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91222



NEW ZEALAND QUALIFICATIONS AUTHORITY
MANA TOHU MĀTAURANGA O AOTEAROA

QUALIFY FOR THE FUTURE WORLD
KIA NOHO TAKATŪ KI TŌ ĀMUA AO!

SUPERVISOR'S USE ONLY

Level 2 Economics, 2015

91222 Analyse inflation using economic concepts and models

2.00 p.m. Thursday 12 November 2015
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 2–11 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

15

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QUESTION ONE: CAUSES OF INFLATION

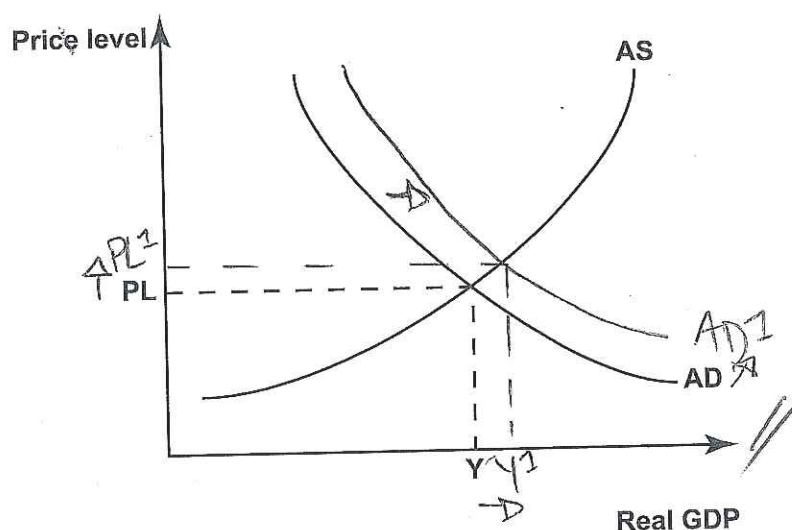
Surveys show 13% of tourists say the Hobbit films influenced their decision to travel to New Zealand. The surge in spending by tourists from premium markets such as Germany, the US, and the UK can be explained by film tourism.

Source (adapted): *The New Zealand Herald*, 7 January 2015, p. A15.

- (a) Explain in detail the impact on inflation of the increase in film tourism in New Zealand.
In your answer:

- use Graph One to show the impact of the increase in film tourism on inflation
- explain in detail how the increase in film tourism could affect inflation
- refer to the change you made on Graph One to support your answer.

Graph One: AD/AS model of New Zealand economy



The influx of tourists as a result of the Hobbit films will increase the Aggregate Demand of the New Zealand economy. When tourists travel to New Zealand they spend New Zealand dollars and contribute to consumption spending as they demand goods and services. This will increase Aggregate demand as consumption spending increases, from AD to AD¹ a shift outwards (to the right). This is an example of demand-pull inflation as aggregate demand increases it will increase the price level, shown on the graph as ~~an~~ a shift upwards from PL to PL¹. The increase in aggregate demand will also increase Real GDP as more goods are being bought in the economy so real GDP ~~shifts~~ moves to the right, from Y₁ to Y₂.

Government regulations will require all firms to undertake earthquake strengthening assessments and complete necessary strengthening by a given date. The total estimated costs for firms will be in excess of \$2 billion.

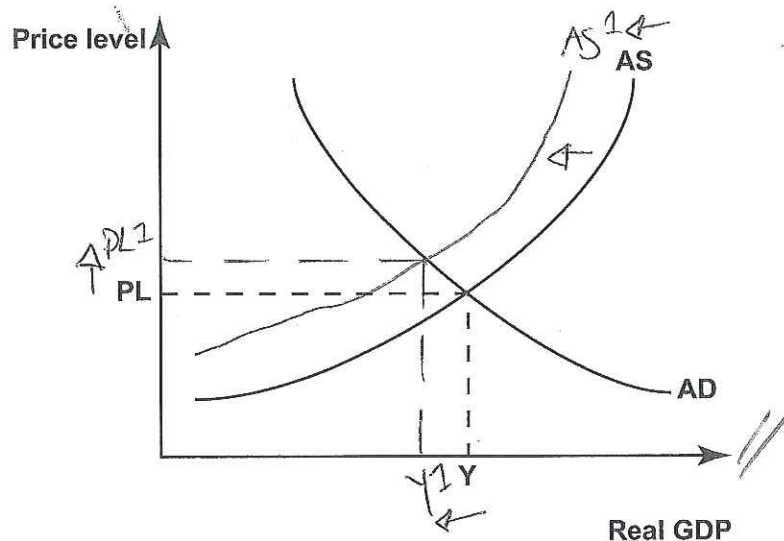
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- (b) Compare and contrast the impact on inflation of the increase in film tourism with the impact of earthquake strengthening regulations.

