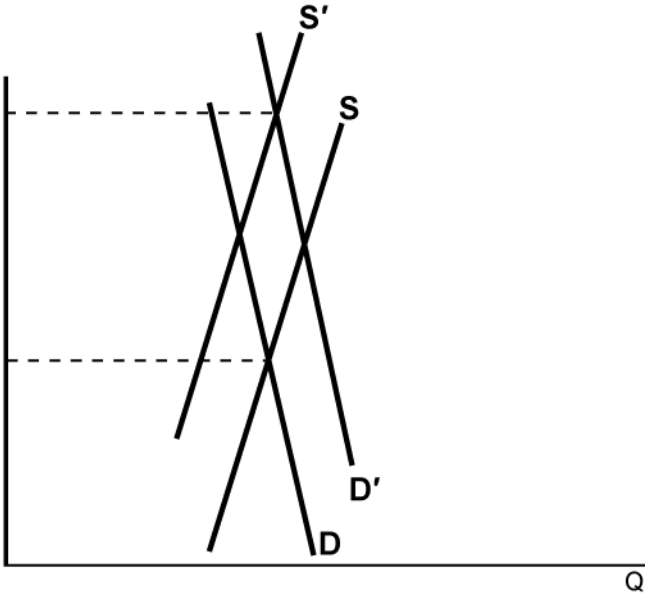


Assessment Schedule – 2008**Scholarship Economics (93402)****Evidence Statement**

Question	Evidence	Judgement
One (a) (i)	(1) $PED = 2.3/94.55 \div 0.37 / 1.707 = .0243 \div 0.217 = 0.11$ (+/- 0.01) (2) $CED = 14.2 \div 24.34 = 0.58$ (+/- 0.01) (3) Comment should mention that because CED is positive, rail and petrol use are substitutes.	All correct = 1 mark (total 1 mark)
(ii)	(1) PED is inelastic because there are few substitutes and it is a necessity for many people as they have little opportunity to make adjustments in the short run. (2) PES is inelastic in the short run because at least one of the inputs in the production of petrol is fixed – for instance there is only one refinery in New Zealand (Marshall's time frame) or data from Resource C, etc. (3) As the price is determined by the intersection of demand and supply curves, even small changes in demand and/or supply that are price inelastic will lead to large changes in price.	1 mark each (total 3 marks)

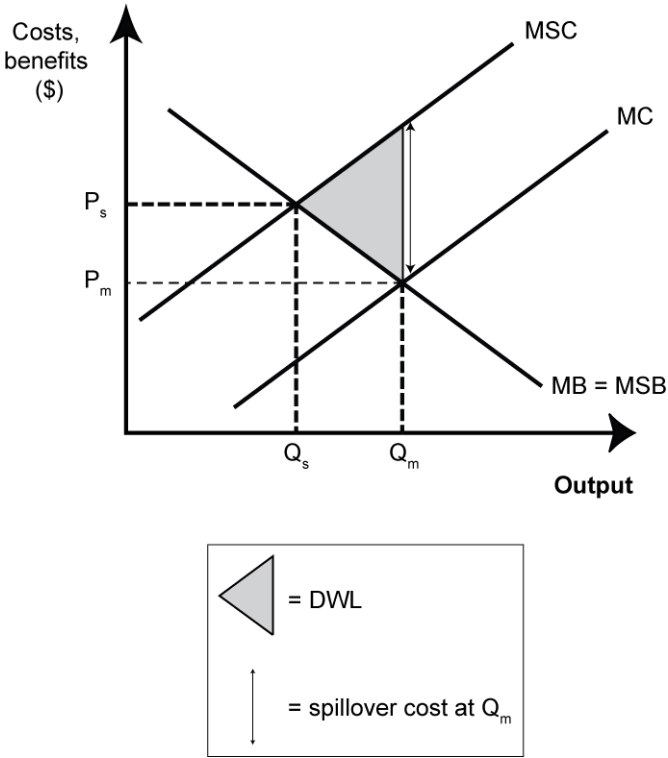
(iii)	<p>Price (US\$)</p>  <p>D and S curves shown as inelastic, increase in demand and decrease in supply shown, axes and \$ price changes accurately shown (Could accept static supply curve).</p>	(total 1 mark)
(b) (i)	<p>PED will become more elastic over time because consumers have time to adjust their spending patterns and their lifestyles to higher petrol prices, such as changing to more efficient vehicles, using public transport or reducing commuting by moving closer to work. According to Resource D, PED is estimated to increase from 0.26 to 0.8.</p>	<p>How: PED/PES become more elastic = 1 mark Reason for PED = 1 mark</p>
(ii)	<p>PES will become more elastic over time because in the long run all inputs are variable – can be changed, for instance developing new oil fields, improving the infrastructure such as building new refineries, etc. This means that over time, output can respond more readily to the incentive of increasing prices (Marshall discussion of time frames).</p>	<p>Reason for PES = 1 mark (total 3 marks)</p>

