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## AS 91403: Demonstrate understanding of macro-economic influences on the New Zealand economy (3.5)

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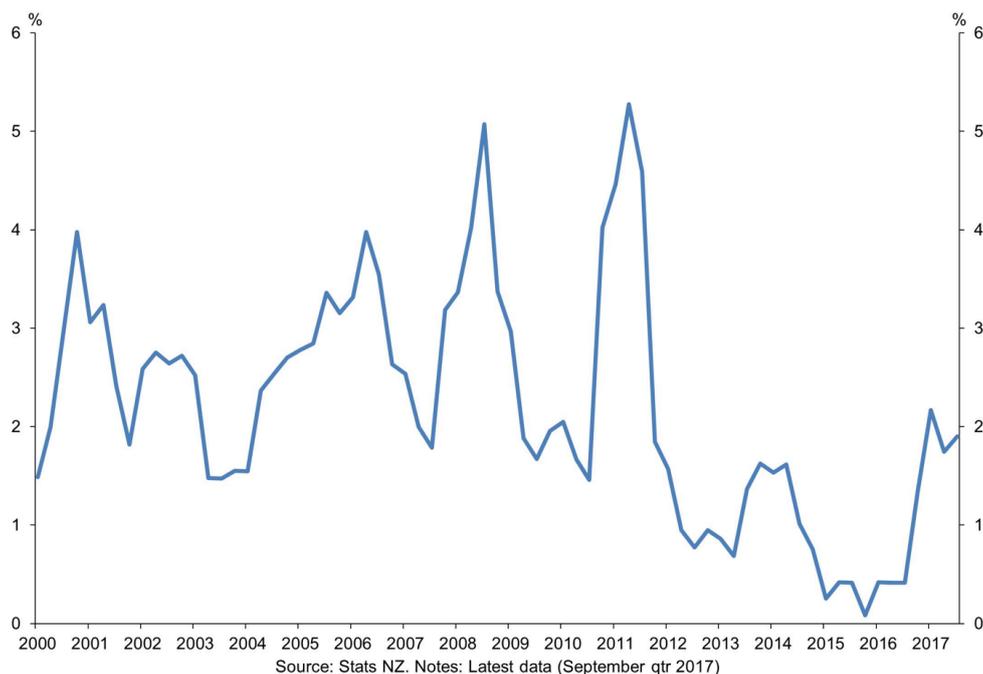
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# Price stability

## Inflation in New Zealand



The Consumers Price Index (CPI) measures changes to the prices of the consumer items New Zealand households buy, and provides a measure of household inflation. Inflation is the term used to describe a rise of average prices through the economy. It means that money is losing its value.

Under the current Policy Targets Agreement (PTA) the Reserve Bank is required to keep annual increases in the CPI between 1 and 3 percent on average over the medium term, with a focus on keeping future average inflation near the 2 percent target midpoint.

Source: Statistics New Zealand

Changes in the general (average) price level are measured by changes in the Consumer Price Index (CPI). An increase in the Consumer Price Index will indicate an increase in the general (average) price level, which is **inflation**. A decrease in the Consumer Price Index will indicate a fall in the general (average) price level, which is **deflation**. **Disinflation** is the term given to the situation where there is a rise in the general (average) price level but by a smaller percentage than the previous time period. Disinflation is a fall in the rate of inflation.

