RIVER VALLEY HIGH SCHOOL
YEAR 6 Preliminary Examination II
in preparation for General Certificate of Education Advanced Level
Higher 2

ECONOMICS 9757/01

Paper 1 Case Study **12 September 2017**

2 hours 15 minutes

Additional Materials: Answer Paper

READ THESE INSTRUCTIONS FIRST

Write your index number and name on all the work you hand in.
Write in dark blue or black pen on both sides of the paper.
You may use a soft pencil for any diagrams, graphs or rough working.
Do not use staples, paper clips, highlighters, glue or correction fluid.

Answer **all** questions.
Start each case study on a new sheet of paper.

At the end of the examination, fasten your work securely together.
Your answers for each case study are to be handed in **separately.**

The number of marks is given in brackets [ ] at the end of each question or part question.

Answer **all** questions.

Question 1: The market for oil and electric cars

Table 1: Oil production and consumption (millions of barrels)

Region	**Consumption**		**Production**	
	2014	2015	2014	2015
North America	23421	23753	18833	19733
South & Central America	7171	7139	7659	7761
Europe & Eurasia	18287	18450	17206	17479
Middle East	9180	9300	28515	30065
Asia Pacific	31195	32494	8307	8369
Total	89254	91136	80520	83407

Source: BP Statistical Review of World Energy

Extract 1: Are low oil prices here to stay?

Despite a recent upturn, the price of oil has slumped almost 50% since last summer following the longest-running decline for 20 years. US oil, and to a lesser extent Libyan oil returning to the market, has pushed up supply while a slowdown in the Chinese and EU economies have led to a poor outlook for the economy, causing oil prices to fall sharply.

This is precisely when the Organization of Petroleum Exporting Countries (OPEC), the cartel of major global oil producers, would normally step in to stabilise prices by cutting production. It has done so many times in the past, so often in fact that the market expects OPEC to intervene.

This time it hasn't. In a historic move at the end of last year, OPEC said not only that it would not cut production from its 30 million barrels a day quota, but had no intention of doing so even if oil fell to US$20 a barrel. And this was no empty threat. Despite opposition from Venezuela, OPEC leader Saudi Arabia refused to bail out its more vulnerable members. Many OPEC members need an oil price of US$100 or more to balance their budgets, but with an estimated US$900bn in government reserves, Saudi Arabia can afford to play the waiting game.

OPEC now supplies a little over 30% of the world's oil, down from almost 50% in the 1970s, partly due to US oil producers flooding the market. "Given this scenario, who should be expected to cut production to put a floor under prices?" OPEC argued last month. Equally, Saudi Arabia is not prepared to sacrifice more market share while its competitors, not least US oil producers, prosper. Safe in the knowledge that it can withstand very low oil prices for the best part of a decade, it would rather stand back and "let economics do the work".

Source: *BBC News*, 24 February 2015

Extract 2: Why the low oil price will not harm sales of electric cars

Crude oil makes up about 50% of the volume of modern cars. It is not only used to power vehicles, but can also be present in other areas of the vehicle such as in the enamel in paint to the synthetic rubber in the tyres. Increasingly, it is widely assumed that the tumbling oil prices will put a dent in the sales of electric cars, as internal combustion engines of conventional vehicles become increasingly cheap to run. But for buyers of electric cars, the relative cost of refuelling is in fact a minor consideration. The popularity of electric cars in the years to come will depend much more on improvements to their performance than on the oil price.

Buyers of electric cars are not looking for cheap motoring. Electric cars attract some buyers because they serve as a badge for people committed to environmental protection to demonstrate to the world that they care about the environment, no matter what the cost. Owners of electric cars are not looking for budget motoring but status as early adopters of cutting-edge technology. Low maintenance costs and the ability to recharge at home add to the appeal of electric cars.

In the long run, the cost of the vehicles themselves will be far more influential than the oil price when it comes to getting people to buy them. Already, where battery packs generally comprise an estimated 25% of total costs of electric car production, economies of scale reaped by companies like Tesla, an electric car maker, has led to a decline in the cost of producing battery packs for electric vehicles from about US$1000 per kWh in 2007 to about US$450 per kWh in 2014. The battery in a Nissan Leaf, the world's bestselling electric car, accounts for half the selling price. However, a breakthrough in battery chemistry or other technologies will be needed to bring costs down enough to make electric cars a realistic mass-market prospect. Yet, the challenges of overcoming a lack of infrastructure have yet to be resolved. If electric cars fail to catch on, low fuel prices will not be the reason.

Source: *The Economist*, 24 February 2015

Extract 3: Toyota follows Tesla in announcing technology sharing initiative

Japanese carmaker Toyota this week announced it will freely share all of its hydrogen fuel cell technology in order to spur development of low-emission cars around the world. Elon Musk's Tesla Motors, took a similar step in making its patents available to other carmakers late last year. Both firms are trying to avoid a total collapse of the newly-formed electric car market. The first generation low-emission vehicles will be critical, requiring a concerted effort and unconventional collaboration between automakers, government regulators, academia and energy providers.

Source: *The Guardian*, 8 January 2015

Extract 4: China's electric car boom - Should Tesla Motors worry?

During the last four months of 2014, China's electric vehicle sales skyrocketed. Analysts attributed the jump in sales to the elimination of the vehicle tax on Chinese electric vehicles. When China's auto market started to slow in 2008, together with the rest of the world, the country sought to stimulate automotive sales and encourage its citizens to buy cleaner cars by cutting taxes on energy-efficient gasoline engines. In 2008, the central government cut taxes on these small cars to 5% from 10%. That was the year China became the largest auto market in the world.

It's still far from clear what factors are driving China's recent electric vehicle boom and why Tesla was left out. Another possibility is that China's policies to promote electric vehicles have finally reached a tipping point. For instance, to deal with traffic congestion in major Chinese cities, many municipal governments, including Beijing, have limited the number of new vehicle registrations. In Beijing, electric vehicles are exempt from this quota system. The central government has also instituted a new set of policies to encourage competition among domestic manufacturers, such as providing subsidies to help smaller companies achieve large-scale production, which increases competitive pressure that was woefully lacking during the early years of China's electric vehicle program. Perhaps locally produced vehicles have finally reached a quality threshold that make them attractive to Chinese buyers.

Whatever the reason, just as China's electric vehicle market is taking off, Tesla is facing new competitive challenges at home and abroad. Traditional automakers like BMW, Volkswagen and General Motors are developing electric vehicles that are faster, cheaper, and boast better range than before. In fact, in October 2014, Volkswagen's CEO announced the company was developing more than 20 types of electric vehicles for the Chinese market. Then there is also the prospect of competition from newcomers like tech giant Apple which is hiring away Tesla's engineers with high salaries and is rumoured to be developing its own electric car. At the same time, Tesla is struggling to establish its brand in the world's key emerging market at what may be a critical inflection point. That is a huge problem.

Source: *Fortune*, 18 February 2015

Questions

(a) (i) Given the information contained in Table 1, identify the region that has had the greatest impact on world oil prices. Justify your answer. [3]

(ii) Besides the return of US oil and Libyan oil pushing up supply, explain one other reason that has contributed to the change in world oil prices. [2]

(b) What can you conclude from the evidence in Extract 1 about the likely value of the price elasticity of demand of oil? [2]

(c) Explain how OPEC can 'stabilise prices by cutting production' of oil. [3]

(d) Describe the likely market structure of China's electric car industry. [2]

(e) Discuss the factors affecting the choice of competition strategies in China's electric car industry. [8]

(f) Assess how the level of contestability of the electric car market in China impacts the ability of the firms in the industry to earn excess profits in the long run. [10]

[Total: 30]

Question 2: Problems in the European Union

Extract 5: Germany needs migrants as workforce dwindles, but must pay for them

German chancellor Angela Merkel has refused to put a cap on refugee numbers to a country where the population of around 82 million is set to shrink by 15 percent by 2050, according to government forecasts, with the workforce falling by 30 percent.

