

93402



S

OUTSTANDING SCHOLARSHIP EXEMPLAR



NEW ZEALAND QUALIFICATIONS AUTHORITY
MANA TOHU MĀTAURANGA O AOTEAROA

QUALIFY FOR THE FUTURE WORLD
KIA NOHO TAKATŪ KI TŌ ĀMUA AO!

Scholarship 2018 Economics

2.00 p.m. Monday 19 November 2018

Time allowed: Three hours

Total marks: 24

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 answer ALL the questions in this booklet.

Pull out Resource Booklet 93402R from the centre of 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 2–28 in the correct order and that none of these pages is blank.

Question	Mark
ONE	
TWO	
THREE	
TOTAL	

/24

ASSESSOR'S USE ONLY

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

INSTRUCTIONS: Write an essay in response to each of the three questions in this paper. Question Two is on page 10, and Question Three is on page 18.

QUESTION ONE: TOURIST ACCOMMODATION IN THE INTERNET ERA

Refer to Resources A to D and your knowledge of microeconomic theory to answer this question.

Over the past 10 years there have been significant changes in the tourist accommodation market, in terms of how people learn about travel options, how they book their trips, and where they choose to stay.

Evaluate the impact of the internet and social media on allocative efficiency in the tourist accommodation market. Use appropriate economic models to support your answer.

In your answer:

- analyse the impact of the internet and social media on supply and demand
- analyse the impact of the internet and social media on price elasticity of supply and demand
- discuss the impact of the changes within the market on the level and nature of supply, and the type of market structure
- evaluate the overall impact of these changes on allocative efficiency.

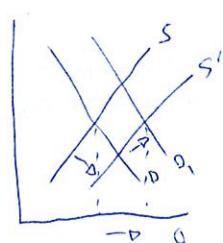
Use this space for planning your essay. This plan will NOT be marked.

PLANNING

Tourist accommodation

Internet + social media ↑ demand as easy, more efficient / substitutable

Social media ↑ Supply



- substitution

PES short term shift include
long term

- Supply you focus

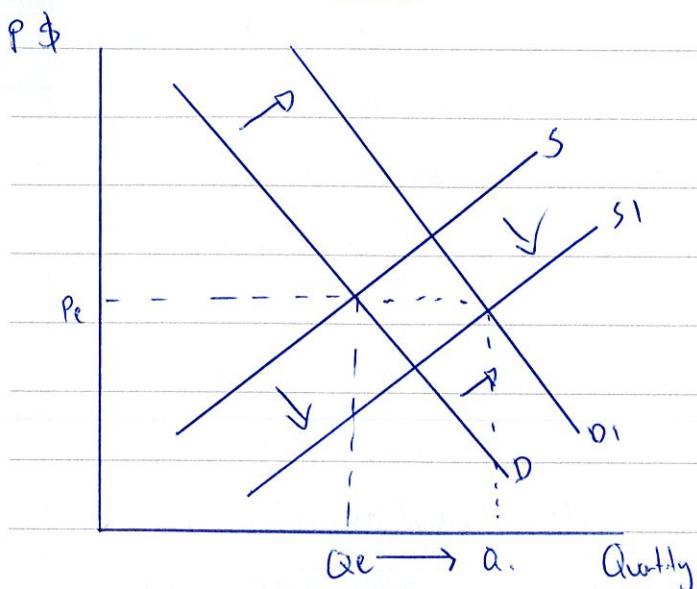
Perfect competition oligopolis duopoly monopolies

Internet and social media has taken the tourist accommodation market by storm. New technologies allow consumers to customise travel experiences to their desires, have easier experiences, and are more able to modify travel plans (Russia).

Social media has affected the demand for the tourist accommodation market by allowing potential customers access to more resources than ever on Travel, through Online review sites, social media sharing such as Instagram, and other online advice sites (Res D). As a result being exposed to such new ~~ad~~ adventures is enticing for consumers, and increases their demand for travel accommodation. Res A stated that younger adults are more likely to have budgeted for Travel or they have a bigger desire to do so, and as a large proportion of social media users are young adults it's likely that the internet has helped this increased demand.

The internet has also increased the supply of travel housing, as stated by res B Networked hospitality business have become possible due to creation of network platforms on the internet. The internet has allowed for increased price competition, as well due to more firms entering the Tourism accommodation market.

market, as Res 13 states "Strong growth opportunity, entice tourists to enter the holiday rental market". As more houses are being converted into tourist short-term accommodation, this will result in a decreased supply in the housing market and price pressures, tightening supply in tourist accommodation.



