

Chapter 19 The circular flow of income and aggregate demand

Answers to Knowledge checks

- 19.1** The model at this early stage is a closed system because we are mapping all of the transactions between households and firms, and there are no external linkages with other economic agents.
- 19.2** A fall in investment expenditure following a rise in the rate of interest will mean that injections into the circular flow have fallen.
- 19.3** If households choose to save more because the rate of return on savings has increased with the rate of interest, this will mean that there was an increase in withdrawals from the circular flow.
- 19.4** If we are interested in the volume of output being produced in a period, it is important to separate out the effect of changing prices in order to avoid over-estimating the changes in 'real' output.
- 19.5** Firms undertake investment expenditure — but so also does the government.
- 19.6** If households decide to save more at any given level of income because they feel pessimistic about the future, then the consumption function would shift downwards.
- 19.7** Changes in any of the components of aggregate demand will shift the curve, but a change in the overall price level will lead to a movement along it.

Answers to Exercises and Case studies

Exercise 19.1

- a** The overall level of prices in an economy is an example of a **macroeconomic** phenomenon.
- b** The price of ice cream is **microeconomic** in nature.
- c** The overall rate of unemployment in the UK is a **macroeconomic** variable.
- d** The unemployment rate among catering workers in Aberdeen is **microeconomic** in character.
- e** The average wage paid to construction workers in Southampton is also a **microeconomic** phenomenon.

Exercise 19.2

- a** Aggregate demand is $C + I + G + X - M$
which is $75 + 30 + 25 + 50 - 55 = 125$.
- b** The trade balance is given by exports minus imports, which is $50 - 55 = -5$.

Exercise 19.3

- a** True.
- b** True.
- c** False. A fall in the average/overall price level in an economy is likely to be associated with changes in the pattern of demand: the demand for some goods and services will increase but for others it may stay the same or fall.
- d** False. Although government expenditure is indeed regarded as autonomous, it does not affect the shape of the aggregate demand curve, but its position.

- e True, given that interest rates tend to be relatively low when prices are relatively low (*see* page 274 of the book).
- f False. Consumption expenditure tends to be the largest component by quite a long way.

Case study 19.1

Investment and the financial crisis

- a In the lead-up to the financial crisis, which began to take effect in 2008, investment had been between 17 and 17.5% of GDP. However, as the crisis unfolded, investment fell, reaching just over 15% of GDP by 2009. This reflected the turmoil in financial markets, with the banks struggling to carry on their business and reluctant to lend. Even firms that wanted to borrow for investment found it difficult to obtain loans. After 2009, investment began to recover, but slowly. By 2017 investment was still below 17%.
- b Interest rates hit an all-time low during and after the crisis. We would normally expect this to boost investment, as low interest rates mean a low cost of borrowing. However, investment also depends upon the willingness of banks to lend, and on the view that firms take about the future direction of the economy. With all the uncertainty that came with the crisis, firms are likely to have formed weak expectations about the future prospects for the economy, so may have been reluctant to invest. One thing you will see as you proceed with your study of macroeconomics is that we are always looking to explain real-world events — but there are rarely single or simple explanations. The truth is a combination of different influences.

Answers to end-of-chapter questions

A Multiple-choice questions

- 1 d. Exports
- 2 a. $C + I + G + (X - M)$
- 3 c. A decrease in savings

B Knowledge and understanding questions

- 4 Gross domestic product (GDP) is the total level of economic activity carried out in an economy during a given period.

A full explanation of gross domestic product	2 marks
A vague or partial explanation of gross domestic product	1 mark

- 5 The *AD* curve is downward sloping suggesting that there is an inverse relationship between *AD* and the price level.

An explanation of the relationship between <i>AD</i> and the price level	up to 2 marks
A diagram showing the relationship between <i>AD</i> and the price level	up to 2 marks

- 6 Factors may include:
 - Decrease in consumption
 - Increase in savings
 - Increase in taxation
 - Decrease in investment

- Decrease in government spending
- Increase in imports
- Decrease in exports

Two factors explained	4 marks
One factor explained AND one factor identified	3 marks
One factor explained OR two factors identified	2 marks
One factor identified	1 mark

C Stimulus response question

7 a

AO1 Knowledge	1 mark
AO2 Application	1 mark
AO3 Analysis	2 marks

Knowledge (1 mark) is likely to include:

- Income

Application (1 mark) is likely to include:

- Application to *AD/GDP*

Analysis (2 marks) is likely to include:

Analysis of the effect of a decrease in consumer income, for example:

- Reduction in *AD*
- Shift of the *AD* curve to the left
- Decrease in GDP

b

AO1 Knowledge	1 mark
AO2 Application	1 mark
AO3 Analysis	5 marks
AO4 Evaluation	5 marks

Knowledge (1 mark) is likely to include:

- Income

Application (1 mark) is likely to include:

- Application to *AD/GDP*

Analysis (5 marks) is likely to include:

Analysis of the effect of a decrease in consumer income, for example:

- Reduction in *AD*
- Shift of the *AD* curve to the left
- Decrease in GDP

Evaluation (5 marks) is likely to include:

Evaluation that a decrease in consumer income will not lead to a fall in GDP, for example:

- Other factors may also change, e.g. taxation, government spending, international competitiveness
- Depends upon the size of the decrease in consumer income
- Depends upon the income elasticity of demand of domestically purchased goods

A judgement whether a decrease in consumer income will always lead to a fall in GDP