

## The aggregate demand/aggregate supply (AD/AS) model

### Introduction

The aggregate demand-aggregate supply model is a macroeconomic model of the whole economy. It examines the roles of aggregate demand and aggregate supply in determining the general level of prices in Australia as well as levels of income, production and employment.

**Note:** Unlike the demand-supply model we examined earlier which showed the equilibrium level of price and quantity for a particular good or service, this model looks at general equilibrium across the whole economy and the overall level of prices and economic activity.

### Aggregate demand

Aggregate demand is the total quantity of goods and services (or GDP) demanded. As shown in the circular flow model it is the total of:

- consumption spending by households (C)
- investment spending by firms (I)
- government spending (G)
- net exports (X-M).

Thus, aggregate demand is the total planned spending of households, firms, the government and foreigners at a given price level:

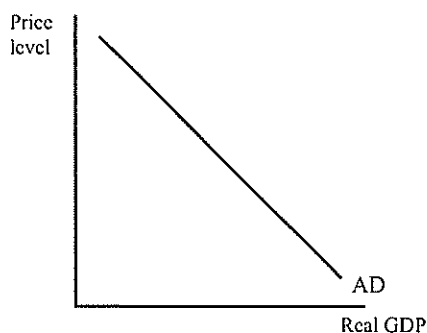
$$\text{Aggregate demand} = C + I + G + (X - M)$$

### The aggregate demand curve

The aggregate demand curve shows the relationship between aggregate demand and the general level of prices of all goods and services, assuming all other factors are constant.

**Note:** Aggregate demand refers to the total quantity of goods and services demanded, as shown by real GDP. This is different from the demand/supply model we did in week 4 which referred to demand for one good only.

The aggregate demand curve is downward sloping as shown below:



The AD curve shows that as the price level increases, the total quantity demanded decreases. Alternatively, if the general level of prices decreases, there is an increase in total quantity demanded.

There are three reasons why the total quantity demanded decreases as prices increase:

- **Spending power**

The higher the price level, the lower is people's spending power because the real value of money decreases. That is, as prices rise the incomes of households and revenues of firms and governments are able to buy less.

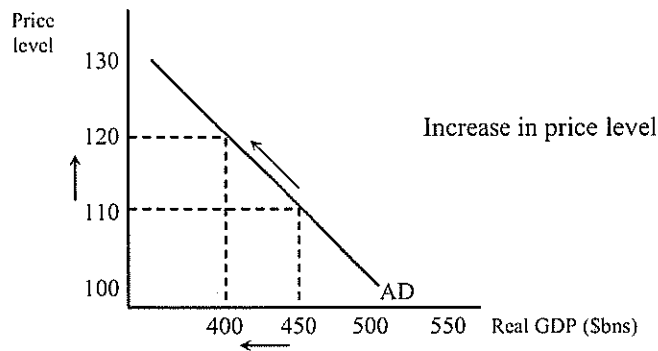
- **Time**

The higher prices are now, the more likely it is that people will wait and buy later, in the expectation that prices will fall or incomes rise.

- **Imports**

As prices rise Australian goods and services become relatively more expensive compared to imports. People will buy more imports and less Australian goods. Also, foreigners will buy less exports.

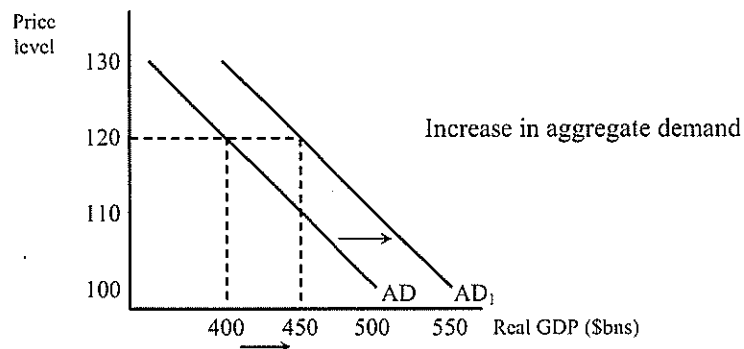
These reasons mean that, assuming other factors remain constant, a change in the level of prices will cause a change in the total quantity demanded, shown on the diagram as a movement along the curve.



The diagram shows that if the price level increases from 110 to 120, the quantity of real GDP demanded falls from \$450bn to \$400bn.

### Changes in aggregate demand

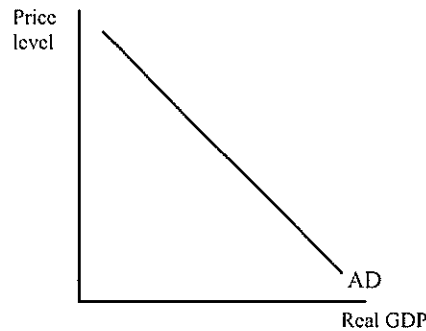
An increase or decrease in aggregate demand is shown as a shift in the aggregate demand curve to the right or left. For example, an increase in aggregate demand means the AD curve shifts to the right. This means more will be bought at each price level.



The diagram shows that there has been an increase in aggregate demand from AD to AD<sub>1</sub>. This means that the quantity demanded has increased at all price levels. For example, at price level of 120 aggregate demand was \$400bn. After the increase from AD to AD<sub>1</sub> aggregate demand was 450 at the same price level.

**Activity 1**

Show a decrease in aggregate demand on the diagram below:



An increase or decrease in aggregate demand is caused by a change in any of the components (C + I + G + X – M) of aggregate demand. For example if household consumption increases the aggregate demand curve will shift to the right. Some of the factors that influence aggregate demand are discussed below.

**Factors influencing aggregate demand**

Factors that influence aggregate demand and cause the AD curve to shift include:

- **Consumer confidence or sentiment**

Household expectations about future income, employment prospects and inflation affect decisions about whether to consume or save income. For example, an increase in confidence encourages more spending and less saving so aggregate demand increases.

- **Income**

The level of income affects household spending decisions. If real wages increase, that is wages rise faster than inflation, what will be the effect on aggregate demand?

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- **Business confidence**

Expectations from firms about future sales and profits affect business investment spending on new plant and equipment. If firms are optimistic about the future what will be the effect on aggregate demand?

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- **Overseas economic activity**

The level of economic activity overseas, particularly in our trading partners, affects demand for Australian exports. If there was a decline in the general world economy what would be the effect on aggregate demand in Australia?

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- **Fiscal policy**

Fiscal policy by the government determines the level of taxation and government spending in the economy. (Fiscal policy is covered in detail later.) Changes in taxation or government spending can affect the consumption, investment, government spending and net export components of aggregate demand. For example if the government offered income tax cuts what would be the effect on aggregate demand?

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- **Exchange rate**

Changes in the exchange rate affect the price and therefore attractiveness of exports and imports. For example, if there was an appreciation of the exchange rate what would be the impact on aggregate demand?

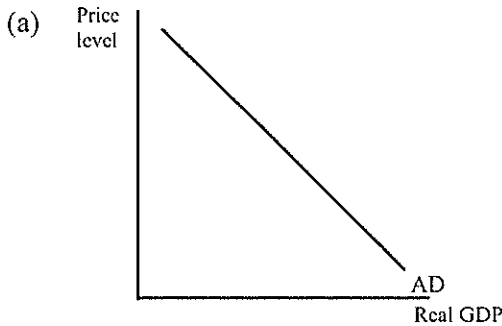
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- **Interest rates**

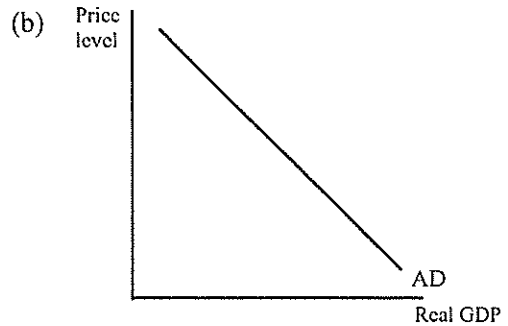
Interest rates affect the cost of borrowed funds and therefore household consumption of durable items such as houses, cars, furniture and so on, and also business investment which is largely financed by loans. If there was a fall in interest rates what would be the effect on aggregate demand?