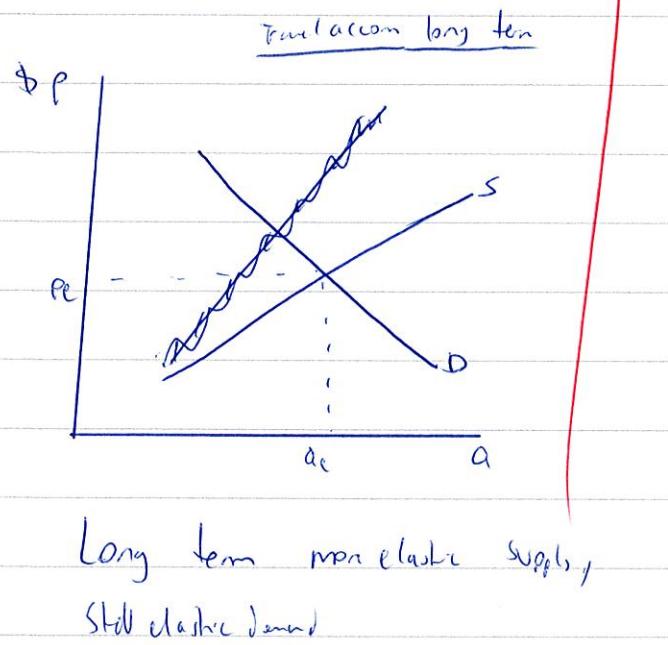
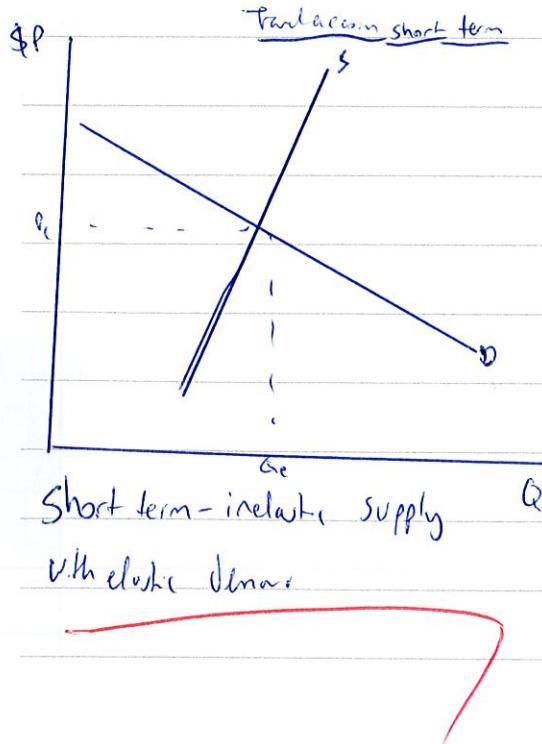
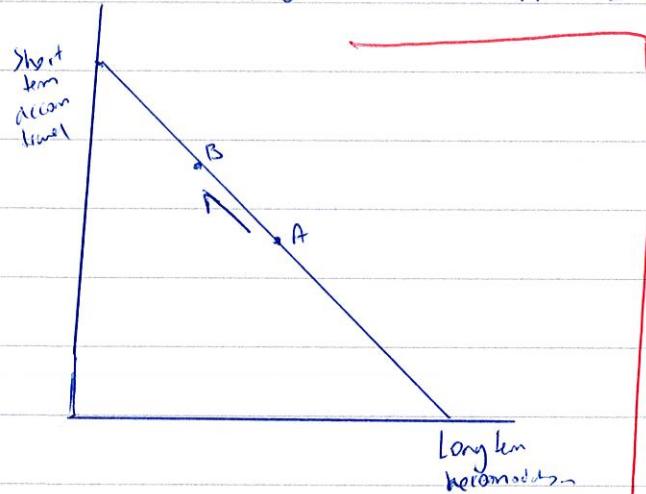
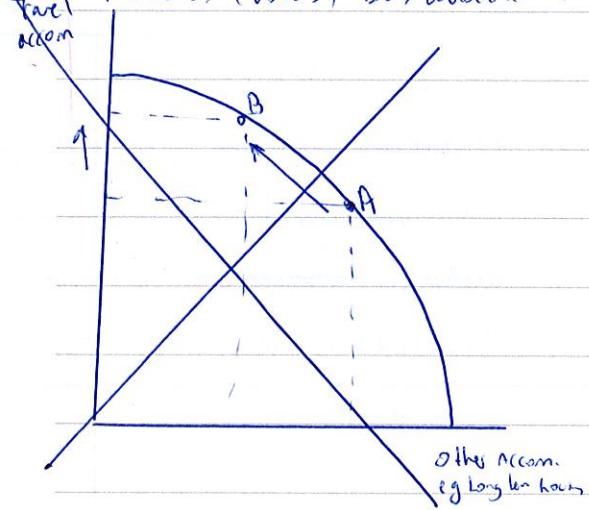
As shown by the graph on the left, the increase demand from S to S' and demand from D to D' results in a large Q increase from Q to Q_1 , with the price effect not a noticeable one dependent on whether Demand increases more or Supply.

Social Media/internet will result in a more efficient service for consumers, as stated by Res A user they are able to make plans while they are travelling more. The internet also increases the number of substitutes available for accommodation as there are now motels, hotels, online business like Air BnB. With increased price competitiveness in the market, if supply of accommodation increases by more than the increase in demand then lower prices will benefit consumers as well and take up smaller portions of their income (albeit still a luxury good).

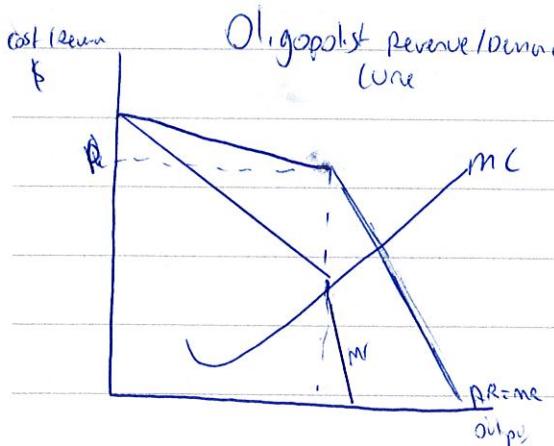
Thus as consumers have larger amounts of substitutes, are able to modify plans more easily, (as luxury goods) then the expansion of the internet has increased the price elasticity of demand to become more elastic (ie $|>1|$ greater than 1). Whilst before the internet travel accommodation demand would still have been elastic, the introduction of more substitutes, greater knowledge of the market has increased its price elasticity.

The price elasticity of supply of tourist accommodation will still be relatively inelastic in the short term as it cannot respond as quickly as changes in demand due to limitations of resources, ie a house owner has a tenant with a contract so cannot move into short term accommodation immediately. However due to the internet increasing knowledge of the market ^{therefore to invent}, producers can shift into the market in the long term if the opportunity cost of the short term markets profits are higher than what they are getting. As such in the long term supply will become more elastic and resources may be shifted away from other markets, as the short term accommodation for travel is more profitable. The ppc below shows

resources (hours) being allocated to short term travel market, with constant opportunity cost.

