

Exemplar for Internal Achievement Standard Economics Level 2

This exemplar supports assessment against:

Achievement Standard 91227

Analyse how government policies and contemporary economic issues interact

An annotated exemplar is an extract of student evidence, with a commentary, to explain key aspects of the standard. It assists teachers to make assessment judgements at the grade boundaries.

New Zealand Qualifications Authority

To support internal assessment

Grade Boundary: Low Excellence

1. For Excellence, the student needs to analyse comprehensively how government policies and contemporary economic issues interact.

This involves:

- justifying a combination of government policies that achieves specific policy objectives relating to one contemporary economic issue and minimises any negative flow-on effects on two other contemporary economic issues
- integrating changes shown on economic models into detailed explanations of direct impacts and flow-on effects of government policies.

The student has comprehensively analysed government policies that aim to reduce unemployment levels and increase real growth. The student has described what these two specific policy objectives are in the introduction, and explained how three different government policies relate to real GDP growth and employment (1).

The student has justified how and why the three policies could achieve the two specific policy objectives throughout the summary, integrating the language of the AS/AD, Labour market, and PPF models into detailed explanations of the short-term direct impacts and long-term flow-on effects of the policies (2).

The student has explained in detail why the additional contractionary monetary policy is needed to minimise negative flow-on effects on inflation (3).

For a more secure Excellence, the student could add the other important aspect of an economic justification. Integrating the AS/AD model into the explanation to explain how the additional policy could work to ease inflationary pressure (4).

Introduction

The specific policy objectives are to reduce the unemployment level from 6.2% in 2013 to 4.5% in the next two years, and to increase real growth (RGDP) from 2.5% in 2013 to 4% in the next two years. Some of the growth in nominal GDP can often be attributed to demand-pull or cost-push inflation. Therefore, the combination of government policies needs to be able to achieve real growth and employment while minimising any negative impacts on inflation and the balance of payments (current account).

Policy 1: Infrastructure Spending (roading, rail systems, broadband, and construction in Christchurch)

Policy 2: Re-Training of workers

Policy 3: Better Management of Welfare Benefits

[Student explained the three policies above in detail, presenting accurately labelled models, and changes shown on the AS/AD, Labour market, and PPF models were integrated into the explanations of the short-term direct impacts and long-term flow-on effects of the policies].

Policy Package Summary

The package of policies I have provided work together to increase employment levels. The first policy, increased infrastructure spending will cause more jobs to become available in the industries such as construction and retail. The second policy will retrain and upskill workers who were previously unemployed, and provide incentives for firms to hire these people. The third policy addresses the welfare system and forcing long-term unemployed people to participate in re-training programs and find employment. Together the policies increase the participation rates, increase the amount of available jobs and reduce unemployment.

All three policies have a potential effect on labour prices. Supply and demand of labour determine the wage rates. Each policy increases employment, so there are more workers in the work force. This means the participation rate increases in all cases. The first policy, to increase infrastructure-spending causes businesses to re-open to satisfy increased demand for products – meaning more workers are needed so demand for labour increases. The second policy to re-train workers, matches the greater amount of workers needed by providing incentives for firms to employ and train people.

The third policy manages welfare spending better, and creates jobs by providing firms with more control over how many they can afford to employ – meaning firms are more willing to employ workers and demand for labour increases. It is arguable that a change in participation rates, or change in the size of the labour force shifts the SL curve. For example, if the availability of welfare support decreases the SL curve would shift right, increasing the supply of labour.

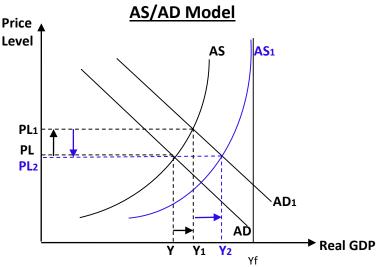
Selecting these types of fiscal policies increases the likelihood that retrained workers and those seeking employment can find jobs. If supply and demand of labour increases then the change in the wage rates will depend on the proportional shift between the SL and DL curves. For example, if workers are retrained in an industry that did not have a large demand for workers then the shift in supply will be proportionally greater than the shift in demand for labour, resulting in a lower wage rate. This is why it is important that industries with skill shortages be primarily focused on by government for the retraining and upskilling incentives.

