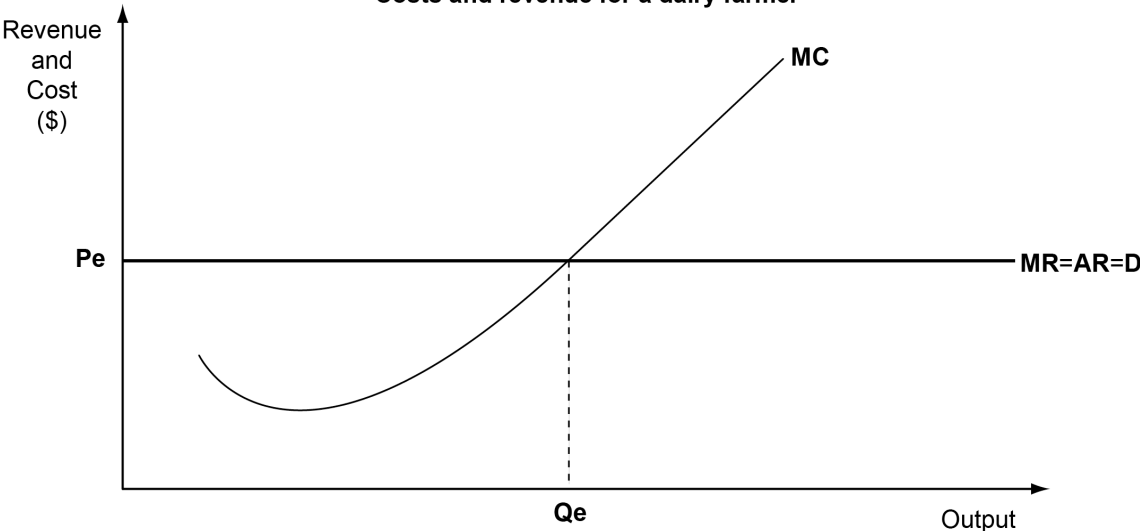


Assessment Schedule – 2012
Scholarship Economics (93402)
Evidence Statement

Question	Evidence
ONE (a) (i)	<p style="text-align: center;">Graph One</p> <div><p>New Zealand market for milk products</p><p>Price (\$)</p><p>$P_{w2}$</p><p>$P_{w1}$</p><p>$S_{nz}$</p><p>$D_{nz}$</p><p>Quantity</p></div> <div><p>World market for milk products</p><p>Price (\$)</p><p>$Q_w$</p><p>$Q_w^1$</p><p>$S_w$</p><p>$D_w$</p><p>$D_{w^1}$</p><p>Quantity</p></div>

(a) (ii)	<p>The linked graphs above show increasing world demand resulting in an increase in the world price for milk products and an increase in the price in New Zealand – New Zealand as price taker.</p> <p>The increase in demand in the world market for milk products pushes up the world price of milk products. This is the price that New Zealand milk producers can receive for exports. As a result of the higher world price for milk products, New Zealand producers will seek to export more. Prices in New Zealand for milk products will rise in response since New Zealand producers will only supply the New Zealand market at similar prices to what they can receive for their exports.</p>
(b) (i)	<p style="text-align: center;">Costs and revenue for a dairy farmer</p> 
(b) (ii)	<p>Since duopolies and oligopolies produce close substitutes, consumers can easily switch between them. If one firm drops prices, then the other firm is likely to drop prices also in order to maintain market share, resulting in a less than proportionate increase in sales compared with the cut in prices and thus inelastic demand for price cuts. Total revenue would fall as a result.</p>
(b) (iii)	<p>A monopsony is the sole buyer of a good or service. Since Fonterra processes 94.8% of the milk in New Zealand, it is virtually the only buyer of milk for most farmers. At the same time, since it processes such a large proportion of New Zealand's milk, it is virtually the sole supplier of processed milk to retailers, and so is a monopoly.</p>
(c)	<p>This is an open-ended question allowing for discussion of the market structures in the New Zealand dairy farming industry, the New Zealand milk processing industry and the New Zealand supermarket industry, and the extent to which these market structures affect the allocative efficiency of the New Zealand markets for milk and milk products, as well as the impact that this has on New Zealand consumers, suppliers (ie dairy farmers) and</p>