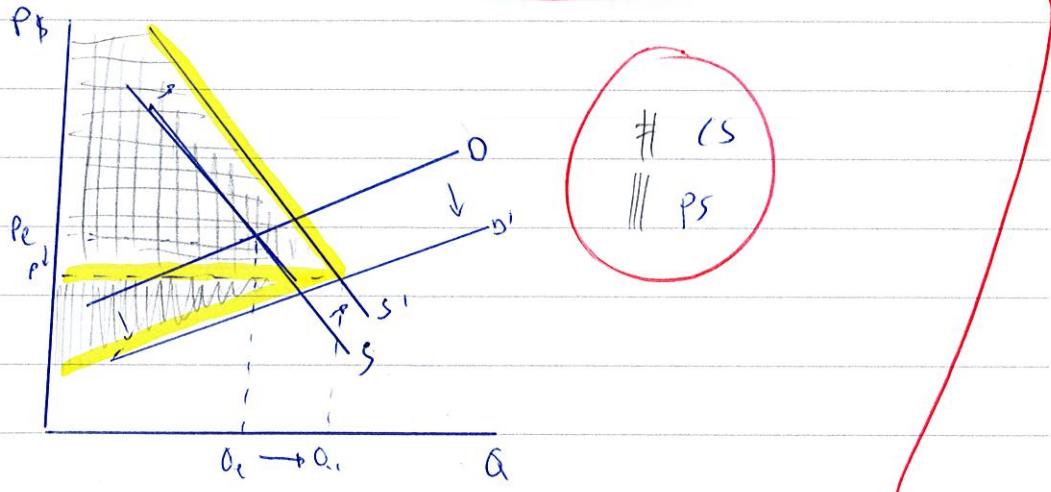


The level of supply has greatly increased. Pp In past years, the inspiration to us, it was through travel agents, and travel accommodation was mainly from hotels and hostels. With the introduction of the internet and its effect on travel, there has been a large increase in accommodation for travel. Previously the travel accommodation market may have been considered oligopolistic with a few types, with some market power and barriers to entry as not everyone could open their own hotel/hostel. Now however, Supply of Travel housing has changed from purely business, to peer travel accommodation through airbnb and other similar websites. Now there are many firms/producers/suppliers of travel accommodation, and although there is some level of price competition it is mainly non-price competition. That is the determinant of whether one accommodation is picked over the other. This is shown by Pesa A - "travellers prefer to experience local culture rather than observe, can target neighborhoods to stay in ... " and Pesa B "experience value that has enhanced my travels". Thus now this may be more in line with monopolistic competition. When there are many suppliers, with many product differentiations, lower barriers to entry exist as now anyone who owns a house can enter the market for tourist accommodation, and some price competition although not as much.



Note: This would not be perfectly competitive as there are barriers to entry (own house), there is price competition to some level, and non-price as not all products (accommodation options) are homogeneous.

The introduction of so many new suppliers of accomodation for travel into the market has allowed for more price competition, and is a move towards a more ~~affordable~~^{socially acceptable} efficient point and is closer to perfect competition output than before.



Both producer surplus and consumer surplus are increased.

The increased demand and supply results in an increase in Q from Q_e to Q_f , and most likely a decrease in p from P_e to P_f . Shown by PSSB study, Airbnb has hurt 200,000 hotel's advocates with hotels by price. Although price has slightly fallen producer surplus increases, as the firm now units to make a surplus off.

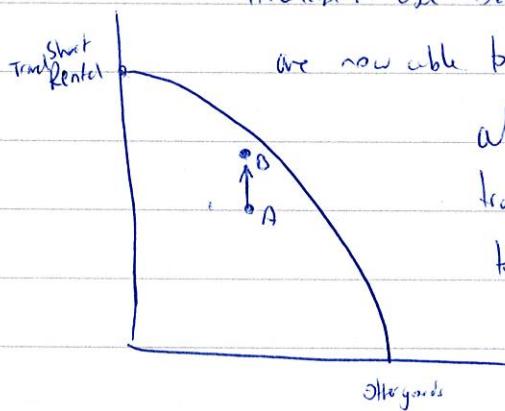
(Producer surplus will increase, as more units consumed (^{short term} for hotel) at a lower price. ~~The market was always efficient, efficient~~ efficiency requires perfect competition which is rare in real life. All the new equilibrium surplus are maximised, and efficiency is increased.)

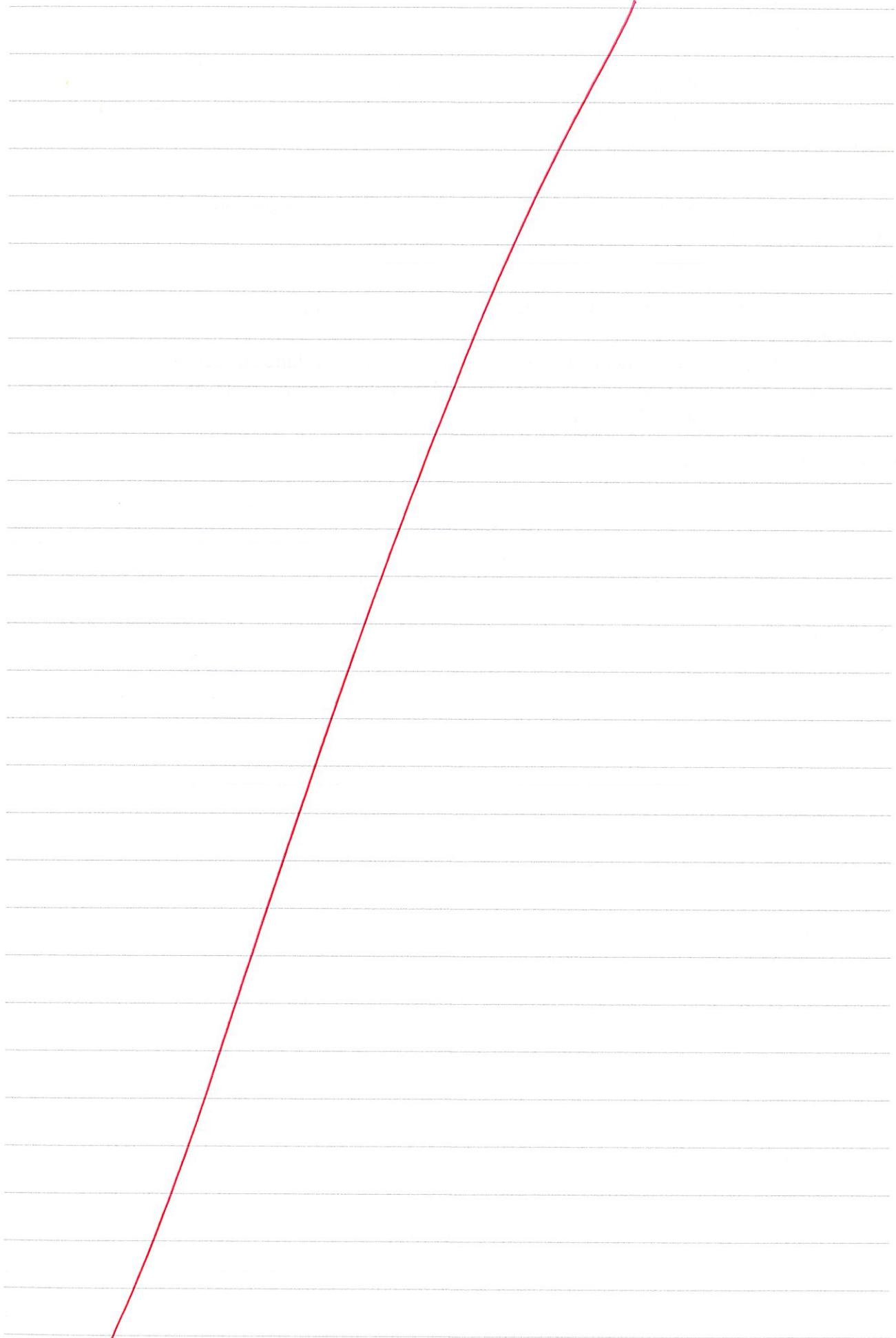
- * The internet has affected decisions of consumers hugely, 1 in 95% of travellers reading at least 7 reviews, and 67% of all bookings done online, at 43%, ~~marketers~~ using Instagram for planning, inspiration. The internet has allowed for increased consumer power as they have greater knowledge, and prefers an information imbalance.

which results in market failure. Res D shows how brands used to control the message being told about their accommodation, whilst now the move in Online review site gives consumers better knowledge and more choices. Thus the market for accommodations for travel has become more allocatively efficient.)

