

Economics Teach Yourself Series

Topic 6: Aggregate Demand and Aggregate Supply (Units 1-4)

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Aggregate Demand and Aggregate Supply

Much of the Economics course deals with macroeconomics – looking at the whole economy. Hence, while we look at Demand and Supply curves and the effect of changes in demand and supply, we also need to focus on Aggregate demand and Aggregate Supply – the total demand and total supply of goods and services within the domestic economy.

Initial terminology

As it appears in Units 1 - 4

Aggregate demand (AD) represents the sum of spending on goods and services produced by a nation over a year. It is made up of $C + I + G + X - M$.

Aggregate demand-side factors are the macroeconomic influences that determine the level of spending or AD at various prices, in turn affecting the cyclical level of economic activity. For example, they include consumer confidence, business confidence, the exchange rate for the Australian dollar and overseas conditions.

Aggregate supply (AS) is the total or combined supply of all types of goods and services produced over a period by the nation's businesses. It is especially affected by the availability of a nation's resources and the efficiency with which these resources are used.

Aggregate supply-side factors are the main determinants of a nation's productive capacity or potential level of GDP (for example, quantity and productivity of resources), especially in the long term. They involve changes in the volume and/or efficiency of resources.

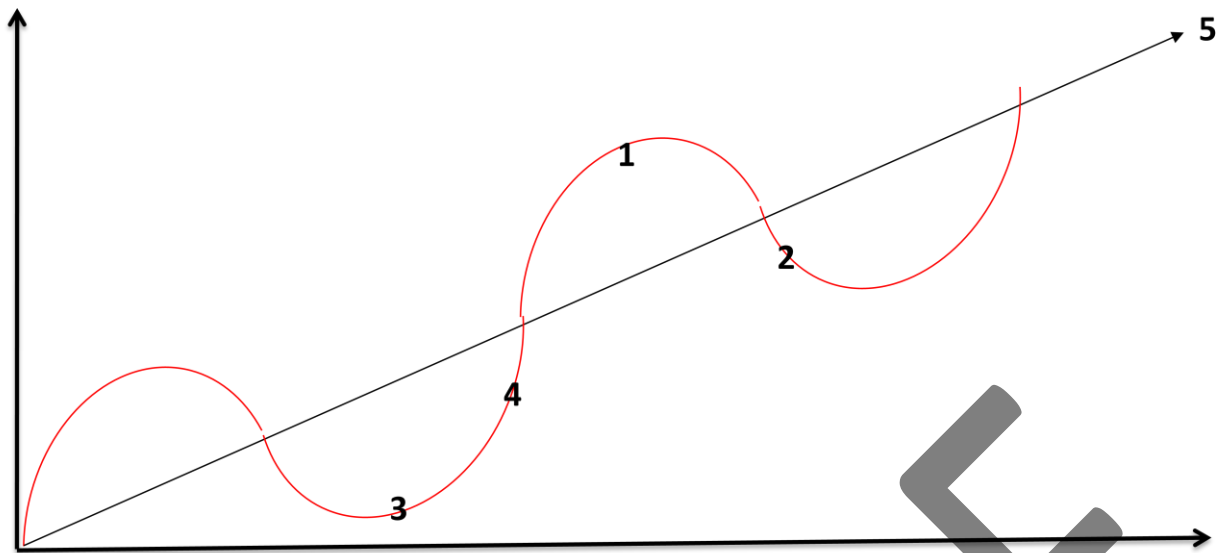
The Business Cycle

As it appears in Units 2 - 4

An economy is involved in the production of goods and services to satisfy the needs and wants of the members of that economy. The level of production (the supply of goods and services) will vary according to various factors and the demand for the output of production (the goods and services) will also vary due to a variety of reasons.

This interaction of the supply of goods and services and the demand for goods and services is referred to as the level of economic activity.

Because the level of supply and demand vary, so too does the level of economic activity. Economists recognise that the fluctuations in the levels of supply and demand occur over a period of time called the Business Cycle (or Trade Cycle). This cycle is able to be represented diagrammatically:



The diagram represents four distinct phases of the business cycle:

