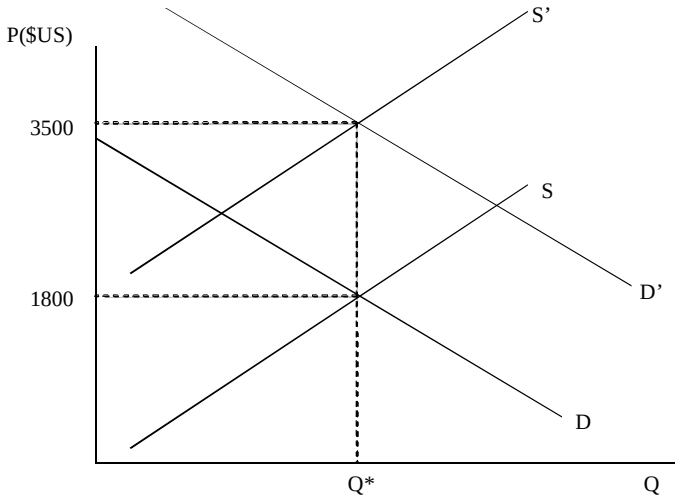
Assessment Schedule – 2007

Scholarship Economics (93402)

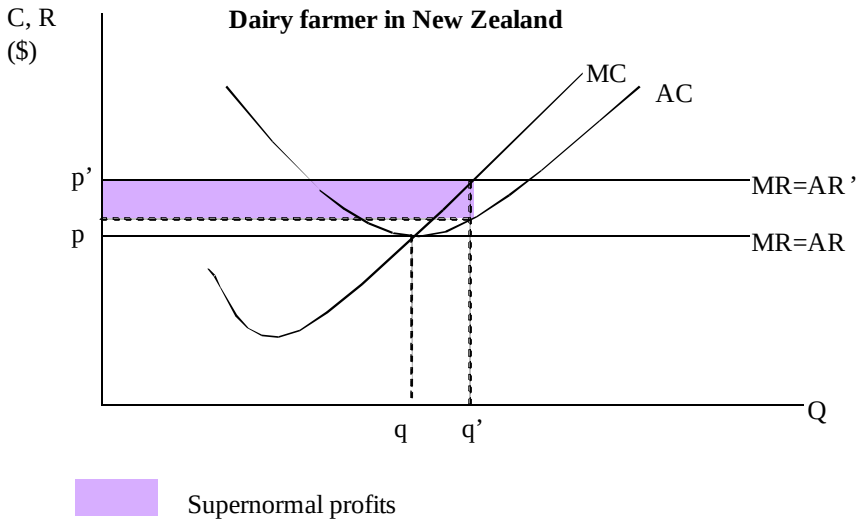
QUESTION ONE

(a)

(i)



World supply of dairy products decreases as a result of shortages of water for cows and increase in cost of feed for cows as grain prices that feed 95% of dairy cows increase. There has also been a worldwide increase in demand, which may have occurred because incomes worldwide are rising and consumer preference moving towards dairy products.



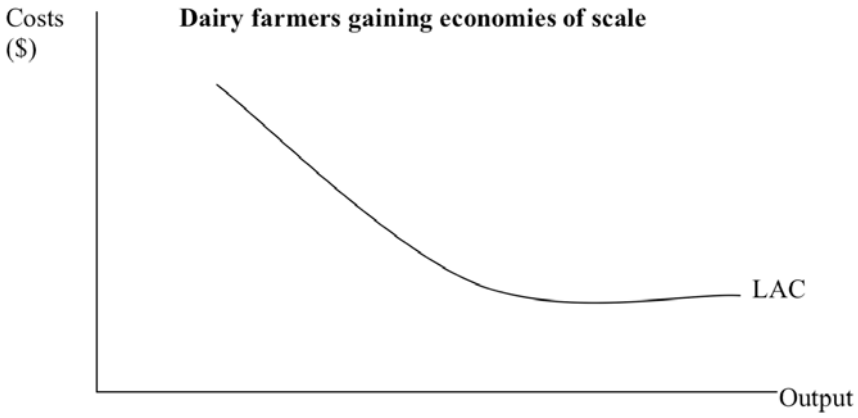
Explanation: dairy farmer benefits from the increase in price to a point where AR > AC therefore earning supernormal profits.

(ii)

Subnormal profits defined as occurring where TC > TR (or AC > AR) and returns are below that necessary to keep the firm in the present industry in the long run.