Question	Evidence	1 – 4 marks	5 – 6 marks	7 – 8 marks
One (c)	<ul style="list-style-type: none"> • Policies to reduce GHG emissions aim to increase fuel prices, yet as earlier answers indicate, PED is very low, therefore very large increases in price are required • Discussion of the effectiveness of using taxes or other mechanisms to discourage the use of fossil fuels depends on PED. Answers could include a diagram showing the impact of an indirect tax on fuel, with inelastic demand indicating large consumer incidence and little responsiveness in consumption in short run. • Resource D indicates PED increases over time, therefore tax will become more effective by a factor of 3 in long run. • Diagram to show impact of subsidy on public transport, with inelastic demand indicating little impact on output in the short run. The subsidy will become more effective in long run as PED becomes more elastic. • Resource E suggests that encouraging a switch to public transport using electric trains enables a 78 per cent reduction in GHG emissions per passenger km. • Mention of the CED calculation in the earlier section is relevant here, as is the fact that a subsidy on passenger transport would increase the PED of petrol. • Resource E also suggests that these policies to mitigate GHG emissions may pale into insignificance as the growth in vehicle populations are growing far more strongly in the emerging economies of China and India. • Resource F suggests the government has limited ability to impose (indirect) fuel taxes at present because of the surge in petrol prices, however these price increases are having the desired effect of discouraging petrol consumption and encouraging a shift towards more sustainable passenger transport. • Candidates' own knowledge of economic theory is rewarded as well as their scholarship skills of abstraction and synthesis of the resource material and displaying critical thought. 	For a limited attempt to consider the effect of PED on the subsidies used to encourage the use of passenger transport.	For a clear <i>but undeveloped</i> consideration of how PED may limit the effectiveness of taxes used to discourage fossil fuels consumption.	For a reasoned and well argued consideration of how PED may limit the effectiveness of taxes used to discourage fossil fuels consumption in the short run and how this may change in the long run (or) mention that improvements in public transport services will increase PED for petrol. (a+a)
		For a limited attempt to explain the effect of the 2008 changes in the market for oil and the reallocation of resources away from private transport and towards more allocatively efficient passenger transport.	For a clear <i>but undeveloped</i> discussion of how PED may limit the effectiveness of subsidies used to encourage the more efficient use of passenger transport.	For a reasoned and well argued consideration of how PED may limit the effectiveness of subsidies used to encourage the more efficient use of passenger transport in the short run and how this may change in the long run. (b+b)
		Some judgement given of the effectiveness of the interventions to mitigate GHG emissions.	For a clear <i>but undeveloped</i> discussion of how the 2008 changes in the market for oil in are already having the desired effect – of a substantial increase in the price of fossil fuel and thus a reallocation of resources away from	For a clear and well argued discussion of how the 2008 changes in the market for oil in are already having the desired effect – of a substantial increase in the price of fossil fuel and thus a reallocation of resources away from private transport and towards more