In your answer:

- use Graph Two to show the impact of earthquake strengthening regulations on inflation
- explain in detail how earthquake strengthening regulations would affect inflation
- explain in detail how the increase in film tourism may have a smaller impact on inflation than earthquake strengthening regulations
- refer to the changes you made on Graph One and Graph Two to support your explanations.

Graph Two: AD/AS model of New Zealand economy

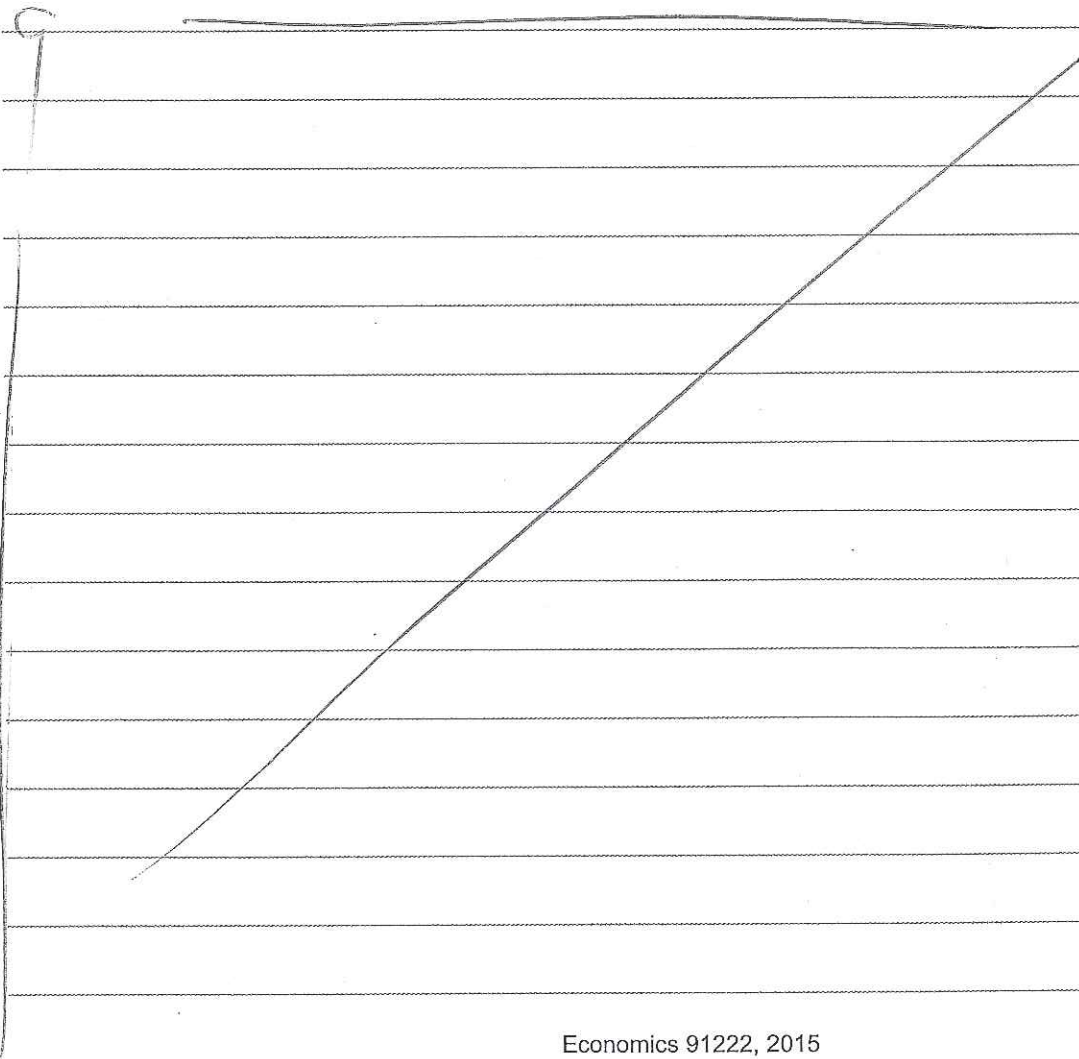


~~Earthquake~~ Earthquake strengthening regulations will increase firms' cost of production as complying with the regulations will ~~increase~~ cost be a new, necessary cost for firms. This means the cost to operate has increased making ~~producing~~ ^{relatively} goods their business less profitable as less of their income is profits as ~~expansion of it~~ their costs to produce their goods/services has increased. This decrease in Aggregate Supply will cause cost-push inflation as the cost to produce goods increase. Firms will shift \uparrow increased cost onto consumer increasing the price level. This is shown on Graph Two as the Aggregate Supply curve shifts inward, to the right from AS to AS¹ as aggregate supply

There is more space for your answer to Question One on the following page.

has decreased due to increased costs the price level will increase, ~~PL~~ price level goes up from PL to PL¹. The effect of cost-push inflation is that economic growth decreases as real GDP will decrease, ~~from~~ shown on graph to as a move of real GDP to the left from Y to Y¹.

The increase in film tourism may have had a smaller impact as only 13% of tourists were introduced ~~to~~ by the Hobbit films. This will increase Aggregate demand and demand pull inflation but is much smaller in comparison to the cost push inflation of firms decreasing aggregate supply due to the earthquake strengthening. All firms in New Zealand are required to earthquake strengthen their businesses, this affects far more people and is worth ~~far~~ ^{much} more than 13% approx. of the tourism industry.