The policy package has a positive effect on the balance of payments. The increase in infrastructure spending in Christchurch will increase tourism export earnings longer-term and the spending on various projects means an increase in AD to AD1. The amount of goods and services produced will increase, so Real GDP will increase from Y to Y1. This reduces unemployment, moving the economy closer to full employment (Yfull).

Retrained and upskilled workers may be employed by exporting industries and less unemployment means more disposable income. This does mean there is the potential for demand of imported goods to increase. Families who may have previously struggled to make ends meet would spend their higher wages on wants like technology and cars, and this would decrease the balance of payments.

However, it is likely that the increased exports of goods and services will help offset the increased imports of consumer goods.

The balance of payments will benefit from the fiscal policies and any short-term negative effects of increased incomes on AD are outweighed by the significant benefits each policy provides in the long-term on AS (AD Model).



All of the policies increase the price level of goods and services. The first policy causes a shift in AD and demand-pull inflation. The second and third policies also increase AD in the short-term as seen on the model PL to PL1, but have beneficial effects longer term on AS. Retraining and upskilling workers will improve productivity, and better roading and rail services will lower firms' costs of production. There is a shift in the AS curve to AS1 and a decrease in price level from PL1 to PL2, therefore an increase in Real GDP from Y to Y2, moving the employment level closer to

Yfull. Additionally, better workers with new skills, and faster technology e.g. broadband will improve firms' efficiency and future productive capacity, shifting the PPF curve outwards.

To minimise the impact on price level, an additional policy added to this package is contractionary monetary policy used by the Reserve Bank to counteract the negative effects of inflation. The OCR would be increased and therefore interest rates would increase, *consumption falls as the cost of borrowing increases for households and firms, and inflationary pressure would drop, maintaining price stability between 1-3% as defined in the Policy Targets Agreement.

Any increase in the OCR has to be moderate to avoid any long-term detrimental effects on exports, investment and consumption. Because DL is formed from the demand for final goods and services and could threaten employment levels (derived demand). The higher exchange rate lowers the cost of oil and other imported materials, reducing firms' costs of production, so AS increases and reduces inflationary pressure further (no cost-push inflation). However, our exports lose price competiveness and demand for NZ goods overseas will decrease, negatively affecting AD and the balance of payments, and the employment level because we rely heavily on export earnings to increase our Real GDP.

The long-term benefits of the fiscal policies should still outweigh any short-term adjustments made to the OCR to maintain price stability in the short to medium term. I believe implementing policies that re-develop cities like Christchurch, solve skill shortages, increase productivity, and decrease the poverty gap will improve the quality of New Zealander's lives by increasing the employment levels, wage rates, and improve the balance of payments because of a significant increase in Real GDP growth.

Example of integrating the AS/AD model into the additional policy: ...*consumption falls as the cost of borrowing increases for households and firms, because AD = C+I+G+(X-M).

Falling (C) and (I) due to higher interest rates will decrease AD1 back towards AD and demand-pull inflationary pressure would drop from PL1 back towards PL in the short to medium term, or this policy counteracts the short-term inflationary effects of the fiscal policies and therefore price level may remain relatively constant around PL.

Grade Boundary: High Merit

2. For Merit, the student needs to analyse in depth how government policies and contemporary economic issues interact.

This involves:

- providing a detailed explanation of the direct impact of government policies on one contemporary economic issue using an economic model(s)
- providing a detailed explanation of the flow-on effects of government policies on two other contemporary economic issues using an economic model(s).

The student has provided an in-depth analysis of government policies that aim to reduce unemployment levels and increase real growth. The student has described what these two specific policy objectives are in the introduction and explained how three different government policies relate to real GDP growth and employment (5).

The student has explained how and why the policies could achieve the two specific policy objectives throughout the summary, integrating the language of the AS/AD and Labour market models into the explanation (6).

The student provided a detailed explanation of the secondary policy in relation to minimising the negative flow-on effects on inflation in the analysis (7).

To reach Excellence, the student could the student's explanation would become comprehensive with more detail about how 'the effects of one should balance the effects of the others' (8), providing the necessary evidence of how the impact on inflation is minimised. For example, the student could use the argument that supply-side fiscal policy will help to counteract short-term demand-side inflationary pressure.