In the long run, some individual (**sheep)** farmers will exit the industry, reducing market supply. This will drive up market price to the point where all individual producers are able to earn normal profits in the long run.

(iii)



As output increases, the long-run average costs decreases, indicating economies of scale occurring. These economies can come from technical economics, financial economies, managerial economies, etc (farms merging their operations and increasing productivity by utilizing capital equipment more efficiently); and the LAC curve is downward sloping enabling the farmers to reduce their per-unit costs.

(iv)

Globalisation will bring about more international trade in dairy products. World supply of dairy output increases, and suppliers will go to where the costs are minimised. New Zealand producers are increasingly exposed to competitive pressures from overseas and will have to reduce their total costs in line with those of overseas producers. New Zealand producers would find it difficult to reduce labour costs in line with the cheap labour economies of Asia; therefore, they will need to exploit other advantages, such as increases in productivity that can be achieved with farm amalgamations, and low energy inputs, which mean lower carbon emissions, etc. Globalisation also means there will be more competition from other producers and other products. Other issues such as food miles will require NZ producers to demonstrate super efficiency and production at minimal carbon emissions.

(b)

- Show change in market price for dairy and sheep products indicating returns to dairy improved relative to sheep farming. Model might include market diagrams from 1 (a) (i) and (ii)
- Describe how supply will change in response to an increase in the price of related goods; explains why there will be a decrease in supply of sheep and an increase in the quantity supplied of dairy. Model might include NZ dairy market showing increasing QS at the higher price. Model: decrease in supply of sheep.
- Reference to price elasticity of supply for dairy, explaining the responsiveness of QS to changes in P of dairy. Model might include Marshall's time periods.
- Allocative efficiency occurs where CS and PS is maximised at market equilibrium.
- Changes in the factor market can be referred to (resource D). Final and derived demand. Model is the relevant factor markets.
- Production possibility curve drawn to show dairy and sheep production, with combination moving towards more of dairy. Model will include PPC.
- Move from A to B more dairy, less sheep
- Reference to the bowed out shape of the PPC, as not all resources perfectly transferable from S to D, therefore increasing costs
- Opportunity costs
- Positive aspects of these automatic responses, enabling resources to be reallocated away from sunset and towards sunrise industries, no government planning required because the invisible hand is at work, with the market able to achieve allocative efficiency.
- Distinction between productive efficiency and allocative efficiency
- Negative aspects mentioned, uncertainty for producers, cannot plan ahead, markets tend to be cyclical, just as likely to get a downturn in dairy market later on causing further disruption, frictional unemployment, etc. Model may include markets returning to long-run equilibrium.
- Candidates could go onto discussing externalities resulting from increases in dairy production.

Total marks for (a) and (b) = 8

Generic mark guide for ONE (c)

Total marks for (c) = 8

	Performance Descriptor (PD) from the Scholarship standard	Judgement statement	**Total out of 8**
Outstanding level of performance	(PD 1) Produce and effectively communicate an outstanding and sophisticated economic analysis by applying microeconomic theory to the given context, which is complete, demonstrates depth in critical thought, and is economically literate.	For a reasoned and well argued consideration of the effectiveness of the operation of the price mechanism in context using a wide range of microeconomic models. For a clear and well argued discussion of the linkage between changes in the global market and reallocation of resources using models For a clear and well argued discussion of allocative efficiency with clear judgement and evaluation.	**7 or 8**
Scholarship level of performance	(PD 2) Produce and effectively communicate a sophisticated economic analysis by applying microeconomic theory to the given context.	For a clear *but undeveloped* consideration of the effectiveness of the operation of the price mechanism in context using a range of microeconomic models. For a clear *but undeveloped* discussion of the linkage between changes in the global market and reallocation of resources using models. For a clear *but undeveloped* discussion of allocative efficiency with judgement and evaluation.	**5 or 6**
Fair level of performance	(PD3) Produce a comprehensive analysis by applying microeconomic theory to the given context.	For a limited attempt to consider the effectiveness of the operation of the price mechanism in context with limited use of a microeconomic model. For a limited attempt to link changes in the global market and reallocation of resources using a model. For a limited attempt to discuss allocative efficiency with limited judgement and evaluation.	**3 or 4**
Limited level of performance	(lesser level of PD 3)	For an answer that has some basic correct facts but includes irrelevancies. Errors of theory or omissions of analysis are substantial on: • the effectiveness of the operation of the price mechanism in context, including models. • The reallocation of resources in response to changes in the global market • the description of allocative efficiency.	**1 or 2**
Nothing meaningful done	(including not attempted)		**0**

