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NZQA | Mana Tohu Mātauranga o Aotearoa
New Zealand Qualifications Authority

Level 2 Economics 2025

91224 Analyse economic growth using economic concepts and models

Credits: Four

Achievement	Achievement with Merit	Achievement with Excellence
Analyse economic growth using economic concepts and models.	Analyse economic growth in depth using economic concepts and models.	Analyse economic growth 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.

Do not write in the margins (////). This area will be cut off when the booklet is marked.

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

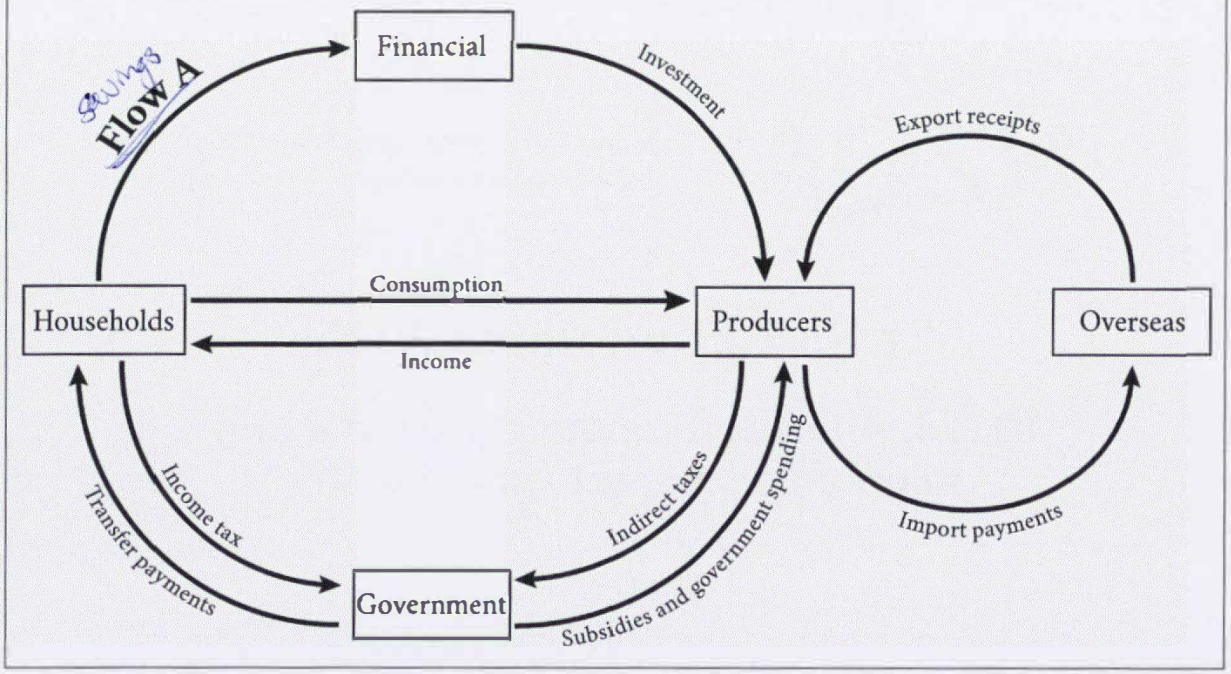
Excellence

TOTAL 24

As - production capital entrepreneur
AD: C+I+G+(X-M)

QUESTION ONE: The circular flow model and impacts on economic growth

Model One: The circular flow model



(a) Use Model One to answer the following questions.

(i) Identify money **Flow A** on the model.

Savings

(ii) Explain one reason why money Flow A might decrease in value.

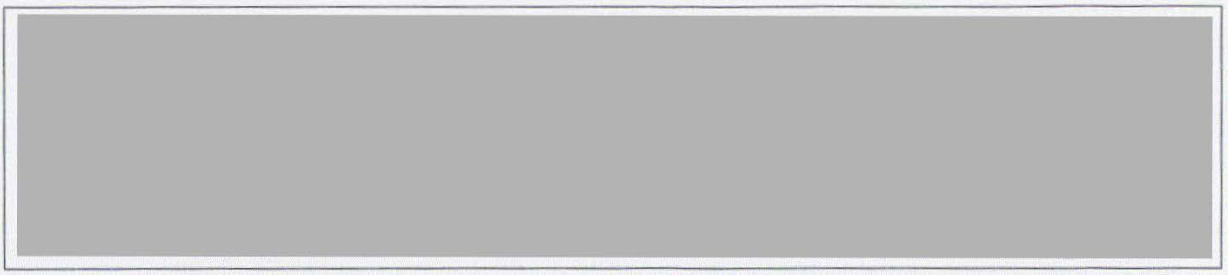
Savings might decrease in value if interest rates decrease. This is because people will be ~~earning~~ receiving less interest on their savings, so they will use more savings for consumption spending.