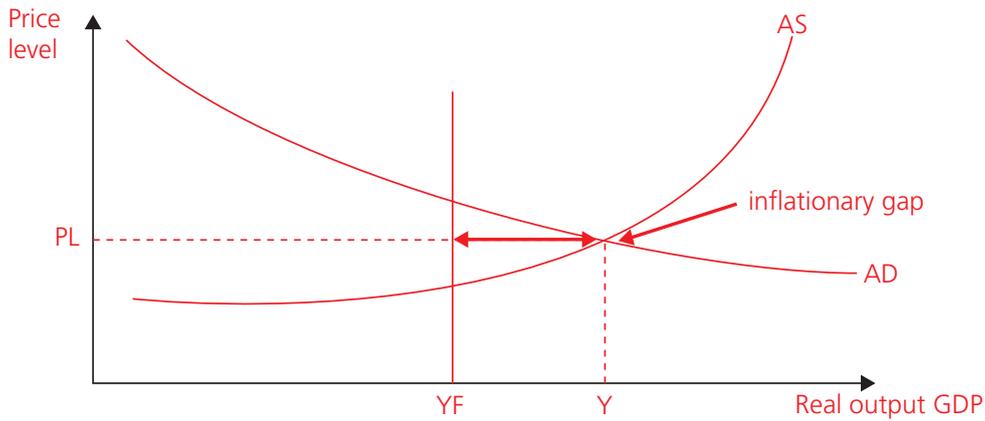
**Price stability** is the goal of government to avoid long periods of inflation or deflation to keep prices stable so that money can maintain its purchasing power over time. Therefore, governments agree that some inflation in an economy is desirable. In New Zealand, the Governor of the Reserve Bank is charged with keeping inflation between 1% and 3% (on average over the medium term) as outlined in its Policy Target Agreement (PTA).

A large increase in the rate of inflation can have a detrimental effect on various groups. The real income of low income households or those on fixed incomes whose incomes fail to keep up with the increase in the general price level, will fall. The purchasing power of their income falls and they can buy less than previously. Generally, high rates of inflation can harm exporters because their goods and services are less price competitive and therefore more difficult to sell. Importers can benefit from high rates of inflation because their goods and services are relatively more price competitive than those produced or provided by local (domestic) firms. Overall firms may struggle and close down with a resulting increase in unemployment (decrease in employment). Also, as export receipts fall and import payments increase the balance of payments current account will deteriorate (worsen), creating a greater deficit or smaller surplus.

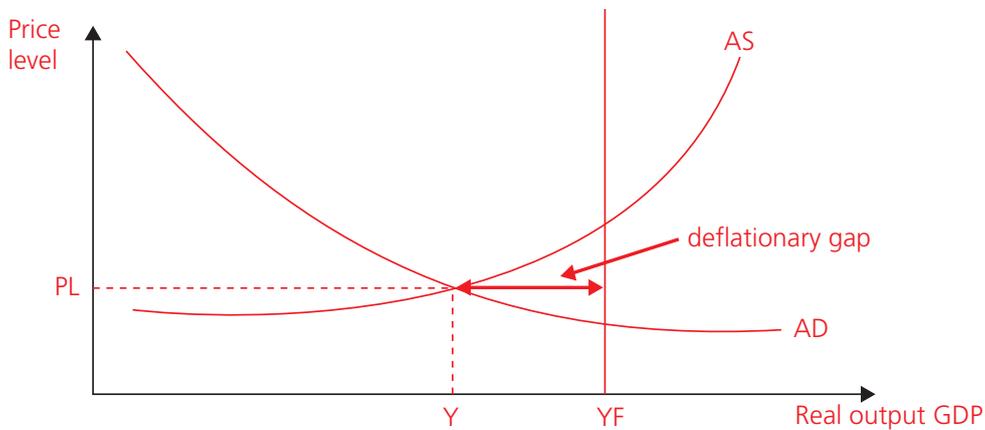
A decrease in the general price level (deflation) can also be viewed as undesirable because it may be a sign that the economy is heading towards a recession. In times of deflation consumption spending may decrease because households delay spending in the hope that prices will fall further. As consumption spending falls firms' stock levels build up and they cut back production. Part of cutting back production will result in fewer workers needed leading to an increase in unemployment.

3 Draw a fully labelled diagram for the situations indicated.

a An economy with an inflationary gap.



b An economy with a deflationary gap.



c Complete the table below for shifts in the AD or AS curve.