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Introduction:

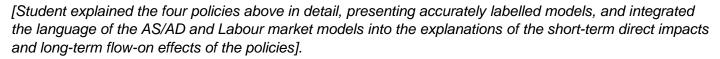
The specific policy objectives are to reduce the unemployment level from 6.2% in 2013 to 4.5% in the next two years, and to increase real growth (RGDP) from 2.5% in 2013 to 4% in the next two years. Some of the growth in nominal GDP can often be attributed to demand-pull or cost-push inflation. Therefore, the combination of government policies needs to be able to achieve real growth and employment while minimising any negative impacts on inflation and the balance of payments (current account).

Primary policy 1: Investing in Infrastructure, expansionary fiscal policy - Rebuilding Christchurch

Primary policy 2: Investing in Infrastructure, expansionary fiscal policy - Improving transport systems

Primary policy 3: Investing in new technology for the agricultural sector, expansionary fiscal policy

Secondary policy 4: Subsidise more scholarships for technology university students



Summary:

Therefore, overall, through this mix of three primary policies and single secondary policy we can increase Real GDP and improve employment levels in New Zealand.

All four policies will improve employment by improving productivity, shifting the AS curve right in the long term (improving infrastructure, investing in agricultural technology, subsidising scholarships) and by shifts right of the AD curve in the short term (improving transport systems, rebuilding Christchurch, and the other two mentioned above).

Graphs 1 and 4 prove that the shifts right of the AD and AS curves increase GDP from Y1 to Y2 and therefore increase employment. As proved by graph 2, DL increases from DL1 to DL2 because firms have to hire more workers to produce more goods and services (derived demand), and wage costs rise from W1 to W2.

The policies 1-3 will cause the price level to rise as the shift AD right (as proved by graph 1, AD shifts from AD1 to AD2, price level rises from PL1 to PL2) in the short term. However, the policies also reduce inflation, because eventually the shifts right of AS cause price level to drop, as proved by graph 4, as AS1 shifts to AS2, PL drops from PL1 to PL2 in the long term.

I estimate therefore that between them the effects of one should balance the effects of the others.

Almost all of the polices have positive effects on the balance of payments (exports-imports), as they increase AS, which both lowers price levels and increases Real GDP making our goods more attractive to consumers both in NZ and overseas.

Allowing us to have more goods to export as proven on graph 5 as price decreases from P1 to P2, quantity demanded increases from Q1 to Q2 and therefore improve our exports to imports ratio.

The exception to this is the rebuilding Christchurch policy, which increases demand-pull inflation due to increased consumption and wage costs rise, creating an inflationary spiral. Therefore, this can have a negative effect on the attractiveness of our goods and services to price motivated consumers both here and overseas.

However, rebuilding Christchurch shifts AD right so increases our GDP and employment levels, as well as improving overall national morale, which is why I continue to advocate it as a viable economic policy.

Grade Boundary: Low Merit

3. For Merit, the student needs to analyse in depth how government policies and contemporary economic issues interact.

This involves:

- providing a detailed explanation of the direct impact of government policies on one contemporary economic issue using an economic model(s)
- providing a detailed explanation of the flow-on effects of government policies on two other contemporary economic issues using an economic model(s).

This student has explained in depth, for three different government policies, the two specific policy objectives of sustainable development and significant growth due to the multiplier effect in the introduction (9).

The student has incorporated the language of the AS/AD model into detailed explanations of the direct impact on growth, and the flow-on effects of the policies on inflation and employment (10).

Additionally, the student has explained in the summary how the policies would achieve significant economic growth (11).

For a more secure Merit, the student could explain how the three policies achieve the objective of sustainable development (12). Additionally, the student could provide more explanation of Policy 1, involving the 'why' and 'how' (12), to adding more evidence of an in-depth analysis.

Sustainable Development: Sustainable development requires that actions taken at the present do not inhibit prospects of future generations to enjoy the level of consumption, wealth, utility or welfare compared to those enjoyed by the present population.

Significant Economic Growth: Significant economic growth is achieved when the policy introduced has a multiplier effect on the economy. This means that growth in one section of the economy will have flow on effects, which result in even more growth effects for this section of the economy.

For example, if firms benefited from an increase in export receipts and so increased production, they would pay more wages out to their workers (households). This increase in disposable income (HDI) of the households will lead to increased consumer spending which will lead to firm's further increasing production. This further increase in production is the multiplier effect.

