



ECO.MAC5 Aggregate Demand: Components and Determinants

AQA 7136 · Calculators not allowed · about 120 minutes

Total Marks

Name: _____ Date: ____ / ____ / ____

Answer all questions. Write full sentences for extended responses and the essay question. Time guidance: 120 minutes.

- 1

Aggregate demand identity in the context of the UK economy: state the AD equation and name each component.

(Total for Question 1 is 2 marks)
- 2

Disposable income and UK household consumption: explain how a rise in household disposable income affects consumer spending, naming the mechanism and likely magnitude qualifier.

(Total for Question 2 is 3 marks)
- 3

Interest rates and consumer spending in the UK: explain two channels by which a fall in interest rates can increase consumption.

(Total for Question 3 is 3 marks)
- 4

Wealth effects and household spending in the UK: define the wealth effect and explain how a fall in house prices might affect consumption.

(Total for Question 4 is 2 marks)
- 5

Investment determinants: explain how a rise in business confidence or animal spirits affects firms' investment decisions in the UK economy.

(Total for Question 5 is 3 marks)
- 6

The accelerator effect for UK investment: state the accelerator principle and give a brief numeric example showing how a 2% rise in demand could cause a larger percentage change in investment if the capital output ratio is 4.

(Total for Question 6 is 2 marks)
- 7

Retained profits and investment: explain why a higher level of retained profits in firms might increase aggregate investment in the UK without any change in bank lending conditions.

(Total for Question 7 is 2 marks)

- 8** Government spending determinants in the UK: distinguish between cyclical changes in government spending and discretionary fiscal policy and give one example of each.

(Total for Question 8 is 3 marks)

- 9** Net exports determinants: explain how a depreciation of the pound sterling is likely to affect UK net exports, assuming no immediate change in elasticities.

(Total for Question 9 is 3 marks)

- 10** AD curve shift diagram: UK scenario where the Bank of England cuts interest rates by 0.5 percentage points. Identify which AD component is primarily affected, indicate the direction of the shift of the AD curve, and explain why. Draw an AD curve diagram showing labelled axes, the initial equilibrium and the new equilibrium after the shift.

Figure (to be drawn): Student should draw Price level on vertical axis and Real GDP on horizontal axis. Draw AD1 and AD2 with AD2 to the right of AD1, and an upward sloping SRAS. Mark initial equilibrium E1 at intersection of AD1 and SRAS, and new equilibrium E2 at intersection of AD2 and SRAS. Show PL1 and PL2 and Y1 and Y2.

(Total for Question 10 is 6 marks)

- 11** AD curve shift diagram: international scenario where several of the UK's main trading partners experience faster growth and higher incomes. Identify the AD component affected, the direction of the AD shift for the UK, and explain the chain of causation. Draw an AD diagram labelling axes, initial and new equilibrium and the shift.

Figure (to be drawn): Student should draw Price level on vertical axis and Real GDP on horizontal axis. Draw AD1 and AD2 with AD2 to the right of AD1, and an upward sloping SRAS. Mark initial equilibrium E1 and new equilibrium E2 after the rightward shift.

(Total for Question 11 is 6 marks)

- 12** Evaluate which component of aggregate demand is most significant in driving changes in UK aggregate demand, considering consumption, investment, government spending and net exports. Use diagrams where helpful and reach a supported judgement.

(Total for Question 12 is 25 marks)

Mark scheme · ECO.MAC5 Aggregate Demand: Components and Determinants

Question 1

- **B1** $AD = C + I + G + (X - M)$
- **B1** names of components: C = consumption, I = investment, G = government spending, X = exports, M = imports (so $X - M$ = net exports)
- **Answer: $AD = C + I + G + (X - M)$; C is consumption, I investment, G government spending, X exports, M imports.**