But many of the people currently arriving from countries such as Syria do not speak German and have few formal qualifications, so it will take time and investment to reduce their dependence on state welfare and get them into work. Each unemployed refugee costs taxpayers 12,000 euros a year, government figures show. Only 8 percent find work in the first year and most rely on the state for everything from food and housing to language courses. However, the costs will be offset within 5 to 10 years as more and more refugees start working and paying taxes, according to a study by the German Institute for Economic Research (DIW). The study forecast that rising migrant employment would gradually drive up German national output, with per capita income increasing by 0.5 percent by 2030. In addition, Germany, the largest economy in European Union, is expected to post a budget surplus this year and thus, has the means to accommodate the refugees.

To tackle a lack of formal qualifications or schooling, an extra 30,000 teachers are needed for refugees and their children to boost their chances in the labour market, according to the Cologne Institute for Economic Research.

Source: *Reuters*, 11 December 2015

Extract 6: Germany's record trade surplus is a bigger threat to European Union than Greece

This is the fifth consecutive year that Germany’s surplus has been above 6 percent of GDP and is surely more dangerous for European Union unity than anything going on in Greece. International Monetary Fund warned last year that the German surplus is destructive for the Economic and Monetary Union (EMU) as a whole. It is not in Germany’s own economic interest, and makes it even harder for the EMU crisis-states to claw their way out of trouble. Germany’s trade surplus was achieved by squeezing wages in the early years of EMU, undercutting the production cost in the South. Efforts by France, Spain, Italy, Portugal and Greece to claw back lost ground by doing the same at this late stage is precisely what pushed the EMU system as a whole into a deflationary slump from 2011 to 2014. The imbalance is also getting worse because the German regulatory and tax structure is geared in favour of output and exports, and against consumption.

Chronic surpluses are a way of stealing demand from elsewhere as they export unemployment to other countries. The sooner Germany abandons fiscal control and invests its own money in its own country for its own good, the better it will be for everybody.

Source: *Telegraph*, 5 May 2015

Extract 7: Don't Blame Germany for Greece's Debt Crisis

The prevailing narrative of the Greek crisis was that the Germans, the European Central Bank and the International Monetary Fund (IMF) had saddled too much debt on the Greeks and imposed counterproductive austerity policies on its government.

But the prevailing narrative overlooked a number of inconvenient truths. The first fact is that this is actually the third bailout in the last five years, and in 2012, the Greeks did benefit from a $117 billion write-off of debt owed to private banks. Second, much of the roughly $380 billion in remaining debt is owed to sovereign nations, meaning that the true creditors are German, Dutch, French and other European taxpayers. Third, while Greece did adopt painful fiscal austerity in recent years, it has been slow to carry out many of the needed structural reforms (such as privatizing state-owned enterprises) it agreed to under previous bailouts.

Furthermore, countries most adamant about being tough on the Greek were not the Germans, but poorer eastern European Union member nations where people are understandably frustrated at bailing out Greece. On the other side, however, German taxpayers will now pay a good chunk of a third Greek bailout.

Source: *Times*, 31 July 2015

Extract 8: Borders are closing and banks are in retreat. Is globalisation dead?

Globalisation was meant to be the unstoppable economic force bringing prosperity to all but that was before the financial crisis. For the past four years, international trade flows have increased more slowly than global GDP. Even though global trade flows are still expanding, crisis-scarred global banks are retreating from risky cross-border lending. There are also some sectors where globalisation is in substantial retreat, like the steel industry where trade flows have never returned to pre-2007 levels. From 2009, although governments have generally not resorted to blatant protectionist measures, quieter ways of giving domestic firms an unfair advantage, like tax rebates for exporters, have often been undertaken.

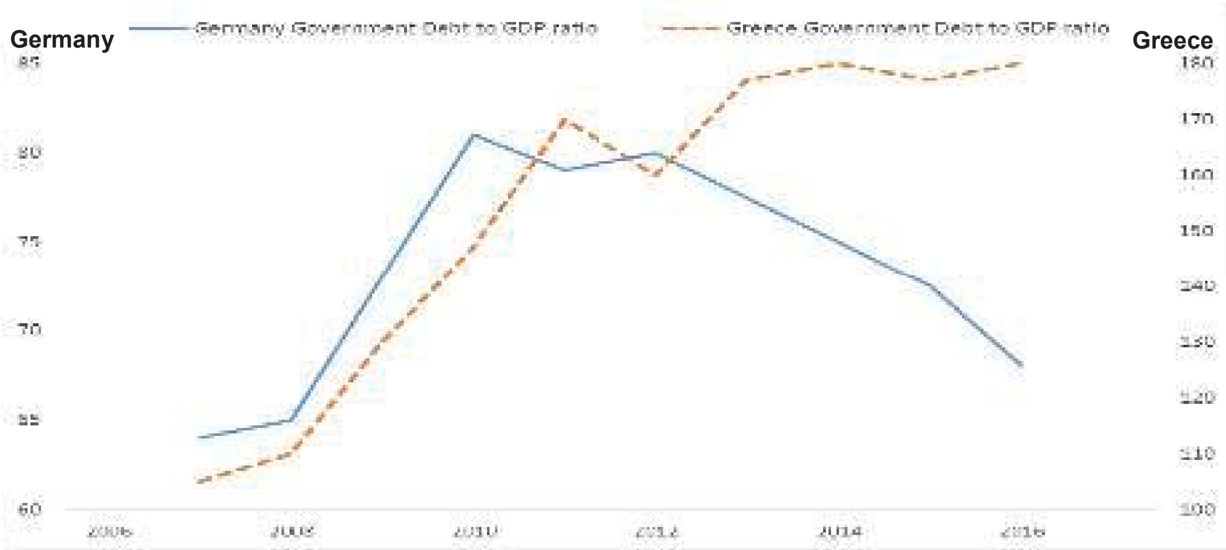
With globalisation, IMF has suggested that developing countries must be cautious about expanding their banking sectors and opening up their capital markets without tough regulation as inflows of speculative “hot money” can be dangerous. In addition, just as governments have not always been good at protecting their citizens from rapid inflows and outflows of foreign money, the failure to shield workers from foreign competition has also undermined faith in globalisation.

Globalisation has been an extraordinary force for lifting people out of poverty in the global economy of big, low-income countries like China and India. At the same time, it has been a boon for consumers in the west, who have feasted on imports of cut-price goods. But globalisation has also become a scapegoat for mass layoffs and stagnating wages among workers in some developed countries, as manufacturing jobs have been shifted offshore especially in the US. Even though US is a big winner from globalisation, but within that there are probably millions of losers as US does not have an effective social safety net for workers who lose their jobs. In the European Union, it has been migration flows that have caused controversy but there is little evidence that migration lowers domestic wages. However, with median wages stagnating, the free movement of goods or workers often gets the blame.

In the long term, globalisation will only be supported if there are better social safety nets at home and proper controls on cross-border capital flows to make trade more stable.

Source: *The Guardian*, 23 May 2015

Figure 1: Debt to GDP Ratio in Germany and Greece



Source: www.tradingeconomics.com accessed on 7 August 2017

Table 2: Germany's exports to trading partners in 2015

	% of total exports
United States	9.53
France	8.58
United Kingdom	7.43
Netherlands	6.61
China	5.98

Source: World Bank, accessed on 7 August 2017

Questions

(a) Compare the patterns of the government debt to GDP ratio in Greece and Germany between 2010 and 2015. [2]

(b) Extract 7 suggests that austerity measures were imposed on Greece to help reduce its debt. Explain the likely factors that may influence the effectiveness of these measures. [4]

(c) Extract 5 mentions that German chancellor Angela Merkel had refused to put a cap on refugee numbers into Germany. Using cost–benefit analysis, explain why this decision was made. [6]

(d) Assess whether the problems posed by Germany's trade surplus or Greece's debt will be more serious to the European Union. [8]

(e) With reference to the data, discuss whether the benefits associated with a less globalised world will outweigh the costs. [10]

[Total: 30]

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RIVER VALLEY HIGH SCHOOL
YEAR 6 Preliminary Examination II
in preparation for General Certificate of Education Advanced Level
Higher 2

ECONOMICS 9757/02

Paper 2: Essay Questions **15 September 2017**

2 hours 15 minutes

Additional Materials: Answer Paper

READ THESE INSTRUCTIONS FIRST

Write your index number and name on all the work you hand in.
Write in dark blue or black pen on both sides of the paper.
You may use a soft pencil for any diagrams, graphs or rough working.
Do not use staples, paper clips, highlighters, glue or correction fluid.