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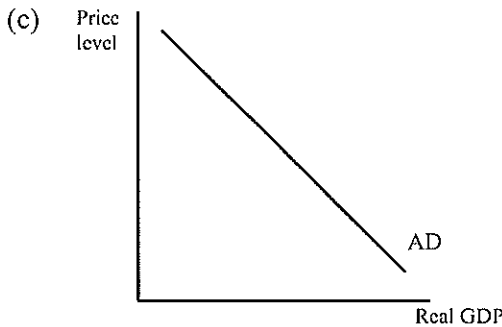
**Activity 2**



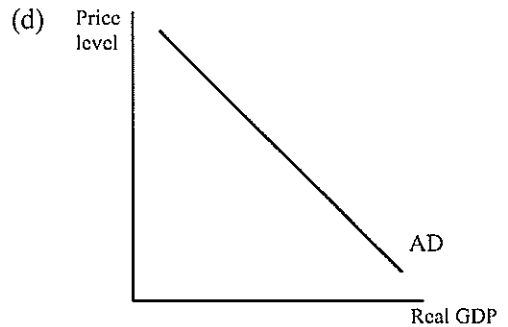
**A drop in consumer and business confidence**



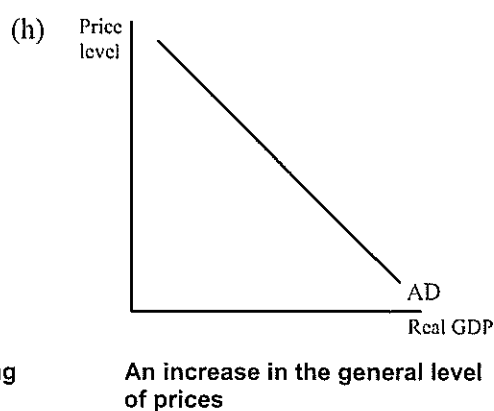
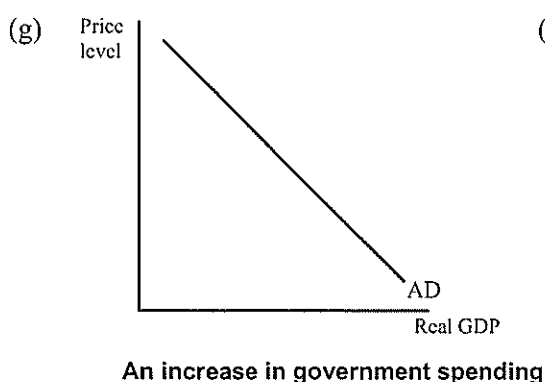
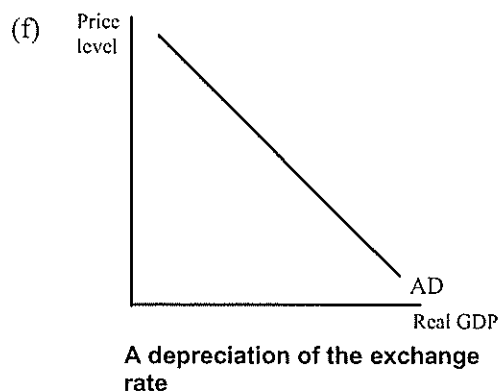
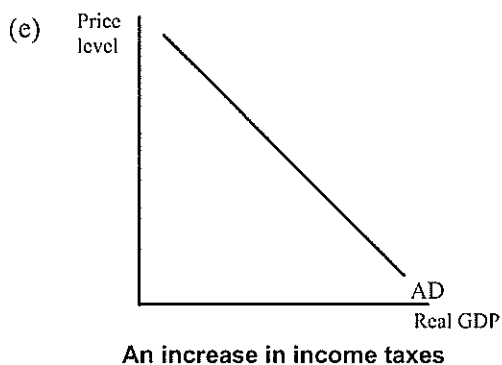
**An increase in interest rates**



**A world economic upturn**



**A decrease in real wages**



2. Explain why there is a decrease in the total quantity of goods and services demanded when the general level of prices increases.

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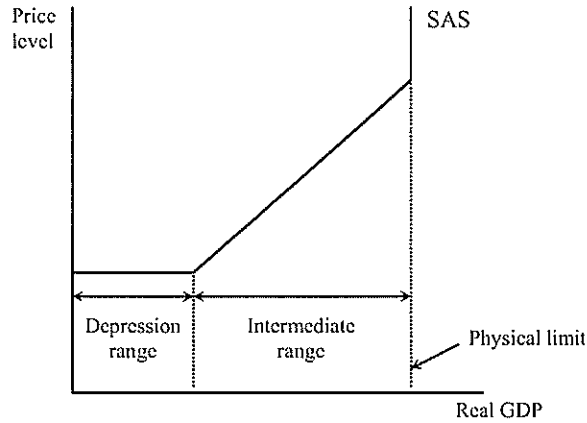
**Aggregate supply**

Aggregate supply is the total quantity of goods and services produced in Australia over a year, that is real GDP. When examining aggregate supply we consider two timeframes: the short run and the long run.

- **Short run** – this is the period in which the prices of goods and services can change in response to changes in the factors of supply, such as wages and raw materials.
- **Long run** – this is the period when all input prices (for example wages) have adjusted to any disturbances. For example, in the labour market wages have changed so that the quantity of labour demanded equals the quantity of labour supplied. This means the economy is at full employment. From your knowledge of the full employment objective (see week 9) you will know this is also known as the natural rate of unemployment (about 5% unemployment).

**Short run aggregate supply**

The short run aggregate supply (SAS) curve shows the relationship between the total quantity of goods and services supplied and the price level, assuming other factors affecting supply are constant. The SAS curve is shown below:



The short run aggregate supply curve has three sections:

1. **Depression range**

The horizontal part of the curve shows a situation where the economy is depressed, or in a severe recession. This means that production can increase even though prices remain the same. This situation occurs when firms have lots of excess capacity and are willing to sell more even if prices don't rise. This is an unusual situation in the Australian economy.

2. **Intermediate range**

The upward sloping part of the SAS curve is where the economy normally operates. An increase in prices causes an increase in the total quantity supplied. This would be shown as a movement along the SAS curve.

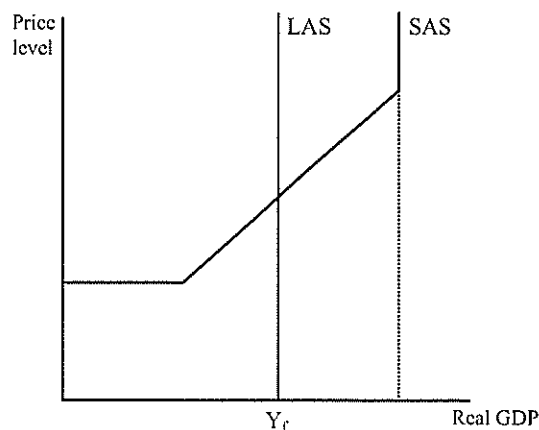
**Note that the model assumes the economy is operating in this part of the curve from now on.**

3. **Physical limit**

The vertical part of the SAS curve shows the absolute physical limit of the economy. In this section it is not possible to produce more even if prices rise as all resources are being used. This means there would be 0% unemployment. (This corresponds to the idea of operating on a production possibility frontier.)

