COMMERCE PRESENTATIONS AND PUBLICATIONS



VCE ECONOMICS ASSESSMENT TASK UNIT 3 2014

Outcome 1

(40% of Unit 3)

Explain how markets operate to allocate scarce resources, and discuss the extent to which markets operate freely in Australia.

Option: preambles to be given to students in advance (see pages 15-16)

Reading time: 10 minutes Writing time: 60 minutes

QUESTION AND ANSWER BOOK

Structure of book					
Number of	Number of questions	Number of			
questions	to be answered	Marks			
Multiple choice	10	10			
Structured questions	2	30			

STUDENT NAME

TEACHER NAME

- Students are permitted to bring into the assessment room: pens, pencils, highlighters, erasers, sharpeners and rulers.
- Students are NOT permitted to bring into the assessment room: blank sheets of paper and/or white out liquid/tape.
- No calculator is allowed in this assessment task.

Materials supplied

- Question and answer book of 14 pages (including MC Answer sheet).
- Multiple choice answer sheet
- Additional space is available at the end of the book if you need extra paper to complete an answer

Instructions

- Write your name and teacher's name in the space provided above..
- All written responses must be in English.

Students are NOT permitted to bring mobile phones and/or any other unauthorised electronic devices into the assessment room

Instructions for section A

Answer **all** questions in **pencil** on the answer sheet provided for multiple choice questions. Choose the response that is **correct** or the **best answers** the question.

A correct answer scores 1, an incorrect answer scores 0.

Marks will **not** be deducted for incorrect answers.

No marks will be given if more than one answer is completed for any question.

Question 1

During the middle of January 2014, southern Victoria experienced a heat wave that affected some agricultural producers. In the Yarra Valley, wine grape growers reported damage to approximately 5% of crops. This is likely to cause which of the following?

- A. An increase in supply and a lower the price of wine
- B. A decrease in supply and a higher price of wine
- C. An increase in demand and a higher price of wine
- D. A decrease in demand and a lower price of wine

Question 2

A mining company operating out of the small town adjacent to the Goulburn River reported a significant gold discovery in early 2014. This is <u>unlikely</u> to cause which of the following?

- A. A higher price for gold
- B. A higher share price for the Nagambie Mining Company
- C. Resources to shift into the Nagambie region
- D. A rise in the relative price of silver

Question 3

Which of the following is the best example of a market failure associated with the large size of Australian banks?

- A. Large banks lead to economies of large scale production
- B. Large banks make big profits
- C. Large banks create a moral hazard problem as banks can become too big to fail
- D. Large banks tend to substitute out of labour and into capital

Question 4

The construction of a port facility in Hastings to complement Melbourne Ports will result in two port facilities able to process the cartage of goods into and out of Victoria. This is likely to result in all of the following except:

- A. Downward pressure on the price of imported consumer products
- B. An increased demand for labour in the Hastings region
- C. A fall in the demand for labour on Melbourne Ports
- D. An increase in the cost to transport goods to interstate or overseas destinations

Question 5

Which of the following recent examples of business activity does not represent a market failure?

- A. The merger of two small supermarkets in competition with Coles and Woolworths
- B. A company producing ball and roller bearings entering into two separate agreements with competitors to increase the price of components used in vehicles and machinery
- C. Coles and Woolworths preventing rival supermarkets from securing leases in a large shopping centre complexes.
- D. Mitsubishi Electric engaging in resale price maintenance by attempting to induce one of its dealers not to sell its air conditioning products at prices below a minimum specified price

Question 6

Bill Mitchell, a professor of Economics, argues that the Australian government should buy back Qantas in order to compete with other government-owned international airlines which see their investment in terms of achieving a broader economic purpose, such as encouraging tourism. If he is correct, and the federal government did purchase Qantas for the benefit of the domestic tourism industry, this would:

- A. Immediately create a monopoly in the airline market
- B. Represent an example of positive externality in consumption
- C. Lead to lower prices of tourism services
- D. Cause a reallocation of resources away from tourism

Question 7

The Victorian government has been under pressure to introduce stricter laws to prevent the increasing incidence of accidents involving jet-skis and swimmers in Victorian coastal regions. The introduction of tighter regulations for jet-ski use is likely to result in all of the following, except:

- A. A redistribution of income away from jet-ski producers
- B. Lower price of jet skis and fewer resources devoted to jet-ski production
- C. A shift to the left of the demand curve for jet-skis and a contraction of supply
- D. A decrease in the price of non-motorised water craft

Question 8

Which of the following microeconomic demand/supply side factors is unlikely to be a factor contributing to the poor growth in sales of personal computers (PCs) over recent years?