As undifferentiated goods are also being used for economic benefits this further increases the allocative efficiency as resources are becoming more utilised reducing idle resources. Shown below is

increased use of undifferentiated resources that are now able to be used thanks to the internet allowing for the increase in both travel accommodation as well as ways to share product to consumer (such advertising through websites, etc.).





7

QUESTION TWO: SINGLE-USE PLASTIC BAGS

Refer to **Resources E to K** and your knowledge of microeconomic theory to answer this question.

Various groups in New Zealand have called for action to reduce consumption of single-use plastic bags, reflecting concerns about the environmental impact these cause. Others argue that consumer choice is more important.

Evaluate the issue of market failure associated with the consumption of single-use plastic bags (SUPBs). Use appropriate economic models to support your answer.

In your answer:

- explain and illustrate the externalities associated with the consumption of SUPBs, and why market failure might occur
- evaluate the case for government intervention, including the importance of consumer sovereignty
- explain and analyse three options for government intervention, and evaluate which option is most likely to achieve allocative efficiency.

Use this space for planning your essay. This plan will NOT be marked.

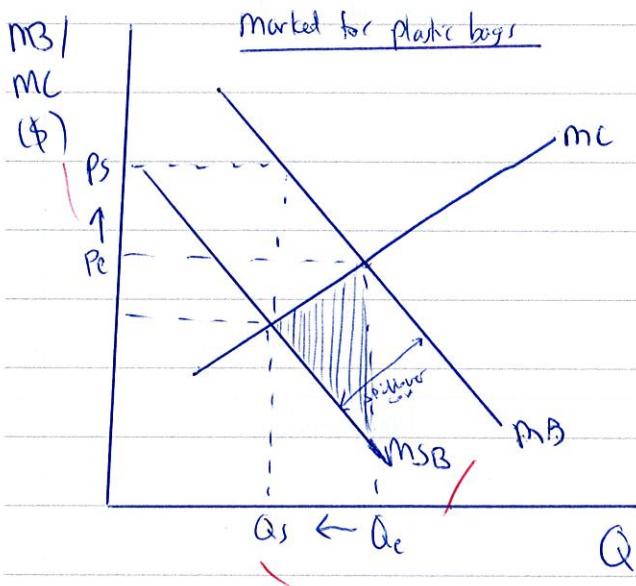
PLANNING

- SUPB Neg ext Consum^

> Tax

- Ban

① Single use plastic bags (SUPB) are products that are extremely durable and resistant to degradation (ref), and are a cause of concern to our environment. Ref states the impacts of plastic bag litter on our environment, from clogging drainage systems, contributing to flooding, contributing to 100 000 marine mammal deaths per year and eventually causing harm to humans through microplastic consumption. These effects are a negative externalities of the consumption of plastic bags (the production of plastic bags may also cause spillover costs to society based on how they are produced, however for this analysis we will consider externalities of consumption).

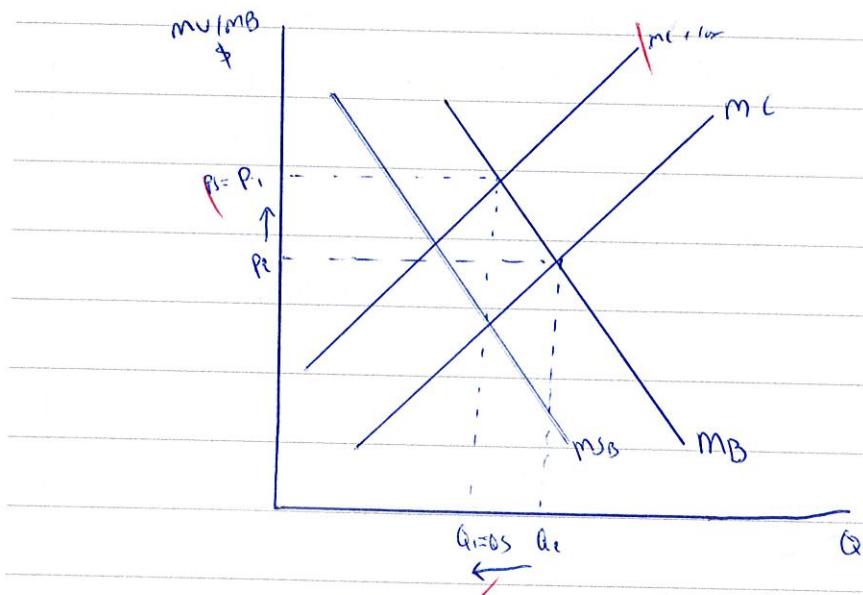


The marginal social ~~benefit~~
cost of consuming plastic bags is less than the marginal benefit due to the externalities associated with consumption. At Q_e , the marginal social benefit is less than the marginal benefit, as the private market has failed to consider the implications of consuming SUPB on society.

As a result the benefits society gains from consuming a unit is less than the private benefit, and so there is market failure, indicated by the shaded area as a deadweight loss. Society would prefer a lower quality product at a higher price, so the private market is overproducing and under pricing resulting in loss of efficiency. The spillover costs are defined as costs on a 3rd party not involved in the original transaction, in this case the consumption of plastic bags is affecting the environment by means of pollution //

Consumer sovereignty is the idea that consumer preferences control the price and output in a free market, essentially a consumer knows what is best for them and consumes the amount they want. Consumer sovereignty is important to have in a free market as it allows the market to be adjusted by the invisible hand rather than from a paternalistic figure like the government. However in the case of SUPBs, the government can argue that due to imperfect information, consumers are not aware of the costs involved and so the market is not accounting for these increased costs to society. Government intervention may be necessary for the market to work correctly, if the government determines the costs of consumption of SUPBs ~~are greater than the~~ to society ~~than the~~ override consumer sovereignty.