(iii) Identify one injection into the circular flow model.

Export receipts

(iv) Explain one reason why this injection might increase in value.

Export receipts could increase in value if NZ producers cut their cost of production, so they can supply more goods/services. This could create more of a surplus, so overseas importers can buy more making export receipts increase.



(b) Explain why economic growth would increase if the Northland trial is successful. Refer to at least two of the flows from Model One in your answer.

If the Northland trial was successful, economic growth would increase, because imports of peanuts would decrease. AD = C+I+G+(X-M), so if M decreased then AD increases and so does economic growth. This means import payments decrease from producers to overseas. If it was successful, more jobs would be available in Northland decreasing their higher than average unemployment rate as said in the resource. This means that producers will be supplying households with income that they can use on consumption spending which increases AD and economic growth.

(c) Discuss the impact of a successful trial on the government's operating balance (revenue – expenditure).

The governments operating balance would increase. This is because more people in the Northland region would have a job, so the government would receive more revenue in the form of income tax. They would also have decreased expenditures as transfer payments to unemployed people decrease. Producers could be more efficient if it was cheaper getting peanuts from Northland than overseas meaning the government would receive more indirect taxes which is revenue. So if revenue increases and expenditure decreases, revenue - expenditure = operating balance, then the operating balance would increase.

QUESTION TWO: Aggregate demand and aggregate supply

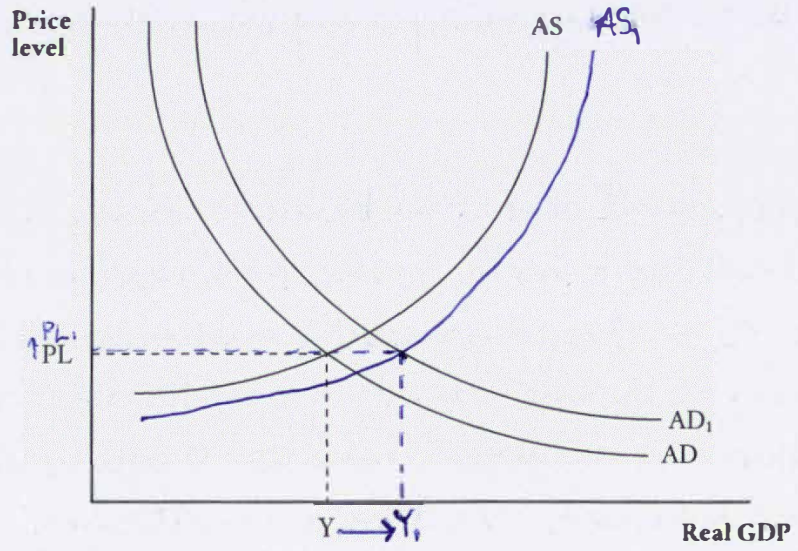
[redacted]

(a) Use the formula for aggregate demand to explain why the purchase of the battery powered aircraft will decrease short-term aggregate demand.

AD = C + I + G + (X - M). Using the aggregate demand equation, consumption spending, investments, goverment spending all stay constant in the short term. But exports - imports decreases because the aircraft are imported from USA. So imports increase (M) so net exports decreases, decreasing AD in the short term.

Graph One shows the longer term increase in aggregate demand that results from the increase in consumption spending due to operating the new aircraft.

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



(b) On Graph One, show the long-term impact of operating the new aircraft on the aggregate supply curve and economic growth.

(c) Referring to Graph One, explain how operating the new aircraft changes the following.

(i) Aggregate supply

In the long run, operating these new aircrafts lower operating costs, as explained in the resource. This decreases the cost of production so Air NZ can be more productive and make more profit/capital, so aggregate supply increases (shifts right) on graph 1 from AS to AS_1.