- A. Changing consumer preferences towards digital tablets (such as ipads)
- B. Lower opportunity costs associated with the production of PCs
- C. Relatively slower growth in disposable incomes
- D. Technological advances improving the quality of PC substitutes

Question 9

The 10th Annual Demographia International Housing Affordability Survey, released in January 2014, ranks Australia as having one of the most expensive housing markets in the world. Which of the following is not likely to be a supply factor contributing to the relatively high price for Australian housing?

- A. Government regulations that limit the amount of land that is available for housing developments
- B. The relatively high cost of labour and other inputs
- C. Favourable taxation arrangements for housing investors
- D. An increase in the failure or closure of a number housing developers (e.g. house builders)

Question 10

In 2014, Australia Post is on the verge of major structural change that will see a reduction in the number of mail deliveries and potentially a change in ownership (i.e. privatisation). Which of the following is incorrect in relation to the price elasticity of demand or supply of standard letter services produced by Australia Post?

- A. The price elasticity of demand has fallen as a result of advances in technology making a substitute (email) more readily available
- B. The price elasticity of demand has risen because standard letters are considered less of a necessity by Australian consumers
- C. The price elasticity of supply is likely to be high because of spare capacity at postal depots and on postal trucks
- D. The fact that stamps are relatively cheap will, ceteris paribus, lead to a relatively low price elasticity of demand

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Instructions for section B

Answer **all** questions in **pen** in the spaces provided.

Question 1

SPC Ardmona processes approximately 150,000 tonnes of fruit and tomatoes at various production facilities in the Goulburn Valley region. In January 2014, the Federal Government rejected a \$25 million assistance request from SPC Ardmona, raising the prospect of thousands of job losses in the regional Victorian city of Shepparton. SPC sought help from the Victorian and Federal governments to restructure its operations, arguing the high Australian dollar and cheap imports had made it hard to compete. However, the Prime Minister argued that SPC Ardmona's parent company, Coca Cola Amatil, had the resources to carry out the restructure without government funding. In addition, he urged SPC to renegotiate its workplace agreement, saying some aspects are "extremely generous" and need to be changed.

Explain how the government,	one other	economic factor,	influences	the decision
making of businesses like SPC				4 marks

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Cx.

b. In the tomato processing industry, SPC competes against companies like Unilever, Campbells and Heinz. Assuming that SPC Ardmona decided to cease operations in Australia, explain how this is likely to affect each of the following:

i. the market structure in the tomato processing industry

6 marks

ii. the prices of canned tomatoes
Cx.
iii, the price electricity of domand for Uning connect tory
iii. the price elasticity of demand for Heinz canned tomatoes

c. On one fully labelled diagram, draw two supply curves, one for canned tomatoes and one for fresh tomatoes and then explain why canned tomatoes are likely to have a higher price elasticity of supply relative to fresh tomatoes. 4 marks

d. Explain how the closure of SPC Ardmona might impact on both the market for fresh tomatoes and the allocation of resources. 4 marks

e. Assume that the government decides to provide SPC Ardmona with a smaller subsidy. The diagram below illustrates this impact on the market for canned tomatoes and other SPC products. Explain how the equilibrium market price adjusts from E1 to E2. 2 marks



Question 2

The Federal Government is increasingly concerned about Australia's 'harmful binge drinking culture', especially among young people. It has developed the National Binge Drinking Strategy (NBDS) that 'focuses on raising awareness of the short and long-term impacts of risky drinking among young people, and over time, contributing to the development of a more responsible drinking culture within Australian society'. [Source: http://www.alcohol.gov.au] The strategy has included the introduction of the alcopops tax and is increasingly being supported by state government efforts to introduce laws that further help to reallocate the nation's resources away from the production and consumption of alcohol. This includes measures being pushed through NSW Parliament in early 2014 that include mandatory sentencing for 'one-punch assaults' and new licensing laws that make it illegal for venues to serve alcohol past 3am. If successful, these measures will help to address a market failure that is resulting in an inefficient allocation of Australia's resources.

a. Briefly discuss what is meant by an inefficient allocation of resources. 2 marks

 De On
Explain how an alcopops tax is designed to achieve a more efficient allocation of resources. Draw a demand and supply diagram below to support your explanation. 4 marks
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d. Identify and briefly discuss one other market failure in the Australian economy.