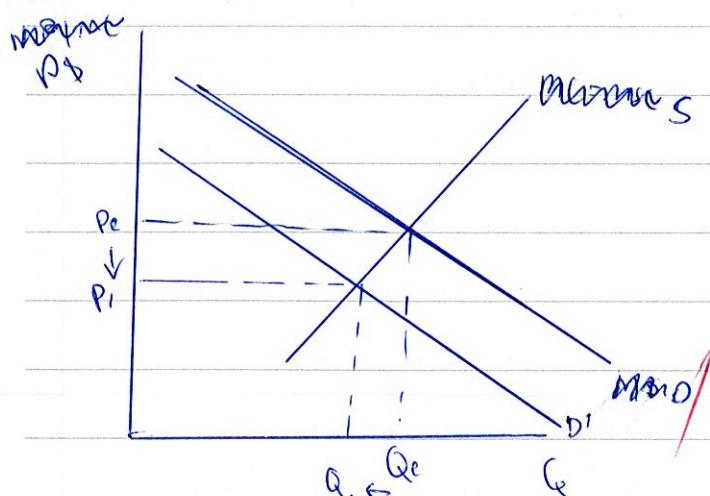
One possible intervention is the introduction of a tax/levy on SUPBs. Research 1 states that plastic bags essentially have a very elastic demand as "small charge or SUPB drastically change consumer behaviour". It is also stated that the levy has been implemented in other economies with great success, a 5 p levy in 2010 brought about an 86% reduction in plastic bag usage in the UK.



As shown on the graph of the previous page, a levy is an indirect tax on producers and would have the effect of shifting the Supply/MC curve to the left due to increased costs by producers. The right amount of tax would be able to both decrease the quantity consumed of plastic bags, as well as increase the price. As the demand for plastic bags are elastic, so the change in $\frac{Q_d}{P_{\text{new}}}$ will be proportionally greater than the change in price. Taxes are usually associated with a loss of efficiency, however in this case they are internalising a market externality and so there is no owl as there is a removal of the spillover costs by consumers at the social equilibrium Q.s. The market will become allocatively efficient if the full impacts of spillover costs are recognised. Govt revenue gained from the can also be put forward to helping the environment or educating on harm of SUPBS, thus benefiting the economy.

Another point would be to educate consumers on effect of plastic bags. Manufacturers are encouraging this policy over a complete ban, as resource to state, that this will lose tens of thousands of jobs resulting in a reduced standard of living, for many workers, increased inequality and a loss of equity (fairness) of households, as made to lose their jobs and can't support their families anymore. The effect of increasing knowledge ^{of the harm of PB's} would be to decrease demand for plastic bags, however this will need to occur over the long term due to consumer choices needing time to change.

Market for plastic bags.



As shown by the graph, increased education would result in better awareness of the harm of plastic bags and would result in a decrease in consumption. Although there is a lower price associated with increased information about harm of plastic bags, the main problem is a loss in Q consumed.

Increased education on the reusability / recycling of plastic bags however would do little to change the market, it may lead to a small decrease in demand as more consumer reuse them however the most important effect would be the reduction of landfills filled with plastic bags. This policy would be economically friendly for manufacturers, and would still help to reduce environmental impacts. It may help

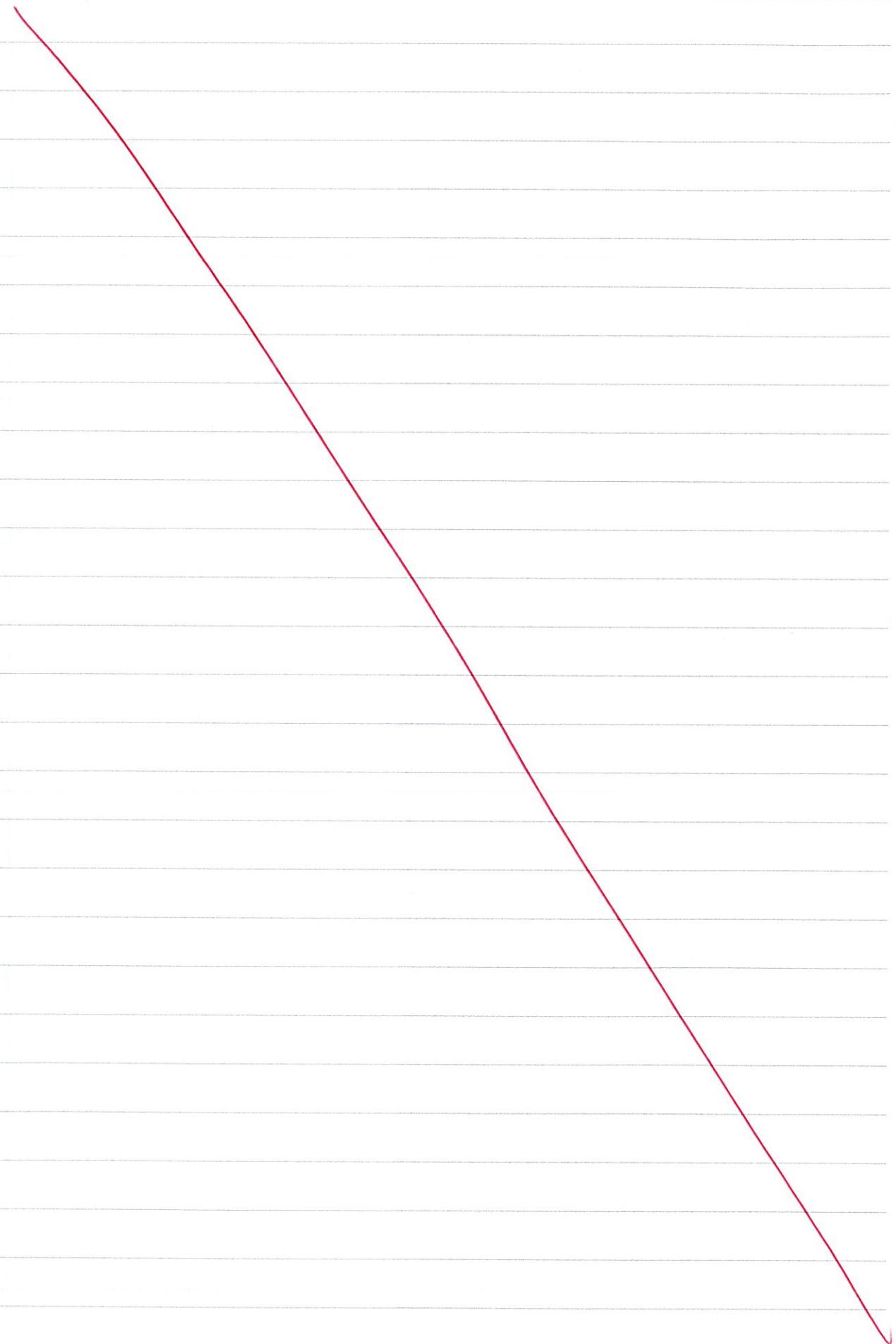
The final policy of a complete ban on plastic bags would result in an immediate decrease of SUPPLY's consumed as expected, however the impact of this is unlikely to be effective if only supermarkets are participating (as stated by Res J). For this to be effective, ~~therefore~~ all markets must agree to participate to make a noticeable impact, otherwise consumer would just get plastic bags from other places. There is a possibility of a black market occurring for Plastic bags, as some consumer may feel they need them. The biggest implication of a ban would be the loss of jobs in the economy that would result in lower standards of life for those workers and it is likely that those workers in manufacturing plastic bags