QUESTION TWO: THE QUANTITY THEORY OF MONEY

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During 2014, the fall in export receipts represented an estimated \$6.1 billion reduction in dairy farming income, compared to the previous year in the New Zealand economy. Reductions in export receipts have an effect on the money supply.

- (a) Explain in detail the impact of reduced export receipts in the New Zealand dairy industry on inflation.

In your answer:

- explain in detail how reduced export receipts in the dairy industry will affect inflation
- refer to all the variables in the Quantity Theory of Money equation.

$$M \times V = D \times Q //$$

$$\text{Money Supply} = M //$$

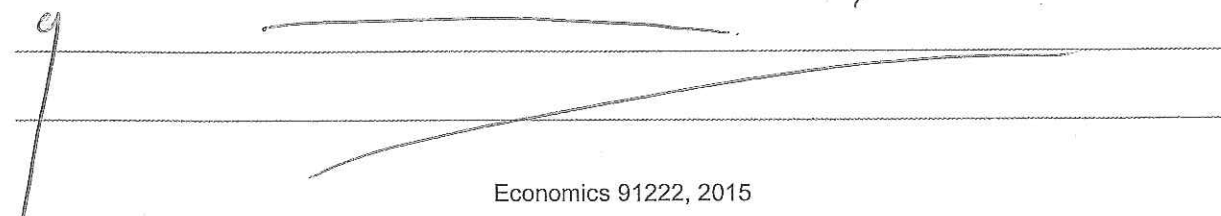
$$\text{velocity of circulation} = V //$$

$$\text{Price level} = P //$$

$$\text{production level (real output)} = Q //$$

Export receipts are injections into the money supply of the economy. The fall of export receipts due to the \$6.1 billion reduction in dairy farming income (one of New Zealand's main exports) will decrease money supply. Exports are a component of aggregate demand, if Net exports decrease then Aggregate Demand will decrease which will decrease the price level (inflation). The reduced export receipts will reduce inflation.

The decrease in money supply due to the decrease in export receipts will effect the price level if velocity^(V) and ~~production~~^{real output}^(Q) stay constant. The quantity theory of money states that Money Supply and velocity of circulation must equal price level and ~~production~~^{real output} level, so with money supply decreasing the price level must decrease. This means the new Zealand economy will experience ~~a fall in~~ deflation as the price level decreases.