Answer **three** questions in total, of which **one** must be from Section A, **one** from Section B and **one** from **either** Section A or Section B.

Start **each** question on a **new** sheet of paper as the answers are to be **handed in separately.** Indicate clearly the **question number**.

The number of marks is given in brackets [ ] at the end of each question or part question.

Answer **three** questions in total.

Section A

One or two of your three chosen questions must be from this section.

1 Just a year ago, anticipation of higher profits prompted cattle farmers in the European Union (EU) to switch to produce dairy, a major ingredient of many dairy-based products such as cheese. At the same time, the EU abolished dairy production quotas while China, a key importer of EU products, saw slower economic growth.

The Economist, August 2015

Using economic analysis, discuss the impact these events are likely to have had on EU consumers and farmers. [25]

2 The cornerstone of the Singapore government's philosophy towards public housing lies in the Home Ownership Scheme introduced in 1964. It involves the provision of fairly generous and broad-based subsidies to ensure affordable and thus widespread home ownership.

Source: Lee Kuan Yew School of Public Policy, 2014

(a) Using appropriate examples, explain the key differences between a merit good and a public good. [10]

(b) Discuss the determinants of a government's decision to intervene in the market for public housing. [15]

3 'There is little difference between perfect and imperfect markets. They all have profit maximisation as an aim, they all are subject to competition and they all exploit resources to benefit the producers rather than the consumers.'

Discuss the validity of this statement. [25]

Section B

One or two of your three chosen questions must be from this section.

4 The prospect that the US Federal Reserve will decide to start raising interest rates has raised fears about the effects it will have on the economies of emerging markets.

(a) Explain how the decision to raise interest rates in the US might affect the economic agents in the domestic sector and its economy. [10]

(b) Discuss whether the fears are justified. [15]

5 Economists often distinguish small and open economies, such as Singapore, from large and less open ones.

(a) Explain how size and openness could account for why economies pursue policy mix to different extent. [10]

(b) Discuss how far the size and openness of Singapore have influenced her choice of policies to achieve price stability. [15]

6 Discuss how far government policies adopted in Singapore affect the economy's patterns of trade.

[25]

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RVHS 2017 Y6 H2 Prelim II CSQ1

Suggested Answers

ai. Given the information contained in Table 1, identify the region that had the greatest impact on world oil prices. Justify your answer. [3]

- **Middle East** [1]

- Total consumption in the Middle East had an overall percentage increase of 1.31 percent **(DD↑)**, which was outstripped by its total production which had an overall percentage increase of 5.44 percent **(SS↑)**

- It had the **greatest net increase** in oil production (i.e. increase in SS outweighs the increase in DD) compared to the rest of the regions given, causing world **oil prices to fall**.

[Award 1m for identifying the region; 2m for justifying the answer]

aii. Besides the return of US oil and Libyan oil pushing up supply, explain one other reason that has contributed to the change in world oil prices. [2]

- According to Extract 1, given the current slowdown in the Chinese and EU economies have led to a **poor outlook**, consumers are not optimistic about their employment prospects for the future. Thus, **expectations of lower future income** will lead to a fall in their current **demand for final goods and services** like cars. The **derived demand for oil**, which is a factor input in the production of cars, will thus fall.

b. What can you conclude from the evidence in Extract 1 about the likely value of the price elasticity of demand of oil? [2]

- The value of price elasticity of demand of oil is likely to be less than one (i.e. demand is price inelastic)

- Given the increase in supply of oil, according to Extract 1, due to the return of US oil and Libyan oil to the market, if demand for oil is price inelastic due to it **being a necessity since it (an industrial raw material and commodity) is a key factor input in the production of many goods and services**, there will be a sharp fall in prices.

c. Explain how OPEC can ‘stabilise prices by cutting production’ of oil. [3]

- OPEC, the cartel of major oil producers’ supplies over 30% of the world’s oil (i.e. market share) would fix production quotas among member states. Through the agreement, OPEC effectively acts as a monopoly for oil setting quantity to be at the profit-maximizing level of output where MC = MR.
- However, when price of oil fell, it threatened the survival of smaller cartel members/ “more vulnerable members”.
- If OPEC were to cut the production of oil, it will reduce the total market oil supply, propping up oil prices, achieving the effect of stabilising prices.

d. Describe the likely market structure of China’s electric car industry. [2]

- Oligopoly. There are a few large dominant firms (Volkswagen, BMW & General Motors). OR high barriers to entry (economies of scale, Extract 2) and branding (Extract 4).

e. Discuss the factors affecting the choice of competition strategies in China’s electric car industry. [8]

Firms within the electric car market can undertake competition strategies to increase the level of profits earned. The choice of competition strategies can be explained by factors such the type of market structure and government regulations.

Factor 1: Type of Market Structure

One of the factors affecting the choice of competition strategies in the electric car industry is the **type of market structure**. As explained earlier, the likely market structure of China’s electric car industry is an oligopoly. Due to the small number of dominant firms in the industry, the electric car makers are mutually interdependent where each oligopolistic electric car maker makes its decision based on the reactions of other electric car makers in the same industry. As such, this leads to rival consciousness as they have to be aware of the decisions of other firms so that it can respond accordingly.

The behavior undertaken by a non-collusive oligopoly can be explained using the kinked demand curve theory. The model seeks to explain how it is that, even where there is no collusion at all between the car firms, prices can nevertheless remain stable.

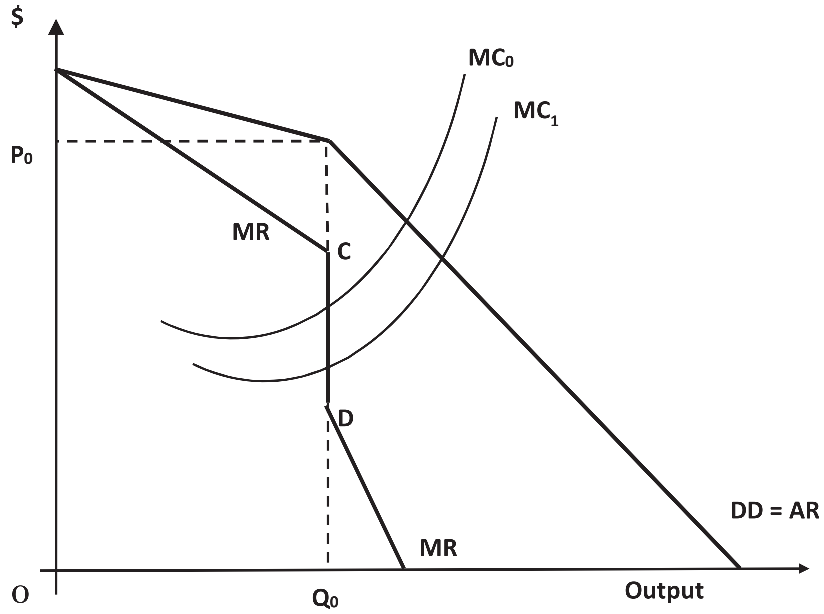

Figure: Profit-maximization of an Oligopolist

Based on the assumption that rival firms would match any price decrease it makes but not follow it in any price increase, the oligopolist faces a price elastic demand curve at prices above P_0 and an inelastic demand curve at prices below P_0. On this assumption, each oligopolist will face a demand curve that is kinked at the current price and output as seen in the above figure. As a result, a rise in price may lead to the electric car firm experiencing a more than proportionate fall in quantity demanded, while a price cut results in a less than proportionate increase in quantity demanded. In both cases, the electric car firm experiences a fall in total revenue. Since the profit maximising output level is where MR = MC, any change in MC, for example from MC_0 to MC_1, intersects MR at quantity OQ_0 and price OP_0. This results in price rigidity, where the price remains unchanged over a wide range of costs. Hence, the type of market structure is one important factor that affects the choice of competition strategies.