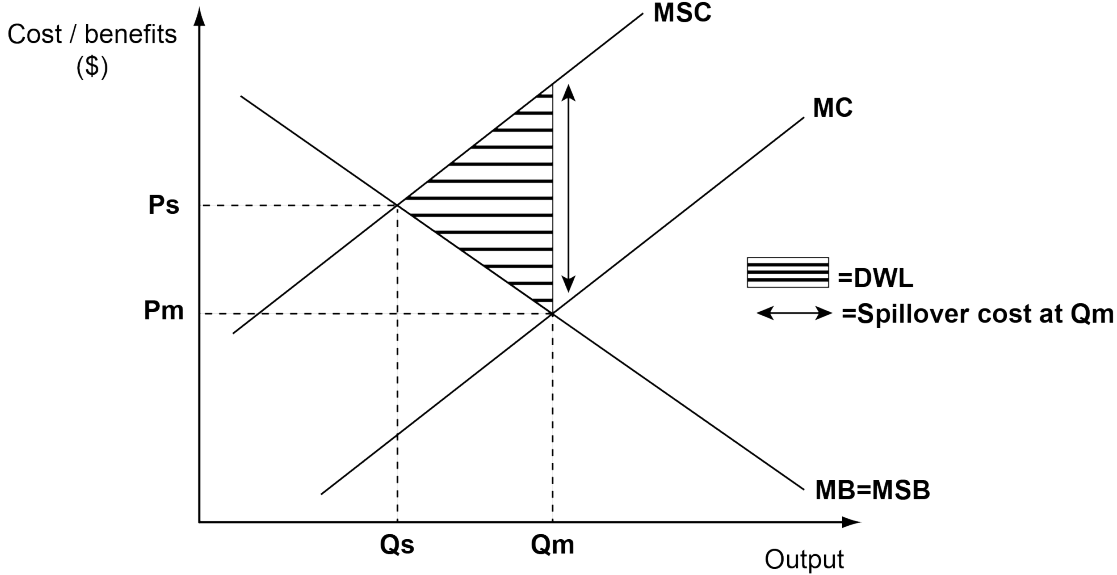
supermarkets.

- Dairy farming is a perfectly competitive industry with farmers being price takers, producing a homogeneous product, having a horizontal AR / MR curve and few or no barriers to entry.
- The milk processing industry is dominated by *Fonterra*, which processes almost all milk produced in New Zealand so is effectively a monopsony. *Fonterra* therefore has strong control over the price paid to suppliers / farmers. It is also a near monopoly in selling processed milk so has strong control over price, and its market position creates strong barriers to entry.
- The supermarket industry is a duopoly dominated by *Foodstuffs* and *Progressive Enterprises Ltd* with some competition from independents. As a result, the supermarkets have strong control over price, strong barriers to entry in the form of economies of scale and brand loyalty, and utilise non-price competition.
- While dairy farming is perfectly competitive, both the milk processing and supermarket industries are imperfectly competitive.
- Dairy farming is allocatively efficient as it is perfectly competitive. No / few barriers to entry and market forces will result in farmers operating where demand (AR) equals supply (MC), ie at the market equilibrium and that farmers are earning a normal profit in the long run.
- *Fonterra's* position as a monopsony means that it can dictate milk prices to suppliers, ie farmers, and could push farm gate prices down. This may not be the case in New Zealand, however, since the farmers are the shareholders in *Fonterra*.
- *Fonterra's* position as a monopoly supplier means that it has strong control over the price, so price will be higher than in a more competitive market and the quantity lower, resulting in a loss of allocative efficiency and deadweight loss. *Fonterra's* dominant position is likely to lead to supernormal profits. High barriers to entry ensure that monopoly prices will not be forced down by competition.
- The supermarket duopoly (or oligopoly) market structure means that as a form of imperfect competition, goods may be over-priced as firms tend toward non-price competition (except for loss leader behaviour). Strong barriers prevent competitors from entering the market. Since supermarkets and their products are close substitutes, supermarkets will maintain prices at a similar level as the competitor to avoid a price war. Due to inelastic demand for price decreases supermarkets would not choose to lower prices as this would lead to a fall in revenue. The result is prices will be higher than in a more competitive market and quantity lower resulting in a loss of allocative efficiency and deadweight loss. Supermarkets' market dominance will lead to supernormal profits and higher prices than would be the case given greater competition.
- As a result of the imperfect competition in both the milk processing and supermarket industries, consumer prices are likely to be higher than would be the case in a more competitive market and choice will be more limited.
- Appropriate economic models would be of a perfectly competitive firm operating at a price determined by market equilibrium and of a monopoly operating at profit maximising equilibrium, showing deadweight loss due to allocative inefficiencies.