Policy 1: Subsidisation of tertiary education is an expansionary fiscal policy. The NZ government should invest in certain areas of tertiary education. This will create a more skilled workforce, as students who go to university and see selected courses are now cheaper, are more likely to stick to it until they graduate. The areas that should be subsidised are science, information technology (IT), and agriculture. This is because science and IT are changing the world that we live in, and agriculture is part of NZs biggest industries. As these industries can reward you with a sizable income return e.g. science = cancer research, technology experts = web designers/game designers/content creators/system architects, and agriculture = dairy technology/genetic engineering/pest control.

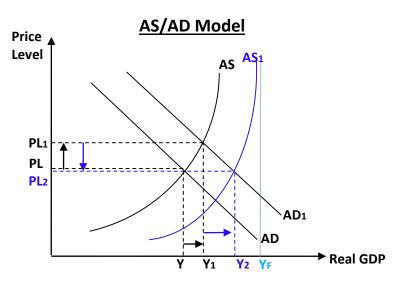
The workers' demand for goods and services will increase overall so consumption spending will increase (C), increasing AD because (C) is a component of AD, the AD curve has shifted to the right to AD1 as seen on the model. If there is an increase in demand for milk/milk products, dairy farmers' income will increase. This may result in an increase in firms supplying more spa pools (this is called induced spending). An indirect expenditure flowing on from a farmers increase in dairy production could be a purchase of more fertiliser products for the farmer's pastures.

A way for the government to get maximum benefits out of this is to lay down some guidelines for the subsidised courses. One recommendation is making students who benefit from the cheaper, subsidised courses stay and work in NZ for five years after graduating. This will mean the income that they earn will be spent in the NZ economy. Additionally, if they quit the course or go overseas earlier they have to pay the cost of the course back to the government. The graph shows that because demand for products has increased, prices have risen. This will increase our inflation rate (PL-PL1), creating demand-pull inflation. However, real output has increased (Y-Y1), so more jobs will be created to cater for the needs of the economy, moving us closer to Yf and significant economic growth.

Policy 2: Lowering company tax is a supply-side fiscal policy. A low company tax policy in NZ could attract overseas investors to start new firms, and our higher skilled workforce would make the decision to invest here easier. However, we would need to put in place some requirements like employing a certain number of New Zealanders. The AS curve would shift right to AS1 because costs of production have decreased and the extra employment (spending) is seen as a shift along the AD1 curve to the new intersection of AD1 and AS1.

Inflation has been counter-balanced, because the increase in AD from Policy 1 pushed up prices, but Policy 2 shifts the AS curve, therefore price level decreases from PL1 to PL2, easing cost-push inflation and real output has increased further from Y1 to Y2, moving closer to full employment (Yfull) and more economic growth.

Policy 3: Subsidisation of research and development (R&D) is a supply-side fiscal policy, as the government would help firms by subsidising a certain percentage of firms' R&D costs. If firms are willing to invest \$10,000 dollars in R&D, the government will provide an extra 10%, investing \$1,000 dollars into approved research and development areas. If a firm is willing to invest more, then proportionally the amount of subsidy received by firms will increase.



As firms now have more incentive to invest in R&D this will shift the AS curve to the right to AS1, as they develop more efficient ways to use their resources and faster ways to produce. This will push down prices on the world market and our NZ exports (e.g. dairy products) will become more competitive. This will mean we will sell more and have higher incomes. This is why AD shifts to the right, AD1, the increase in income will flow through to the rest of the economy. More luxury goods will be demanded, as a higher disposable income has occurred and consumption increases. This double shift on the graph again counter-balances

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the inflation rate, because increased AD pushes up prices, and increased AS decreases prices (PL-PL1-PL2). This means it has no substantial effect on prices in general on the NZ market.

Combined policies flow-on effects on Inflation: Subsidisation of tertiary education has shifted AD to the right; this increases prices and therefore creates some demand-pull inflation. However, the other two policies show no increase or a decrease in inflation, because the policies result in a double shift or a shift of the AS curve to the right, so the only real thing that has happened is real output has increased, shifted right from Y to Y2, so this means we have successfully achieved economic growth.

Combined policies flow-on effects on Employment: All three policies create more jobs in NZ and decrease unemployment. Increased AD is causing firms to hire more workers so they can cater for consumers increased spending and for producing our exports, AD shifts to AD1. Increased aggregate supply is creating the need for more workers due to new technology (policy 3) as the machines need skilled people to operate them with the shift right of AS to AS1, and both shifts has increased real output from Y to Y2, and this reduces unemployment, moving our economy closer to full employment (Yfull).

