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2

91222



912220



NEW ZEALAND QUALIFICATIONS AUTHORITY  
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## Level 2 Economics, 2017

### 91222 Analyse inflation using economic concepts and models

2.00 p.m. Monday 20 November 2017  
Credits: Four

| Achievement   | Achievement with Merit   | Achievement with Excellence   |
|---|--|---|
| Analyse inflation using economic concepts and models. | Analyse inflation in depth using economic concepts and models. | Analyse inflation comprehensively using economic concepts and models. |

Check that the National Student Number (NSN) on your admission slip is the same as the number at the top of this page.

**You should attempt ALL the questions in this booklet.**

If you need more room for any answer, use the extra space provided at the back of this booklet.

Check that this booklet has pages 2–12 in the correct order and that none of these pages is blank.

**YOU MUST HAND THIS BOOKLET TO THE SUPERVISOR AT THE END OF THE EXAMINATION.**

Merit

TOTAL

16

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## QUESTION ONE: CAUSES OF INFLATION

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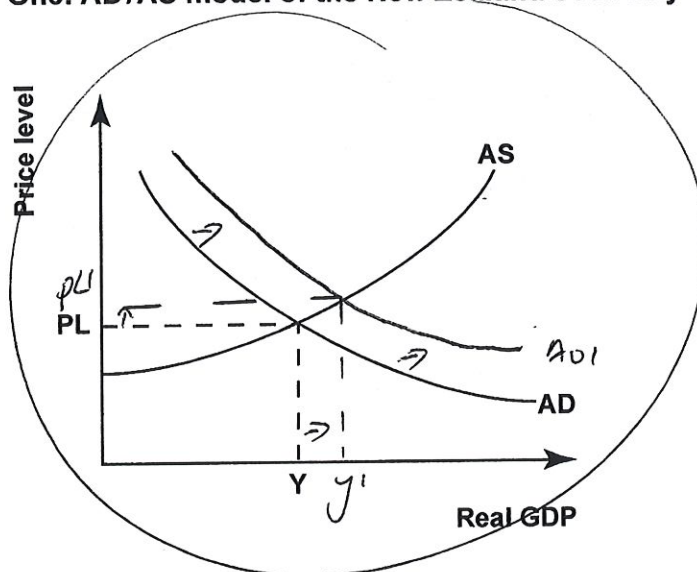
The Government wants to make New Zealand conservation land predator-free by 2050, increasing budget funds to target the eradication of all pests that threaten New Zealand's native birds.

Source (adapted): <http://www.stuff.co.nz/environment/82454116/government-sets-target-to-make-new-zealand-predatorfree-by-2050>

This should have the added benefit of attracting more tourists to New Zealand.

Graph One: AD/AS model of the New Zealand economy

increased  
government  
spending



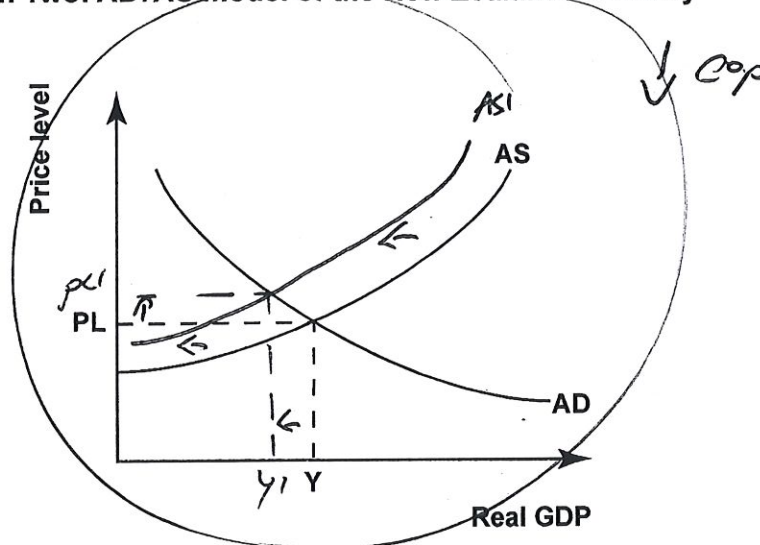
- (a) (i) On Graph One, show the impact of the government programme to make New Zealand conservation land predator-free by 2050.
- (ii) Using Graph One, fully explain the impact on inflation of the government programme.