Question 2

- **M1** a rise in disposable income increases households' ability to spend, raising consumption
- **A1** developed: the increase in consumption depends on the marginal propensity to consume (MPC), so only a proportion of the income rise is spent
- **A1** may note that the effect is larger where MPC is high, smaller where households save more or pay down debt
- **Answer: Higher disposable income raises consumption, but the effect is limited by the MPC, so only a fraction of extra income is spent.**

Question 3

- **M1** lower interest rates reduce the cost of borrowing so households take more loans for big-ticket items, raising consumption
- **A1** developed: lower rates also reduce the return to saving, encouraging spending instead of saving
- **A1** allow further development: lower mortgage rates increase disposable income for mortgagors, or asset price rises via lower rates raise perceived wealth and spending
- **Answer: A fall in interest rates raises consumption by reducing borrowing costs and by lowering the incentive to save; it can also raise real disposable income for mortgagors and boost wealth effects.**

Question 4

- **B1** definition: the wealth effect is the change in consumption resulting from changes in the value of household assets such as housing or financial assets
- **B1** explanation: a fall in house prices reduces perceived wealth and may lead households to cut spending, lowering consumption
- **Answer: The wealth effect is how asset price changes alter spending; a fall in house prices reduces perceived wealth and tends to lower consumption.**

Question 5

- **M1** higher business confidence raises expected future profitability of projects, making firms more willing to invest
- **A1** developed: this increases planned capital spending even at the same interest rate because the expected return on investment is judged higher
- **A1** may mention accelerator effect or that confidence affects perceptions of demand and thus firms' capacity plans
- **Answer: Rising business confidence increases expected returns and perceived demand, so firms raise investment spending even without a change in interest rates.**

Question 6

- **B1** statement: the accelerator says investment depends on changes in output, so a rise in demand leads firms to raise investment to expand capacity
- **B1** example: with capital output ratio 4, a 2% rise in demand implies roughly 8% additional investment demand ($2\% \times 4 = 8\%$)
- **Answer: Accelerator: investment responds to changes in output. Example: 2% demand rise times capital output ratio 4 implies about an 8% rise in investment demand.**

Question 7

- **B1** retained profits provide an internal source of finance, reducing firms' reliance on external borrowing
- **B1** with more internal funds, firms can finance investment projects that raise capital spending and hence aggregate investment

Question 8

- **M1** cyclical government spending changes occur automatically with the economic cycle, e.g. higher unemployment benefits and lower tax receipts in a recession
- **A1** discretionary fiscal policy is an active policy choice to change G , e.g. a government chooses to increase infrastructure spending to stimulate demand
- **A1** example for each provided as required
- **Answer: Cyclical: automatic rise in unemployment benefits in a recession. Discretionary: a planned increase in infrastructure spending to boost AD.**

Question 9

- **M1** a depreciation makes UK exports cheaper to foreign buyers, so export volumes tend to rise
- **M1** imports become more expensive to UK buyers, so import volumes tend to fall
- **A1** together these changes tend to improve net exports ($X - M$), increasing AD, although the overall effect depends on price elasticities of demand and any pass through to prices
- **Answer: A depreciation makes exports cheaper and imports more expensive, so export volumes rise and import volumes fall, improving net exports and raising AD, subject to elasticities.**

Question 10

- **B1** identifies the components primarily affected: C and I (consumption and investment) due to lower borrowing costs and reduced incentive to save
- **B1** states the AD curve shifts right ($AD_1 \rightarrow AD_2$), increasing real GDP and the price level
- **M1** explains mechanism: lower interest rates reduce cost of credit, increase mortgage disposable income, encourage consumer durables and business borrowing for capital, raising C and I and hence AD
- **A1** developed explanation: mentions MPC/accelerator or wealth effects or that the magnitude depends on levels of spare capacity and confidence
- **M1** diagram credit: correctly labelled axes and AD curves with arrow showing rightward shift
- **A1** diagram credit: initial equilibrium labelled and new equilibrium labelled with PL and Y changes shown
- **Answer: Primary components: C and I. AD shifts right from AD_1 to AD_2 because cheaper borrowing and higher disposable income for mortgagors boost consumption and investment; diagram shows AD rightward shift, labelled axes, E_1 and E_2 , PL_1/PL_2 and Y_1/Y_2 .**