Due to the feature of mutual interdependency in this market structure, electric car firms avoid any unnecessary price changes. Instead, they choose to compete using non-price competition, otherwise known as product differentiation, to increase demand and make demand for its electric cars more price inelastic. As seen in Extract 4, there is evidence of car firms exhibiting strategic behavior (i.e. actions taken by firms which are intended to influence the market environment in which they compete) - "traditional car makers like BMW, Volkswagen and General Motors are developing electric vehicles that are faster, cheaper and boast better range than before," showing how a firm's research & development and marketing strategies are influenced by what its rivals are doing, in order to maintain or increase profits in the long run. Successful product differentiation increase demand for the firm's electric cars directly, and make demand for its electric cars more price inelastic, allowing firms to charge higher prices and earn higher profit.

<u>**Factor 2: Changes in government policies**</u>

Lastly, **changes in government policies** could also affect the choice of competition strategies. As seen in Extract 4, the central government has also "instituted a new set of policies to encourage competition among domestic manufacturers." Government policies favouring competition such as "subsidies to *help smaller companies achieve large-scale* production" has helped to increase the level of competition within the industry. Prior to the new set of government policies, the established large electric car firm is able to sell its output at a much lower price which potential new firms are unable to match. This deters new firms from entering the industry as they do not have the customer base to warrant a high output level to experience the economies of scale enjoyed by an established large firm, so entry is blocked. With government intervention, small firms can now compete with the larger firms and remain in the industry. Such policies may force existing competitors to engage in further product differentiation to maintain their market share, and the evidence of this can be seen in Extract 4 where "locally produced vehicles finally reached a quality threshold", and "traditional automakers… developing electric vehicles.. faster, cheaper, and boast better range than before."

Evaluation (any one):

- According to Extract 2, low oil prices will not harm sales of electric cars. This information corroborates with the fact that electric car firms avoid any unnecessary price changes. The low cost of using a conventional car would not lead to a huge substitution effect (i.e. consumers switching over to conventional cars), as owners of electric cars are not looking for "budget monitoring but status as early adopters of cutting-edge technology." Hence, electric car firms are more likely to engage in product differentiation so that if they succeed in innovating, demand for their electric cars would rise and become more price inelastic, resulting in higher profits.

Level of Response Marking Scheme		
L2	A <u>developed</u> explanation on how the market structure affects the choice of competition strategies, linking to price rigidity and dominant mode of competition being non-price competition AND Any other point that affects the choice of competition strategies	**4-6**
L1	An <u>undeveloped</u> explanation on how the market structure affects the choice of competition strategies, linking to price rigidity and dominant mode of competition being non-price competition **AND** Any other point that affects the choice of competition strategies **OR** Other undeveloped points that affects the choice of competition strategies	**1-3**
E	For an evaluative judgement with substantiation. (e.g. on the relative importance of the factors)	**1-2**

f. Assess how the level of contestability of the electric car market in China impacts the ability of the firms in the industry to earn excess profits in the long run. [10]

Introduction

- A contestable market is an economic concept that refers to a market in which there are a only a few firms that, because of the threat of new entrants, behave in a competitive manner.

Thesis: The level of contestability will have a negative impact on the ability of firms in the industry to earn excess profits.

- The **leveling of access to technology** in the electric car market has increased the level of contestability, negatively impacting the ability of firms to maintain supernormal profits. The level of access to technology affects the ability of potential entrants to compete with incumbent firms.
- At the same time, **government intervention** can reduce the impact of **sunk costs** through subsidies. With a fall in the level of sunk costs, it would be less costly for firms to enter and compete with the incumbent firms.
- **Extract 4:** Tesla is facing new competitive challenges, with traditional automakers as well as newcomers like Apple quickly entering the industry to compete. China subsidises automakers to achieve economies of scale in production.
- Tesla has released several patents pertaining to the technology of electric vehicles, increasing the level of access to technology by potential entrants.
- **Effect on profits**: Increase in the level of access to technology can reduce set up costs, increase demand for the industry, making it easier for rival firms to contest the market.
- When a firm in the industry makes supernormal profits, there is an incentive for rival firms to enter the industry to compete for a share of the market and the profits.
- This leads to a fall in the profitability of the incumbent firm.

Anti-thesis: The level of contestability will have a positive impact on the ability of firms in the industry to earn excess profits.

- There exists **high levels of sunk costs** and **significant barriers to entry** in the industry for electric car markets in China.
- **Extract 2:** Consumers are brand conscious, look out for status as early adopters of technology. Significant EOS in producing car batteries.
- The level of sunk costs in the electric car market is likely to be high, leading to lower contestability. A potential entrant would need to obtain factories and complex machinery for the mass production of electric cars (car batteries), which is a large investment. The brand loyalty of consumers may also be significant as traditional automakers such as BMW, Volkswagen and General Motors have well-established brand names that have lasted decades.
- **Effect on profits:** The level of sunk costs of the firms in the industry affects the ability of potential entrants to enter and exit the industry to compete with incumbent firms. A high level of brand loyalty amongst consumers in the industry would lower the level of contestability as consumers would not be likely to switch to consuming products from potential rival firms.
- Both factors would reduce the likelihood of potential entrants entering the market to contest the profits of the incumbents.
- This leads to the incumbent firm having a higher ability to maintain the level of supernormal profits earned.

Evaluation: Other factors

- **Increase in collaboration:** The industry is likely to see an increase in level of collaboration in the long run as both Toyota and Tesla call for greater investment into R&D, increasing the level of access to technology for all firms and increasing contestability.
- **Government intervention:** The Chinese government has also implemented policies to encourage competition. This can take the form of subsidies for new firms or lowering of tariffs for car imports.
-

Level of Response Marking Scheme		
High L2	A **balanced and clearly developed** explanation and discussion of impact of contestability on the level of long run profits of firms in the electric car market in China.	7
Low L2	A **balanced and mostly developed** explanation and discussion of the impact of contestability on the level of long run profits of firms in the electric car market in China.	5-6
High L1	**Unbalanced or undeveloped** explanation of the impact of contestability on the level of long run profits of firms in the electric car market in China.	3-4
Low L1	Smattering of valid points	1-2

Evaluative Comment (1 – 3 marks)

An evaluative conclusion with substantiation.

E3	Builds on an appropriate analysis to evaluate critically to arrive at a well-reasoned judgment and decision	3
E2	Some attempt of evaluation or a conclusion that answers the question but doesn't explain the judgement or base it on analysis	2
E1	Mainly unsupported evaluative statement	1

2017 RVHS H2 Prelims II
Question 2 Problems in the European Union (suggested answers)

(a) Compare the patterns of the government debt to GDP ratio in Greece and Germany between 2010 and 2015. [2]

Government debt to GDP ratio in Greece increased while it decreased in Germany. [1]

Government debt in Greece is consistently more than 100% of GDP while that of Germany is less than 100% of GDP. [1]

(b) Extract 7 suggests that austerity measures were imposed on Greece to help reduce its debt. Explain the likely factors that may influence the effectiveness of these measures. [4]

Debt is incurred when the government borrows to fund a budget deficit. Austerity measures aim to increase tax revenue while decreasing government spending. The effectiveness of austerity measures imposed on Greece to reduce its debt is thus dependent on its ability to increase tax revenue and decrease government spending.

1. Consumers and investors' confidence in the Greek economy
If Greece succeeds in decreasing its debt, consumers and investors' confidence might be raised thereby increasing consumption (C) and investment (I) and increasing national income (NY) and employment in the future. This will help to increase tax revenue and reduce government spending, thus helping to reduce the debt / avoid more borrowing and chalking up debt, rendering austerity measures effective.
Or
With a decrease in consumers and investors' confidence when Greece's debt is high, austerity measures may dampen C & I which will result in a fall in tax base and a fall in tax revenue. This reduces the effectiveness of austerity measures in trying to reduce the debt.

2.Ability of the government to reduce government spending
It may be difficult to reduce some forms of government spending such as healthcare. These may be strongly resisted. Hence, failure to reduce government spending with no corresponding increase in tax revenue may mean that the debt is not reduced, rendering austerity measures ineffective.