			private transport and towards more allocatively efficient passenger transport.	allocatively efficient passenger transport (or) low PED for petrol enables government to raise the revenue to pay the subsidy to public transport. (c+c)
			For an evaluation of the issue that the effectiveness of the interventions to mitigate GHG emissions may pale into insignificance as vehicle populations are growing far more strongly in the emerging economies of China and India.	For a clear evaluation of the effectiveness of the interventions to mitigate GHG emissions. This may include reference to the insignificance of the interventions as vehicle populations are growing far more strongly in the emerging economies of China and India. (d+d)

Codes (a), (b), (c) and (d) were used in the marking of the essays to identify specific evidence of performance. Details are given in the righthand column of the judgement statement above. Markers were also guided by the generic marking schedule. (This is included at the end of the schedule.)

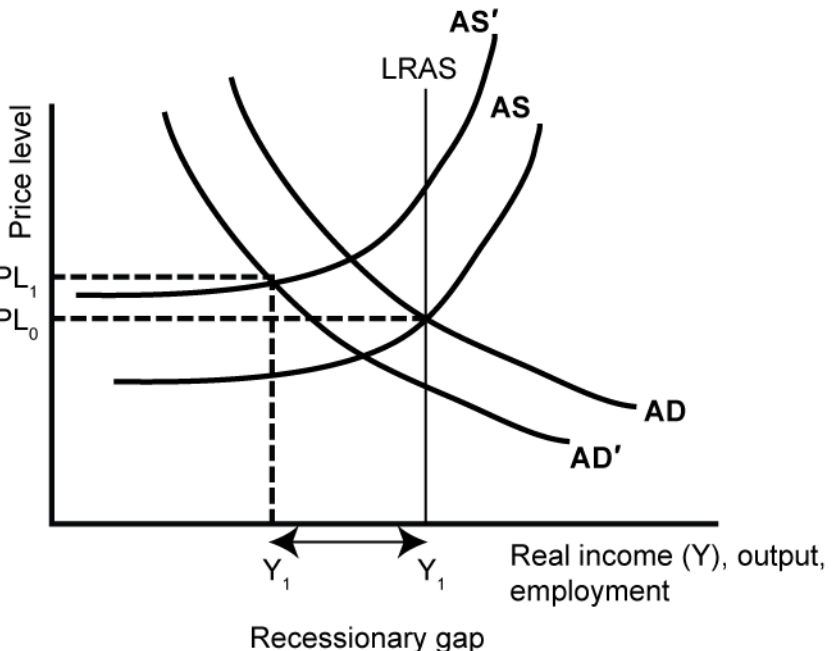
Question	Evidence	Judgement
Two (a) (i)	<p>A firm that is able to provide a good or service to the whole market at a lower cost (more efficiently) than if there were two or more firms in the industry.</p> <p>The railways in New Zealand are a classic example of a natural monopoly because there are economies of scale that result from high set-up costs (networks) yet the marginal costs of providing for one more consumer is very low.</p>	(total 1 mark)
(ii)	<p style="text-align: center;">Natural monopolist</p>	<p>Appropriate diagram (NB: AC minimum is where $MR < 0$)</p> <p>(total 1 mark)</p>
(iii)	<p>Profit maximising output is where $MC = MR$ with the firm producing at output f.</p> <p>The firm is over-pricing and under-producing, which leads to a loss of allocative efficiency/this can be shown by the area of deadweight loss niq. This represents the loss of CS and PS that is not passed onto other parties.</p>	Loss of AE / DWL explained with clear reference to graph = 1 mark
(iv)	Auckland International Airport and Vector are natural monopolies and an economist would suggest restricting competition, whereas The Warehouse is an oligopoly where more suppliers would be welcomed as this would introduce welcome competition and reduce the market share of key players on the market.	The Warehouse is not a natural monopoly (total 1 mark)