### Long run aggregate supply

Long run aggregate supply (LAS) is the relationship between the quantity of goods and services (real GDP) supplied and the price level when there is full employment, that is the economy is operating at its natural rate of unemployment. Long aggregate supply is shown graphically below:



The LAS curve intersects the SAS curve in the intermediate range, not in the physical limit range, and is vertical.

- **Why the LAS curve is vertical**

The LAS curve is vertical because in the long run, an economy's supply of goods and services depends on the quantity of resources available and the technology used. As price does not affect these, there is only one level of real GDP that can be produced at full employment, no matter what the price is.

- **Why the LAS curve is less than the physical limit**

Real GDP can't be increased above its physical limit, but it can be increased above its long run level in the short term by driving unemployment below its natural rate. When this happens, wages will start to rise due to shortages of labour and output eventually falls back to its long run level.

### Changes in aggregate supply

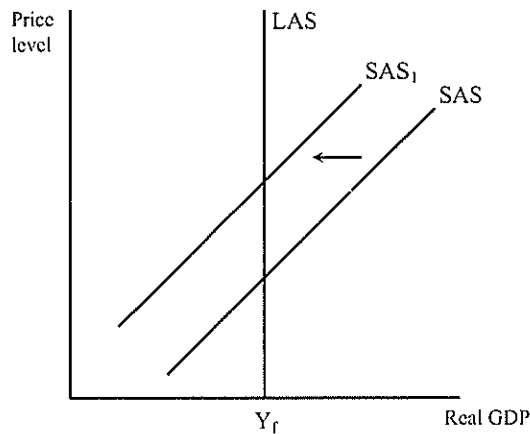
There are a number of factors that influence aggregate supply. Some of these change short run aggregate supply only, others change both short run and long run aggregate supply together.

#### Changes in short run aggregate supply only

The only factors that change short run aggregate supply but not the long run aggregate supply are the costs of production such as wages or raw materials prices. The LAS curve is unchanged because in the long run markets have had time to adjust to these changes and they do not affect the full employment level of GDP.

For example, if there was an increase in wage rates, the costs of production would increase and firms would be willing to supply less real GDP at each price level. There will be a decrease in short run aggregate supply. The SAS curve will shift to the left while the LAS curve remains unchanged as shown below:

**Note that the model shows only the intermediate range of the SAS curve.**

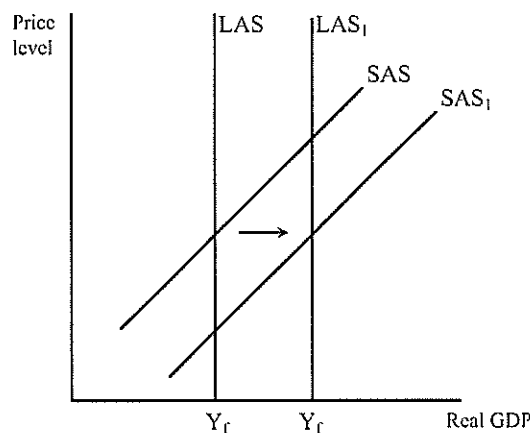


**Changes in short run and long run aggregate supply**

Factors that affect both long run and short run aggregate supply include:

- **the labour force**  
As the size of the labour force increases, the total quantity that can be supplied increases.
- **the capital stock**  
The larger the stock of plant and equipment, the more productive the labour force and the greater the output that can be produced, so aggregate supply increases.
- **technology/productivity**  
New technology or improved productivity allows businesses to produce more output from its resources, so aggregate supply will increase.

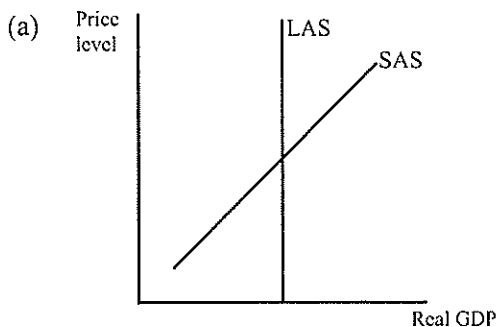
An increase in any of these factors causes **both** the long run and the short run aggregate supply curves to shift right. This is because all of these affect short run costs as well as long run potential. This is shown below:



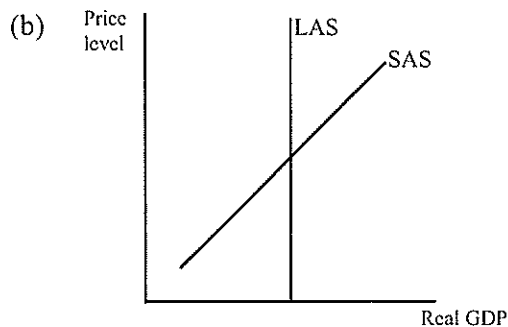


**Activity 3**

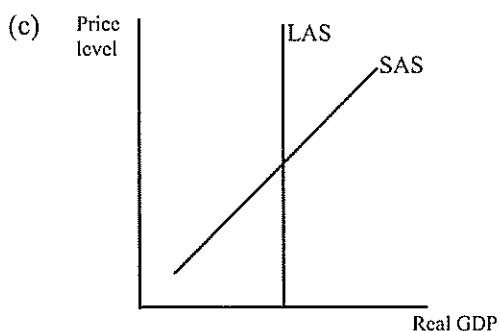
Show how the following would affect aggregate supply on the diagrams below:



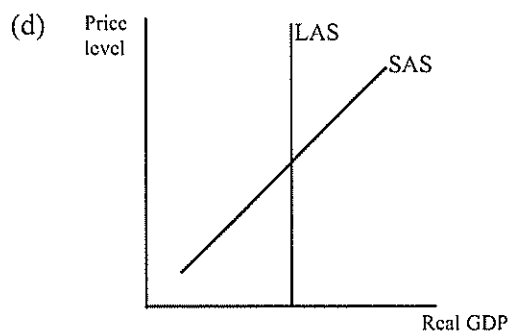
**A drop in the price of raw materials**



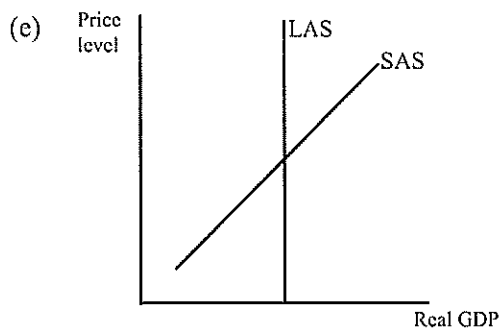
**Strong population growth**



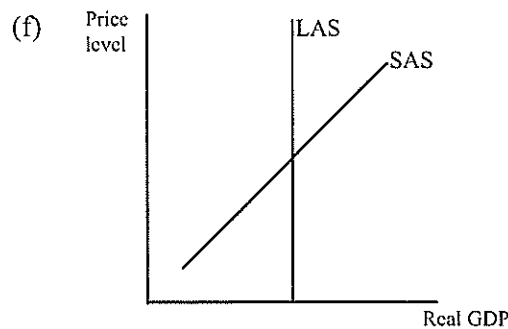
**An increase in interest rates**



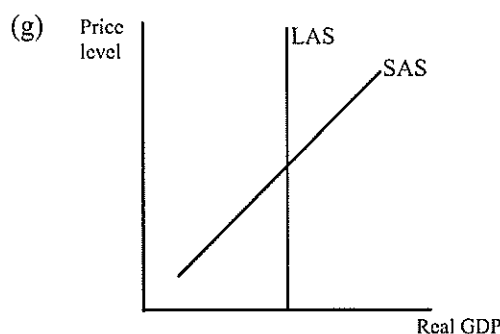
**An improvement in worker productivity**