are not wealthy. Bans would also affect consumer sovereignty as stated before.

The most likely policy to achieve allocative efficiency would be a combination of the policies. A tax may be very effective in reducing short term consumption of SUPB and thus account for the spillover costs and remove the cost, although consumer sovereignty is sacrificed if it is for the better goods as the implications of plastic consumption are not reflected in market prices (lower costs). Alongside this it would be wise to use the tax revenue for increased knowledge about how to recycle and reuse so that those with plastic bags can make better decisions about how to dispose of them. These two policies would be more effective than an immediate ban as the ban would need everyone to agree otherwise it will not be impactful, and the ban would result in lost jobs and equity for those households. The ban would be costly to impose and monitor, and would be another reason to use the other policies instead.

* The ban would also harm retailers who have already purchased plastic bags, it is likely producers have stocks of plastic bags, costing 3.65d per bag, if the ban is ineffective then these bags may need to be disposed of which will be harmful to the environment as it is likely not all will be recycled. It would be better to gradually reduce demand so producer have time to adjust their spending and reduce purchase of SUPB. This would also allow households time to move from new skills so that they can enter other fields of work when SUPB production is planned to decline. It is more equitable for them, and doesn't sacrifice.

efficiency in the form of unutilised human labour. //



6

QUESTION THREE: MONETARY POLICY AND THE RESERVE BANK ACT

Refer to Resources L to O and your knowledge of macroeconomic theory to answer this question.

In March 2018, the Finance Minister and new governor of the Reserve Bank of New Zealand signed a new Policy Targets Agreement (PTA) that added the goal of "supporting maximum levels of sustainable employment within the economy" to the existing goal of price stability.

Analyse how monetary policy is currently used to achieve price stability, and evaluate the impact on the New Zealand economy of a change requiring maximising employment to be considered alongside price stability in monetary policy decisions. Use appropriate economic models to support your answer.

In your answer:

- explain the Policy Targets Agreement, and how monetary policy is currently used to influence the rate of inflation to achieve price stability
- analyse how monetary policy could be used to influence the level of employment in New Zealand
- evaluate the impact the change to monetary policy could have on the New Zealand economy, and on the effectiveness of monetary policy.

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PLANNING

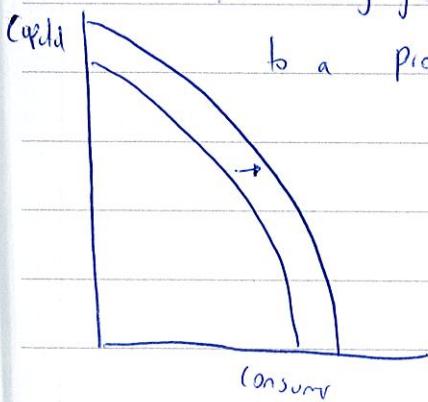
- PTA - 1-3% pru stabl., good

- ↑ inflato. ↑ grade ↑ emps,
↓ inf ↓ emps

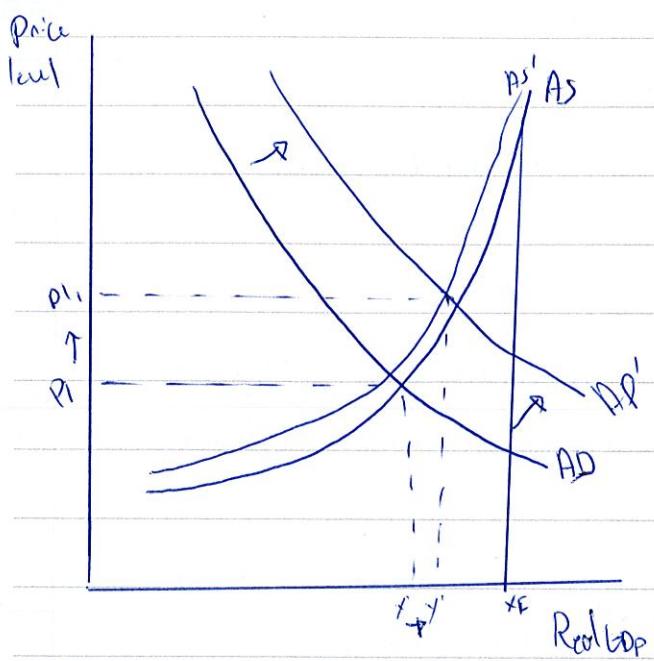


Monetary policy has been used to control inflation for many years, and was the sole priority of monetary policy before 2018 when employment was also influenced by the change of government from National to Labour.