2 marks

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VCE ECONOMICS ASSESSMENT TASK UNIT 3 2014

Outcome 1

Multiple choice answer sheet

Student

Name

Answer the 10 questions by shading only one box (either A, B, C, or D) in each of the 10 rows below:

			(
1	Α	В	С	D	
2	Α	В	С	D	
3	Α	В	С	D	O.
4	Α	В	С	D	
5	Α	В	С	D	
6	Α	В	С	D	
7	Α	В	С	D]
8	Α	В	С	D	
9	Α	В	С	D	
10	Α	В	С	D]



PRELIMINARY INFORMATION GIVEN IN ADVANCE OF CPAP ECONOMICS UNIT 3 ASSESSMENT TASK OUTCOME 1 (2014)

Part B of Outcome 1 is comprised of three structured questions worth a total of 30 marks. The preambles to each question are contained below. You should endeavour to anticipate possible questions in light of:

- (a) the information contained in each preamble; and
- (b) the key knowledge and skills for Outcome 1 (reprinted on the back of this sheet).

Question 1 (20 marks)

SPC Ardmona processes approximately 150,000 tonnes of fruit and tomatoes at various production facilities in the Goulburn Valley region. In January 2014, the Federal Government rejected a \$25 million assistance request from SPC Ardmona, raising the prospect of thousands of job losses in the regional Victorian city of Shepparton. SPC sought help from the Victorian and Federal governments to restructure its operations, arguing the high Australian dollar and cheap imports had made it hard to compete. However, the Prime Minister argued that SPC Ardmona's parent company, Coca Cola Amatil, had the resources to carry out the restructure without government funding. In addition, he urged SPC to renegotiate its workplace agreement, saying some aspects are "extremely generous" and need to be changed.

Question 2 (10 marks)

The Federal Government is increasingly concerned about Australia's 'harmful binge drinking culture', especially among young people. It has developed the National Binge Drinking Strategy (NBDS) that 'focuses on raising awareness of the short and long-term impacts of risky drinking among young people, and over time, contributing to the development of a more responsible drinking culture within Australian society'. [Source: http://www.alcohol.gov.au] The strategy has included the introduction of the alcopops tax and is increasingly being supported by state government efforts to introduce laws that further help to reallocate the nation's resources away from the production and consumption of alcohol. This includes measures being pushed through NSW Parliament in early 2014 that include mandatory sentencing for 'one-punch assaults' and new licensing laws that make it illegal for venues to serve alcohol past 3am. If successful, these measures will help to address a market failure that is resulting in an inefficient allocation of Australia's resources.



VCE ECONOMICS 2014 Unit 3 Outcome 1: Key knowledge and skills

Outcome 1

On completion of this unit the student should be able to explain how markets operate to allocate scarce resources, and discuss the extent to which markets operate freely in Australia.

To achieve this outcome the student will draw on key knowledge and key skills outlined in Area of Study 1.

Key knowledge

- key economic concepts including relative scarcity, opportunity cost and the efficient allocation of resources;
- economic factors influencing decision making of households, businesses, government and other relevant groups;
- the law of demand and the demand curve;
- microeconomic demand side factors that influence prices and quantity of goods and services in individual markets, including disposable income, the price of substitutes and complements, preferences and tastes, interest rates, population growth and demographic change, and consumer sentiment;
- the law of supply and the supply curve;
- microeconomic supply side factors that influence prices and quantity of goods and services in individual markets, including the prices of the factors of production, technological change, productivity growth and climatic conditions;
- effects of changes in supply and demand on equilibrium prices and quantity traded;
- the role of relative prices in the allocation of resources;
- the meaning and significance of price elasticity of supply and demand;
- factors affecting price elasticity of demand, including the degree of necessity, availability of
- substitutes and proportion of income;
- factors affecting price elasticity of supply, including spare capacity, production period and durability of goods;
- market structure including perfect competition, monopolistic competition, oligopoly and monopoly, and its impact on prices, the efficiency of resource allocation and living standards;
- sources of market failure including market power, public goods, externalities and asymmetric information;
- the reasons for government intervention in the market, including addressing market failure, redistribution of income and stabilisation of the level of economic activity.

Key skills

These skills include the ability to

- use a range of sources to acquire economic information;
- define key economic concepts and use them appropriately;
- construct graphs and tables to represent economic data;
- interpret and analyse statistical and graphical data;
- use economic theory and evidence to explain how resources are allocated in a market system;
- evaluate the competitiveness of markets in the Australian economy;
- discuss the extent to which markets operate freely in Australia.

COMMERCE PRESENTATIONS AND PUBLICATIONS



VCE ECONOMICS ASSESSMENT TASK UNIT 3 2014

Outcome 1

(40% of Unit 3)

Explain how markets operate to allocate scarce resources, and discuss the extent to which markets operate freely in Australia.

