

Student 4: High Achieved
NZQA Intended for teacher use only

[Student used the SMC/SMB model to illustrate the negative externalities associated with over-consumption of alcohol, and included economic information from secondary sources in an explanation of the spillover costs and third parties affected by the over-consumption of alcohol]

1

In the private market for alcohol, alcohol is under-priced and over-consumed. The private consumer does not take into account all the costs of consuming alcohol, which results in spillover costs. These are shown on the graph by the gap between the MB and MSB curve. The MB curve shows the extra benefit gained by the consumer from the consumption of extra units of goods and the MSB curve represents the Marginal Benefit plus the spillover costs to society of consuming the good.

1

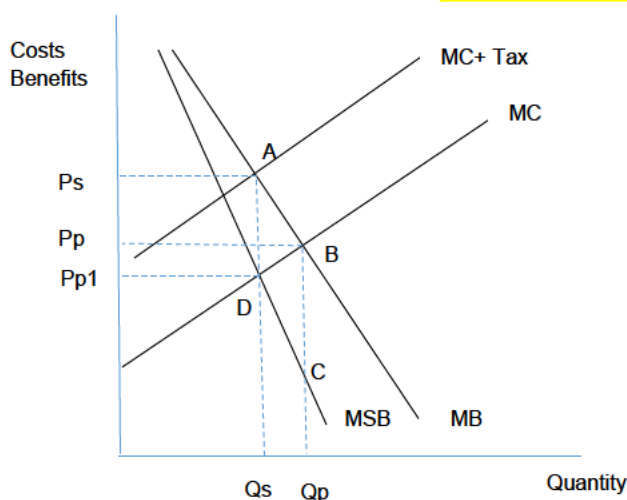
In the private market, MB is greater than MSB, which results in an area of deadweight loss as consumption occurs where the costs are greater than the benefits to society, area BCD. With no government intervention, society would continue to operate at the private market of P_p and Q_p , which is not socially desirable or allocatively efficient because...

[Student provided a detailed explanation of the policy of imposing a ban on alcohol in terms of efficiency and equity, using the SMC/SMB model.]

2

Policy 2: Implementing a Sales Tax

One way to reduce the amount of alcohol consumed to the socially desirable amount Q_s is to implement a sales tax on alcohol. The correct amount of tax placed on alcohol would be



the area of P_s , P_p1 , A, D, and increasing price should encourage consumers that are only willing to pay below P_s to stop consuming, moving the quantity of alcohol consumed to Q_s . This will internalise the market failure, by letting the tax pay for most of the damage that the government would otherwise have to pay for from other taxes. After the tax is added there is a loss of both consumer and producer surplus, area ABD, that is not reallocated into government revenue.

3

The loss coming from consumers who were willing to pay P_s or more at market equilibrium anyway, but were only paying P_p , similar with producers that could afford to supply the private market at P_p1 , but who were achieving higher profits at the market price of P_p .

3

The tax reduces the spillover costs and is much more beneficial due to the amount of externalities being reduced than the costs of the loss of consumer and producer surplus. The sale tax covers approximately half of alcohol externalities in New Zealand, so is considered an effective policy. It may not be considered equitable to society because although alcohol is a luxury good, many in society may have a reliance on the product, and adding too much tax may cause civil unrest for consumers who would be forced to buy cheaper types of alcohol, and lower income households may not be able to afford it at all.

5

4

Although the health hazards are greater than the benefits, because of consumer sovereignty many people still believe it is a necessity.