Summary: The policies have achieved significant economic growth, because our newly skilled workforce and lower company tax rate have increased our households' disposable income.

This means net social welfare will increase, and stay that way as they keep on earning more income.

The new jobs create employees with income they can now spend on goods and services. The owners

The new jobs create employees with income they can now spend on goods and services. The owners /employers who benefit from this consumer spending will be able to increase their spending so this cycle will continually repeat itself.

Overall, the government will also cover its costs from the policies; this is because they will benefit from an increase in the income PAYE tax, and more GST from consumers buying more goods and services. If the government decided to adopt this policy package, they would benefit from it for many years to come. It will help close the income gap between NZ and Australia, which has been a target they are trying to reach.

They achieve sustainable economic growth as well, because of the R&D policy...

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Example of an explanation of why for policy 1: the increase in AD is due to an increase in (G), and an increase in skills/training could lead to an increase in AS longer term, due to improved productivity of labour.

Example of further explanation of how the policies counteract any negative impact on inflation:

Using the example above for policy 1 of improved productivity of labour, which could create a double shift of the AD and AS curves for policy 1. Therefore, two policies have double shifts, which means overall price level remains relatively constant, so minimising the impact of the growth policies on inflation and easing any demand-side inflationary pressure from increases in (G) and (C).

Grade Boundary: High Achieved

4. For Achieved, the student needs to analyse how government policies and contemporary economic issues interact.

This involves:

- identifying, stating or describing government policies that achieve specific policy objectives relating to one contemporary economic issue
- provide an explanation of the direct impact of government policies on one contemporary economic issue using an economic model(s)
- provide an explanation of the flow-on effects of government policies on two other contemporary economic issues using an economic model(s).

This student has described the two specific policy objectives of sustainable and significant growth in the introduction (13).

The student has explained how three policies directly affect growth and the flowon effects of the policies on inflation and employment, by using the language of the AS/AD model in the explanations (14).

Additionally, the student has explained in the summary how the policies would achieve significant economic growth (15).

To reach Merit, the student could provide more description of Policies 1 and 3, and explain how the three policies achieve the objective of sustainable economic growth. The student could expand the explanations, involving how and why, in order to form an in depth analysis (16).

Significant and Sustainable Economic growth: Sustainable economic growth is about actions taking place in the present that will cause economic growth, but does not diminish the prospects of future generation's level of consumption, wealth, and utility or welfare compared to the people in the present.

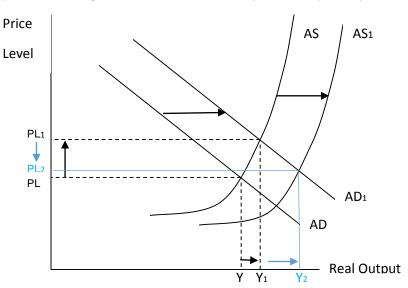
Sustainable economics takes greater account of the social and environmental consequences of growth strategies. For example, sustainable economic growth will consider if the strategy for growth causes any environment damage or resource depletion. Significant growth relates to closing the gap between NZ and Australia.

Policy 1: Increase subsidies for firms involved in emerging, sunrise industries (fiscal policy) e.g....

This means there will be an increase in government spending because (G) is a component of AD, so this will increase aggregate demand AD = C+G+I+(X-M) which means the aggregate demand curve shifts right from AD to AD1. This will cause an increase in price level from PL to PL1 and real output from Y to Y1. An increase in real output means there is an increase in economic growth.

This will also increase aggregate supply (AS to AS1), because a subsidy reduces the firms costs of production. The price level will fall (PL1-PL2) and the real output would increase (Y1-Y2), this will increase economic growth and lessen cost-push inflation.

Policy 2: Increasing the OCR (contractionary monetary policy) will encourage people to save money, as it is



profitable for them, but the cost of borrowing has increased, because interest rates have increased. People are encouraged to save instead of spend so there will be a decrease in consumption spending (C), and mortgage payments will now be more expensive. Any increase in savings will make more funds available for investment by firms. However, interest rates would need to decrease before firms would borrow for investment.

This will cause a decrease in aggregate demand, which will shift the aggregate demand curve left from AD1 back towards AD. This will

help counteract the demand-side inflation from policy 1, and will negatively affect real output a little, but the increase in AS increases Y1 to Y2. As the increase in real output caused by aggregate supply shifting right is greater than the decrease in real output caused by decreased AD, there will be an increase in real output overall. As the price level decreased and the real output has increased, there will be an increase in economic growth.