The government programme aimed at making NZ conservation land predator free by 2050 will increase government spending. This is because the government will spend more on eradication of the threatening pests, increasing what they spend on goods and services such as transport. Also, the programme will increase ~~aggregate demand~~ <sup>exports receipts</sup> as more tourists will want to see the increasing variety of bird life that are not threatened by predators. This in turn increases aggregate demand from  $AD$  to  $AD_1$  (outward shift) and increasing the price level from  $PL$  to  $PL_1$ . Inflation has occurred //

Along with the increase in residential house prices, there has been a similar increase in commercial property prices and business rental costs. During 2016, these price increases spread from the major cities to smaller towns and rural areas in New Zealand.

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Graph Two: AD/AS model of the New Zealand economy



- (b) (i) On Graph Two, show the impact of the increase in prices and rental costs of commercial property in New Zealand.
- (ii) Using Graph Two, fully explain the impact on inflation of the increase in prices and rental costs of commercial property in New Zealand.

An increase in prices and rental prices of commercial property will increase costs of production for firms. This is because they will now have to pay higher amounts of rent to occupy their buildings, which increases costs and decreases profit. Firms will decrease their production in the economy to maintain profit margin. This in turn decreases aggregate supply, as indicated by an outward shift of the curve from AS to AS1, increasing the price level and causing inflation.



- (iii) Fully explain why the impact on inflation of the government programme in part (a) may be less than the impact of increases in the price and rental costs of commercial property in New Zealand in part (b).

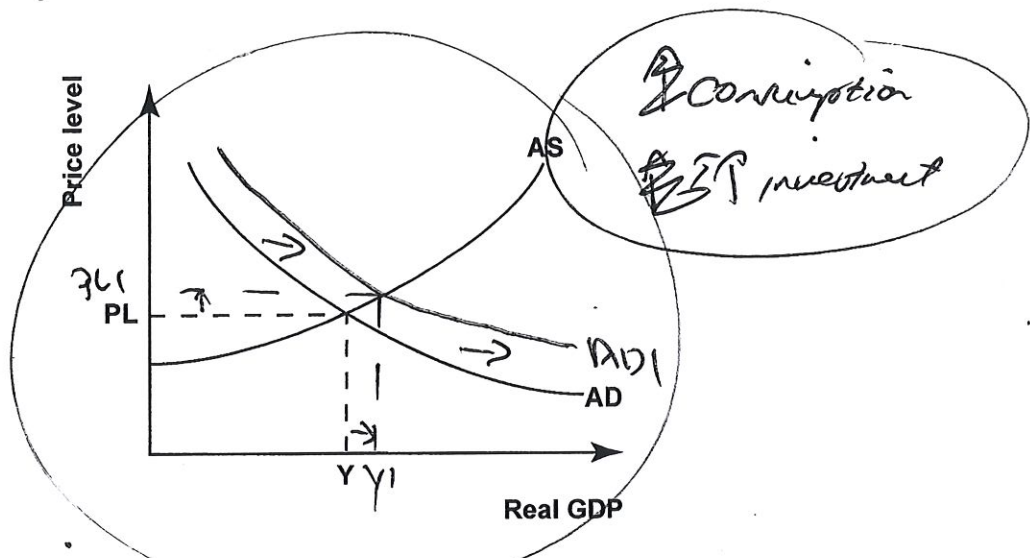
Both situations increase the price level which causes inflation to occur. However, the government scheme of tackling part (a) have less of an effect than increasing prices and rent of commercial property. This is because the government scheme only allows greater spending in a restricted area of the economy, which is conservation and tourism or native birds (exports receipts / government spending). Not all tourists want to visit NZ to experience native birds. However, increasing commercial prices will increase costs of firms who rent, but this encourages investment and consumption through firms who own businesses. Greater rental income will encourage consumption of goods/services and investment which increases aggregate demand and causes inflation. All commercial property owners and firms who rent are affected. However, only a restricted part of exports and increased govt spending are affected with the government programme, making commercial property have a greater impact of inflation.

## QUESTION TWO: RECOVERY AND INFLATION

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Economic forecasts suggest that New Zealand will experience inflation throughout 2017, increasing to 2.2% by 2020, after hitting a low of 0.1% in January 2016. This increase in inflation is expected to come from the economy experiencing a recovery and growing through increased consumer and business confidence.