QUESTION TWO

(a)

(i)

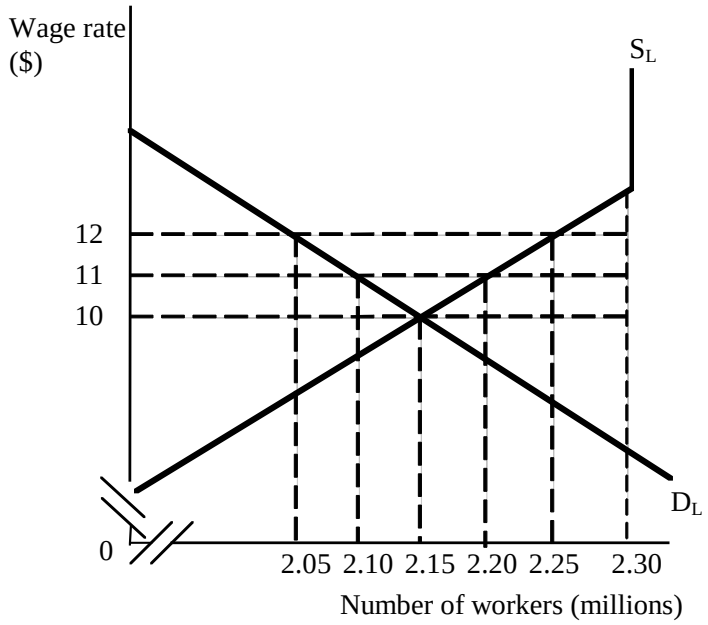
Real wages increased by 2.3% (4.6% increase in nominal wages less the 2.6% increase in the price level). Workers will be more interested in real wages because it will indicate that the purchasing power of their wages has increased, ie they can purchase more goods and services with their earnings.

(ii)

Government intervenes in this way to ensure that workers are paid equitably, so that even those on low incomes can afford to pay for basic necessities, such as food, clothing, and accommodation. The market has failed at equilibrium to achieve equitable outcomes. The minimum wage ensures there is a reduction of income inequality, which will increase equity.

(iii)

The labour market and minimum wage rate

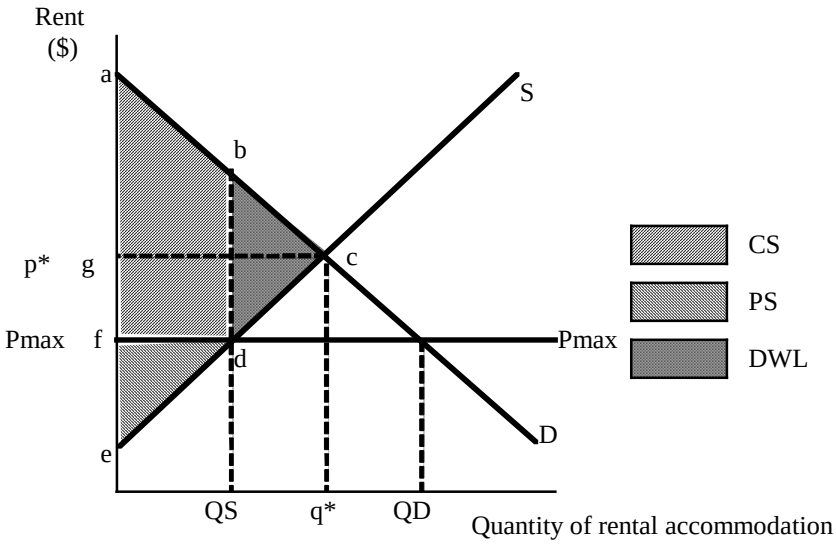


Minimum wage illustrated as being above equilibrium wage. Increasing the minimum wage rate will reduce the level of employment (QD_L) because employers are less able to keep all existing workers in employment at the higher pay rate. Also, there will be an increase in the involuntary level of unemployment and reduction in the voluntary unemployment, because the opportunity cost of not working increases when the minimum wage increases.