Judgement Statement

Performance descriptor 1	8 Marks	<p>The candidate will produce and effectively communicate an outstanding and sophisticated economic analysis of the market structures in the New Zealand dairy farming industry, milk processing industry and supermarket industry, by applying microeconomic theory, which is complete, demonstrates depth in critical thought, and is economically literate</p> <p><i>AND</i></p> <p>develops a sophisticated argument as to how the market structures affect the allocative efficiency of the various markets present in the New Zealand milk industry and its impact on consumers, suppliers and supermarkets</p> <p><i>AND</i></p> <p>demonstrates excellent level of abstraction and synthesis of the resource material</p> <p><i>AND</i></p> <p>excellent application of economic theory relevant to the evaluation.</p>
	7 Marks	<p>The essay fulfils most of the requirements of Descriptor 1 above but: contains minor factual inaccuracies (when this affects a statement or opinion)</p> <p><i>OR</i></p> <p>deals inadequately with an essential point</p> <p><i>OR</i></p> <p>lacks sufficient abstraction or synthesis of source material</p> <p><i>OR</i></p> <p>has some minor failure in the critical evaluation</p> <p><i>OR</i></p> <p>may lack some fluency and /or coherence.</p>
Performance descriptor 2	6 Marks	<p>The candidate will produce and effectively communicate a sophisticated economic analysis of the market structures in the New Zealand dairy farming industry, milk processing industry and supermarket industry, by applying microeconomic theory</p> <p><i>AND</i></p> <p>provides a well-developed argument as to how the market structures affect the allocative efficiency of the various markets present in the New Zealand milk industry and its impact on consumers, suppliers and supermarkets</p> <p><i>AND</i></p> <p>demonstrates competent level of abstraction and synthesis of the resource material</p> <p><i>AND</i></p> <p>competent application of economic theory relevant to the evaluation.</p>

	5 Marks	<p>The essay fulfils most of the requirements of Descriptor 2 as above but: has some unsupported generalisations OR some major point is neglected or part of the question is not answered fully OR has some inadequacy in the critical evaluation OR ideas may not be communicated effectively.</p>
Performance descriptor 3	4 Marks	<p>The candidate will produce a comprehensive analysis of market structures in the New Zealand dairy farming industry, milk processing industry and supermarket industry, by applying microeconomic theory AND provides a clear but undeveloped argument as to how the market structures affect the allocative efficiency of the various markets present in the New Zealand milk industry and its impact on consumers, suppliers and supermarkets AND demonstrates some level of abstraction and synthesis of the resource material AND some application of economic theory relevant to the evaluation.</p>
	3 Marks	<p>The answers fulfil most of the requirements of Descriptor 3 above but: are incomplete OR fail to present a cogent argument or make critical analysis OR do not communicate ideas adequately.</p>
	2 Marks	<p>The answers show limited understanding relevant to the question. Some information is recalled, but ideas are not explained or analysed.</p>
	1 Mark	<p>The answers contain a minimal amount of relevant evidence.</p>
	0 Marks	<p>Blank booklet or irrelevant answers.</p>