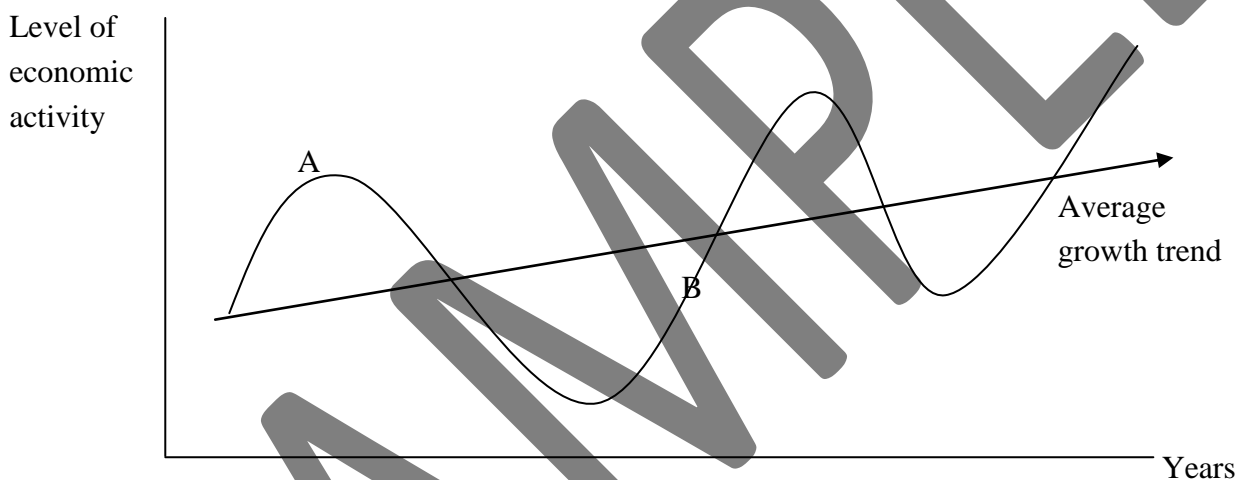
1. Boom or peak – at this point the economy is growing at a quite high rate. It can be expected that consumer and business confidence is high and the level of demand is strong. Supply of goods and services is also high so it is assumed that the level of employment is also high (unemployment is low). The issues for the economy at this point are two-fold:
 - Demand pressures are high which may be causing or will cause inflation
 - If domestic supply can't match the demand there may be a move towards imports which can worsen our Current Account position.
2. Contraction or downturn – eventually the high rates of growth and the rises in prices lead to a decline in demand. Consumers begin saving as the inflation rate has risen leading to a decline in consumer confidence. Businesses react by cutting production and possibly shedding labour. Confidence further declines and the economy slows further.
3. Trough – at this point the economy has 'bottomed out'. The economy has reached a point where production has declined to its minimum level and demand has also declined to its minimum. The economy is expected to 'bounce back' from this point as inflation is low and spending is encouraged by the government through its policies.
If the trough remains for a number of periods (quarters), the economy is said to be in a recession.
4. Expansion or recovery – with a low inflation rate and low interest rates, borrowing and spending recommence. The economy begins to grow again and demand begins to increase, leading to an increase in production and employment as supply must increase to meet the increased demand. Economic growth rises and unemployment falls.
5. This point is technically not part of the business cycle. It depicts a sustained rate of economic growth without the fluctuations shown in the diagram. As the diagram shows, the business cycle fluctuates around this line of sustainable and constant growth and represents where we would like the economy to be over the course of the business cycle.

Avoiding the fluctuations in the business cycle is part of the role of the government and the policies implemented by the government aim to keep troughs short and shallow and peaks long and not quite so high. Ideally the government would like its policies to result in a steady curve – Point 5 on the diagram.

Review Questions

1. The level of economic activity refers to
 - A. all production and expenditure by businesses
 - B. any activity by individuals, businesses and government that generates production, income, employment and expenditure
 - C. consumption and expenditure on goods and services by households
 - D. the activities of the government in the economy
2. When a recession in the business cycle occurs
 - A. unemployment rises, business confidence falls and prices fall
 - B. unemployment rises, business investment rises and prices fall
 - C. unemployment falls, business confidence rises and prices fall
 - D. unemployment falls, business confidence falls and prices rise

Refer to diagram of the business cycle below.



3. Identify and describe each of the phases – A and B - indicated on the business cycle diagram.

Solutions to Review Questions

1. Answer: B

Explanation:

Economic activity is directed towards satisfying wants. Individuals use income to satisfy their wants and their demand for goods and services encourages production of goods and services by businesses. Businesses will employ factors of production to meet consumer demand. Wages are earned by labour resources and profits are earned by owners of capital resources. Governments will also receive money through taxation. This income is then spent by individuals, businesses and governments to satisfy more wants, which will generate more demand, production and economic activity. Therefore, economic activity by all of these parties generates production, income, employment and expenditure.

2. Answer: A

Explanation:

A recession is a period of decreasing economic activity and it is indicated by a fall in economic growth as measured by GDP during two consecutive quarters. As economic activity slows, business confidence falls as consumer demand for goods and services drops. Businesses will respond by reducing production levels, which means less labour is required causing higher levels of unemployment. There will be pressure on businesses to reduce prices to clear excess stock resulting from lower consumer demand for goods and services.