Graph Three: AD/AS model of the New Zealand economy



- (a) (i) On Graph Three, show the impact of a recovery on the Aggregate Demand curve.  
 (ii) Using Graph Three, fully explain how a recovery could lead to a period of inflation.

During a recovery stage in the New Zealand economy, levels of consumer confidence and business confidence will rise. This results in greater consumption through consumer spending by consumers and greater investment into capital resources by producers. Consumers spend more as they have more confidence in the economy, greater employment etc, while businesses increase investment to purchase capital goods to increase production and satisfy consumption. As a result, this increases aggregate demand, shown by an outward shift of the curve from ~~AD~~ AD to AD1. The price level also increases from PL to PL1, causing inflation.



From 2014 to the start of 2016, the New Zealand economy experienced a period of disinflation. Projections by economic forecasters suggest that from the beginning of 2016 until 2020, there will be steady and constant inflation in the New Zealand economy.

Source (adapted): <http://www.tradingeconomics.com/new-zealand/inflation-cpi/forecast> (accessed 17 January 2017)

(b) Compare and contrast the effects of a period of steady and constant inflation on:

- New Zealand export firms compared to New Zealand import firms
- New Zealand savers compared to New Zealand borrowers.

In periods of constant inflation, different sectors in the economy will be affected in different ways. Those New Zealand firms who export goods and services will lose out as they ~~lose~~ export sales and their export receipts will decrease. This is because purchasing exports ~~to~~ <sup>from NZ</sup> overseas becomes less price competitive <sup>costs are higher, less incentive to purchase exports</sup> and those firms will purchase in other markets that are more price competitive. These NZ export firms may decrease their investment as there is not as great a need to purchase capital goods to increase production. However, those who import will benefit as the imports become more price competitive / more affordable, which decreases import firms costs and increases their demand for imports.

During constant / steady inflation rates, ~~consumer~~ consumption will be slowed as more people save. People who save will be better off as they will receive better returns on their deposits through increased interest rates as a result of inflation. Borrowers will be worse off as they will have to pay higher levels of interest on their borrowed money, which will decrease their consumption (less disposable income).

after paying interest. Also, the real value  
of the borrowed money falls with inflation,  
decreasing borrowers purchasing power with the borrowed  
funds. //

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M5



### QUESTION THREE: THE IMPACTS OF INFLATION

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Forecast figures from Treasury indicate the possibility of a decrease in real wages during 2017.

Source (adapted): <http://www.treasury.govt.nz/economy/overview/2016/10.htm>

- (a) Fully explain how real wages can fall even when there is an increase in nominal wages. In your answer, include a definition of nominal wages and real wages.

Nominal wages are the amount of wages that is earned without adjusting it to current period of inflation e.g. 2% per annum. Whereas, real wages are adjusted to current inflation levels or a certain period of time - i.e. it is expressed in current terms. Real wages can fall even if there is an increase in nominal wages when there are periods of deflation, where the price level decreases. This makes real wages fall below nominal wages that are increasing. //



New measures of inflation being developed for groups of households by the Statistics Department will provide greater insight into the inflation experienced by these household groups.

Source (adapted): [http://www.stats.govt.nz/browse\\_for\\_stats/economic\\_indicators/prices\\_indexes/HouseholdLivingCostsPriceIndexes\\_HOTPSep16qtr](http://www.stats.govt.nz/browse_for_stats/economic_indicators/prices_indexes/HouseholdLivingCostsPriceIndexes_HOTPSep16qtr)

Table One: Household living cost inflation rates

| Household group                       | Average rate of inflation between 2008 and 2016 | Cumulative rate of inflation between 2008 and 2016 | Major items in household spending basket 2014 (approx. % of total spending) |
|---------------------------------------|---|--|---|
| Superannuitants                       | 2.375 %   | 19.0 %   | Housing 42<br>Transport 9<br>Clothing 1.5                                   |
| Top 20 % of Households by expenditure | 1.137 %   | 9.1 %  | Housing 15<br>Transport 17<br>Clothing 5                                    |
| National average (CPI)                | 1.625 %   | 13.0 %   |   |

Created from figures available from [http://www.stats.govt.nz/browse\\_for\\_stats/economic\\_indicators/prices\\_indexes/HouseholdLivingCostsPriceIndexes\\_HOTPSep16qtr](http://www.stats.govt.nz/browse_for_stats/economic_indicators/prices_indexes/HouseholdLivingCostsPriceIndexes_HOTPSep16qtr)

- (b) (i) Using the information on household spending baskets, fully explain why different household groups have experienced a rate of inflation different from the national average.