Question	Evidence
TWO (a) (i)	As identified in Resource F , New Zealand's wild fish stocks is rival, meaning consumption by one consumer prevents its consumption by others. This distinguishes it from a public good, which is non-rival, where the consumption of the good by one party does not interrupt the consumption of others. A private good is excludable by price, which means it can only be consumed by those who can pay for it. On the other hand, New Zealand's wild fish stocks are a common good, is rival, but non-excludable by price.
(a) (ii)	Because of the lack of private property rights, the marginal cost of exploiting the resource is zero. This means that more and more fishers will take more and more of the fish, beyond the point of maximum sustainable yield, where the resource is then over-exploited. The result is a depletion of the resource and a fall in the value of the resource for all users.
(b) (i)	 <p>(to include some indication of a supply-side policy)</p>
(b) (ii)	<p>The graph shows the effect of a negative externality of production in the wild fishery resource. At market equilibrium Q_m the resource is under-priced and over-utilised with the level of dead weight loss (DWL) indicated by the shaded area.</p> <p>The supply side policies including the definition of property rights, the imposition of taxes, or marketable quotas have the effect of reducing the amount of fishing and thus shifting MC to the left to MSC. This will achieve a more allocatively efficient equilibrium at Q_s and at a price of P_s.</p>

(b) (iii)	<p>The conflict over the diminishing resource is worsening because the recreational fishers are outside the quota management system (QMS). Since 1986 the QMS has been relatively successful at rebuilding the commercial species for commercial fishers. The fish stocks are slowly recovering, and commercial fishers are looking forward to continued catches that their property rights give them. However, this is at a time when the number of recreational fishers is growing and the improvement in technology and access have significantly increased the fishing effort of recreational fishers and the charter operators.</p>
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(c)	<p>This is an open-ended question allowing for discussion of the effectiveness of establishing property rights to wild fisheries resources, a common good (open access resource) to increase sustainability, and its impact on equity for the four stakeholders.</p> <p>Discussion may include:</p> <ul style="list-style-type: none"> • A common good (as described in the scaffolding question) is becoming less common • A sustainable fishery is where the catch is at a sustainable rate, and the fish population does not decline over time because of the rate of catch or the fishing practices used • Property rights give fishers the incentive to protect their fish stocks and utilise them in a sustainable way (or even enhance them) to provide a future income from fishing, and to protect the value of the property right into the future • Individual transferable quotas (ITQs) under the quota management system (QMS) are tradable on the open market • QMS is considered relatively successful for the commercial species that is applied to • Recreational fishers remain outside of the QMS. They have size and bag limits, but this doesn't stop the increase in the numbers of fishers and the fishing effort, particularly in the inshore fishery • Many more now live in areas with attractive fishing grounds nearby; the residents have increasingly sophisticated gear, so the fishing effort has increased • There is increasing level of potential conflict between the interest groups: commercial and recreational fishers, fisheries scientists, government, the local community, iwi, etc. • Some recreational fishers consider that with their rising numbers they should have a greater share of the catch • Increasing conflict is reducing the effectiveness of QMS as commercial and recreational fishers are 'locked in a race to fish' • Some doubt recreational fishers can be brought into the QMS, but examples from freshwater fishery and from overseas indicate it is possible. <p>Evaluation could be demonstrated with comments such as:</p> <ul style="list-style-type: none"> • The success of the QMS in achieving more sustainable catch rates might over-ride customary interests of recreational and other fishers • Equal treatment for all stakeholders could be considered equitable • Equity issues may arise because it is the perception of many New Zealanders that they 'have a right to catch a feed', and the commercial fishers have a property right they bought and have been protecting, and they feel is under threat. However, iwis' customary fishing rights should be protected under existing legislation • Could discuss horizontal and vertical equity issues, as well as intergenerational equity (which is at the heart of sustainability), and how market economics with judicious intervention (regulation) can provide answers to satisfy competing interests • Recommendations as to future policy direction in the allocation of the resource, such as other strategies to establish additional marine reserves, etc.
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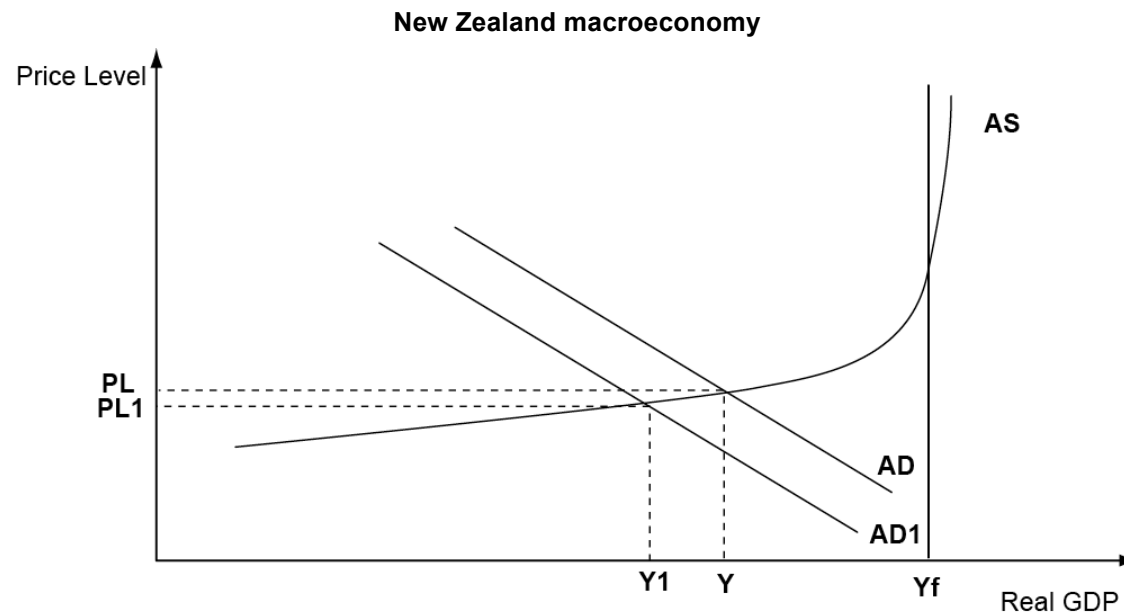
Judgement Statement