Policy 3: Decrease the tax on imported raw materials (supply-side fiscal policy)...

This will cause an increase in aggregate supply, which means aggregate supply will shift from AS to AS1. This happens because firms are able to produce more as the costs of production have decreased. Cost of production decreased as the tax on imported raw materials decreased and therefore firms are able to buy the same amounts of raw material at a lower cost.

This makes an increase in aggregate supply and will cause the price level to decrease (PL1 to PL2) and real output to increase from Y1 to Y2. The increase in real output also means that there is an increase in economic growth.

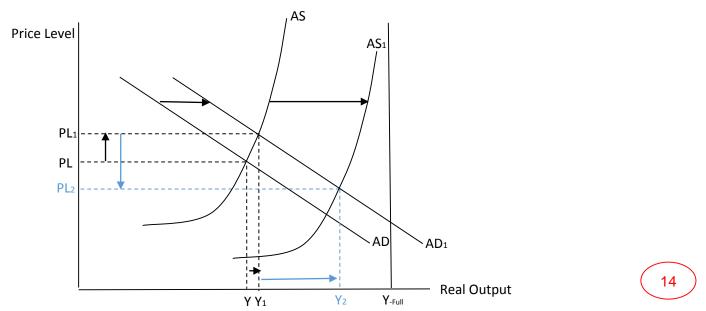
<u>Combined flow-on effects on inflation</u>: Increase subsidies for firms. This means there was an increase in government spending (G). This will increase aggregate demand (AD = C+G+I+X-M) which means the aggregate demand curve shifts to the right from AD to AD1. This will cause an increase in price level from

PL to PL1. The price level increased and therefore there was inflation. However, the shift of aggregate supply to the right was much greater than the shift of aggregate demand to the right, so overall the level decreased which means there was deflation, as seen in the graph below PL-PL1-PL2.

Increasing the OCR and therefore interest rates will encourage people to save money rather than borrow money as the cost of borrowing has increased. People are saving instead of spending so there will be a decrease in consumer spending (C). This will cause a decrease in aggregate demand, which will shift aggregate demand curve to the left. This will cause a fall in price level back towards PL.

Decrease the tax on imported raw materials. This will cause an increase in aggregate supply, which means aggregate supply will shift to right. This happens because firms are able to produce more because the costs of production have decreased. This improves efficiency, which will increase aggregate supply and will cause the price level to decrease. Therefore, overall there is a decrease in price level from PL to PL2, so there was deflation.

Combined flow-on effects on employment: As the equilibrium has shifted closer to Y-Full, this suggests there was an increase in employment. As increasing the OCR, decreasing tax on imported raw materials



and increasing subsidies for firms caused an increase in real output from Y to Y2, which means there was an increased need for more workers, and improved efficiency. As (G) and (C) has increased, firms will have to employ more people to work because firms may not be able to produce at full capacity without more staff and therefore firms' demand for labour increases. As more people are employed, the unemployment rate will decrease and the employment rate will increase.

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Summary

These policies show significant economic growth, as the graphs above show a significant increase in real output which means efficiency has increased significantly. The increased subsidy for firms, firstly, increased aggregate demand, as it is government spending, and therefore increased price level a bit making sure that the price level was not too low, and also increased AS because costs of production decreased. Secondly, contractionary monetary policy helped to ease short to medium term inflationary pressure, and thirdly, decreasing the tax on imported raw materials would increase aggregate supply by lowering the costs of production and lowering the price level while increasing real output, and creating economic growth and more employment. This means that in the long-term households will have more disposable income and this will decrease the income gap between NZ and Australia.

Grade Boundary: Low Achieved

5. For Achieved, the student needs to analyse how government policies and contemporary economic issues interact.

This involves:

- identifying, stating or describing government policies that achieve specific policy objectives relating to one contemporary economic issue
- provide an explanation of the direct impact of government policies on one contemporary economic issue using an economic model(s)
- provide an explanation of the flow-on effects of government policies on two other contemporary economic issues using an economic model(s).

This student has described, in the introduction, the two specific policy objectives of sustainable and significant growth (17).