Reading time: 10 minutes Writing time: 60 minutes

SUGGESTED ANSWERS AND MARKING SCHEME

		Č					
MC Answers							
1	Α	В	C	D			
2	Α	B	C	D	. .		
3	Α	В	С	D			
4	Α	В	С	D	O_{\star}		
5	Α	В	С	D			
6	A	В	C	D	-		
7	A	В	С	D			
8	A	B	С	D			
9	Α	В	С	D]		
10	Α	В	С	D			

Note to teachers and students

All completed assessment material (including question booklets) should be collected by the teacher and returned to students upon the completion of Unit 3.

CPAP Assessment Task Economics Unit 3 Outcome 1 2014 Multiple Choice answers and explanations

Question 1

During the middle of January 2014, southern Victoria experienced a heat wave that affected some agricultural producers. In the Yarra Valley, wine grape growers reported damage to approximately 5% of crops. This is likely to cause which of the following?

- A. An increase in supply and a lower the price of wine
- B. A decrease in supply and a higher price of wine
- C. An increase in demand and a higher price of wine
- D. A decrease in demand and a lower price of wine

Damage to grapes will reduce the supply of wine (i.e. shift the supply curve to the left) and exert upward pressure on prices. While demand for wine will be affected, it will decrease as a result of a higher price (i.e. a contraction along the demand curve).

Question 2

A mining company operating out of the small town adjacent to the Goulburn River reported a significant gold discovery in early 2014. This is <u>unlikely</u> to cause which of the following?

- A. A higher price for gold
- B. A higher share price for the Nagambie Mining Company
- C. Resources to shift into the Nagambie region
- D. A rise in the relative price of silver

The gold discovery will (and did) cause the share price for Nagambie Mining to rise as investors were anticipating higher profits, dividends and capital growth in Nagambie Mining shares. It will also result in resources such as labour and capital to flow into the region in search of more gold discoveries. However, the discovery (ceteris paribus) will increase the supply of gold on markets and *reduce the price of gold* (think of the supply curve shifting to the right). A lower price of gold will also mean that the relative price of silver must now be higher (i.e. any given price of silver will now be higher when compared to the price of gold).

Question 3 Which of the following is the best example of a market failure associated with the large size of Australian banks?

- A. Large banks lead to economies of large scale production
- B. Large banks make big profits
- C. Large banks create a moral hazard problem as banks can become too big to fail
- D. Large banks tend to substitute out of labour and into capital

Large banks do indeed lead to economies of scale benefits that can reduce average costs and potentially benefit consumers – therefore this is not a market failure. Similarly, large Australian banks do make big profits, but the size of profits, in isolation, is irrelevant in the context of market failures. Only if the banks make super-normal (or abnormal) profits might it be considered a market failure. This is better gauged by the profits as a percentage of investment (rate of return). With respect to D, banks do indeed take advantage of technology and substitute out of labour, which creates redundancies. However, this is not in itself an example of a market failure. C is the best response because a major drawback of tolerating larger banks is the moral hazard (a form of market failure) it

creates. Banks become too big to fail and bankers are therefore more likely to take on very risky investments (e.g. lend to high risk projects) knowing that the federal government will bail them out if they do get into financial difficulty. This was one of the problems facing governments around the world during the GFC. The fact that they become so big leaves the government with little choice given that a reluctance to bail out a large bank is likely to result in a financial crisis and damage to the broader economy.

Question 4

The construction of a port facility in Hastings to complement Melbourne Ports will result in two port facilities able to process the cartage of goods into and out of Victoria. This is likely to result in all of the following except:

- A. Downward pressure on the price of imported consumer products
- B. An increased demand for labour in the Hastings region
- C. A fall in the demand for labour on Melbourne Ports
- D. An increase in the cost to transport goods to interstate or overseas destinations

The addition of the Hastings port will increase Victorian port capacity and exert downward pressure on the price of imported consumer products. [This is equivalent to shifting the supply curve to the right for shipping services.] The Hastings facility will also create employment opportunities for port workers and therefore increase the demand for labour. In contrast, it will reduce the demand for labour in the Melbourne Port because more container traffic will travel through the Hastings port and by-pass Melbourne. Overall, the addition of port capacity will actually reduce shipping costs (not increase them) and make it cheaper to transport goods by sea.

Question 5

Which of the following recent examples of business activity does not represent a market failure?