(ii) Economic growth

As shown on graph 1, AD and AS both increase (shift right) to AD_1 and AS_1. This means that real GDP is increased and shifts right from Y to Y_1. This increase in real GDP means that economic growth has occured.

(d) Compare and contrast the impact of the government making it compulsory to use SAF for domestic flights on economic growth and on the environment.

Environment:

If the government made it compulsory for domestic flights to use SAF, this would positively impact the environment. This is because using SAF over normal jet fuel can reduce greenhouse gas emissions by 90%. This could help slow global warming, having a positive effect on the environment. It also uses up left over forestry slash which prevents forests from being littered with left over waste from harvesting timber. It could also have a negative impact on the environment because

Answer space continues over ➤

the resource states that it would only make enough SAF for a quarter of domestic flights, not all like the government is proposing. So more forestry might have to be done, having a negative environmental impact.
Economic Growth: Economic growth could either increase or decrease. The costs of production for flights would increase as the resource says that SAF costs more than twice the amount of normal fuel. This would decrease Air NZ's supply of domestic flights. However, demand would also increase. This is because the forestry slash industry could generate revenue of $430 million a year. Also, this industry could create hundreds of jobs meaning unemployment rates could decrease, so consumption spending would increase, further increasing AD. ($AD = C + I + G + (X - M)$). Because forestry slash would be harvested in NZ, nothing is imported, and normal jet fuel is imported, but because less would now be needed, imports would decrease, so net exports would increase, further increasing AD. Overall, the increase in AD would outweigh the decrease in AS because there are more factors that will have a lasting impact on AD, such as more employment. This means real GDP would increase, signifying an increase in economic growth.

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The assessment continues on the following page.

QUESTION THREE: Measures of economic growth

Gross domestic product (GDP) is the total value of goods and services produced in New Zealand in a year.

Some households buy fruit and vegetables from shops, while others grow their own from seeds they have bought.

(a) How will GDP be affected in the short-term and long-term if more people choose to buy seeds to grow their own fruit and vegetables?

(i) Short-term

GDP would increase in the short term because more people buy seeds, increasing the value of goods. They will still also need to keep buying fresh produce as they wait for the seeds to grow. So produce remains constant while seeds increase so GDP increase.

(ii) Long-term

In the long term GDP would decrease. This is because people have already bought and planted seeds, so they will have fresh produce growing at their house. So less seeds and less produce is bought, so the value of goods bought decreases, decreasing GDP.

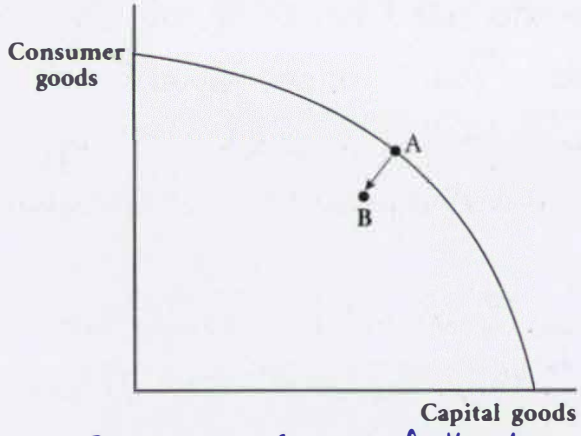
Net social welfare is a broad measure of economic growth that uses a combination of economic indicators and quality of life indicators.

(b) Explain one situation when GDP could increase but net social welfare decreases.

If the government wanted to move teachers into industrial factories to produce more goods to increase GDP. But then education levels would drop and the environment would be harmed with more factories existing. This would increase GDP, but decrease net social welfare.

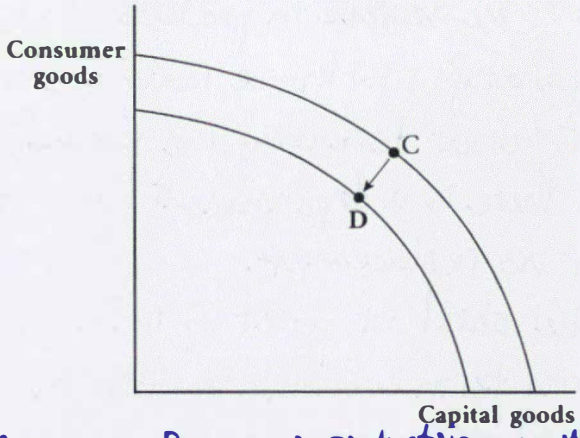
Graph Two and Graph Three show two situations in which economic growth has decreased.