Situation	AD or AS curve shifts and in what direction	Impact on PL	Impact on real output/employment
(i) Cost of imported raw materials decreases due to \$NZ appreciating	AS right	Decrease	Increase
(ii) Productivity of workers improves	AS right	Decrease	Increase
(iii) Workers accept a lower wage award to keep jobs	AS right	Decrease	Increase
(iv) Fall in the cost of raw materials.	AS right	Decrease	Increase
(v) Recession in New Zealand's major trading partners	AD left	Decrease	Decrease
(vi) Renewed confidence in the economy by New Zealand business people	AD right	Increase	Increase
(vii) A cut in direct tax rate	AD right	Increase	Increase
(viii) The cost of raw materials has increased due to the New Zealand dollar depreciating	AS left	Increase	Decrease
(ix) A government budget surplus	AD left	Decrease	Decrease
(x) Decreased transfer payments	AD left	Decrease	Decrease
(xi) The Minister of Finance announces that GST will increase by 1.5% in ten months time	AD right	Increase	Increase

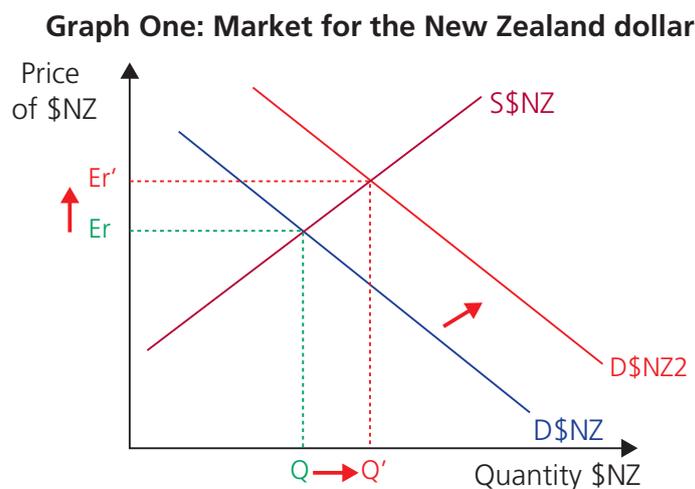
3 a Complete the table below for the New Zealand dollar in the situations indicated.

Situation	Demand for \$NZ and/or supply of \$NZ	Direction of shift	Depreciation or appreciation of \$NZ
(i) An influx of tourists into New Zealand.	Demand \$NZ	Outward	Appreciation
(ii) A decrease in export commodity prices.	Demand \$NZ	Inward	Depreciation
(iii) An increase in overseas investors investing in New Zealand-owned businesses.	Demand \$NZ	Outward	Appreciation
(iv) Overseas firms repatriate profits back to their own country from New Zealand.	Supply \$NZ	Outward	Depreciation
(v) An increase in import commodity prices.	Supply \$NZ	Outward	Depreciation
(vi) New Zealand firms set up a factory in South America.	Supply \$NZ	Outward	Depreciation
(vii) An increase in interest rates in New Zealand	Demand \$NZ Supply \$NZ	Outward Inward	Appreciation Appreciation

b Explain, in detail, how an increase in interest rates would affect the value of the New Zealand dollar.

When interest rates are high in New Zealand relative to overseas then New Zealand investors will find New Zealand a relatively more attractive place to keep their money. This causes a smaller outflow of the New Zealand dollar and there is a decrease in the supply of it, this causes the New Zealand dollar to appreciate. Overseas investors will be attracted by the returns in New Zealand and demand for the New Zealand dollar will increase again, causing the dollar to appreciate further.

c (i) On Graph One, show how an increase in export commodity prices would affect the value of the New Zealand dollar.



(ii) Explain in detail the change you made in (i).

An increase in export commodity prices will increase demand for \$NZ from D\$NZ to D\$NZ2, causing the New Zealand dollar to appreciate (from Er to Er').



Concerns are being raised that increased business confidence and consumer spending will cause the Policy Target Agreement (PTA) to be breached. The Reserve Bank is likely to raise the OCR.

2 Explain why the Policy Target Agreement might be breached and the likely government response.

In your answer you should:

- State the target range for the PTA and explain why it could be breached.
- Explain the government policy that could be used to achieve the target set and its effect on interest rates, consumption spending, investment and net exports.