The different groups outlined above have experienced different inflation <sup>levels</sup> than the national average because the groups each spend different percentages on items in the household basket. Superannuitants spend more on <sup>housing</sup> ~~housing~~ (42%) and less on transport (9%), whereas the top 20% of households ~~spend~~ spend a more even amount on items i.e. less on Housing (15), more on transport (17). This has different effects on the inflation rate these groups experience as some items are weighted more heavily than others

in the consumer price index and therefore this affects inflation accordingly.

The question continues on the following page.



(ii) Compare and contrast the impact of inflation on the living standards of:

- superannuitants

AND

- the top 20% of households by expenditure

if the incomes of both groups increased by the same percentage between 2008 and 2016.

If the incomes of Superannuitants<sup>and the top 20% of earners</sup> increased by the same rate, the group would experience different impacts of inflation on living standards.

Superannuitants tend to spend more of their income on housing, whereas the top 20% of spenders spend similar amounts on housing and transport and less on clothing.

Housing is considered to be a large item that Superannuitants spend on so increased inflation would ~~increase~~ increase their rent.

Since Superannuitants are considered to be low income earners and savers they would spend a larger proportion of their income on the rent, decreasing their ability to purchase other goods/services such as food etc.

With inflation, the value of the Superannuitants' saving is eroded making it <sup>more</sup> difficult to purchase items, due to the real value of money increasing. //

The top 20% will ~~not~~ experience smaller impacts of inflation as they are generally higher income earners who are able to afford ~~luxuries~~ luxuries. They spend less of their income on expenses and housing. //



Extra space if required.

Write the question number(s) if applicable.

QUESTION  
NUMBER

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Unit is less affected by inflation -  
although spending increases they are more  
likely to be able to manage the increased  
prices caused by inflation. //

Extra space if required.

Write the question number(s) if applicable.

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QUESTION  
NUMBER

22  
b) (2)

Unweighted region and where there is greater  
spending on this item compared to others will  
increase innovation by a greater amount, as indicated  
by greater innovation levels of Superconductors compared  
to the top 20% of spenders.

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**Merit exemplar 2017**

| <b>Subject:</b> |                    | <b>Economics</b>  | <b>Standard:</b> | <b>91222</b> | <b>Total score:</b> | <b>16</b> |
|-----------------|--------------------|---|------------------|--------------|---------------------|-----------|
| <b>Q</b>        | <b>Grade score</b> | <b>Annotation</b>   |                  |              |                     |           |
| 1               | M6                 | The candidate has the potential to gain a merit from both (a) and b(ii) though one at this level is enough. In (a) the candidate clearly identifies the changes of the correct components of aggregate demand (using the correct terms) giving a reason sourced from the resource. The graph is also well integrated with AD and price level movements identified. In b(ii) the answer is also well explained using the key terms of cost of production and profit margins, however, there is an error in not linking price changes to profit motives. The answer is not an E7 as the candidate does not clearly link the effect on the number of firms as the reason for greater movements in price between the two scenarios. |                  |              |                     |           |
| 2               | M5                 | The Merit in this question comes from Q2a. The components of aggregate demand; investment and consumption are correctly identified using the right terms and linked to changes in aggregate demand and price level (using labels). Q2b does not reach a Merit level even though they correctly give a reason for the effects on export firms and import firms. The candidate needed to predict an outcome for both to gain M6. The discussion on savers and borrowers is wrong as they discuss the effect of changes in interest rates rather than the effect of inflation itself.  |                  |              |                     |           |
| 3               | M5                 | The candidate gains an MS from part b(i) in this question. The candidate effectively compares the personal inflation rate being created by a particular basket of goods and services whereas the average is created by the weighted CPI for the average household. The candidate does not gain an M6 as Q3a is incorrect, i.e. an increase in nominal wages and deflation would make real wages rise. The candidate does not get an E7 as b(ii) compares how the inflation rates for the two groups are created not the effects of the inflation rates.   |                  |              |                     |           |