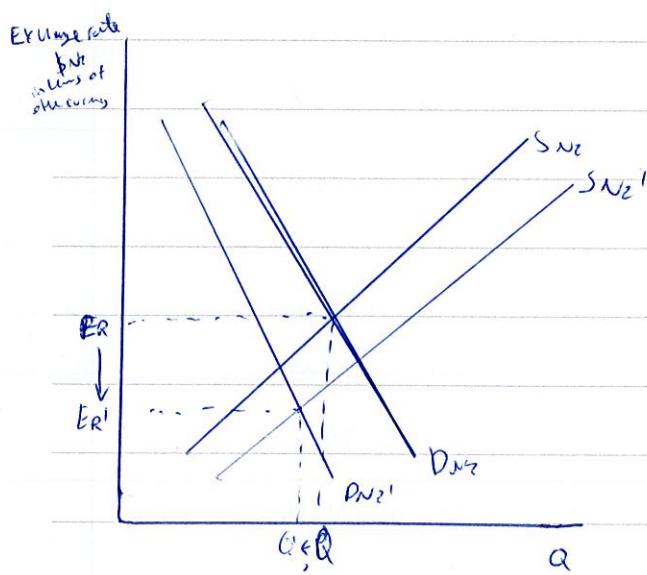
The Policy Target Agreement (PTA) is an agreement to control inflation at acceptable levels between 1-3%, so as to encourage steady growth rather than high inflation or deflation. Having a steady rate of inflation is beneficial for the economy as consumer spending is relatively stable compared to inflation. Expectations where consumers choose to spend now rather than later as they expect prices to rise, or ~~expect~~ holding off on consumption in times of deflation, expectations of goods are expected to become cheaper. This stable consumer spending combined with stable prices is very beneficial to producers as it is easier for them to forecast the future and invest in expanding production. This all leads to steady economic growth. Stable prices also limit speculative investment, and encourage productive investment which allows the economy to increase its capacity. Stable prices allow for steady growth as shown on the ppt below, and signal to a prospering economy.



Monetary policy is the control of the OCR, which affects interest rates. Loose monetary policy is when the OCR is reduced, decreasing interest rates. These decrease interest rates have multiple effects to increase the economy's output with inflationary pressure.



• Loose monetary policy act as an incentive for consumers to spend as the rate of return of investments in the bank are lower so they aren't earning as much interest. The cost of borrowing is also lower, resulting in increased borrowing by consumers to spend, and increased borrowing by producers to invest.

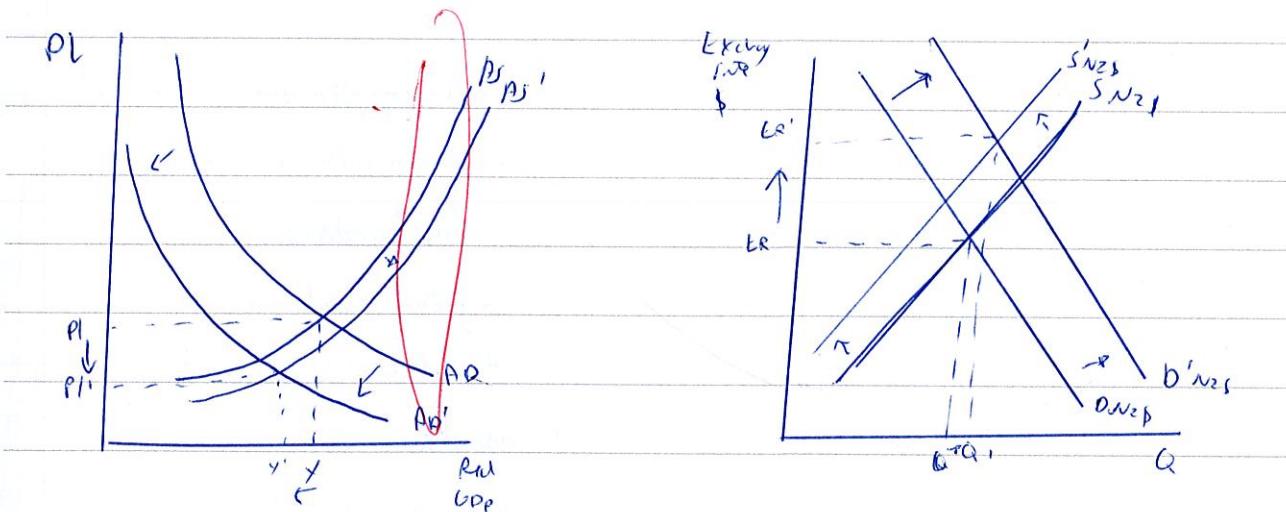


• Lower interest rates will also impact the foreign exchange market, as if the relative IR of NZ\$ is lower than other currencies, investors will choose to invest elsewhere for higher return on their savings and foreign reserves already in NZ\$ may choose to move their funds away, as well

or New Zealand themselves. This reduces demand for NZ\$, and increases supply. The Q being traded is unknown and dependent on which factor is bigger, however there is a large decrease in the Exchange rate, a depreciation. This lower ER results in increased competitiveness for NZ exporters as those priced in overseas dollars will be able to exchange into more NZ\$, or if priced in NZ\$ will be more price competitive. And overall result in an increase of export refunds. Imports are now more expensive for NZ consumers, and so will result in demand import payments, and an overall increase in the $(X-M)$. As Aggregate demand is made up of $C + I + G + (X-M)$, and increase in C, I and $(X-M)$ results in

a sizeable shift to the right. This is a slight shift of A_s due to higher imported raw material costs, however the after business has a smaller impact. Thus on the graph on page 20, we see a shift of $AD \rightarrow AD'$, a slight decrease in $A_s \rightarrow A_s'$, shifting real output from y_b to y_1 as prices are inflated from $p_b P_1$. Loose policy is used to add inflationary pressure if Nz seems to be having inflation on the lower end of the 1-3%. and is used in times of downturns and troughs to reduce the negative impacts on the economy.

The opposite case is true for tight monetary policy. The cost of borrowing becomes higher, those with loans/mortgages have higher interest payments (unless they are on a fixed rate), the cost of investing is greater so decrease the marginal rate of return is lower for business.



Then, an appreciation of the NzD as investing in Nz is looked to be more worthwhile, with a reduced supply of NzD as Nz 's no longer invest overseas as the Nz rate of return is better compared. The decrease increase of NzD , and reduced supply's NzD result in appreciation of ER BCI shown here. Then all combine to reduce inflationary pressure as demand consumption (C , Investment I and Lower $(x-m)$) due to appreciation (lower exports to be less competitive overseas) and increasing import needs as higher

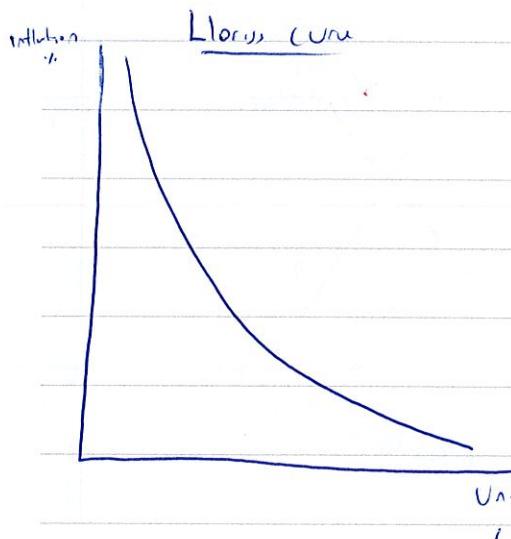
are now relatively more affordable. This leads to decrease in AD to AD₁
an increase in supply to AS due to cheaper imported raw materials and thus
dissinflationary effects and reduced output.

