [2]

2.4 Gross investment is total spending on capital; net investment is gross minus depreciation – only net investment ADDS to the capital stock.

2.5 The world oil price rises. Which curve shifts, in which direction, and why? [2]

2.5 SRAS shifts LEFT: oil is an input cost, so production costs rise at every output level, raising the price level and cutting output.

2.6 With heavy spare capacity, what does the Keynesian LRAS imply about the price effect of a rise in AD? [2]

2.6 With spare capacity, the Keynesian LRAS is flat at the given price level, so higher AD raises REAL OUTPUT with little or no inflation until capacity is approached.

Exercises 3.1·3.2

3.1 (*Original.*) In the model AD: $P = 90 - Y/2$ and SRAS: $P = 20 + Y/2$, an investment injection shifts AD up by 15 at every output. Find both equilibria and describe the adjustment. [4]

3.2 (*Original.*) Explain two factors that shift LONG-run aggregate supply, with the mechanism for each. [4]

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3.1 Before: $90 - Y/2 = 20 + Y/2$ gives $Y = 70$, $P = 55$. After the upward shift AD is $P = 105 - Y/2$: $105 - Y/2 = 20 + Y/2$ gives $Y = 85$, $P = 62.5$. Output rises from 70 to 85 and the price level from 55 to 62.5; at the old output the economy now demands more than firms supply, so prices and output rise together along SRAS to the new equilibrium.

3.2 (*Original.*) Explain two factors that shift LONG-run aggregate supply, with the mechanism for each. [4]

3.2 Any two with mechanism: technology (more output per input shifts LRAS right); education and skills (a more productive workforce); demography or net migration (a larger labour force); competition policy or deregulation (more efficient allocation); lower income tax (incentives to work); investment (a bigger capital stock).

Exercise 3.3

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3.3 A depreciation makes exports cheaper abroad and imports dearer at home, so export volumes tend to rise and import volumes to fall – net trade ($X - M$) rises and AD shifts right. Limits: import prices rising can feed inflation (cost-push), and if export and import demand are price INELASTIC in the short run, the value of net trade can fall before it rises (the J-curve); non-price factors (quality, design) still matter.

Local review guidance: both equilibria solved from the equations before any description; LRAS factors from the specification list with the capacity mechanism; (R1 3.3) the Marshall-Lerner inelasticity caveat earns the analysis mark. This is authored classroom guidance.