Note: 2 marks for each point well explained.

(c) Extract 5 mentions that German chancellor Angela Merkel had refused to put a cap on refugee numbers into Germany. Using cost–benefit analysis, explain why this decision was made. [6]

For this decision to be made, the benefits must have outweigh the cost of doing this.

Benefit of an increase in refugees into Germany
Influx of foreigners can help replace the shrinking workforce probably due to Germany's aging population [1]. This will prevent or slow down a fall in the quantity of labour and thus, prevent a fall or a slowdown in potential growth in the future. [1]

OR

As stated in Extract 5, in 5 to 10 years there will be more and more refugees who will start working and pay taxes [1]. This will increase tax revenue for the government [1], which can be used to further their fiscal spending in the future.

Cost of an increase in refugees into Germany
With an increase in refugees into Germany, there will be higher government spending since each unemployed refugee costs taxpayers 12,000 euros [1] as stated in Extract 5. It was also mentioned that only 8 percent find work in the first year and most rely on the states for everything from food and housing to language courses. This government spending on unemployed refugees will result in having less government budget to spend on other areas [1] to help promote economic growth i.e. opportunity cost is incurred.

Synthesis

1) Given that Germany is facing a shrinking workforce in time to come, the expected benefit from refugees joining the workforce is likely to be quite substantial [1].

2) Extract 5 suggests that Germany has a budget surplus and has the means to fund the cost of accommodating the refugees. Thus, it is likely that the benefit of refusing to put a cap on the numbers of refugees outweighs the cost of doing so [1], hence the decision of not putting a cap on refugee numbers was undertaken.

Note: 2 marks for benefit (choose either 1 of the suggested points well explained)
2 marks for cost
(Comment can be up 5 marks for well explained points)
1 mark for synthesis

(d) **Assess whether the problems posed by Germany's trade surplus or Greece's debt will be more serious to the European Union. [8]**

<u>Thesis: The problems posed by Germany's trade surplus is detrimental to the European Union</u>

<u>Impact on BOP position of Germany's trading partners in the EU</u>

Germany's trade surplus is likely due to its lower cost of production through wage competitiveness as pointed out in Extract 6. This results in lower prices of its export and enabled Germany to divert export demand from other EU countries to its economy instead. These chronic surpluses in Germany are a way of stealing demand from elsewhere and may result in a persistent balance of trade (BOT) deficit for other EU countries.

Secondly, the German regulatory and tax structure is geared in favour of output and exports and against consumption. Taken together, these will lead to a fall in demand for many EU countries' exports leading to a fall in their net exports, worsening their BOT and balance of payment (BOP) position.

<u>Impact on economic growth and unemployment of other EU countries</u>

The fall in net exports will lead to a fall in aggregate demand (AD) and national income (NY) via reverse multiplier effect. This leads to increased unemployment levels in the other EU countries. This may weaken consumer and investor's confidence, lowering consumption and investment, thereby worsening national income and unemployment levels further in the other EU countries.

<u>Impact on economic growth and general price level of other EU countries</u>

To match up to Germany's competitiveness, a few EU countries such as France, Spain and Greece tried to lower their wages as mentioned in Extract 6. The fall in wages will lead to a fall in disposable income, decreasing consumption, leading to a fall in AD and NY. This will lead to a multiple fall in national income via reverse multiplier effect and a dampening/deflationary effect on general price level, which explains the deflationary slump as mentioned in Extract 6.

<u>Anti-Thesis: The problems posed by Greece's debt is detrimental to the European Union</u>

<u>Impact on economic growth, unemployment and general price levels of other EU countries (opportunity cost of lending money to Greece)</u>

As noted in Extract 7, Greece received several bailouts from the EU since 2010 and she has benefitted from a large write-off of debt owed to private banks in 2012. In addition, the true creditors of much of Greece's remaining large debt are German, Dutch, French and other European taxpayers. If Greece were to default on her debt or if the debt is written off as bad debt just like in 2012, it will be of a high cost to other EU countries. This is because the money loaned to Greece will not be recovered and as a result, there will be less reserves and funds available for future government expenditure in other EU countries.

These funds used to bail out Greece could have been used by other EU countries to increase their fiscal spending which will help bring about economic growth in their own country instead. For example, bailing out Greece by other EU countries will limit the amount of funds available for other uses such as building infrastructure, which will then restrict any increase or even lower their AD in the short run and this will also have a negative impact on LRAS in the long run. If AD falls, unemployment levels will increase. At the same time, with a fall in AD, general price level in other EU countries will fall too.

<u>Impact on economic growth, unemployment and general price levels of other EU countries (a fall in investors' and consumers' confidence in other EU countries)</u>

The large debt owed by Greece and the possible risk of default again will result in a contagion impact on other EU countries. These events will reduce investors' and consumer's confidence in other EU countries, resulting in a further fall in I and C, thus decreasing AD and NY, worsening unemployment levels and current deflation in other EU countries as mentioned above.

<u>Synthesis (whether the problems posed by Germany's trade surplus or Greece's debt will be more serious to the EU)</u>

While it is undeniable that Germany "export unemployment to other countries" through its trade surpluses as mentioned in Extract 6, it is important to note that Germany does not only export to other EU countries but also to countries outside of EU as well. Table 2 pointed out that Germany's largest export partner is actually United States, which took up 9.53% of Germany's total exports in 2015. As such, the adverse impact of Germany's trade surplus on other EU countries may be over-amplified.

On the other hand, the debt crisis in Greece seems to be more of a serious threat to EU because the creditors of the Greece's large debt are the other EU countries. The possible risk of default by Greece remains high and these will have a negative impact on the economic growth, employment level and general price level of other EU countries. As such, the trade surplus in Germany may not be that serious to EU as compared to Greece's debt.

Level	Description	Marks
L2	Developed discussion on whether the problems posed by Germany's trade surplus or Greece's debt will be more serious to the macroeconomic aims of other countries in the European Union. Developed discussion: coverage of 3 reasons in total (2 for thesis and 1 for anti-thesis or vice versa with links explicitly made to other EU countries' macroeconomic goals) as to how the problems posed by Germany's trade surplus or Greece's debt is detrimental to the other countries in the European Union.	4-6
L1	Undeveloped discussion on whether the problems posed by Germany's trade surplus or Greece's debt will be more serious to the macroeconomic aims of other countries in the European Union. Undeveloped discussion as to how the problems posed by Germany's trade surplus or Greece's debt is detrimental to the other countries in the European Union: • coverage of 3 reasons in total (2 for thesis and 1 for anti-thesis without links explicitly made to other EU countries' macroeconomic goals • coverage of 2 reasons in total (1 for thesis and 1 for anti-thesis with links explicitly made to other EU countries' macroeconomic	1-3

	goals • 2 reasons for thesis or 2 reasons for anti-thesis	
	Evaluation	
E2	Developed judgment that is supported with economic analysis.	2
E1	Unexplained judgment.	1

(e) With reference to the data, discuss whether benefits will outweigh costs with a less globalized world economy. [10]

Introduction
Definition:
Globalization is the closer integration of countries and people of the world through the ease of movement of goods and services, capital and labour.

Thesis: Benefits associated with a less globalized world economy

Positive impact on a country's financial stability and thus, economic growth

As mentioned, with a less globalized world economy, there will be a reduction in the movement of capital globally. As such, the expansion of banking sectors and opening up of capital markets, especially in developing countries, will be slower. This will result in a reduction of speculative hot money flows globally. Hot money inflows into a country will lead to an increase in money supply and as such, interest rates will fall and prompts more borrowing. Even though the increase in consumption and investment will lead to an increase in aggregate demand, these hot money can possibly quickly turn to bust when global investors change their minds and pull their money out of the economy. Money supply will fall drastically and this pushes up domestic interest rates, which many borrowers will then have problems paying off their debt and banks might end up with a large amount of bad debts.

As a result, having less hot money flows will have a positive impact on financial stability globally because a smaller global capital flows leave less room for imbalances which will endanger the development of financial stability. This is especially beneficial for developing countries where their banking sectors and capital markets are still relatively small and undeveloped as mentioned in Extract 8 whereby inflows of speculative hot money can be dangerous.