Performance descriptor 1	8 Marks	<p>The candidate will produce and effectively communicate an outstanding and sophisticated economic analysis of the allocatively efficient and sustainable exploitation of the New Zealand wild fishery, a common good (a renewable yet open access resource) and its impact on equity for the four stakeholders by applying microeconomic theory, which is complete, demonstrates depth in critical thought, and is economically literate</p> <p>AND</p> <p>develops a sophisticated argument as to how the quota management system and establishing property rights can achieve a sustainable level of catch in the New Zealand wild fishery</p> <p>AND</p> <p>demonstrates excellent level of abstraction and synthesis of the resource material</p> <p>AND</p> <p>excellent application of economic theory relevant to evaluating effective policy measures used to restrict exploitation of the New Zealand wild fishery.</p>
	7 Marks	<p>The essay fulfils most of the requirements of Descriptor 1 above but: contains minor factual inaccuracies (when this affects a statement or opinion)</p> <p>OR</p> <p>deals inadequately with an essential point</p> <p>OR</p> <p>lacks sufficient abstraction or synthesis of source material</p> <p>OR</p> <p>has some minor failure in the critical evaluation</p> <p>OR</p> <p>may lack some fluency and /or coherence.</p>
Performance descriptor 2	6 Marks	<p>The candidate will produce and effectively communicate a sophisticated economic analysis of the allocatively efficient and sustainable exploitation of the New Zealand wild fishery, a common good (a renewable yet open access resource) and its impact on equity for the four stakeholders by applying microeconomic theory</p> <p>AND</p> <p>provides a well-developed argument on how the quota management system and establishing property rights can achieve a sustainable level of catch in the New Zealand wild fishery</p> <p>AND</p> <p>demonstrates competent level of abstraction and synthesis of the resource material</p> <p>AND</p> <p>competent application of economic theory relevant to evaluating effective policy measures used to restrict exploitation of the New Zealand wild fishery.</p>