(b)

(i)

Maximum rent control and allocative efficiency



For a maximum price control to have an impact on the market, it will be shown as being below market equilibrium. Rental will be controlled at a low level shown as **f** in the diagram above. The long-run effect is opposite to that intended by the government. In fact, investment is diverted away from low rental accommodation, less rental accommodation will be provided by the private sector because of a lack of incentives for landlords, and also landlords will be unable to maintain existing stock so that the quantity supplied falls. Lower rental levels encourage more consumers to rent, so the quantity demanded increases. The net effect is a shortage, as QD > QS. Consumers may benefit from an increase in consumer surplus (depends on elasticities); however, this is likely to be outweighed by the lack of housing. Producer surplus decreases, some of this being transferred to consumer surplus and the remaining amount lost to the market as deadweight loss.

(ii)

The problems described above do not result from market failure, therefore must be considered as government failure (government intervention in a properly functioning economy).

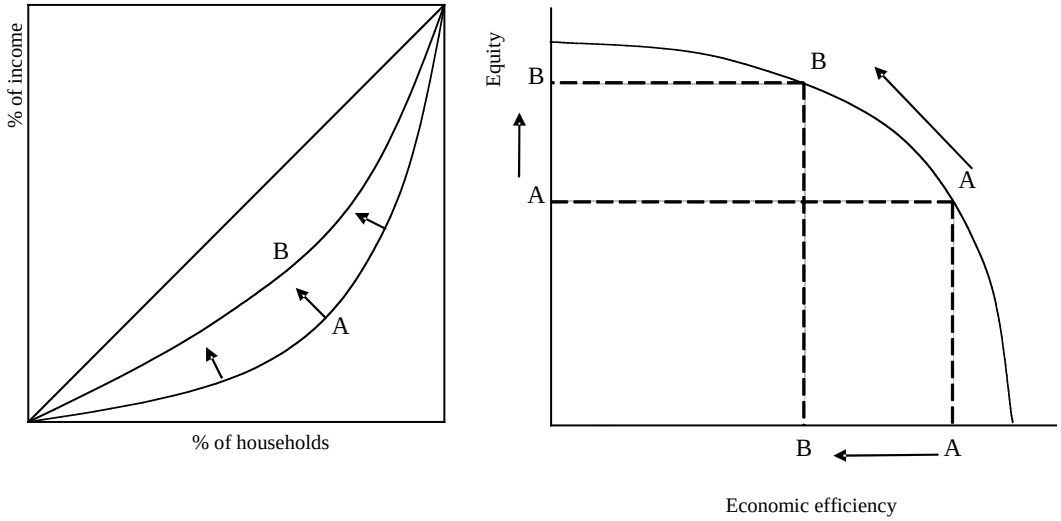
The market would be effective in providing rental accommodation. Any shortage would result in rising rents which would attract more investment in low rental accommodation. There are other ways to ensure the availability of accommodation to those on low incomes, such as the payment of accommodation allowances.

Total marks for (a) and (b) = 8

(c)

Governments will use redistributive policies such as progressive income tax and transfer payments, such as working for families to reduce income inequalities in the interest of promoting equity. The government takes from the rich in order to give to the poor.
With regard to income tax:
Horizontal equity in terms of income tax is the concept that those on similar incomes (ie those with the same ability to pay) should pay the same amounts of tax, so that the tax system should not discriminate between people, or distort consumer behavior. On the other hand, vertical equity is the concept that people on higher incomes are more able to pay their taxes and should pay more. Income tax in New Zealand is charged at a progressive rate, so that those on higher incomes pay a higher rate of tax.
The transfer payments can also be analysed in terms horizontal and vertical equity.
Horizontal equity would suggest providing equal benefits for those in equal situations, for instance being without employment, or on low incomes. Vertical equity means treating differently those who are different. For instance, those with more children to support would receive greater support because their needs are judged as being greater. The government ensures benefits are targeted towards those that are most in need. We could argue that vertical equity has greater prominence in both taxation and transfer payments when aiming to deliver a redistributive policy.

Equity versus efficiency trade-off



These redistributive policies (progressive income tax and transfer payments) will decrease inequality of income distribution, shifting the Lorenz curve to the left and suggesting an increase in equity. However, economists suggest that this leads to a decrease in economic efficiency. This can result from a progressive income tax that is structured too progressively, so that those in the highest tax brackets are less motivated to earn more because the marginal tax rates are relatively high. In addition, some targeted welfare payments such as WFF are structured in such a way that any increase in incomes reduces entitlements (abatements), again reducing the motives to earn more. This can reduce productivity as described in Resource G. As shown in the diagram above, economists refer to the equity efficiency trade-off. Redistributive policies used to increase equity will lead to a loss of efficiency resulting from the loss of incentives and productivity.