Positive impact on a developed country's employment level and income gap

With globalization, there might be massive layoffs in developed countries like the US, where labour-intensive jobs like manufacturing jobs get shifted offshore as pointed out in Extract 8. As these labour-intensive industries in the developed economies lose their competitiveness in the production of such goods, they may be forced to shut down. If this is so, this may lead to a substantial degree of structural unemployment (especially in the short term) as retrenched workers may not be able to pick up the relevant skills to take on jobs created in the new industries created.

As such, with a reduction or a slowdown in movement of goods and services, capital and labour, the pace of labour-intensive industries and jobs shifting from developed to developing economies will be slowed down. The extent of structural unemployment faced by developed economies will be less serious. At the same time, workers in these economies will have more time to pick up relevant new skills to take on jobs in new industries created before the labour-intensive industries move out of the country totally.

<u>Anti-Thesis: Costs associated with a less globalized world economy</u>

<u>Negative impact on amount of goods and services that a country can enjoy</u>

Extract 8 mentioned that US has been a big winner from globalisation. First of all, with greater ease of movement of goods and services, consumers in advanced economies such as US have been able to enjoy a wider variety of goods and services. Moreover, by undertaking subdued means of giving domestic firms an unfair advantage in Extract 8, it runs contrary to the law of comparative advantage. By retreating into protectionism, It results in a reduced world output and as such, the goods and services that can be enjoyed by consumers in each country will be comparatively smaller.

<u>Negative impact on a developing country's employment level</u>

Extract 8 also pointed out that globalisation has been a great force to lift people out of poverty in big and low-income economies like China and India. With a less globalized economy, workers in the developing economies where there is a large population, might find it harder to be employed. As such, more people in the developing economies might be unemployed and unemployment rate in the developing economies might increase. This will lead to a fall in consumption as income levels fall and at the same time, aggregate demand and national income falls further which may lead to a deflationary spiral.

<u>Synthesis (whether benefits will outweigh costs with a less globalized world economy)</u>

The benefits enjoyed or costs incurred by developing and developed economies with a less globalized world economy differ.

To conclude, the costs associated with a less globalized world economy should outweigh the benefits. First of all, as Extract 8 pointed out, there is little evidence that free flow of labour lowers domestic wages. Next, with increased globalisation, there will be better allocation of resources which results in increased world output and consumption for all.

Most importantly, the increase in structural unemployment experienced by developed economies with increased globalisation is likely to be evident only in the short run. Better social safety nets like unemployment benefits while equipping the unemployed with new skills through retraining programmes can be put in place to help them to get a job.

To reduce the problem associated with hot money flows, tough regulations and proper controls can be put in place, especially by developing economies, while opening up their capital markets to reduce the occurrence of hot money flows.

Level	Description	Marks
L2	Developed discussion of whether benefits outweigh costs with a less globalized world economy. (Developed discussion includes two well-explained benefits and one well-explained cost, or vice versa, with reference to the extract.)	5-7

L1	Undeveloped discussion of whether benefits outweigh costs with a less globalized world economy or without any reference to the extract. (Undeveloped discussion includes one well-explained benefit and one well-explained cost, with reference to the extract.) Or Developed explanation of two benefits or two costs of a less globalized world economy.	1-4

In addition, up to a further 3 marks for valid evaluative comment. Students should come to a reasoned judgement by weighing the benefits and costs of a less globalized world economy and this should be substantiated with economic reasoning and evidences from the extracts. An example of economic reasoning includes whether policies can be undertaken to minimize the costs of a less globalized world economy.

2017 RVHS Y6 H2 Econs Prelim II Paper 2 Q1

Just a year ago, anticipation of higher profits prompted cattle farmers in the European Union (EU) to switch to produce dairy, which is a major ingredient of many dairy-based products such as cheese. At the same time, EU abolished dairy production quotas while China, a key importer of EU products, saw slower economic growth.

The Economist, August 2015

Using economic analysis, discuss the impact these events are likely to have had on EU consumers and farmers. [25]

Introduction:

The demand for dairy arises from dairy-based products manufacturers (e.g. the laughing cow) who manufacture and sell cheese. Hence they buy/consume dairy as it is a factor input to produce cheese. On the other hand, supply comes from cattle farmers who produce dairy for sale. The impact of these events on dairy consumers and farmers can be measured via changes in the consumer expenditure and total revenue received by farmers. This will then affect consumer expenditure and total revenue for dairy-based products in a range of markets, such as premium cheese and house brand bread.

❶ Impact of events on EU consumers and farmers of dairy

Firstly, in the past year, there is an increase in the number of farmers producing dairy. This is due to the anticipation of higher profits to be made in the dairy market, resulting in some farmers switching from rearing cows for beef to dairy. As such, at every price level, there are more farmers willing and able to supply dairy and the supply of dairy increases.

Secondly, the abolishment of dairy production quotas affected the supply of dairy. A dairy quota imposes a physical limit on the quantity of dairy that can be produced within EU in a given period of time. It restricts the supply of dairy to keep prices high. The abolition of production quota will lead to an expansion of EU dairy production, leading to significant increases in EU net exports to the world market, hence supply of dairy increases.

Taken together, the supply of dairy will rise from S_0 to S_1 as shown in Figure 1. This will cause the price of dairy to fall, which is accompanied by a rise in its quantity demanded. The extent of this increase in quantity demanded depends on the price elasticity of demand (PED) for dairy as PED measures the degree of responsiveness of quantity demanded to a change in its price, ceteris paribus.

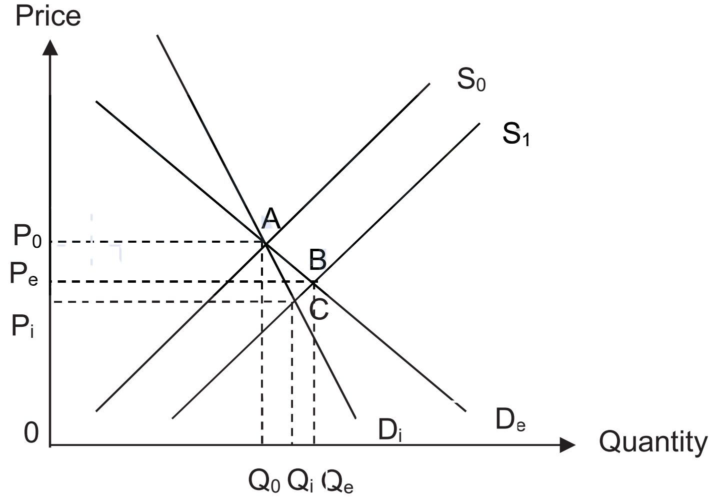

Figure 1: Increase in supply

If the demand for dairy is relatively price inelastic, the fall in price from P_0 to P_i will cause the quantity demanded to rise less than proportionately from Q_0 to Q_i. This will result in a fall in the consumer expenditure/total revenue from $0P_0AQ_0$ to $0P_iCQ_i$. And if the demand for dairy is relatively price elastic, the fall in price from P_0 to P_e will cause the quantity demanded to rise more than proportionately from Q_0 to Q_e. Thus, the consumer expenditure/total revenue will rise from $0P_0AQ_0$ to $0P_eBQ_e$. ***In this context, it is more likely that the PED value of dairy is less than one as it is deemed as a necessity for firms (e.g. the laughing cow) that produce cheese as dairy is one of the factor inputs to produce these foods, i.e. PED<1. As such, EU consumers of dairy generally gain from lower prices and higher quantity consumed, while EU farmers lose out, assuming unchanged costs of production.***

At the same time, China, a key importer of EU dairy, saw slower economic growth. The economic slowdown in China implies that income increases at a decreasing rate. An increase in income, albeit at a slower rate has increased consumers' purchasing power. Consumers are now more willing and able to purchase dairy, which is a normal good, i.e. YED>0. Since the demand for dairy is derived from the demand for dairy-based products, demand for dairy increases.