	5 Marks	<p>The essay fulfils most of the requirements of Descriptor 2 as above but: has some unsupported generalisations <i>OR</i> some major point is neglected or part of the question is not answered fully <i>OR</i> has some inadequacy in the critical evaluation <i>OR</i> ideas may not be communicated effectively.</p>
Performance descriptor 3	4 Marks	<p>The candidate will produce a comprehensive analysis of the allocatively efficient and sustainable exploitation of the New Zealand wild fishery, a common good (a renewable yet open access resource) and its impact on equity for the four stakeholders by applying microeconomic theory <i>AND</i> develops a clear but undeveloped argument on how the quota management system and establishing property rights can achieve a sustainable level of catch in the New Zealand wild fishery <i>AND</i> demonstrates some level of abstraction and synthesis of the resource material <i>AND</i> some application of economic theory relevant to evaluating effective policy measures used to restrict exploitation of the New Zealand wild fishery.</p>
	3 Marks	<p>The answers fulfil most of the requirements of Descriptor 3 above but: are incomplete <i>OR</i> fails to present a cogent argument or make critical analysis <i>OR</i> does not communicate ideas adequately.</p>
	2 Marks	The answers show limited understanding relevant to the question. Some information is recalled, but ideas are not explained or analysed.
	1 Mark	The answers contain a minimal amount of relevant evidence.
	0 Marks	Blank booklet or irrelevant answers.

Question	Evidence
THREE (a) (i)	Because of private sector borrowing from overseas banks, and more overseas investments in New Zealand than there are New Zealand investments overseas, the balance of investment income is in deficit. As a result, New Zealand's current account payments are greater than current account receipts, so there is an overall current account deficit that has to be financed from overseas borrowing, increasing the net external debt.
(a) (ii)	New Zealand was affected by the global financial crisis leading to a downturn in the economy. As a result, government revenue from tax and SOE returns has been insufficient to cover all of government expenses leading to operating deficits that have had to be financed from borrowing, leading to increasing public debt. In addition, the Christchurch earthquakes meant government had to increase its borrowing.
(a) (iii)	<p>The level of net external debt will rise faster than public debt. The main reasons for this are the government finances are in relatively good health and, with the economy in recovery it is able to budget for a balanced budget by 2014, which will enable public debt levels to fall. In addition, the government is planning partial asset sales, which should also enable debt reduction.</p> <p>On the other hand, New Zealand's net external debt level is predicted to rise because of the on-going current account deficit. The blame for this can be laid at New Zealand's poor record of household savings.</p>
(b) (i)	<p>The downgrades will increase the cost of credit, which is the interest rate we have to pay to overseas creditors. Because of the low level of government indebtedness the impact on government finances should be fairly minimal; however, the impact on the current account will be more significant. The increase in the interest rate will lead to an increase in the outflow in the balance of income, which will increase the deficit on balance of investment income and the current account balance will worsen.</p> <p>A well-argued long-term view on the impact on the balance of payments, rather than the short-term impact of rising interest rates, was also acceptable. Exchange rate effect – ceteris paribus, reduced foreign investment in New Zealand (due to greater risk following the downgrade) would cause a depreciation of the exchange rate, consequently the balance of goods might improve and /or the balance of income deteriorate as more \$NZ are required to repay a given amount of interest overseas .</p>

(b) (ii)



The austerity measures will reduce government spending (G). G is a component of AD . If G falls, then AD falls, and this is shown as a shift to the left of the curve. As a consequence, there should be a disinflationary, or even deflationary effect on equilibrium price level seen as a move from PL to $PL1$. In addition, equilibrium national income will fall from Y to $Y1$, and this will also lead to a decrease in the rate of employment.