Total marks for (c) = 8

Generic mark guide for TWO (c)

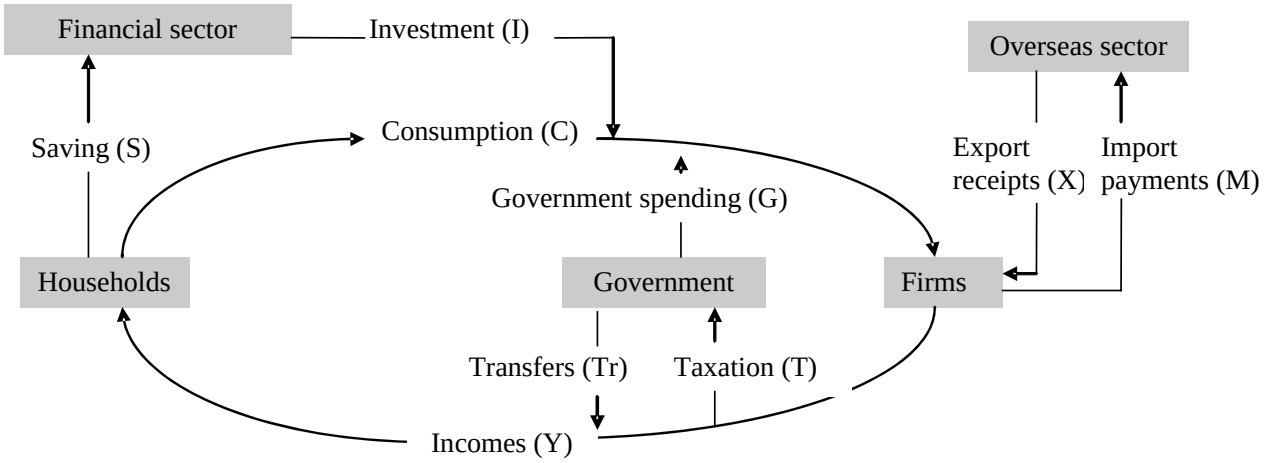
	Performance Descriptor (PD) from the Scholarship standard	Judgement statement	**Total out of 8**
Outstanding level of performance	(PD 1) Produce and effectively communicate an outstanding and sophisticated economic analysis by applying microeconomic theory to the given context, which is complete, demonstrates depth in critical thought, and is economically literate.	For a reasoned and well argued discussion of the redistributive policies (for instance using progressive taxation and the WFF transfer payments) used to increase horizontal and vertical equity. For a clear and well argued discussion of economic efficiency (that will include PE, where CS and PS are maximised, and a statement of Pareto efficiency). For a clear and well argued discussion of the relevance of the equity efficiency trade-off with clear judgement and evaluation.	**7 or 8**
Excellent level of performance	(PD 2) Produce and effectively communicate a sophisticated economic analysis by applying microeconomic theory to the given context.	For a clear *but undeveloped* discussion of the redistributive policies used to increase horizontal and vertical equity. For a clear *but undeveloped* discussion of economic efficiency (to include PE / where CS and PS are maximised / Pareto efficiency). For a clear *but undeveloped* discussion of the relevance of the equity efficiency trade-off with judgement and evaluation.	**5 or 6**
Fair level of performance	(PD3) Produce a comprehensive analysis by applying microeconomic theory to the given context.	For a *limited attempt* to consider the redistributive policies used to increase horizontal and vertical equity. For a *limited attempt* to describe economic efficiency. For a *limited attempt* to discuss the relevance of the equity efficiency trade-off with limited judgement and evaluation.	**3 or 4**
Limited level of performance	(lesser level of PD 3)	For an answer that has some basic correct facts but includes irrelevancies. Errors of theory or omissions of analysis are substantial on: • the redistributive policies used to increase horizontal and vertical equity. • the description of economic efficiency. • the relevance of the equity efficiency trade-off.	**1 or 2**
Nothing meaningful done	(including not attempted)		**0**

QUESTION THREE

(a)

(i)

Saving defined as income available to fund consumption at a later date, etc. Savings are vital for providing funds for investment, to overcome depreciation to maintain production levels, or to fund increases in capital formation to increase production in the future. We can show the significance of saving to the economy with a circular flow or AD / AS diagram.