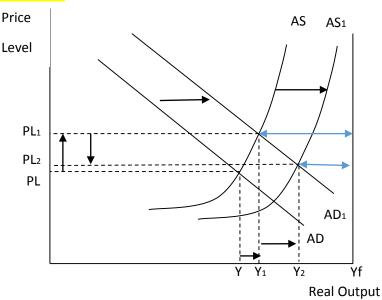
The student has explained how three different government policies directly affect growth, and the flow-on effects of the policies on inflation and employment, by using the language of the AS/AD model in the explanations (18).

Additionally, the student has explained how the policies would achieve significant economic growth in the summary (19).

For a more secure Achieved, the student could provide more description for Policies 2 and 3 (20), and provide more explanation (involving how or why) of the combined flow-on effects on employment (20). Additionally, the student could include a description of how the policies achieve the objective of sustainable economic growth (20).

Sustainable economic growth is large growth that ensures that the use of resources and the environment today does not damage prospects for use by future generations i.e. can be continued long into the future without negative effects further in time. Significant growth relates to closing the gap between NZ and Australia.

<u>Policy 1:</u> The first policy is to subsidise fees for specific courses, which have been selected by the government as needing skilled and/or retrained workers. This will increase (G), therefore shifting AD to the right to AD1.



The objective of this policy is to get people in NZ to gain specific qualifications/skills for areas of work that are experiencing staff shortages. This policy will reduce the amount of unemployed, as retrained and 18 upskilled beneficiaries gain qualifications for job vacancies, and are available to go straight into work. This is shown on the model by the eventual shift closer to 'Y full'. This will help government transfers to decrease as the numbers of previously unemployed decreases. Therefore, there will be a double shift in price levels, going down as AD shifts to AD1 and the AS curve shifts right from AS

to AS1. This will mean price level stays constant, however due to the AD shift there will be an increase in economic growth and when the AS growth kicks in there will be significant economic growth.

<u>Policy 2:</u> Involves the government refunding some tax/giving tax credits to higher earning firms once they have invested money into research & development (R&D). The money is only refunded to the firms once the R&D has been completed. This will create demand-side growth, because this will increase (G), therefore shifting AD to the right to AD1.

This will increase firms' productivity if the R&D is successful, thus decreasing their costs of production, and...

The increase in productivity will cause a shift in the AS curve to the right to AS1. This will increase the firm's profit, therefore Real GDP and economic growth will occur seen as Y moving to Y2 and unemployment decreases from Y1-Yf to Y2-Yf.

Policy 3: Keep the Kiwisaver scheme going so that as well as people saving their money, both firms and the government will invest into this scheme shown in the graph above by the shift in the AD curve to AD1 as the government is spending more money due to this scheme, because...

This will lower current consumption and give firms more money to spend on capital goods, because...

This is shown in the model above by the shift from AS to AS1. This will create both supply-side and demand-side growth, by....

Combined flow-on effects on Inflation:

- 1. As shown on the AS/AD model inflation (price level) will increase from PL to PL1, with more qualified and skilled workers, productivity would improve so AS will increase and then price level reduces from PL1 to PL2.
- 2. There is some demand-side growth, hence there is some inflation from PL to PL1, but this is inflation only in the short term. Successful R&D will improve productivity; hence, production becomes less expensive so prices can go down from PL1 to PL2. In the long term the inflation will be countered due to the AS growth making this a sustainable policy to use.

3. There would have been a short period of inflation when this policy is first started. Now there will be disinflation as we are well into this policy, due to... 20

However, this inflation will only occur in the short term as the supply-side growth in the same policy will lower the inflation (disinflation) over a longer term effectively 'undoing' the small amount of inflation created by the demand-side growth when the policy was first introduced, because...

Overall, disinflation will occur in the long term, as there is supply-side growth. However, there will be a small amount of inflation in the short term at first when the policy package is introduced. This is due to there being some demand-side inflation, due to...

Combined flow-on effects on Employment:

In all three policies, the levels of unemployment decrease, increasing levels of employment closer to 'Y full', by...

Summary:

Therefore, these policies would achieve significant growth shown by the large amount of supply-side growth. This is the best option, as it does not increase inflation as demand-side growth does. These policies will achieve significant economic growth as there will be a multiplier effect such as when R&D is successful and other firms will have to set up to produce this new good/service/technology. This will cause an increase in employment to fill the new jobs created, but these firms will also need raw materials which could be purchased locally thus creating an increase in local demand.

Hence, some induced spending will occur as local firms would be receiving more income and there will be an increase in local employment. There would be both supply-side and demand-side growth so the growth will be a lot faster than if there was only one type of growth.