3. Phase A represents the peak (or boom) phase of the business cycle. This occurs when a period of expansion reaches an upper turning point. In this phase, inflation is at a high and unemployment is at a low level. If an economy is already operating at its productive capacity, it can create an inflationary boom period.

Phase B represents a recovery after a trough or recession. In this phase, economic activity begins to expand. After a certain period of time, it is expected that employment will rise leading to fall in unemployment. Inflation will begin to rise during a recovery period as demand, and production to meet this, increases.

4. Answer: B

Explanation:

An economic boom is characterised by unsustainable high rate of economic growth, rapidly declining unemployment and rising inflation. In its early stages, a boom is also characterised by rising consumer confidence. Between Year 1 and Year 2, all these indicators have moved in the characteristic direction of a boom.

5. *Leakages in the circular flow diagram are represented by taxes, savings and spending on imports. Taxes, savings and import spending flow out of the circular flow that exists between households and businesses and do not add to Aggregate demand. Taxes are collected by the government, savings are deposited in banks and import spending flows overseas, therefore leaking from the continuous flow of spending that occurs within the economic sectors.*

6. *Answer: C*

Explanation:

Non-market activity refers to activity that doesn't see the output reach the market. This is because the output is produced and consumed within the household.

7.

Participant	Sector
Your parents	Household
City of Frankston	Government
ANZ Bank	Financial
An American tourist	Overseas
Your school	Business
Your Economics teacher	Household
Woolworths	Business

8. *Answer: D*

Explanation:

Aggregate demand is the total amount of expenditure on all goods and services produced in Australia in a given period. It has a number of components and is represented as $AD = C + I + G_1 + G_2 + X - M$. The level of household disposable income influences C; the level of business confidence impacts on I and the level of government expenditure on capital equipment such as roads, ports and railways affects G_2 . The level of productivity of the labour force is a factor that affects aggregate supply, not aggregate demand.

9. *Answer: A*

Explanation:

An increase in government welfare payments and a decrease in personal income tax rates will increase the personal disposal income of households, thereby increasing the private consumption (C) component of aggregate demand. This will encourage an increase in economic activity. An increase in interest rates, particularly with respect to borrowings, has the effect of lowering household income and/or business profits and discourages economic activity. An increase in the exchange rate, or appreciation, tends to slow exports and raise imports. This has the effect of slowing aggregate demand and economic activity.

10. One of the following responses would be acceptable:

- Improved levels of consumer confidence or expectations can lead to an increase in consumption spending. If consumers have favourable expectations (i.e. about future income, inflation and their employment prospects) it will influence them to spend more on goods and services rather than save their income.
- The availability of higher levels of household disposable income can increase consumption spending on local and foreign goods and services. Disposable income is the money that households have available to spend after payment of personal income tax. Cuts in personal income tax or the receipt of government transfers (e.g. income assistance) can lead to an increase in disposable income.

11.

- i. A depreciation of the Australian dollar will promote economic growth. As the economy becomes more competitive in international markets, our exports will become more desirable to overseas buyers. This encourages overseas purchasers to buy our goods and services as they will be comparatively cheaper.
- ii. An increase in interest rates puts pressure on businesses by increasing their costs of borrowing. Loan repayments represent a cost of production to businesses, which affect profitability. Higher rates will discourage businesses from investing in production, leading to lower economic activity and GDP growth.

12. Answer: C

Explanation:

A rise in the cost of materials can lead to a reduction in profit levels and makes businesses less willing and able to produce competitively. Both interest rates and labour costs represent a cost of production and a fall in either of these will increase profitability and encourage higher levels of production of goods and services. A rise in the participation rate represents an increase in the size of the workforce and greater availability of labour. This helps to expand productive capacity and, therefore, increase aggregate supply and economic activity.

13.

- i. The level of interest rates affects the ability of consumers and businesses to borrow and represent the cost of credit. Higher interest rates will make it more costly to finance private consumption and private investment expenditure, thereby lowering aggregate demand and economic activity. Interest rates also represent a production cost to businesses that have borrowed money to finance their operations. Higher interest rates represent an unfavourable supply condition as it can make businesses less competitive, thereby reducing aggregate supply and economic activity.
- ii. The exchange rate affects the price and attractiveness of exports against imports. If the Australian dollar appreciates, it will make our exports more expensive (i.e. causing less to be sold) but imports relatively cheaper (i.e. encouraging more purchases of foreign goods and services). This will have the effect of slowing aggregate demand and economic activity. The exchange rate can also affect production costs for businesses using imported products. An appreciation of the Australian dollar will make imports cheaper, thereby reducing production costs. This encourages an increase in aggregate supply and economic activity.