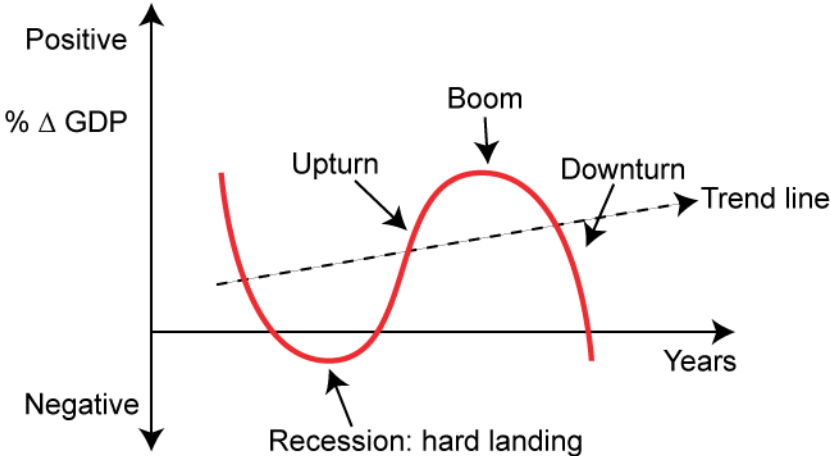
<p>(b)</p> <p>(i)</p> <p>(ii)</p>	<p style="text-align: center;">Negative externalities of production of road transport</p>  <p>Road transport imposes costs on other people, ie there are negative externalities of production in the form of road congestion and pollution. MSC is to the left of MC, indicating the market is over-supplying and under-pricing in relation to social equilibrium. Area of DWL indicates loss of allocative efficiency.</p> <p>(Could possibly be interpreted as negative externality of consumption if it's private transport with appropriate diagram drawn).</p>	<p>Appropriate graph with externality, labelled = 1 mark</p> <p>Clear explanation = 1 mark</p> <p>DWL accurately identified = 1 mark</p> <p>(total 3 marks)</p>
<p>(iii)</p>	<p>Rail is considered more efficient because the main trunk line is electrified, therefore there are fewer carbon emissions.</p> <p>(or)</p> <p>By encouraging more transport onto the railways, it reduces the output of road transport, which reduces the area of DWL until social equilibrium is reached where $MSB = MSC$.</p>	<p>(total 1 mark)</p>

Question	Evidence	1 – 4 marks	5 – 6 marks	7 – 8 marks
(c)	<p style="text-align: center;">Natural monopolist</p> <ul style="list-style-type: none"> Resource H indicated problems with lack of investment and Toll needing “reasonable” returns and maximising value for private shareholders. It would aim to produce at output f, which is under-producing and over-pricing in relation to social equilibrium. Government intervenes, aiming to increasing the level of output in order to reduce DWL in the market for rail transport, recognising that rail is “an essential asset in a sustainable transport system”. It also wishes to reduce the negative externalities of road transport and to address the issue of long-term lack of investment in rail. Therefore, the government feels the public would be better served if it was a collective good or service. Options available include price controls to $P = AC$, which would achieve normal profits; however, there would be problems of estimating a fair value of the assets of the business. Price control to achieve social equilibrium where $P = MC$. This option is unsustainable. The firm is unable to operate at this level of output in the 	<p>For a clear <i>but undeveloped</i> consideration of why Toll NZ operating the rail network (a natural monopoly) at profit maximisation would lead to the loss of allocative efficiency.</p> <p>AND/OR</p> <p>For a limited attempt to consider the range of interventions that could be used to ensure the rail network was achieving a more allocatively efficient outcome.</p> <p>AND/OR</p> <p>For a limited attempt to consider the arguments for and against deciding to nationalise the rail network to achieve a more allocatively efficient outcome for transport in New Zealand.</p>	<p>For a clear <i>but undeveloped</i> consideration of why Toll NZ operating the rail network (a natural monopoly) at profit maximisation would lead to the loss of allocative efficiency.</p> <p>AND</p> <p>For a clear <i>but undeveloped</i> consideration of the range of interventions that could be used to ensure the rail network was achieving a more allocatively efficient outcome.</p> <p>AND/OR</p> <p>For a clear <i>but undeveloped</i> consideration of the arguments for and against deciding to nationalise the rail network to achieve a more allocatively efficient outcome.</p>	<p>For a reasoned and well argued consideration of why Toll NZ operating the rail network (a natural monopoly) at profit maximisation would lead to the loss of allocative efficiency or an in-depth understanding of policies. (a)</p> <p>AND</p> <p>For a reasoned and well argued consideration of the range of interventions that could be used to ensure the rail network was achieving a more allocatively efficient outcome. (b+b)</p> <p>AND</p> <p>For a reasoned and well argued consideration of the arguments for and against deciding to nationalise the rail network to achieve a more allocatively efficient outcome for transport in New Zealand.</p>