Question 11

- **B1** identifies the component affected as exports (X), and hence net exports ($X - M$)
- **B1** states the AD curve shifts right ($AD_1 \rightarrow AD_2$), increasing real GDP and the price level
- **M1** explains mechanism: higher incomes abroad raise demand for UK exports, increasing X and improving net exports, which directly raises AD
- **A1** developed point: notes effect size depends on price competitiveness, exchange rate and elasticity of demand for UK exports
- **M1** diagram credit: correctly labelled axes and AD curves with rightward shift arrow
- **A1** diagram credit: initial and new equilibria labelled with PL and Y changes indicated
- **Answer: Component affected: exports (X), so ($X - M$) rises and AD shifts right. Mechanism: richer trading partners buy more UK exports; diagram shows AD_1 to AD_2 rightward shift, labelled axes, E_1 and E_2 and PL/Y changes.**

Question 12

- **Level 1** (1-5): Basic statements about components of AD with limited analysis. May list factors affecting C, I, G and (X - M) without clear links to the UK context or without evaluation.
- **Level 2** (6-10): Developed explanation of how two or more AD components can affect aggregate demand, with some contextual examples for the UK and some use of economic reasoning. Limited evaluation or balance of arguments.
- **Level 3** (11-15): Detailed analysis of multiple AD components, showing how each can drive changes in AD, supported by diagrams and UK-relevant examples. Balanced evaluation considering magnitude, persistence and constraints, leading to a reasoned judgement.
- **Level 4** (16-20): Comprehensive analysis and well developed evaluation. Considers interactions between components, time lags, policy constraints, and distributional effects. Uses theory (MPC, accelerator, multiplier), diagrams and real-world plausibility to compare components and builds a clear supported conclusion.
- **Level 5** (21-25): Excellent, well-structured evaluation. Integrates strong theoretical analysis with multiple contextual examples and diagrams. Weighs evidence on magnitude, volatility, persistence, fiscal constraints and openness of the UK economy. Reaches a balanced, well-justified judgement about which component is most significant, noting conditions under which this judgement would change.
- **Indicative content:**
 - Consumption often accounts for the largest share of UK AD and so small percentage changes in C can have large absolute effects. Discuss MPC, wealth effects (house prices, pensions), interest rates and consumer confidence.
 - Investment is volatile and has high multiplier and accelerator interactions; it can lead to substantial swings in AD and has strong supply-side effects. Consider retained profits, business confidence and interest rates, plus time lags and reversibility.
 - Government spending can be large and deliberately adjusted; discretionary fiscal policy can have direct, immediate effects on AD but is constrained by budgets, debt and political cycles. Distinguish automatic stabilisers from discretionary changes.
 - Net exports depend on external demand, exchange rates and competitiveness. For the UK, trade openness, the size of export sectors and exchange rate movements matter. Consider that net exports can be small relative to C but still swing AD during global shocks.
 - Consider persistence and speed: consumption reacts fairly quickly to income and confidence but is smoother; investment is more volatile and can be decisive in downturns; government spending can be targeted but faces long implementation lags for some projects; net exports can flip rapidly with exchange rate shocks or global conditions.
 - Consider multiplier and crowding out: fiscal multipliers may vary; temporary government spending can be offset by higher interest rates or borrowing costs. Investment-led growth may be more sustainable if it raises productive capacity.
 - Evaluate distributional and sectoral effects, measurement issues and uncertainty about elasticities. Note condition dependence: e.g. near full capacity, demand-driven C increases cause inflation rather than output growth; in deep recessions investment and government spending may be more effective.
 - Conclude with a supported judgement that identifies the most significant component for the UK given a specified context, or that the most significant component varies by economic state, providing criteria for when each component dominates.