Therefore, the policies do not need any extra policies, as there is already a multiplier effect for growth, which will achieve significant growth. The policies don't need any additional policies to combat the effects of inflation as despite there being a small increase in inflation in the short term, the supply-side growth will counter that and in the long term there will be deflation (negative inflation).

The policies achieve sustainable growth by...

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Grade Boundary: High Not Achieved

6. For Achieved, the student needs to analyse how government policies and contemporary economic issues interact.

This involves:

- identifying, stating or describing government policies that achieve specific policy objectives relating to one contemporary economic issue
- provide an explanation of the direct impact of government policies on one contemporary economic issue using an economic model(s)
- provide an explanation of the flow-on effects of government policies on two other contemporary economic issues using an economic model(s).

This student has described, in the introduction, the two specific policy objectives of sustainable growth and significant growth (21).

The student has partially explained how the policies directly affect growth, and the flow-on effects of the policies on employment, by using the language of the AS/AD model in the explanations (22).

Additionally, the student has stated that the policies would achieve significant economic growth in the summary (23).

To reach Achieved, the student could provide more description for Policies 2 and 3 (24), and provide an explanation of how the policies affect inflation using the language of the AS/AD model, e.g. from PL to PL1 with Policy 1, and from PL1 to PL2 with Policy 2 (24).

Additionally, the student could include a description of how the policies achieve the objective of sustainable economic growth (24).

Significant and Sustainable Economic Growth

Significant growth is large growth that would in this case help to close the income gap between NZ and Australia.

Sustainable economic growth is when growth is being achieved, but is also not destroying a resource while doing it, so not only can the present generation enjoy the effects also future generations can use both the resources and benefit from the effects of the plan.

Policy 1

The first policy is to lower income tax, by...



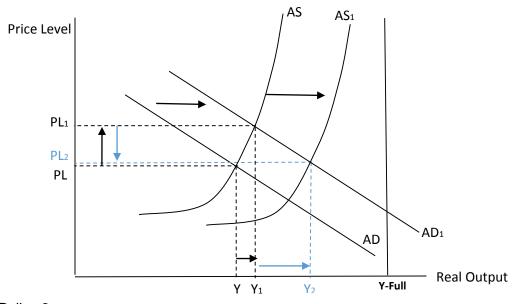
This will produce economic growth because this will increase the amount of deposable income for the average household leading to an increase in consumption, and...

This increase in aggregate demand will result in a higher level of scarcity for commodities, so the price level will increase and therefore output will increase from Y to Y1.

A higher level of output is needed to satisfy the increase in aggregate demand and so AD moves right to AD1 and price level and output increases as you can see on the graph below.

This policy will affect **inflation** by increasing it, because the increase in AD causes the price level to rise, e.g... because households are able and willing to buy more.

As for **unemployment**, it will decrease because firms need more resources in order to produce a higher level of output. More resources are employed and the equilibrium moves closer to Y full as shown on the graph.



Policy 2

The second policy is creating incentives for more research and development (R&D); this will be achieved by the government paying for all a firm's research costs as long as the research and development will increase aggregate supply, by...

This means that firms will want to invest in more R & D and that will increase AS to AS1 as shown on the graph above.

Because R&D encourages more efficient and productive use of resources, therefore...

Its effect on **inflation** is that it will decrease because there is more competition in the market so they will have to lower their prices and that decreases inflation, therefore the combined policies will help price level remain relatively constant because...

The impact on **employment** is that it will decrease because with new technology they may be able to replace some of their workers with machinery or only employ skilled operators and technicians for maintenance. Therefore, real output increases due to improved efficiency and productivity, and there may not be much of an increase in demand for labour.

Policy 3

The third policy is to increase welfare-spending, e.g....



This will produce economic growth because the lower income earners will have more income, this means that they can spend more on goods and services and therefore increase AD to AD1, which leads to an increase in output from Y to Y1, which leads to an increase in economic growth.

The effect on **inflation** is that it will increase because with increased AD comes an increase in price level...

The effect of this policy on **employment** means it will increase because firms need more resources in order to produce a higher level of output, because...

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Summary

So all of these policies as a whole will increase economic growth significantly because all the policies produce economic growth and some have other positive effects such as increasing employment.

So overall, I think these policies will increase economic growth as well as being sustainable, because...

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