These are ways which monetary policy can be used to control inflation.



With the new requirements of monetary policy being used to assist with employment, the dual-policy may be at odds with each other.

As shown previously, with loose monetary policy, growth is encouraged alongside cost-push and demand-pull inflation. Real GDP is increasing, and is nearer to full employment YF. If loose monetary policy is used to encourage increased employment, the inflationary effect will need to be monitored to ensure they remain within the 1-3% guideline. As the dual policy is said to have success overseas (e.g. NZ), with this performing at par or even better than single-policy countries, in controlling inflation.



The tradeoff between inflation and unemployment is shown on the economic curve on the left, which indicate that the two have a negative relationship.

At high levels of unemployment, the inflation rate is low due to demand pressure on prices and low growth,

whilst at low levels of unemployment, there is high inflation due to the booming economy performing near or at its own past full capacity.

(New Zealand's unemployment rate is shown to have a gradual decline from around 10% from 2010 onwards whilst the inflation rate has had fluctuations, whilst remaining in the 1-3%.

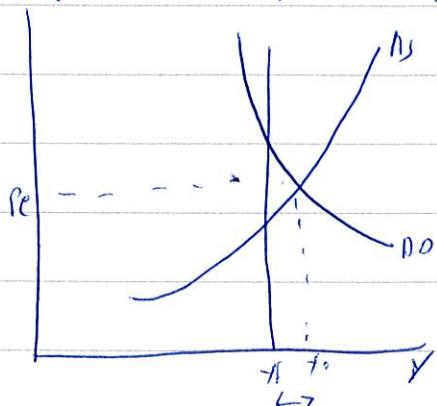
* Next page

The effectiveness of monetary policy in controlling inflation has been slightly compromised, due to the opposite effect ^{first} _{monetary}. Policy has on unemployment when trying to quell inflation. However the unemployment rate is seen to not have been so drastically affected in the past years by monetary policy when employment was not an important issue, and the rate of OCR has remained relatively stable around 3%. over the past 5 years. So the govt should still be able to manage inflation.

The only difference is that now the govt must take consider employment when making any alterations, and although this comes at a slight cost to the effect on inflation it is overall better for the economy as unemployment is a significant factor to the health of an economy and its standard of living, as well as future growth.

2

* Monetary policy to affect employment would be using loose to increase employment, which may be beneficial during economic downturns, however the rate of inflation must be ensured will not exceed 1-3% or this is against the PTA guidelines. The govt would not consider reducing employment as this would signal to a weaker economy, the only occasion where reduced employment will be necessary is if there is an inflationary gap which in this case may be used to reduce it so as to reduce inflationary effects.





Loose monetary policy will best work at low levels of inflation, as the increase in output/employment will be greater than price changes, as there is excess capacity.

Tight monetary policy will be considered when there is risk of too much inflation, at this point there is a possibility that we are off track, but our means and so a reduction in it will not be of hyper concern to the government.

Subject	Economics	Standard	93402	Total score	20
Q	Grade score	Annotation			
1	7	<p>This answer presents a relatively sophisticated economic analysis. For instance:</p> <p>pp 3–4 – provides a detailed explanation of the impact of the internet on the tourist accommodation market including recognition of the most likely impact on market price</p> <p>p 4 – also provides a reasonable explanation of changing price elasticity of demand, recognising several factors that will impact this. This explanation could have been improved by providing greater depth to how these factors impact price elasticity of demand.</p> <p>p 5 – provides perceptive explanation of the differing short- and long-run price elasticity of supply and reasons for this</p> <p>p 6 – provides insightful explanation of how the market structure in the tourist accommodation market has shifted from oligopolistic to monopolistic competition, incorporating reference to the features of these market structures and why the market would not be perfect competition.</p> <p>p 7 – provides a sound explanation of how the market changes have impacted allocative efficiency</p> <p>Overall this answer is economically literate, convincing and shows perception and insight so merits a 7. Further depth of explanation in some areas would have gained a mark of 8.</p>			
2	6	<p>This answer presents a relatively sophisticated economic analysis. For instance:</p> <p>p 11 – detailed and clear explanation of the negative externalities of consumption and of how market failure exists including effective reference to the MSB/MSC graph. Effective integration of the resource material.</p> <p>p 12 – effective and economically literate discussion of consumer sovereignty versus government intervention</p> <p>pp 12–13 – sophisticated integration of the resource material by identifying the idea that SUPB's have elastic price elasticity of demand but did not carry this through to the graphical representation of the effect of the tax</p> <p>pp 13–14 – reasonable explanation as to the effect of a consumer education but this could have been in greater depth. Graphical representation did not incorporate MSB/MSC model and so lacked explanation around moving the market towards the socially desirable equilibrium.</p> <p>p 14 – relatively weak and limited discussion and economic evaluation as to the effect of a ban in relation to achieving an allocatively efficient outcome</p> <p>p 15 – effective and logical evaluation illustrating some insight and perceptive analysis</p> <p>Overall this answer merits a 6 due to the depth of answer provided in most places but to gain higher grade would require an improved analysis of the ban and consumer education options.</p>			

3	7	<p>This answer represents an economically literate and sophisticated analysis. For instance:</p> <p>p 19 – Policy Targets Agreement briefly explained with clear explanation of the benefits of on-going price stability for economic growth. No real explanation of the Official Cash Rate as a monetary policy tool.</p> <p>pp 20–21 – clear and detailed explanation of the effect of loose monetary policy on the economy is provided, including a rationale for where loose monetary policy would be appropriate</p> <p>p 22–23 – a perceptive and logical discussion is provided of the potential conflict that may exist as a result of the change to the PTA including consideration of the implications of the current state of the NZ economy and the relevance to a possible inflationary gap.</p> <p>Overall this answer merits a 7. To gain a higher grade, more detailed discussion was required as to the impact on the effectiveness of monetary policy under the new PTA.</p>
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