The target range for the PTA is to keep (CPI) inflation between 1% and 3% (per annum) on average over the medium term. The concern for the Reserve Bank is that increased consumer and investment spending will cause aggregate demand to increase and cause the general price level (inflation) to rise beyond the target range set.

The government policy to deal with breaches of the PTA is tight (contractionary) monetary policy and will result in an increase in the Official Cash Rate (OCR). As the OCR increases so will banks' retail interest rates. Consumption spending will decrease as interest rates increase because there is a greater incentive to save. The increased cost of borrowing will result in consumers borrowing less and a decreased use of credit spending. Those households with a variable mortgage will pay more in interest, reducing funds available for spending. Aggregate demand (AD) will therefore decrease, reducing inflationary pressures.

Investment spending by firms will decrease because the higher cost of borrowing will increase the risks and reduce the profitability of new ventures. As less capital is purchased, aggregate demand will fall, reducing inflationary pressures. Higher interest rates will cause the NZ\$ to appreciate. Exports will become less price competitive and exporters will swap forex for fewer NZ dollars, so export receipts will fall. Therefore aggregate demand falls, reducing inflationary pressures.



# QUESTIONS & TASKS

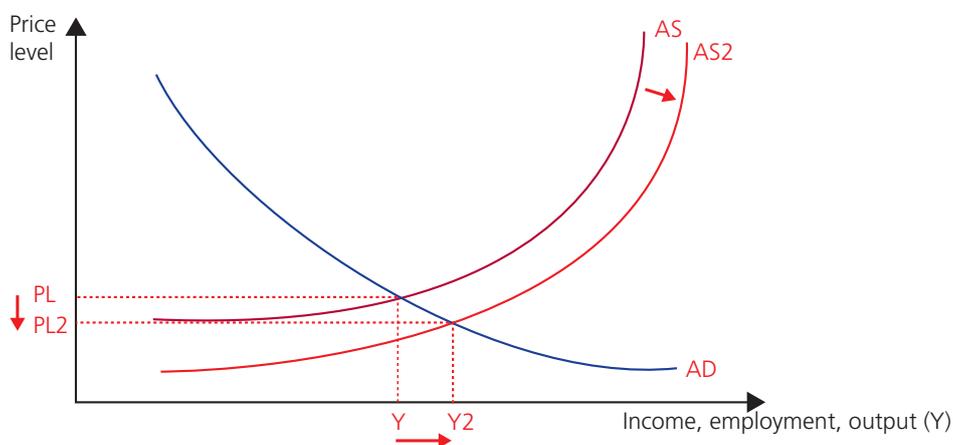
Productivity improvements in the New Zealand economy have arisen as government have made Research and Development (R & D) attractive to firms.

- 1 a Explain the effect that changes in productivity have on inflation and economic growth.

In your answer:

- Illustrate the effects that improved productivity have on the macro economy. Label the curves, any shifts and identify the new equilibrium. Explain the changes you have made to Graph One.

Graph One: AD/AS model



Productivity is output per worker (or machine) and is a determinant of aggregate supply (AS). Increased productivity means that the production process is becoming more efficient. This enables firms to produce more goods and services with the same resources, or decrease the cost of production of producers.

The aggregate supply curve shifts outwards (right) from AS to AS2. This will increase economic growth (shown as the change from Y to Y2) and decrease the price level (shown as the change from PL to PL2).

- b Explain the impact of unions seeking a wage increase on inflation and businesses. Explain the impact of wage increases on inflation and how wage increases and inflation will affect employment levels and output of businesses.

In times of inflation, wages may fail to keep pace with the increases in the general price level so real wages fall. Unions will seek wage awards to keep up with inflation which will increase costs to the firm. As costs of production increase, profits decrease and the AS curve shifts inward causing cost-push inflation.

With inflation occurring because of wage increases, firms' costs will increase and the firms will increase prices to retain profit margins. As prices increase the quantity demanded by consumers will fall. Firms may find that stock (inventory) levels build up so they will reduce output and cut back production. As production falls, firms will need fewer resources and they will cut back on workers' hours or even make some workers redundant, therefore employment will fall.