Graph Two: A decrease from A to B



Graph Three: A decrease from C to D

Land labour tech



Decrease in efficiency of allocation of resources. Decrease in productive capacity

(c) Compare and contrast the causes and effects of the decreases in economic growth shown in Graph Two and Graph Three.

In your answer, explain:

- what could cause the changes shown on the graphs
- which change would be worse for long-term economic growth in New Zealand.

In graph 2, the economy has shifted inward on the PPF from point A on the frontier to point B inside the frontier. This means that at point A, the economy was operating with maximum efficiency, at it's highest productive capacity. Then it shifts inward to point B where resources aren't being allocated efficiently. So the economy is no longer operating at its full potential. A possible cause of this change is unemployment levels rising. Because labour is a factor of production, if there are less people employed, there's less labour, so economic growth is decreased. On graph 3, the productive capacity of the economy shrinks, as the frontier shifts inward from point C to point D. This means that the maximum capacity that the economy can operate at is decreased

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however, at both point C and D, the economy is allocating all resources efficiently as they are both on the frontier. A reason for the decrease in productive capacity could be some of the economy's workforce move overseas. This is a permanent loss of labour decreasing the productive capacity. It could also happen if there is a permanent loss of technology with a less productive or no replacement.

The shift of point C to D in graph 3 would be worse for long term economic growth in NZ than the shift from A to B in graph 2. This is because in graph 2, factors of production are still available, they just aren't allocated efficiently, so the economy could still grow back to a point on the frontier. In graph 3, the economy decreases when it shifts from point C to D, the productive capacity also decreases. So the economy decreases while still being at maximum efficiency. This makes it a lot harder to grow economically in the long run as they will need either new technology, or immigrants coming into the workforce.

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Write the question number(s) if applicable.

QUESTION NUMBER

Extra space if required.
Write the question number(s) if applicable.

QUESTION NUMBER

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Acknowledgements
Material from the following sources has been adapted for use in this assessment:

Question One (b)
SCARLATTI. (2024). *Evaluating the financial feasibility of a Northland peanut industry.* https://www.northlandnz.com/assets/Files-for-Download/Corporate-Library-Documents/Evaluating-the-financial-feasibility-of-a-Northland-peanut-industry-FINAL.pdf
NorthlandInc. (n.d.). *Peanut trials.* https://www.northlandnz.com/northland-inc/what-we-do/regional-infrastructure-and-investment/primary-sector-projects/peanut-trials/

Question Two (a)
RNZ. (2023). *Air New Zealand purchases its first battery-powered electric aircraft.* https://www.rnz.co.nz/news/business/504050/air-new-zealand-purchases-its-first-battery-powered-electric-aircraft

Question Two (d)
Bradley, G. (2024). *Aviation fuel from waste wood viable in Aotearoa, says Air New Zealand, Lanzajet.* New Zealand Herald. www.nzherald.co.nz/business/future-fuel/VPMCRUAELJAPJOJZORTU2ZHLYY/

Excellence

Subject: Economics

Standard: 91224

Total score: 24

Q	Grade score	Marker commentary
One	E8	The candidate gave a clear explanation of what can lead to changes in withdrawals and injections in the circular flow model. Their explanation of the impact on the model of an increase in production was detailed and included how consumption spending would increase and import payments would decrease. The effect of the successful trial on the Government's operating balance was thoroughly explained and included increases in direct and indirect tax, as well as a reduction in transfer payments due to higher employment levels.
Two	E8	The candidate used the correct formula to explain why importing the aircraft would cause a short-term decrease in AD. The impact on growth was explained with clear reference to the model. The candidate discussed the impact of a decision to make the use of SAF compulsory in terms of both economic growth and the environment. The effect on the environment was detailed and used the resource material to develop the explanation. Both positive and negative impacts on economic growth were covered and a judgement made as to which effect would be greater.
Three	E8	The candidate gave a detailed explanation of how GDP can be affected by market and non-market activities, as well as the relationship between GDP and Net Social Welfare. The candidate compared the different causes of a decrease in economic growth, with specific reference to each economic model. They made a judgement of which cause would have the greatest long-term effect on economic growth.