	<p>long run because it could not sustain subnormal profit (defined).</p> <ul style="list-style-type: none"> The government could provide a subsidy to enable the firm to cover this subnormal profit; however, the opportunity cost of this may not be politically bearable to taxpayers and there is the same issue of estimating a fair value of the assets of the business. Nationalisation removes the problem of having to impose $P = MC$; it is politically more acceptable to subsidise rail to $P = MC$ if it is a collective good. The option of nationalisation involves the purchase of Toll Holdings shares of \$665 million, although this is not the full cost. The opportunity costs of such action are the other items of government expenses that could have been paid for, such as additional health care, etc. Could refer to the issues of sustainability such as GHG emissions and the issues addressed in the previous question. 		efficient outcome for transport in New Zealand.	Zealand. (c+c+c)
		AND/OR Some evaluation of the decision	AND Evaluation includes judgement of the decision.	AND Evaluation includes clear and well explained judgement of the decision. (d+d)

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Question	Evidence	Judgement
<p>Three</p> <p>(a)</p> <p>(i), (ii)</p>	<p style="text-align: center;">AD/AS</p>  <p style="text-align: center;">Recessionary gap</p>	<p>Appropriately labelled graph, decrease AD and AS with new PL, Y indicated = 1 mark</p> <p>RG referenced to original equilibrium at full employment = 1 mark</p> <p>(total 2 marks)</p>
<p>(iii)</p>	<p>New Zealand economy is initially shown as operating at full employment level of income, ie equilibrium is on the LRAS curve. The world credit crunch, for example, increases interest rates reducing AD to AD'. The increase in world price of oil increases the cost of imported raw materials that reduces AS to AS'. The recessionary gap is shown as the distance between equilibrium output and the full employment level of output.</p>	<p>Reasons for the decrease in AD and/or AS clearly explained = 1 mark</p> <p>Indeterminate change in PL and decrease in Y leading to RG explained = 1 mark</p> <p>(total 2 marks)</p>

(b) (i)	<p>The (technical) definition of a recession is a time (at least two consecutive quarters) of negative economic growth.</p> <p style="text-align: center;">Business Cycle Recession</p> 	<p>Definition and appropriate identification on graph = 1 mark</p> <p>(total 1 mark)</p>
(ii)	<p>New Zealand economy will be adversely affected by the US downturn from:</p> <ul style="list-style-type: none"> • lower export orders and reduced flows of tourists reducing foreign exchange earnings, which would reduce the current account balance (depending on exchange rate movements). • lower foreign direct investment flows reducing the inflows on the financial account of the balance of payments. • The negative impact may not be as bad as feared as a result of the de-coupling of the emerging economies from dependence on the US economy. New Zealand is increasingly trading with Asian economies, particularly with China after the FTA. 	<p>Two impacts of the US recession on the NZ economy identified and explained = 1 mark each</p> <p>Some evidence of discussion / evaluation = 1 mark</p> <p>(total 3 marks)</p>