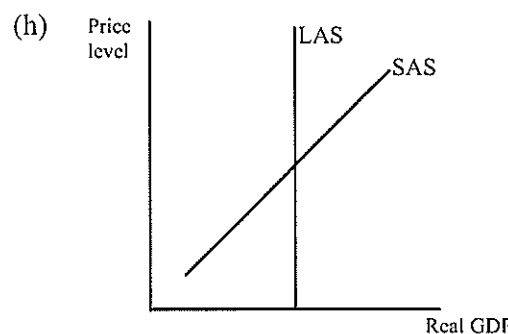
**A rise in the stock of capital goods**



**An increase in the minimum award wage rate**



**A more highly trained labour force**



**A decrease in the company tax rate**

Activity 4: Review questions

1. Read the article below and answer the questions that follow:

**Economy slows down**

Economic growth slowed dramatically in the opening months of the year according to figures released by the ABS yesterday.

The latest national accounts showed the economy expanded by only 0.2% in the March quarter, slowing annual growth down to 3.2%, substantially below expectations.

The accounts show housing investment was slowing and exports had declined, although household spending was strong as was the build-up in company stocks. On the positive side, the farming sector had improved with the recovery from drought.

- (a) *i* Which components of aggregate demand decreased?

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- ii* Suggest some reasons why these components decreased.

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- (b) *i* Which components of aggregate demand increased?

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- ii* Suggest some reasons why these components increased.

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- (c) What was the overall effect on aggregate demand?

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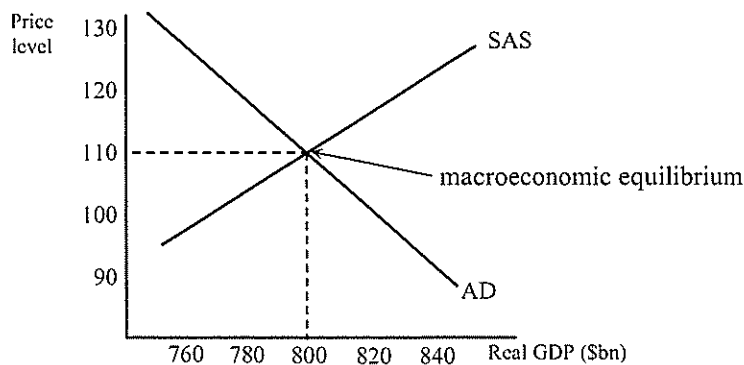
2. Which factor is least likely to affect aggregate demand?
  - J. business expectations
  - K. a change in income tax rates
  - L. a rise in cost of materials
  - M. a global recession.
  
3. Which factor is least likely to affect short run aggregate supply?
  - J. wage rates
  - K. changes in technology
  - L. cost of materials
  - M. interest rates.
  
4. If the size of the labour force decreased due to a rise in the number of discouraged workers:
  - J. both the short run and long run aggregate supply curves would shift to the left
  - K. the short run aggregate supply curve would shift to the left but the long run aggregate supply curve would shift to the right
  - L. the short run aggregate supply curve would shift to the left and the long run aggregate supply curve would remain unchanged
  - M. aggregate demand would increase.
  
5. The aggregate demand curve is downward sloping because as prices rise in Australia:
  - J. people are likely to spend more now to avoid future price rises
  - K. people are likely to spend less on imported goods
  - L. the quantity demanded increases
  - M. the real value of incomes decreases.



## The aggregate demand/aggregate supply (AD/AS) model

### Macroeconomic equilibrium

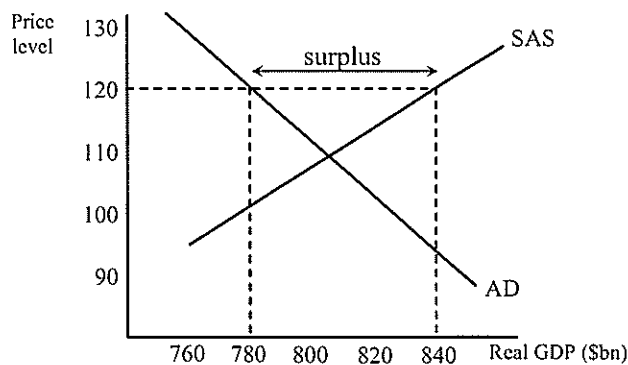
Macroeconomic equilibrium occurs when the quantity of real GDP demanded equals the quantity of real GDP supplied. This is where the aggregate demand curve and the short run aggregate supply curve intersect, as shown below. (Note that the long run aggregate supply curve has been omitted to let you see the equilibrium situation. It will be re-introduced later.)



The diagram shows that macroeconomic equilibrium occurs at a price level of 110 and an output of \$800bn. This is the only price at which the quantity demanded is the same as the quantity supplied.

To see why this is the only equilibrium position, assume the price level was not at the equilibrium level of 110.

### Price level above equilibrium

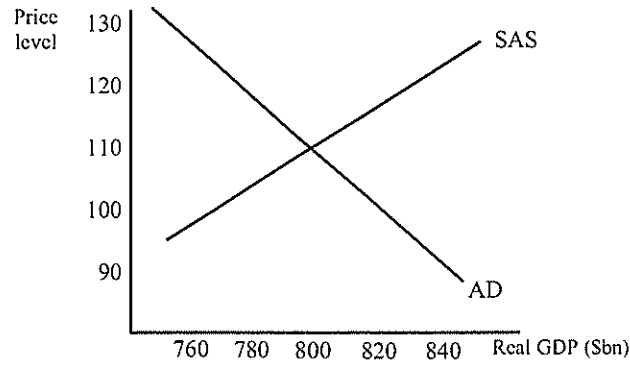


At a price level above equilibrium, at 120, the quantity of real GDP demanded is \$780bn but the quantity of real GDP supplied is \$840bn. This means there is a surplus of goods and services produced. As firms are unable to sell all of their production and stocks are increasing, they will cut prices and decrease production. This will cause an increase in the quantity demanded of real GDP and the surplus will eventually be eliminated at a price level of 110.

**Activity 1**

**Price level below equilibrium**

Explain the effect of the price level being at 100 and show it on the diagram below.