Because these funds are deposited in savings in banks or other institutions in the financial sector, the funds can be lent to firms for investment.

(ii)

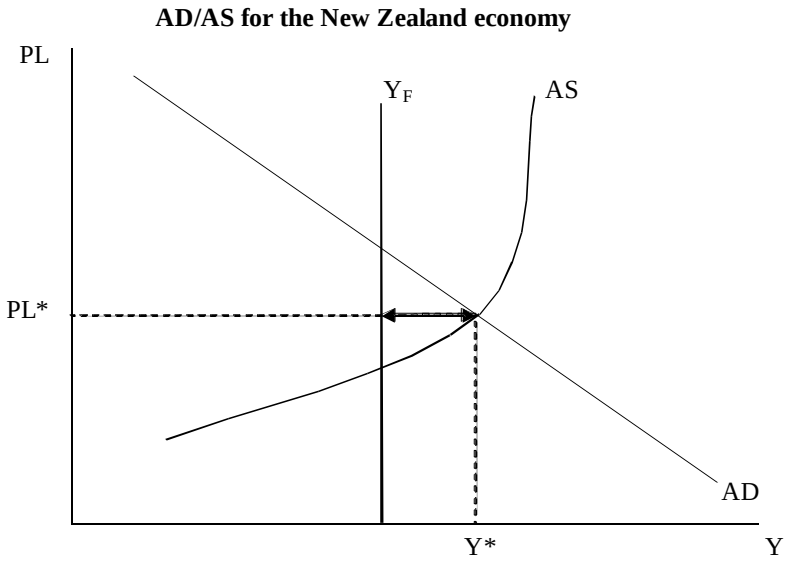
A certain level of saving is essential for the maintenance of production in the economy; however, if all New Zealanders increased their savings, this could result in a significant decrease in consumption spending, so firms cut back on production, in which case incomes will fall and the overall level of economic activity will fall (students could suggest this as the paradox of thrift).

(iii)

As indicated in Resource I, C + I > national income, which has meant using foreign savings, which has led to a high and growing current account deficit. That the savings level in New Zealand has gone from a small positive number in 1990 to a negative of $11.1 billion in 2005 is a problem. Household saving is negative because current consumption is in excess of current income. The use of foreign savings leads to an increase in current account deficit (balance of investment incomes becomes more negative). Dissaving leads to increased expenditure on imports, leading to a worsening current account balance.

(b)

(i)



The arrow indicates the inflationary gap. Evidence in the resource material includes, from resource I (Table 1):

- The information that C > Y with saving at a negative of $11.1 billion

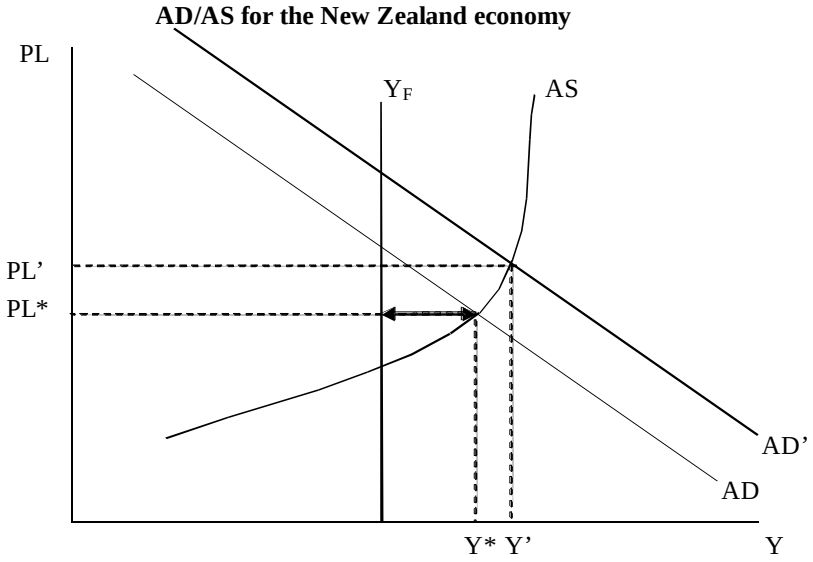
And from resource J:

- Information from NZIER that labour and capacity are both limiting factors for growth by firms
- Even though the government accounts are in surplus as the tax take from consumers and firms has increased, the 3rd graph in resource J (fiscal impulse) suggests a loosening of fiscal policy

And from resource K:

- Boom in the housing market, with house price rises meaning consumers feel more able to spend
- Reference that RBNZ has had difficulty quelling inflationary pressures.