- A. The merger of two small supermarkets in competition with Coles and Woolworths
- B. A company producing ball and roller bearings entering into two separate agreements with competitors to increase the price of components used in vehicles and machinery
- C. Coles and Woolworths preventing rival supermarkets from securing leases in a large shopping centre complexes.
- D. Mitsubishi Electric engaging in resale price maintenance by attempting to induce one of its dealers not to sell its air conditioning products at prices below a minimum specified price

A merger in itself is not an example of a market failure. It is only considered a market failure if it leads to a substantial lessening of competition in the market place. In the case of a merger between two small supermarkets, it will actually increase competition in the supermarket industry and pose a greater threat to the market dominance to the duopolists – Coles and Woolies. All other examples of recent business conduct are indeed examples of market failure (either asymmetric information and/or abuse of market power)

Question 6

Bill Mitchell, a professor of Economics , argues that the Australian government should buy back Qantas in order to compete with other government-owned international airlines which see their investment in terms of achieving a broader economic purpose, such as encouraging tourism. If he is correct, and the federal government did purchase Qantas for the benefit of the domestic tourism industry, this would:

- A. Immediately create a monopoly in the airline market
- B. Represent an example of positive externality in consumption
- C. Lead to lower prices of tourism services
- D. Cause a reallocation of resources away from tourism

If the professor is correct, it means that airline consumers are more likely to purchase Qantas tickets and visit (or remain in) Australia when making travel plans. The purchase of these tickets (i.e. the consumption of the service) will therefore have spin-off benefits for Australian tourism operators. Accordingly, this is an example of a positive externality in consumption. In relation to the other options, the government purchasing Qantas would result in no immediate change to the market structure in the domestic airline industry, with the effective duopoly of Qantas and Virgin remaining in place. With a higher demand for local tourism it will exert upward pressure on prices (not lower prices of tourism services) and this will cause a reallocation of resources into (not out of) the tourism sector.

Question 7

The Victorian government has been under pressure to introduce stricter laws to prevent the increasing incidence of accidents involving jet-skis and swimmers in Victorian coastal regions. The introduction of tighter regulations for jet-ski use is likely to result in all of the following, except:

- A. A redistribution of income away from jet-ski producers
- B. Lower price of jet skis and fewer resources devoted to jet-ski production
- C. A shift to the left of the demand curve for jet-skis and a contraction of supply
- D. A decrease in the price of non-motorised water craft

Tighter regulations will be designed to reduce the use of jet-skis in areas frequented by swimmers. These regulations, will to some extent, result in a fall in the demand for jet-skis which leads to a lower market price (as the demand curve shifts to the left), causing production volumes to fall (i.e. a contraction of supply – left along the D curve), decreasing the incomes of producers who will then devote fewer resources to the production of jet skis. These factors make A, B and C all true statements. The best response is D because the demand for jet-ski substitutes (e.g. other nonmotorised water craft) should increase, causing the price to rise (not fall).

Question 8

Which of the following microeconomic demand/supply side factors is unlikely to be a factor contributing to the poor growth in sales of personal computers (PCs) over recent years?

- A. Changing consumer preferences towards digital tablets (such as ipads)
- B. Lower opportunity costs associated with the production of PCs
- C. Relatively slower growth in disposable incomes
- D. Technological advances improving the quality of PC substitutes

Changing consumer preferences and technological advances have been prime factors driving the substitution away from PCs towards tablets and therefore contributing to the relatively poor growth in the sales of PCs. In addition, poor sales are attributable to the below average rate of growth in the

economy, rising unemployment and the flow on effects for disposable incomes. B is the best option because the growth in tablet demand has made it relatively more costly (in opportunity cost terms) for producers to continue devoting resources to the production of PCs. Producers will therefore demand a higher rate of return on any continued 'investment' in PC production. In other words, the opportunity cost of not reallocating resources away from PC production and towards tablet production will now be higher than before (not lower).

Question 9

The 10th Annual Demographia International Housing Affordability Survey, released in January 2014, ranks Australia as having one of the most expensive housing markets in the world. Which of the following is not likely to be a supply factor contributing to the relatively high price for Australian housing?

- A. Government regulations that limit the amount of land that is available for housing developments
- B. The relatively high cost of labour and other inputs
- C. Favourable taxation arrangements for housing investors
- D. An increase in the failure or closure of a number housing developers (e.g. house builders)

A, B and D all contribute to the relatively high prices for Australian houses as they result in a shift to the left of the supply curve in housing markets, which works to raise prices. More favourable taxation arrangements is another factor contributing to the growth in house prices. However, this is a microeconomic demand side factor (not supply) as it results in an increase in the demand for houses by property investors (e.g. a mum and dad investor that can negatively gear a mortgage loan and purchase a house instead of investing their money in another asset, such as shares or bonds).