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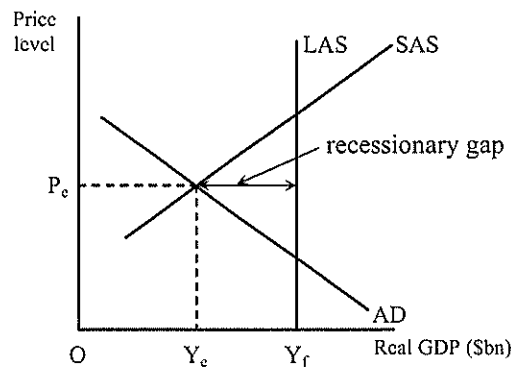
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**Macroeconomic equilibrium and full employment**

Macroeconomic equilibrium does not necessarily occur at full employment. Full employment is when the economy is operating on its **long run** aggregate supply curve, but macroeconomic equilibrium is where aggregate demand and **short run** aggregate supply meet. This means there are three possibilities:

**Unemployment equilibrium**

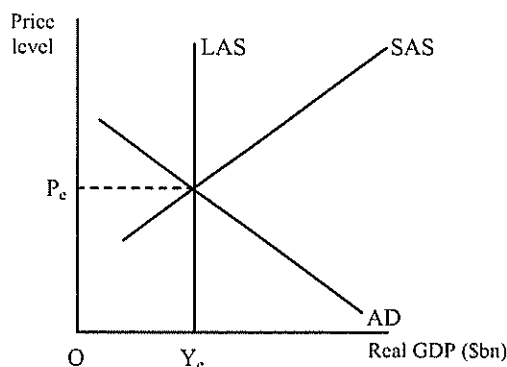
An unemployment equilibrium is where macroeconomic equilibrium occurs at a real GDP level which is less than the full employment level as shown below:



The equilibrium level of output,  $OY_e$ , is less than the full employment level,  $OY_f$ . This means there will be a recessionary gap between the actual level of real GDP and the level of real GDP needed to produce full employment. The level of unemployment in the economy is therefore higher than the natural rate of unemployment.

### Full employment equilibrium

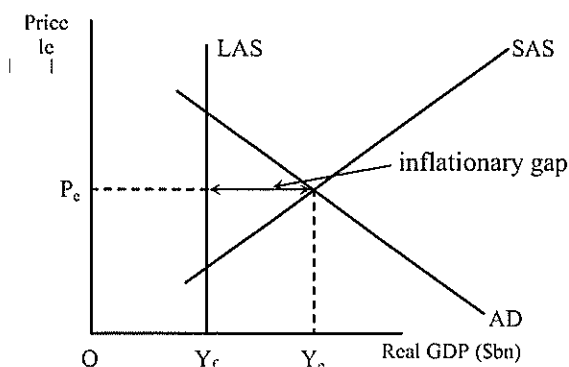
Full employment equilibrium occurs when macroeconomic equilibrium real GDP equals the full employment level as shown below:



The equilibrium level of output,  $OY_e$ , is at the full employment level of output. The aggregate demand curve and the short run aggregate supply curve intersect on the long run aggregate supply curve. The economy will be operating at the natural rate of unemployment.

### Above full-employment equilibrium

Above full-employment equilibrium (also known as over full-employment) occurs when the actual level of real GDP is above the long run level as shown below:



The equilibrium level of real GDP,  $OY_e$ , is higher than the full employment level,  $OY_f$ . There is an inflationary gap in this situation. Unemployment will be lower than its natural rate in the short term. Over time inflationary pressures begin to rise as wages increase and the economy will move back to its natural rate of unemployment.

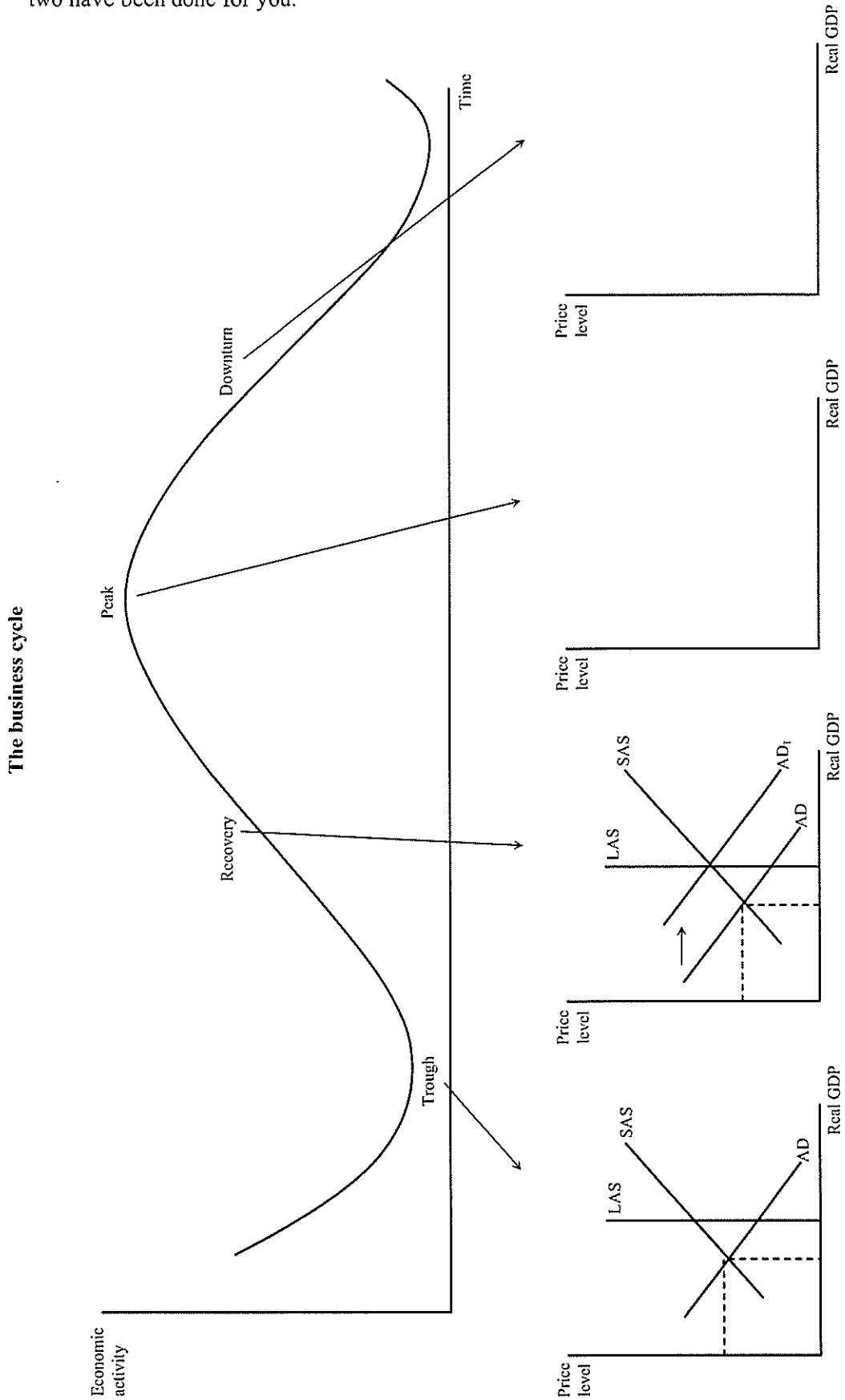
### Business cycles and the AD/AS model

Over time, the long run aggregate supply curve shifts to the right as the labour force grows, technology advances and investment in capital increases the economy's capacity. If both aggregate demand and short run aggregate supply grew at the same rate as long run aggregate supply, the economy would remain at full employment.

However, there will be fluctuations in aggregate demand and short run aggregate supply over time as the factors affecting both change. Sometimes aggregate demand grows more quickly than short run aggregate supply and vice versa. This means that the economy will move between unemployment equilibrium, full employment equilibrium and above full employment equilibrium, creating the business cycle.

Activity 2

Draw appropriate AD/AS diagrams to represent each phase of the business cycle. The first two have been done for you.