Increased production by foreign producers may make it more difficult for the New Zealand dairy industry to regain the record level of export receipts experienced in 2013. Historically, when export-dependent industries experience permanent declines in export receipts and income, they respond by reducing production.

(b) Discuss how a permanent fall in export receipts in the dairy industry may affect inflation in the long run.

In your answer:

- explain in detail why real output in the Quantity Theory of Money may change when there is a permanent fall in dairy export receipts
- explain in detail the impact on inflation if there is a change in real output
- compare and contrast the overall impact on inflation between the initial decline in export receipts in the dairy industry in the short run, and the additional impact of changes in real output if the fall in export receipts remains permanent in the long run.

Real output may decrease as historically export dependent industries reduce production when experiencing permanent declines in export receipts and income. As the New Zealand Dairy Industry is heavily export based the 6.1 billion reduction in export receipts in 2014 was very difficult for the dairy industry. If this year the NZ dairy industry experiences declines in export receipts and income it may be necessary to reduce production. This would make ~~the~~ reduce the decline in price level as $M \times V = P \times Q$, if M (money supply) is still declining (as a result of declining export receipts & incomes) then ~~the decline in~~ ^{by reducing production} real output will decrease (Q) which will make sure the price level doesn't drop too much (P). This ~~at~~ reduction in the decrease in price level will decrease deflation, if real output (production) is reduced enough it can ~~stop~~ stop price level from reducing, allowing for a stable price level and no more deflation. //

^{in the dairy industry}
The initial decline in export receipts would have decreased the rate of inflation as the net exports would have decreased. The economy ~~would have most likely~~ ^{experiencing a reduction of price levels (deflation)}
The additional impact of real output decreasing would

decrease ~~aggregate supply~~ ^{real GDP} as well. If Fed atpt decreasing would decrease Aggregate supply, increasing price level so that the economy would no longer be experiencing deflation. The price level would increase so that inflation would occur, cost push inflation as firms production decreases. //

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M6

QUESTION THREE: CAUSES AND IMPACTS OF INFLATION

1. During 2014 daily early bird parking fees increased in price from \$13 to \$17 for council owned central city parking in Auckland.
2. House owners are feeling confident after learning their property values have increased significantly over the last three years. Increased confidence in their wealth means that home owners are willing and able to borrow more from banks to spend on new cars, boats, and home renovations.

Source (adapted): *The New Zealand Herald*, 12 November 2014, p. A8.

- (a) Explain in detail the different effects on the general price level measured by the Consumer Price Index (CPI) of an increase in price of early bird parking fees (a single product) and the increase in house values.

In your answer:

- explain why an increase in price of early bird parking fees may not cause a change in inflation
- explain in detail how the increase in house values as indicated in the resource material can result in a change in inflation.

The increase in price of one market (the market for early bird parking fees) will most likely not cause a change in the general price level (the market for all goods and services) as when it is added to the average the change ~~from~~ in that ^{small} market will not be enough to increase the price level of all markets. (an increase in price level is inflation). //

An increase in house values increases households consumer confidence, as they are confident about their future. This confidence motivates households to spend rather than save which means they spend more of their disposable incomes and willing to borrow from banks to spend ~~money~~ on cars, boats and home renovations. This increase in the price level on houses has encouraged homeowners to spend in other markets as well, the increase in price level in multiple markets will increase the average price level (inflation). //