Question 10

In 2014, Australia Post is on the verge of major structural change that will see a reduction in the number of mail deliveries and potentially a change in ownership (i.e. privatisation). Which of the following is incorrect in relation to the price elasticity of demand or supply of standard letter services produced by Australia Post?

- A. The price elasticity of demand has fallen as a result of advances in technology making a substitute (email) more readily available
- B. The price elasticity of demand has risen because standard letters are considered less of a necessity by Australian consumers
- C. The price elasticity of supply is likely to be high because of spare capacity at postal depots and on postal trucks
- D. The fact that stamps are relatively cheap will, ceteris paribus, lead to a relatively low price elasticity of demand

The demand for standard letter services offered by Australia Post has been falling due to the prevalence of email as a means of communicating across distances. This fall in demand will also be accompanied by an increase in the PED for postal services given that a substitute is more readily available (and at a fraction of the cost). This makes A the best response as it incorrectly refers to the PED falling. All other statements are true and are examples of factors affecting the PED or the PES that are listed in the Study Design.

Answers to Part B: Written responses

Question 1

SPC Ardmona processes approximately 150,000 tonnes of fruit and tomatoes at various production facilities in the Goulburn Valley region. In January 2014, the Federal Government rejected a \$25 million assistance request from SPC Ardmona, raising the prospect of thousands of job losses in the regional Victorian city of Shepparton. SPC sought help from the Victorian and Federal governments to restructure its operations, arguing the high Australian dollar and cheap imports had made it hard to compete. However, the Prime Minister argued that SPC Ardmona's parent company, Coca Cola Amatil, had the resources to carry out the restructure without government funding. In addition, he urged SPC to renegotiate its workplace agreement, saying some aspects are "extremely generous" and need to be changed.

- a. Explain how the government, and one other economic factor, influences the decision making of businesses like SPC. 4 marks
 - 1 mark for a superficial explanation
 - 2nd mark for detailed explanation
 - Repeat for second factor
 - Half mark for identifying second factor in isolation (without explanation)

Sample answer: SPC decision making is affected by numerous economic factors, including governments and employee representative bodies, such as unions. In the case of the State and Federal governments, they will influence the decision making at SPC via the implementation of various taxes, laws, regulations, etc. In this case, their unwillingness to provide subsidy support (or 'co-investment' funds) will impact on SPC's decision about its continuing presence in the Australian market. It is possible that the failure by governments to provide support will result in SPC's parent company (Coca Cola Amatil) pulling out of the fruit processing industry altogether.

Another factor affecting SPC decision making is the influence of unions who may be resisting any changes to wages and conditions that might be necessary to combat the increasingly competitive global market place. For example, to the extent that wages and conditions of SPC workers is 'extremely generous', this increases production costs and reduces SPC's competitiveness in a global market place that is increasingly dominated by producers from low wage developing countries. This potentially makes it more likely that SPC/Coca Cola Amatil will cease production in Australia and relocate offshore.

Note: students can also refer to the impact of the high dollar or cheaper imports (or any other factor) so long they link the factor to the 'decision making of the business' (a key knowledge point in the Study Design). For example, it would not be enough to say that the higher dollar has decreased the price of imports and reduced production volumes. Instead, students need to refer to the high dollar perhaps causing SPC management to think about reducing prices, re-negotiating wages with unions, asking for government support, etc.

b. In the tomato processing industry, SPC competes against companies like Unilever, Campbells and Heinz. Assuming that SPC Ardmona decided to cease operations in Australia, explain how this is likely to affect each of the following:

6 marks

- iv. the market structure in the tomato processing industry
- v. the prices of canned tomatoes
- vi. the price elasticity of demand for Heinz canned tomatoes
- 1 mark for correctly identifying that the market structure becomes more concentrated (or less competitive)
- 2nd mark for an accurate explanation why this is the case
- 0.5 mark for a correctly identifying that prices of canned tomatoes are likely to rise
- 1.5 marks for accurate explanation of why prices rise
- 0.5 mark for a correctly identifying that the PED falls
- 1.5 marks for accurate explanation of why the PED falls (students need to demonstrate an understanding of the PED)

Sample answer: The market structure in the tomato processing industry is likely to become more concentrated (i.e. less competitive) with a smaller number of firms sharing the market for canned tomatoes. With fewer firms competing in the canned tomato market, the industry is becoming more oligopolistic.