(ii)



Any cut in direct taxation will increase disposable incomes, leading to an increase in C and AD. AD shifts to AD'. Because the economy is at or beyond its full employment level and operating where the AS curve is very steep, this increase in AD will be highly inflationary, shown as an increase in PL to PL'.

(iii)

Resource K focuses on the needs to increase saving to provide for future retirement payments for an ageing population. Therefore, the government could announce in the budget that there will be tax cuts and to neutralise the inflationary stimulus of these cuts could have also announced that these cuts will be deposited into income earners' Kiwisaver accounts. This will reduce the increase in disposable incomes that would have occurred with the tax cuts, therefore limiting the increase in AD and resulting inflationary pressures. This would go some way to satisfy the demands for tax cuts as well as encouraging more savings in the economy, and provide for more funds that could be invested in the local share market to help improve the investment potential for domestic firms.

Total marks for (a) and (b) = 8

(c)

There are a number of issues that are relevant here:
Lack of savings:

- Despite warnings that households will need to save for their future, there has been a lack of policies to encourage saving, through favourable tax treatment
- Government currently provides positive tax incentives for investment properties through LAQCs
- New Zealanders have favoured saving through accumulating housing
- Government has embarked on a saving scheme (NSF)
- Interest rates are high, which has diminished the investment spending by New Zealand firms

Fiscal expansion:

- After years of neglect and increasing congestion and bottlenecks, government has responded and spent up on infrastructure projects
- Spending on WWF and other welfare schemes, some of which have discouraged productivity gains
- The fiscal impulse graph suggests a loosening of fiscal policy as a result of recent changes in government spending
- The crowding-out effect we would expect because of the increase in government spending is being countered by the increase C + I financed from overseas borrowing.

Tight monetary policy

- RBNZ has used tight monetary policy, in particular increases in OCR, which has meant a high interest rate structure in NZ
- High interest rates has led to appreciation of the NZD
- Environment that is highly negative for exporters. CAD has increased to about 10% of GDP

Conclusion could focus on the fact that monetary policy and fiscal policy can been seen to be working against each other. At the same time, RBNZ is tightening monetary policy, and even though the government is running a large fiscal surplus there is a loosening of fiscal stance shown in the graph "fiscal impulse" in resource #2 for the period 2007–09. This resulted from increases in spending in the social security, health, education and infrastructure spending.

Total marks for (c) = 8

Generic mark guide for 3 (c)

	Performance Descriptor (PD) from the Scholarship standard	Judgement statement	**Total out of 8**
Outstanding level of performance	(PD 1) Produce and effectively communicate an outstanding and sophisticated economic analysis by applying macroeconomic theory to the given context, which is complete, demonstrates depth in critical thought, and is economically literate.	For a reasoned and well argued discussion of conflict between current fiscal and monetary policy settings. For a clear and well argued discussion of the impact of current fiscal and monetary policy on national saving, national investment, and the balance of payments.	**7 or 8**
Excellent level of performance	(PD 2) Produce and effectively communicate a sophisticated economic analysis by applying macroeconomic theory to the given context.	For a clear but undeveloped discussion of conflict between current fiscal and monetary policy settings. For a clear but undeveloped discussion of the impact of current fiscal and monetary policy on national saving, national investment, and the balance of payments.	**5 or 6**
Fair level of performance	(PD3) Produce a comprehensive analysis by applying macroeconomic theory to the given context.	For a limited attempt to consider current fiscal and / or monetary policy settings. For a limited attempt to discuss the impact of current fiscal and / or monetary policy on national saving or national investment or the balance of payments.	**3 or 4**
Limited level of performance	(lesser level of PD 3)	For an answer which has some basic correct facts but includes irrelevancies. Errors of theory or omissions of analysis are substantial on: • current fiscal and / or monetary policy settings. • national saving or national investment or the balance of payments.	**1 or 2**
Nothing meaningful done	(including not attempted)		**0**