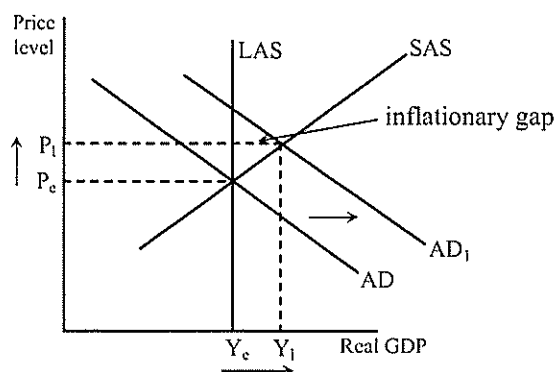
### Changes in macroeconomic equilibrium

The AD/AS model can be used to explain the effects of changes in aggregate demand or aggregate supply in the short term on the economy.

#### Changes in aggregate demand

##### An increase in aggregate demand

Assume the economy is initially at a full employment equilibrium and there is a rise in net exports due to an expanding world economy. This will cause an increase in aggregate demand as shown here:



The economy was initially producing an output of  $OY_e$  at a price level of  $OP_e$ . The rise in net exports causes aggregate demand to increase from  $AD$  to  $AD_1$ . A new equilibrium is reached with output at  $OY_1$  and the price level at  $OP_1$ . Real GDP is above the full employment level, so there is an inflationary gap.

The increase in aggregate demand has increased the prices of all goods and services, so firms have increased their output. The economy will therefore experience inflation.

#### Summary

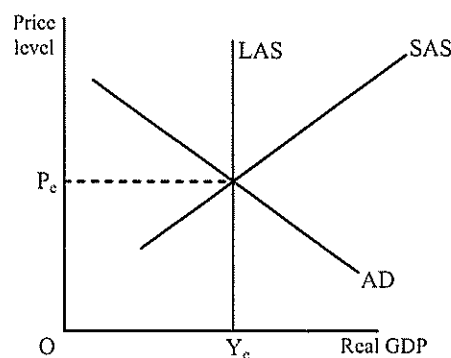
An increase in aggregate demand will cause:

- production and income to increase
- an inflationary gap
- unemployment to decrease
- price levels to increase (inflation).

#### A decrease in aggregate demand

##### Activity 3

Assume the economy is operating at the full employment level of real GDP and there is a decline in investment spending. Show the impact of this on the diagram below and explain the effects on the economy.



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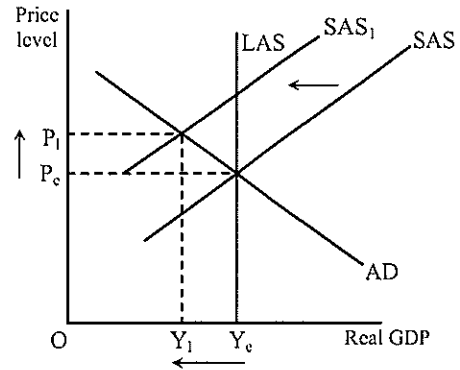
**Changes in aggregate supply**

**A decrease in short run aggregate supply**

Assume the economy is initially operating at the full employment level of real GDP and there is a rise in wages paid by firms. This will increase costs faced by firms so short run aggregate supply will decrease as shown here:

The decrease in short run aggregate supply from SAS to SAS<sub>1</sub> causes the economy to move to a new equilibrium. The price level increases to  $OP_1$  and real GDP decreases to  $OY_1$ .

The economy therefore experiences both inflation and higher unemployment. The combination of higher inflation and unemployment is sometimes known as stagflation.



**Summary**

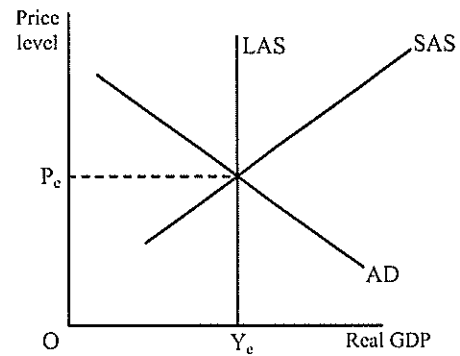
A decrease in short run aggregate supply will cause:

- production and income to decrease
- an recessionary gap
- unemployment to increase
- price to increase (inflation).

**An increase in short run aggregate supply**

**Activity 4**

Assume the economy is operating at the full employment level of real GDP and there is a decrease in the cost of imported production materials. Show the impact of this on the diagram below and explain the effects on the economy.



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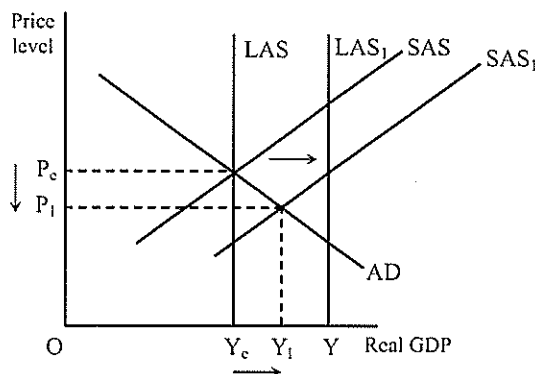
**Activity 5**

Complete the table below to summarise the effects of changes in aggregate demand or supply.

	Inflation	Unemployment	Growth
Increase in AD			
Decrease in AD			
Increase in SAS			
Decrease in SAS			

**An increase in long run aggregate supply**

Over time long run aggregate supply tends to increase as the labour force, capital stock and technology all increase. This is shown below:



The increase in aggregate supply causes the economy to move to a new equilibrium. The price level decreases from  $OP_e$  to  $OP_1$  and real GDP increases from  $OY_e$  to  $OY_1$ . The economy experiences economic growth and increased employment as real GDP increases, and lower prices. The standard of living improves. Note, however, that unless aggregate demand increases as well the economy will have an unemployment rate that is higher than the natural rate,  $OY$ .

**Activity 6**



View the demonstration of the AD/AS model on the CD-ROM and do the exercises. Write your answers here:

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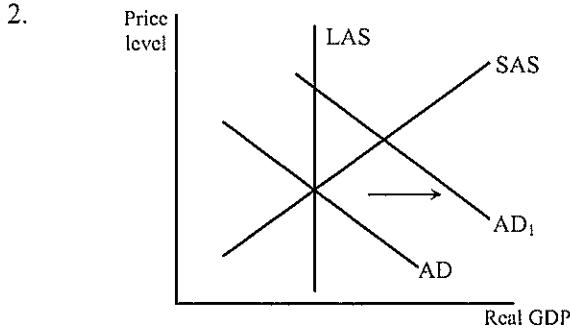
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Activity 7: Review questions

1. A decrease in short run aggregate supply is most likely to be caused by:
  - J. a decrease in interest rates
  - K. a rise in average wages
  - L. cheaper imported production materials
  - M. an increased number of migrants into Australia.



In relation to the diagram above, the shift in aggregate demand from AD to AD<sub>1</sub> could be caused by:

- J. an increase in net exports
  - K. an increase in tax rates
  - L. a decrease in the level of government spending
  - M. a drop in business confidence.
3. An increase in aggregate demand is most likely to
    - J. be caused by an increase in interest rates
    - K. lead to an increase in unemployment
    - L. cause a recessionary gap
    - M. lead to rising prices.
  4. An unemployment equilibrium:
    - J. is most likely during an upturn in the economy
    - K. is caused by a recessionary gap
    - L. may be caused by a decrease in aggregate demand
    - M. is likely to lead to inflation in the economy.
  5. In terms of the AD/AS model, the business cycle is caused by:
    - J. different rates of growth in aggregate demand and short run aggregate supply
    - K. long run aggregate supply generally increasing over time
    - L. aggregate demand increasing more quickly than aggregate supply
    - M. aggregate supply increasing more quickly than aggregate demand.