The price of canned tomatoes is likely to rise. This is because competition tends to exert downward pressure on prices, as firms seek to reduce prices in order to attract customers. Accordingly, a more concentrated market structure, with less competition, the opposite will occur over time and prices will rise. [Prices will also rise because the supply of tomatoes will fall once a major supplier exits the market].

The price elasticity of demand (PED) for **Heinz** canned tomatoes will fall as consumer demand for Heinz tomatoes will be less responsive to a change in the price. In other words, the percentage change in the quantity demanded of canned tomatoes will be lower for any given change in price. This occurs because there has been a reduction in the availability of a major substitute for Heinz tomatoes.

- c. On one fully labelled diagram, draw two supply curves, one for canned tomatoes and one for fresh tomatoes and then explain why canned tomatoes are likely to have a higher price elasticity of supply relative to fresh tomatoes. 4 marks
 - 2 marks for correct curves and correct labelling of the diagram
 - 1 mark for correct curves but more than one mistake with the labelling of the diagram
 1.5 marks for correct curves but one mistake with the labelling of the diagram
 - 2 marks for accurate and detailed explanation.

Note: students should have been able to correctly label the diagram in light of questions 1(e) and 2(b)



Given that canned tomatoes are relatively non-perishable and can be stored for long periods, producers can easily stockpile supplies over time and respond quickly to changing market conditions. So when the price of canned tomatoes increases, producers can quickly respond by increasing supply to the market. Accordingly, the quantity supplied is highly responsive to price changes, reflecting a higher price elasticity of supply. In contrast, fresh tomatoes are more perishable and can only be stored for relatively shorter periods of time. So when the price of fresh tomatoes increases, producers cannot increase supply to the market as quickly as if the product was stored on shelves in a tin. For example, it may take some time for producers to respond to very high prices because they will need to plant seeds and wait approximately 90 days before tomatoes can be harvested.

d. Explain how the closure of SPC Ardmona might impact on both the market for fresh tomatoes and the allocation of resources. 4 marks

- 2 marks for accurate and logical explanation of the impact on prices and quantities
- 2 marks for accurate and logical explanation of the impact on the allocation of resources

Note: to achieve the full two marks for the impact on prices, students must refer to both impacts on demand –the reduced demand from SPC as well as the substitution from canned tomatoes to fresh tomatoes. However, the overall or net effect on prices and quantities is not required. If a student focuses solely on the substitution effect and argues that prices and quantities for fresh tomatoes will rise, they can still achieve the full two marks for the second part of the question (i.e. the impact on the allocation of resources).

Sample answer: The market for fresh tomatoes is likely to experience a decrease in demand because a major purchaser of tomatoes (SPC) will no longer be requiring supplies of fresh tomatoes as inputs. This is equivalent to shifting the demand curve for fresh tomatoes to the left, which results in a lower equilibrium price (and quantity). However, the higher price of a substitute for fresh tomatoes (i.e. canned tomatoes) will cause some consumers to substitute into fresh tomatoes, thereby increasing the demand for fresh tomatoes, helping to prevent prices and quantities from falling too much. [The net effect on the demand for fresh tomatoes will depend upon a number of factors, such as the type of tomato in question and the degree to which the price of canned tomatoes increases. However, it is likely that there will not be a one for one substitution into fresh tomatoes and we could reasonably expect the price and quantity of fresh tomatoes to fall.]

Given that SPC will no longer be in the market for fresh tomatoes from farmers, the lower demand and prices will encourage some farmers to reallocate their resources (e.g. labour, land and machinery) towards alternative productive pursuits. For example, Goulburn Valley farmers supplying SPC may decide to convert (part of) their farms into vineyards, growing wine grapes for the wine industry.

e. Assume that the government decides to provide SPC Ardmona with a smaller subsidy. The diagram below illustrates this impact on the market for canned tomatoes and other SPC products. Explain how the equilibrium market price adjusts from E1 to E2. 2 marks



- 1 mark for a superficial explanation
- 2 marks for a detailed explanation (e.g. referring to terms like expansion, contraction, surplus, excess supply, etc)

Sample answer: At the original price of P1, the market will be in excess supply (or surplus) as SPC will be willing to supply more canned tomatoes to the market (52 instead of S1). The surplus will then result in suppliers reducing prices in order to eliminate the surplus. As price falls towards P2, there is an expansion of demand as consumers are attracted by lower prices as well as a contraction of supply as producers are deterred by lower prices (and will tend to supply in other markets where prices are relatively higher). This continues until the surplus is eliminated and the price falls to P2 with the market resting at its new equilibrium (E2).