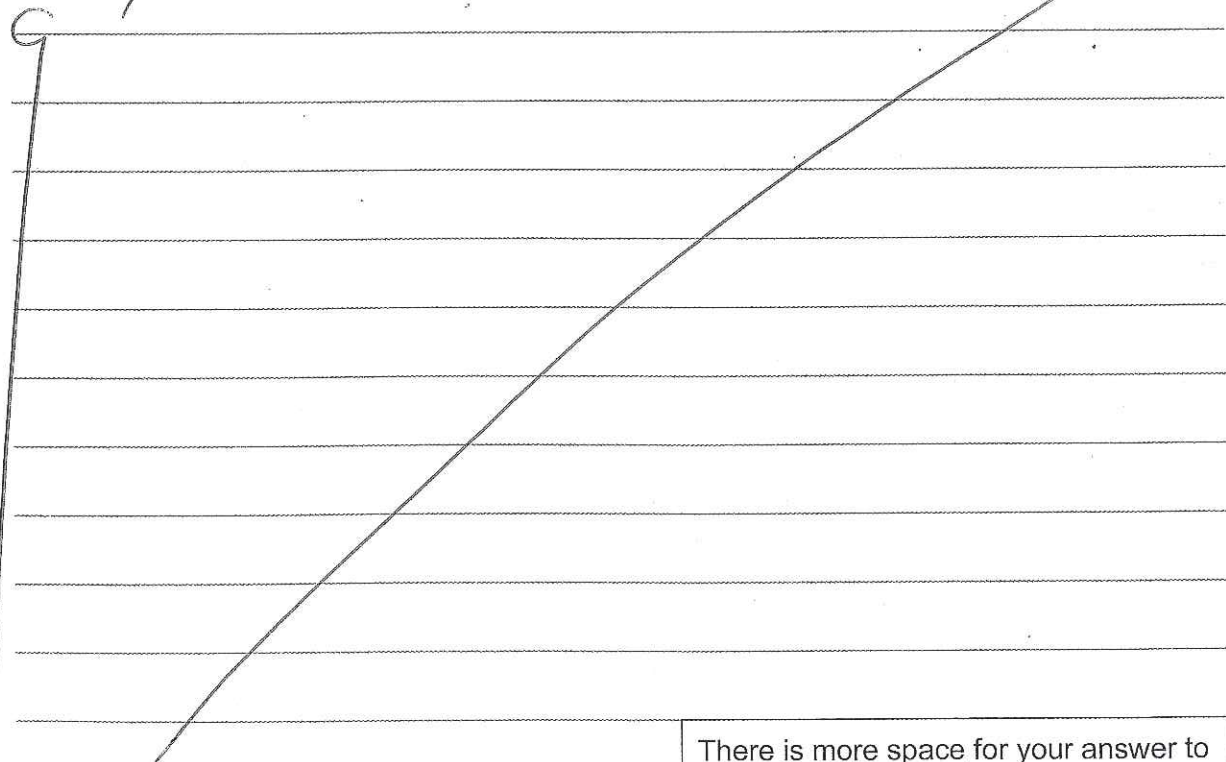
- (b) The business cycle results in periods of inflation and disinflation. Compare and contrast the impact of these periods of inflation and disinflation on various groups in New Zealand society. In your answer:

- explain the difference between inflation and disinflation
- explain in detail the impact of both inflation AND disinflation on savers
- explain in detail the impact of both inflation AND disinflation on the Government's operating balance.

Inflation is an increase in the ~~pr~~ average price level each year. While disinflation is an increase in the average price level ~~but~~ but at a slower rate / lesser rate than the previous year.

Inflation will reduce interest rates, making the cost for borrowing less and the reward for saving less, incentivising households to spend rather than save. This means it is relatively worse to save as ~~the~~ they will get a low return on saving and will experience decreased purchasing power as cost of goods & services increase but amount of saved money doesn't increase as quickly.

Disinflation is relatively better for savers than inflation as interest rates will be higher so there is a better incentive to save rather than spend. //



There is more space for your answer to Question Three on the following page.

Merit exemplar for 9122 22015			Total score	15
Q	Grade score	Annotation		
1	M5	Part A lacks correct economic detail in the explanation for Merit, foreign tourist spending shifts the export receipts component of aggregate demand in graph one. Part B has some of the expectation of Merit. The detailed explanation shows depth by providing two reasons for the cause of inflation to a fully referenced result shown in graph two. The candidate has identified the issue of falling profit margins, but has not explained how it has been addressed by the increase in price level.		
2	M6	Part A has an accurate explanation of a link between the money supply and inflation using an appropriate economic model. Greater detail about the magnitude of the change in price level, using the quantity theory of money would benefit the answer. Part B has identified and explained in detail why price level has increased using an appropriate economic model. The candidate has identified the overall impact on inflation from the short run to the long run, but lacks the depth necessary for Excellence.		
3	A4	Part A demonstrates an explanation of the difference between a single market price increase and multiple markets increasing. In part B there is a description of the difference between inflation and disinflation. There are explanations of how savers are impacted by inflation and disinflation. Neither part A nor part B has a detailed explanation for Merit.		