As seen in Figure 2, demand for dairy shifts rightwards from D_0 to D_1. This will cause the price and quantity of dairy to rise. However, the extent of the increase in price and quantity will depend on the price elasticity of supply of dairy, ceteris paribus. If the supply of dairy is relatively price inelastic, the increase in price from P_0 to P_i will cause the quantity supplied to rise less than proportionately from Q_0 to Q_i. This will result in an increase in consumer expenditure/total revenue from $0P_0AQ_0$ to $0P_iCQ_i$. On the other hand, if the supply of dairy is relatively price elastic, the increase in price from P_0 to P_e will cause the quantity supplied to rise more than proportionately from Q_0 to Q_e. Thus, the consumer expenditure/total revenue will rise from $0P_0AQ_0$ to $0P_eBQ_e$. In other words, in both instances, consumer expenditure/total revenue increases. ***In this context, it is more likely that the PES value of dairy is more than one due to the short gestation period as cows typically produce milk for around 9 – 10 months of the year.*** Hence, EU farmers receive higher total revenue while EU consumers incur higher consumer expenditure on diary.

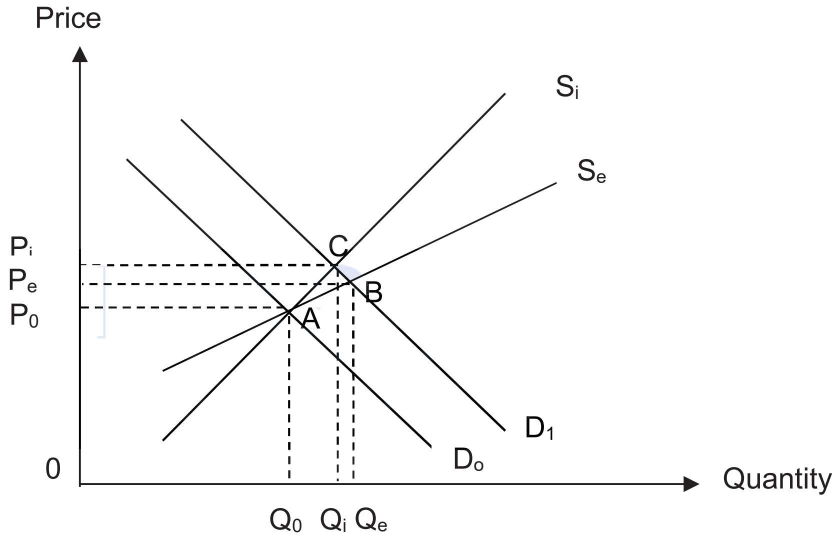

Figure 2: Increase in demand

Combined effect on the market for dairy:

Overall, the combined effect on the market for dairy includes a rise in both its demand and supply. This will cause the equilibrium quantity to rise with the change in price being indeterminate as this is dependent on the extent of change in demand and supply. In this context, due to the economic slowdown in China, it is likely that rise in income may not lead to a substantial increase in demand for dairy. Hence, the increase in supply from S_0 to S_1 is likely to outweigh the increase in demand from D_0 to D_1. With reference to Figure 3, there will be a fall in equilibrium price from P_0 to P_1, and an increase in equilibrium quantity from Q_0 to Q_1. Total expenditure/revenue could increase, decrease or remain unchanged depending on how much price and quantity has changed.

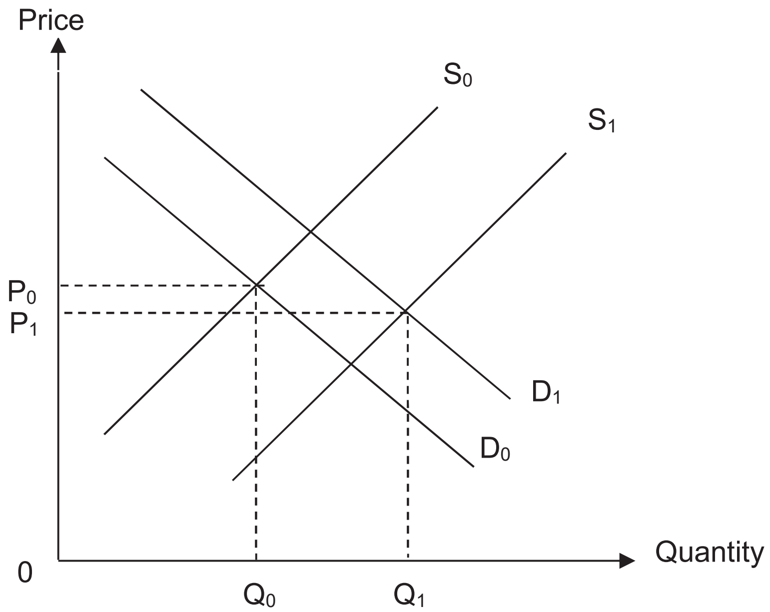

Figure 3: Combined effect of an increase in demand and increase in supply in the dairy market

❷ Impact of events on EU consumers of dairy-based products such as premium cheese

Turning to the dairy-based products market such as premium cheese, we note that the EU producers of premium cheese are firms such as the laughing cow, while consumers are those who purchase cheese for consumption.

The fall in price of dairy, a factor input for cheese means that cheese producers incur a lower cost to produce cheese. This translates to higher profits, ceteris paribus; hence cheese producers are now more willing and able to produce the good, leading to an increase in supply of cheese from S_0 to S_1 as shown in Figure 1. This will cause the price of premium cheese to fall, which is accompanied by a rise in its quantity. The extent of this increase in quantity then depends on the price elasticity of demand (PED) for premium cheese, ceteris paribus. ***In this context, it is more likely that the PED value of a typical brand of premium cheese is more than one as there are many substitutes available in the market/ not a necessity to consume premium cheese, i.e. PED>1. Since the demand for premium cheese is likely to be relatively price elastic, the fall in price from P_0 to P_e will cause the quantity demanded to rise more than proportionately from Q_0 to Q_e. Thus, the consumer expenditure/total revenue will rise from $0P_0AQ_0$ to $0P_eBQ_e$, as seen in Figure 1.***

On the other hand, the slowdown in economic growth in China implies that income increases at a decreasing rate. An increase in income, albeit at a slower rate has increased consumers' purchasing power. Consumers are now more willing and able to purchase premium cheese, which is a luxury good, i.e. YED>1. Given the income elastic nature of premium cheese, an increase in income may be expected to bring about a more than proportionate increase in demand for cheese, ceteris paribus. The larger the YED, the larger will be the increase in demand in response to an increase in income. ***The degree of income elasticity of demand for cheese may differ across the types of cheese (e.g. premium ones like Old Ford which costs $50/ pound).*** Demand for premium cheese increases, and both equilibrium price and quantity of premium cheese increase. This results in an increase in consumer expenditure and total revenue.

Overall, the combined effect on the market for premium cheese includes an increase in supply from S_0 to S_1 and an increase in demand from D_0 to D_1 as seen in Figure 4. This will cause the equilibrium quantity to rise with the change in price being indeterminate as this is dependent on the extent of change in demand and supply. ***The more premium the cheese, the larger the YED value, hence the greater will be the increase in demand as opposed to the increase in supply. As such, both price and quantity will rise, hence total revenue/ consumer expenditure increases from $0P_0AQ_0$ to $0P_1BQ_1$.*** As such, EU consumers of cheese incur higher consumer expenditure, while manufacturers of cheese receive higher total revenue.