Question 2

The Federal Government is increasingly concerned about Australia's 'harmful binge drinking culture', especially among young people. It has developed the National Binge Drinking Strategy (NBDS) that 'focuses on raising awareness of the short and long-term impacts of risky drinking among young people, and over time, contributing to the development of a more responsible drinking culture within Australian society'. [Source: http://www.alcohol.gov.au] The strategy has included the introduction of the alcopops tax and is increasingly being supported by state government efforts to introduce laws that further help to reallocate the nation's resources away from the production and consumption of alcohol. This includes measures being pushed through NSW Parliament in early 2014 that include mandatory sentencing for 'one-punch assaults' and new licensing laws that make it illegal for venues to serve alcohol past 3am. If successful, these measures will help to address a market failure that is resulting in an inefficient allocation of Australia's resources.

a. Briefly discuss what is meant by an inefficient allocation of resources. 2 marks

- 1 mark for superficial discussion
- 2nd mark for an accurate discussion that refers to living standards or national welfare

Sample answer: An inefficient allocation of resources occurs when the nation's resources (such as labour and capital) are used across the economy in combinations and applications such that national living standards or welfare are not being maximised. If resources are inefficiently allocated, it means that it is possible to achieve a 'better' allocation of resources by moving resources away from one activity and towards another, such as away from the production and consumption of alcohol and towards some other less harmful activity.

- Explain how an alcopops tax is designed to achieve a more efficient allocation of resources. Complete the demand and supply diagram below to support your explanation.
 4 marks
 - 1 mark for a simple explanation that highlights that the tax reduces consumption of alcopops
 - 2 marks for a more detailed explanation that highlights how the tax might reduce the harmful effects of binge drinking (e.g. 'one-punch assaults)
 - 3 marks for a sophisticated explanation that highlights how the tax reduces the harmful effects of binge drinking <u>and</u> links this to a more efficient allocation of resources
 - 4th mark for correct use of diagram



The higher price that occurs as a result of the tax leads to reduced consumption of alcopops (contraction along the D curve) and reduced production (Q1 to Q2). This means that fewer resources will be allocated to the production of a harmful product like alcopops. **Sample answer:** The alcopops is designed to internalise the negative externality in consumption in the form of binge drinking and its associated ill effects. By taxing alcopops, it raises production costs and forces up the (relative) price of alcopops, encouraging consumers to substitute away from these products and (hopefully) towards less damaging substances. The tax should therefore lead to fewer resources (such as land and capital) being used in the production of alcopops (e.g. less sales from Q1 to Q2) and more resources. This occurs because there is no longer an over-allocation of resources are, therefore, more likely to be allocated in the production of goods and services that maximises national welfare.

c. Discuss how an alcopops tax might inadvertently lead to a re-allocation of resources towards the consumption of other harmful goods. In your answer, refer to relative prices. 2 marks

- 1 mark for superficial discussion
- 2nd mark for an accurate discussion that refers to living standards or national welfare

Sample answer: The tax on alcopops will increase the price of alcopops relative to all other products. Unfortunately, this means that there will be a fall in the relative price of (arguably) more harmful products, such as straight spirits and illicit drugs. This lower relative price encourages consumers to increase their demand for straight spirits and party drugs and is likely to result in more of the nation's resources (such as labour and capital) being allocated to the production of these harmful goods.

d. Identify and briefly discuss one other market failure in the Australian economy

2 marks

- 1 mark for identifying an alternative market failure
- 2nd mark for a brief discussion

Note: there are a number of market failures to choose from However, it is expected that students will select one of the other market failures listed in the study design (market power, public goods or asymmetric information).

Sample answer: Market failure in the form of **asymmetric information** occurs when one party to a transaction (e.g. a business) has more information about the characteristics of a product than another party (e.g. the consumer) and uses this information to engage in a transaction on the basis of misinformation. In the presence of full information the transaction will not have occurred.

Or

Market failure in the form of **public goods** occurs because an economy without government intervention is unlikely to allocate resources to the production of much needed goods like defence and national security because they have the public good characteristics of non-depletability (one person's consumption does not prevent another person from consuming the good) and non-excludability (it is not possible to exclude non-payers from enjoying the benefits of the good).

Or

Market failure in the form of abuse of **market power** occurs when one or more firms use their position of market dominance (e.g. a duopoly) to engage in anti-competitive behaviour that ultimately leads to higher prices for consumers and an under-allocation of resources to the production of that particular good or service. This will typically occur via the use of monopoly/duopoly power (e.g. cartel behaviour designed to avoid competition by two large businesses) or monopsony power (e.g. duopoly firms squeezing suppliers).

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