Question	Evidence	1 – 4 marks	5 – 6 marks	7 – 8 marks
(c)	<p>Review of the problem and gloomy outlook, eg QSBO graph showing a likely recession stemming from the international downturn caused by the credit crunch and commodity price shocks, which are now leading to stagflation (a problem not seen since the 1980s).</p> <p>Review of the likely policy responses:</p> <ul style="list-style-type: none"> Loosening of monetary policy by reducing OCR, which would reduce interest rates, helping households, business investment and because of lower exchange rates the export sector. However, this would risk inflation rising way beyond the target range and unleash heightened inflationary expectations that could take years to quell. The RBNZ would recognise that many of the inflationary pressures are from the non-tradables sector, as seen in the final graph in the resources provided, and could tighten. However, this action would worsen the downturn and increase unemployment and risk inflation going below the target range. Also, much of the inflationary pressures are now coming from off-shore such as food and fuel price rises, and RBNZ action will have no impact. The government could further run expansionary fiscal policy as seen in the May 2008 budget (see fiscal impulse graph) from increasing government spending and the tax cuts. This is a classic counter-cyclic macro-economic policy response. However, this could exacerbate the inflationary pressures the country is currently facing. It will also reduce the fiscal surplus and may expose the economy to an increase in public debt. This could be within the bounds of its fiscal responsibility as required in the PFA, as long as the OBEGAL is balanced over the business cycle and levels of debt remain below 20 per cent of GDP, which are both possible. There is the issue of monetary and fiscal policy being at odds with each other, which is what appears to be happening in 2008. This could lead to long-term issues. Recognition of the stimulus from the dairy industry, etc. Supply side policies could be mentioned as providing long-term 	For a limited attempt to consider the impact of the external influences eg credit crunch / commodity prices.	For a clear <i>but undeveloped</i> consideration of the impact of the external influences eg credit crunch / commodity prices.	For a reasoned and well argued consideration of the impact of the external influences e.g. credit crunch / commodity prices or an in-depth understanding of policies. (a)
		AND For a limited attempt to consider the use of monetary policy to minimise the impact of the downturn overseas on the New Zealand economy.	AND For a clear <i>but undeveloped</i> consideration of the use of monetary policy to minimise the impact of the downturn overseas on the New Zealand economy.	AND For a reasoned and well argued consideration of the use of monetary policy to minimise the impact of the downturn overseas on the New Zealand economy. (b+b)
		AND/OR For a limited attempt to consider the use of fiscal policy to minimise the impact of the downturn overseas on the New Zealand economy.	AND For a clear <i>but undeveloped</i> consideration of the use of fiscal policy to minimise the impact of the downturn overseas on the New Zealand economy.	AND For a reasoned and well argued consideration of the use of fiscal policy to minimise the impact of the downturn overseas on the New Zealand economy. (c+c)
		AND/OR Evaluation of the	AND/OR Evaluation includes	AND Evaluation

	<p>answers and one of the few ways to stop the migration to Australia, etc.</p> <ul style="list-style-type: none"> Answers should emphasise discussion of the issues, look for evaluative comments and judgments from the better candidates. 	policy responses	judgement of the policy responses	<p>demonstrates clear and well explained judgement and/or recommendations of the policy responses.</p> <p>(d+d+d)</p>
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Generic marking schedule

- 7 or 8 marks:** represent performance at an outstanding level (equivalent to performance descriptor 1).
- 5 or 6 marks:** represent scholarship level performance (performance descriptor 2), but not outstanding.
- 4 marks:** represent borderline (or marginal) Scholarship performance.
- 2 or 3 marks:** represent moderate performance (performance descriptor 3 or 4), but below Scholarship level.
- 1 mark:** represents a low level performance.
- 0 marks:** represents nothing meaningful done (including not attempted).