(c)	<p>This is an open-ended essay question allowing for candidates to bring in a wide range of responses.</p> <p>The evaluation could include:</p> <ul style="list-style-type: none"> • Adopting austerity measures will reduce AD and support measures to reduce the level of inflation and encourage price stability • Adopting austerity measures will reduce the level of import payments relative to export receipts, therefore reducing the current account deficit and encouraging a return to an overall balance of payments • The government is unlikely to adopt austerity measures to reduce its level of debt, if its main concern was to encourage economic growth or full employment, as the reduction in AD will be counterproductive on that score • Government is likely to maintain or boost its level of indebtedness if it was hoping to boost growth and employment • Government's fiscal policy decisions are bound by the financial responsibilities section of the Public Finances Act, which restricts government's ability to spend its way out of a recession in the interests of economic growth and full employment • Expansionary fiscal policy will increase public debt and may have negative consequences on New Zealand's future credit rating • Boosting growth will expand the tax take and reduce welfare spending which should reduce the deficit or even lead to a budget surplus thus reducing public debt • If it was hoping to reduce the level of economic inequality the government is likely to increase marginal tax rates and increase welfare payments. Depending on the state of the economy, this may have a negative impact on the budget deficit and maintain or boost government's level of indebtedness • Government is likely to be influenced by democratic considerations, which is what the voters want. The weighting of its policy aims will depend on the state of the economy and the advice of Treasury and the Reserve Bank • Expansionary fiscal spending (to reduce the current recessionary gap) will further add to the level of public debt. This will likely result in a longer term inter-generational impact on New Zealanders, as the debt repayment and interest costs are passed on to future generations. This will have an impact on the government's goal of an equitable distribution of income.
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Judgement Statement

Performance descriptor 1	8 Marks	<p>The candidate will produce and effectively communicate an outstanding and sophisticated economic analysis of appropriate fiscal policy settings to achieve government's macroeconomic objectives in the contemporary New Zealand context by applying macroeconomic theory, which is complete, demonstrates depth in critical thought, and is economically literate AND develops a sophisticated discussion of the fiscal policy measures used to achieve government's macroeconomic objectives in terms of its level of debt AND demonstrates excellent level of abstraction and synthesis of the resource material AND excellent application of economic theory relevant to discussion of appropriate fiscal policy settings to achieve government's macroeconomic objectives AND provides a sound evaluation of appropriate fiscal policy measures of government, well supported by evidence.</p>
	7 Marks	<p>The essay fulfils most of the requirements of Descriptor 1 above but: contains minor factual inaccuracies (when this affects a statement or opinion) OR deals inadequately with an essential point OR lacks sufficient abstraction or synthesis of source material OR has some minor failure in the critical evaluation OR may lack some fluency and /or coherence.</p>
Performance descriptor 2	6 Marks	<p>The candidate will produce and effectively communicate a sophisticated economic analysis of appropriate fiscal policy settings to achieve government's macroeconomic objectives in the contemporary New Zealand context by applying macroeconomic theory AND provides a well-developed discussion of the fiscal policy measures used to achieve government's macroeconomic objectives in terms of its level of debt AND demonstrates competent level of abstraction and synthesis of the resource material AND competent application of economic theory relevant to discussion of appropriate fiscal policy settings to achieve government's macroeconomic objectives AND provides a competent evaluation of appropriate fiscal policy measures of government well supported by evidence.</p>

	5 Marks	<p>The essay fulfils most of the requirements of Descriptor 2 as above but: has some unsupported generalisations <i>OR</i> some major point is neglected or part of the question is not answered fully <i>OR</i> has some inadequacy in the critical evaluation <i>OR</i> ideas may not be communicated effectively.</p>
Performance descriptor 3	4 Marks	<p>The candidate will produce a comprehensive analysis of appropriate fiscal policy settings to achieve government's macroeconomic objectives in the contemporary New Zealand context by applying macroeconomic theory <i>AND</i> provides a clear but undeveloped discussion of the fiscal policy measures used to achieve government's macroeconomic objectives in terms of its level of debt <i>AND</i> demonstrates some level of abstraction and synthesis of the resource material <i>AND</i> some application of economic theory relevant to discussion of appropriate fiscal policy settings to achieve government's macroeconomic objectives <i>AND</i> provides some evaluation of appropriate fiscal policy measures of government supported by some evidence.</p>
	3 Marks	<p>The answers fulfil most of the requirements of Descriptor 3 above but: are incomplete <i>OR</i> fail to present a cogent argument or make critical analysis <i>OR</i> do not communicate ideas adequately.</p>
	2 Marks	The answers show limited understanding relevant to the question. Some information is recalled, but ideas are not explained or analysed.
	1 Mark	The answers contain a minimal amount of relevant evidence.
	0 Marks	Blank booklet or irrelevant answers.