## The aggregate demand/aggregate supply (AD/AS) model

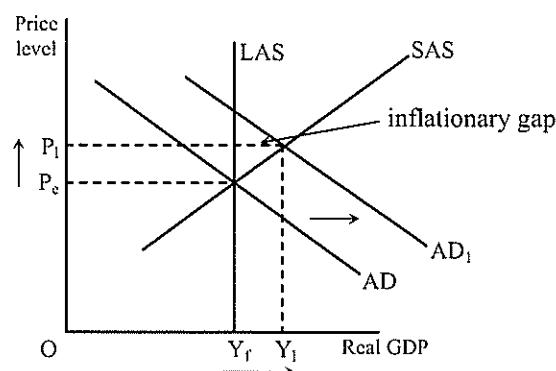
### Using the AD/AS model to explain inflation and unemployment

The aggregate demand-aggregate supply model can be used to explain short term fluctuations in economic activity, and therefore some of the main causes of inflation and unemployment.

### Inflation

#### Demand-pull inflation

Demand-pull inflation results when aggregate demand increases at a faster pace than the increase in long-run aggregate supply. An increase in aggregate demand can be caused by an increase in any of the factors of demand discussed in week 17, for example an increase in the money supply or more government spending. When aggregate demand increases the aggregate demand curve shifts to the right as shown below:

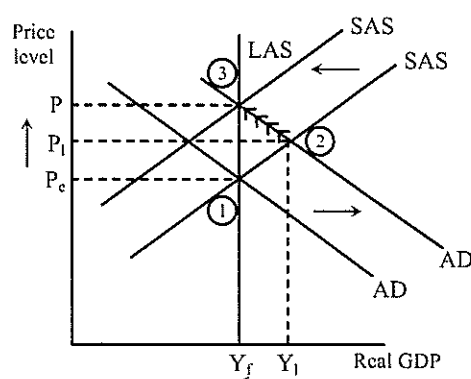


We can assume that the economy was initially at its long run equilibrium, that is at the full employment level of real GDP. An increase in aggregate demand means that the aggregate demand curve has shifted from AD to AD<sub>1</sub>. The economy will move to a new equilibrium level of OY<sub>1</sub> and OP<sub>1</sub>. The economy will experience higher growth and a lower unemployment rate, but there will be inflation. The unemployment rate is below the natural rate.

However, this is not the end of the story. The economy cannot produce at above full employment forever. With unemployment below its natural rate, there will be shortages of labour. Also, as prices rise, workers' real incomes decrease so they will demand wage rises. As wages increase the short run aggregate supply curve gradually shifts to the left, causing further prices rises, until the economy is back to its natural rate of unemployment. This is shown in the diagram below:

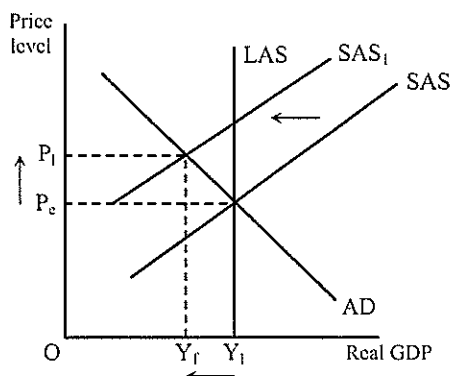
#### Summary:

1. Economy initially at long run equilibrium.
2. Increase in AD means economy moves to new equilibrium at Y<sub>1</sub>
3. SAS gradually decreases until economy back at long run equilibrium.



**Cost-push inflation**

Cost-push inflation can result from a decrease in aggregate supply. Aggregate supply may decrease because of a change in any of the factors affecting supply mentioned in week 17, for example, rising wage rates or an increase in the prices of raw materials. When this happens, firms face increased costs, so they are likely to decrease the quantity they supply at any price. The short run aggregate supply curve will shift to the left as shown below:



Again, the economy is originally in equilibrium at its natural rate of unemployment,  $OY_f$ . If for example, a sudden increase in wages increased the costs of production, the short run aggregate supply curve would shift to  $SAS_1$ . As a result, the economy will experience a decrease in production and employment as well as inflation.

**Activity 1**

1. If as a result of the rising unemployment described in cost-push inflation above, the government decides to increase aggregate demand, what is the likely outcome?

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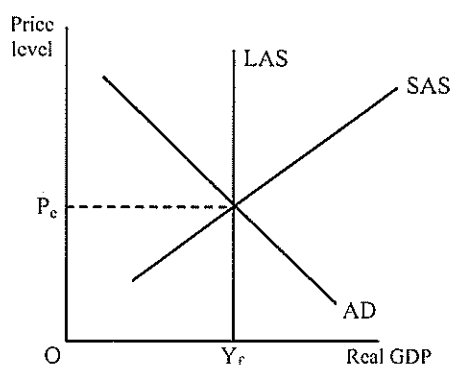
2. **The role of inflationary expectations**

- (a) If workers expect prices to increase in the future, what is likely to happen to wage claims now?

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(b) On the AD/AS diagram below show and explain the likely effect of this.



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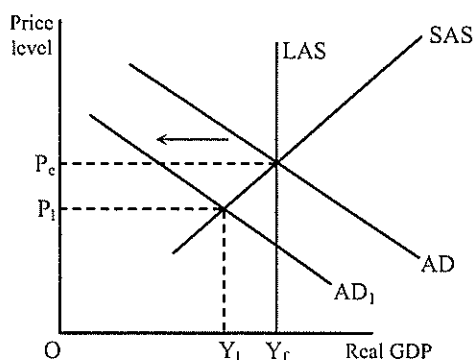
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This sort of action can lead to a wage-price spiral. This is a situation where wages increase which causes prices to increase. As a result, workers negotiate further wage rises which again cause prices to rise and so on.

### Unemployment

According to the AD/AS model the economy will tend to reach long run equilibrium at the natural rate of unemployment. The natural rate of unemployment is the unemployment rate when there is no cyclical unemployment. This means that all unemployment is frictional or structural (that is unemployment exists because people are re-entering the workforce or they do not have the right skills to match vacancies). This is why the government's unemployment objective is around 5%, which is regarded as the natural rate of unemployment.

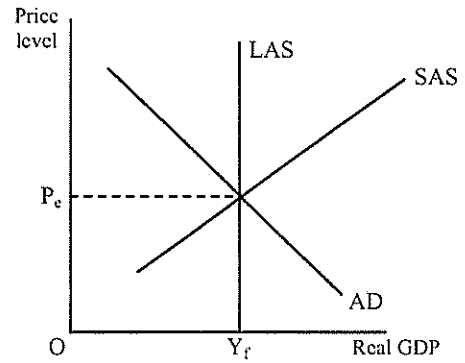
According to the AD/AS model then, unemployment above the natural rate must be cyclical. Cyclical unemployment is generally caused by a decrease in aggregate demand. This is shown on the AD/AS diagram below:



The decrease in aggregate demand from AD to  $AD_1$  causes prices to decrease and also real GDP to fall from the full employment level  $Y_f$  to  $Y_1$ . A recessionary gap occurs and as a result there is cyclical unemployment.

**Activity 2**

Cyclical unemployment may also be caused by rising costs of production, particularly wage rises. Explain how an increase in the costs of production is likely to cause unemployment using the AD/AS diagram here:



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**Activity 3**

1. Read the article below and answer the questions that follow.

## Economy starts to slow

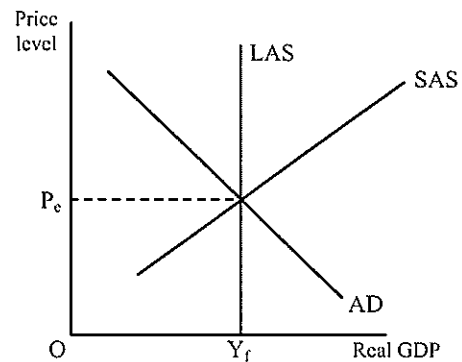
A national business expectation survey released yesterday showed that expectations for the immediate future had dropped sharply. Although companies still enjoyed good business conditions, only a third anticipated increased profits and a quarter expected lower returns.

The survey findings continued the trend from last month where businesses

felt they had been affected by the slowdown in consumer spending. The survey also found that capital investment intentions were at their lowest point for over two years.

The survey findings, along with the recent drop in job advertisements, are consistent with other indicators showing a slowing in economic growth.

Explain the likely effects on the economy of the survey findings in terms of the AD/AS model using the graph here:



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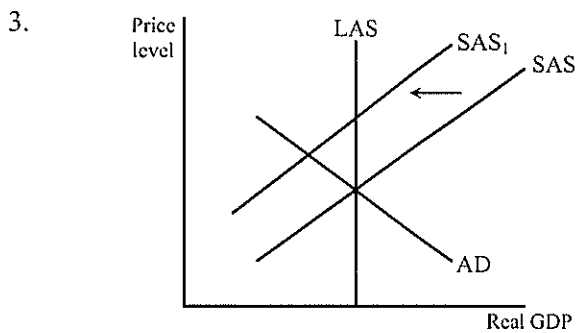
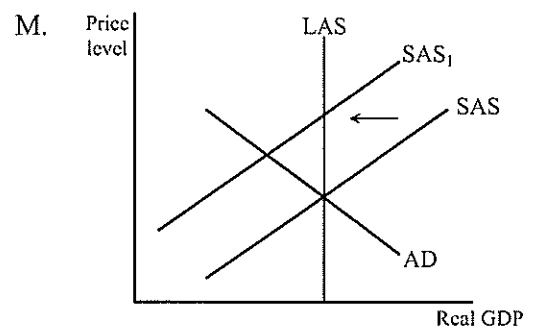
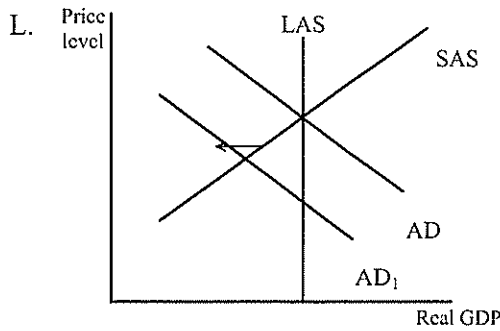
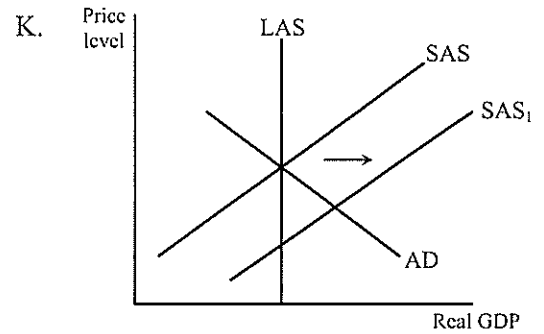
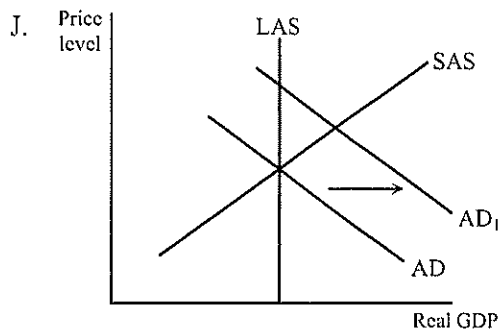
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# Macroeconomics

2. Which of the diagrams below best represents an economy where unemployment has fallen but the price level has increased?



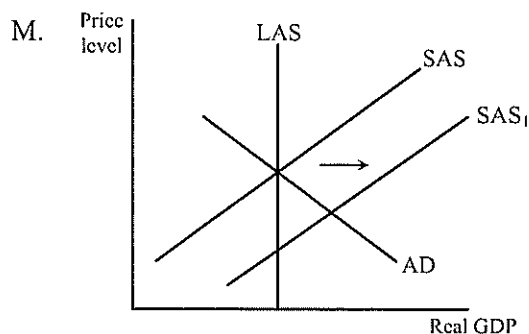
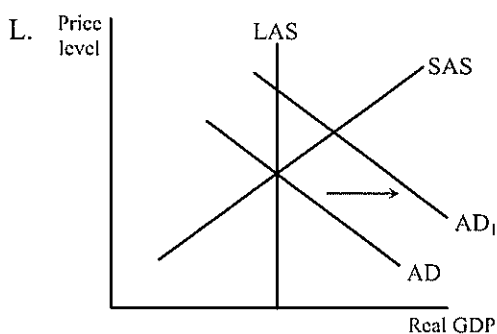
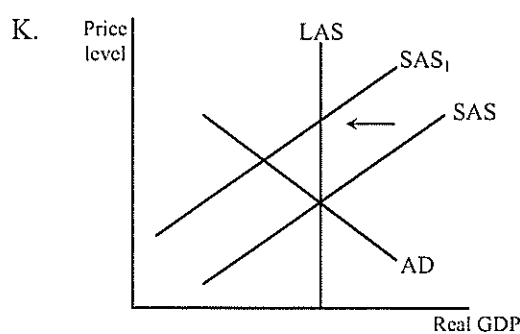
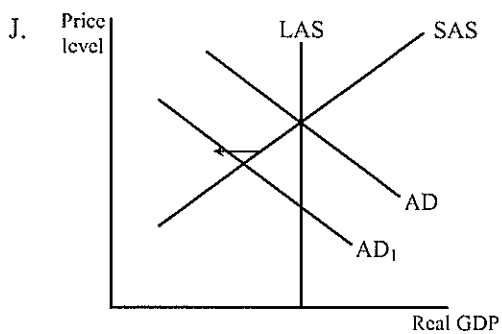
The shift in aggregate supply shown in the diagram above:

- J. could be caused by a decline in the price of raw materials
- K. will result in inflation in the economy
- L. will cause employment to increase
- M. could be caused by a decrease in interest rates.

4. The data in the table below represents a hypothetical economy.

	Unemployment rate	Inflation rate	GDP (\$bn)
Year 1	6.0 %	5.0%	110
Year 2	10.0 %	2.0%	100

Which of the following diagrams best represents the economic situation in the table above?



**Activity 5: Review of AD/AS model**

1. What is aggregate demand?

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2 (a) What are three factors that might increase aggregate demand?

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Macroeconomics

(b) What are three factors that might decrease aggregate demand?

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3. Distinguish between short run aggregate supply and long run aggregate supply.

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4. For each of the following say whether the short run or long run aggregate supply curves are affected and whether they increase or decrease.

(a) An improvement in technology

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(b) A rise in wage rates

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(c) An increase in the size of the labour force

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(d) The exchange rate appreciates

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5. What is meant by macroeconomic equilibrium?

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6. Distinguish between an unemployment equilibrium and above full employment equilibrium.

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7. Explain the cause of the business cycle in terms of the AD/AS model.

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8. Use the AD/AS model to work out the effects of an increase in the money supply on the price level, real GDP and employment.

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9. Use the AD/AS model to work out the effects of an increase in the price of oil on the price level, real GDP and employment.

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