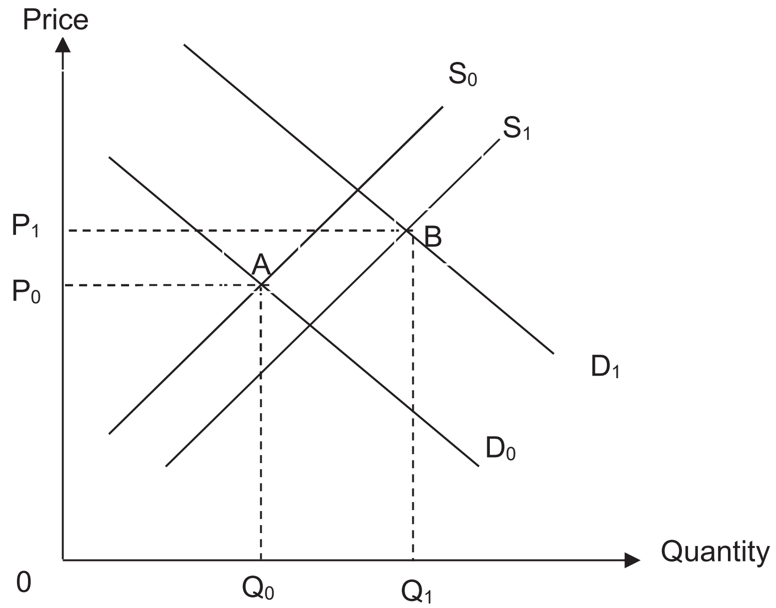

Figure 4: Combined effect of an increase in demand and increase in supply in the premium cheese market

In conclusion, the above analysis only holds true if the ceteris paribus condition is valid. This is because other than the events in the preamble, other factors may affect EU consumers and farmers.

<table>
<tr><th colspan="4">Knowledge, Understanding, Application & Analysis</th></tr>
<tr><td rowspan="2">L3</td><td>Upper
18-20</td><td colspan="2">For a developed discussion on how EU consumers' total expenditure and farmers' total revenue are affected in the dairy and dairy-based product market. The answer should include a developed analysis of the impact of demand and supply on two different types EU consumers (i.e. consumers of dairy = manufacturers of dairy-based products & final consumers of dairy-based products, as well as EU dairy farmers), accurate application of any two elasticity concepts (PES, PED & YED), and excellent attempts at contextualisation.</td></tr>
<tr><td>Lower
15-17</td><td colspan="2">For a developed discussion on how total revenue & consumer expenditure are affected in the dairy market <u>and</u> undeveloped discussion on dairy-based product market.</td></tr>
<tr><td>L2</td><td>10-14</td><td colspan="2">For a developed explanation on how total revenue & consumer expenditure is affected in either the dairy market <u>or</u> dairy-based product market.

OR

For an undeveloped discussion on how total revenue & consumer expenditure is affected in the dairy market <u>and</u> dairy-based product market.</td></tr>
<tr><td rowspan="2">L1</td><td>Upper
6-9</td><td colspan="2">For an undeveloped explanation on how total revenue and consumer expenditure are affected only in the market for dairy/ dairy-based products. Such an answer could include an undeveloped demand and supply analysis for this market, and/or some use of PED/PES/YED and makes no/little attempts at contextualising.

OR

For an undeveloped explanation on how total revenue & consumer expenditure are affected in the market for dairy and dairy-based products market</td></tr>
<tr><td>Lower
1-5</td><td colspan="2">Smattering of valid points.</td></tr>
<tr><td>E3</td><td colspan="2">Builds on an appropriate analysis to evaluate critically to arrive at a well-reasoned judgment and decision</td><td>4-5</td></tr>
<tr><td>E2</td><td colspan="2">Some attempt of evaluation or a conclusion that answers the question but doesn't explain the judgement or base it on analysis</td><td>2-3</td></tr>
<tr><td>E1</td><td colspan="2">For an unexplained assessment or one that is not supported by analysis.</td><td>1</td></tr>
</table>

The cornerstone of the Singapore government's philosophy towards public housing lies in the Home Ownership Scheme introduced in 1964. It involves the provision of fairly generous and broad-based subsidies to ensure affordable and thus widespread home ownership.

Source: Lee Kuan Yew School of Public Policy, 2014

(a) Using appropriate examples, explain the key differences between a merit good and a public good. [10]
(b) Discuss the determinants of a government's decision to intervene in the market for public housing. [15]

A merit good and a public good can be differentiated by characteristics of non-rivalry and non-excludability. As a consequence, the different implications of the characteristics on the level of government intervention can also be a distinguishing factor between the two goods.

Merit good is a private good which is rival in consumption and excludable. It is defined as a good which is deemed socially desirable by the government but under-consumed and it is mainly caused by disregard of positive externalities and ignorance of private benefits while public good is a good which displays characteristics of non-rivalry and non-excludability.

The first key difference is about non-rivalry. Non-rivalry means that the consumption by an additional consumer does not diminish the amount available for consumption by others. As such, this implies that a good which is non-rival will have a marginal cost of serving an additional user being zero. With zero marginal cost, allocative efficiency is achieved only when the good is provided to all who want it at no charge (P=MC=0). At a zero price, the private markets will not produce the goods and any non-zero price would discourage some users from enjoying the good, thereby causing a reduction in society's total welfare. For instance, a public good like national defence has the characteristic of non-rivalry that one more resident into the country will not diminish the amount of protection that the people currently in the country enjoy.

While a public good is non-rival in consumption, a merit good is usually rival in consumption. This means that the consumption by an additional consumer diminishes the amount available for consumption by others. Therefore, the marginal cost of serving an additional consumer is not zero. With non-zero marginal cost, allocative efficiency is thus achieved when the good is provided at non-zero price (i.e. P= MC> 0). Given that producers would only be willing and able to sell at a price that is at least equal to their marginal cost of production, when left to the market forces, profit-seeking producers will be able to charge for their services, meaning the free market is able to produce it. For example, a merit good like healthcare is rival in consumption as one more patient seeing the doctor will deprive another patient from healthcare services at the same time, given the finite amount of resources such as doctor's consultation time.

The second difference is about non-excludability. Non-excludability means that it is prohibitively expensive or impossible to block non-payers from enjoying the good. A public good is non-excludable while a merit good is excludable in consumption. The problem of free-ridership therefore exists in the context of a public good due to non-excludability. Since non-payers can also consume the good, no one would be willing to pay for the good. At the same time, as no profit-seeking producer will be willing to produce a good at a zero price, the free market will not produce the good, even though consumers want the good. For example, it is impossible to block a non-payer from enjoying the protection that national defence provides.

On the other hand, a merit good is excludable in consumption as it is possible to exclude any non-payers from enjoying the benefits of consumption. Producers will therefore be able to segregate consumers into payers and non-payers. As non-payers do not get to consume the service, people would be willing to pay for the good as the problem of free-ridership is non-existent. For example, a patient will not be granted access to a doctor if he refuses to pay for the services, implying excludability in the healthcare market, which is a private good.

These differences lead to the different extent of market failure. As mentioned earlier, because of the implications of non-rivalry and non-excludability, a public good is a case of complete market failure and there will be zero production by the private market even though there is demand for it. As such, it will require full government intervention in order for the good to be produced. On the other hand, the presence of positive externalities and imperfect information will mean there is a need for some degree of government intervention to shift the consumption level from Qm to Qs as there will be under-consumption in the market.

For example, healthcare generates positive externalities. When employees actively go for health check-ups at regular periodic periods, the private benefits will be about getting to detect early their personal medical problems and thereby allowing them to go for appropriate treatment. At the same time, they generate positive externalities (external benefits) for third parties like the employers and co-workers. The employers benefit from cost savings as costs of cover, overtime costs and training costs are reduced while co-workers benefit from the higher productivity when their fellow workers are fit and well.

In addition, a merit good is also caused by imperfect information. In the context of healthcare, due to complex information and ignorance, consumers might not know the full extent of the benefits of healthcare services and this result in under-consumption of healthcare services As such, some form of government intervention might be required to correct the under-consumption.

As such, a public good will result in a complete market failure with no production from the free market while a merit good will result in a partial market failure with under-consumption.

Level	Description	Marks
L3	For an answer that uses appropriate analysis to i) explain the differences of public good and merit good through the characteristics of non-rivalry and non-excludability and included the respective implications. ii) ALSO made use of appropriate examples from the real world to illustrate understanding of the two characteristics.	8-10
L2	A descriptive explanation of the characteristics of non-rivalry and non-excludability and the required underlying implications.	5-7
L1	Knowledge of what is meant by public good and merit good and/or the underlying implications of the characteristics.	1-4

b) Discuss the determinants of a government's decision to intervene in the market for public housing. [15]

The governments around the world intervene in the market for public housing because the price mechanism in an unregulated market fails to achieve a socially optimal allocation of resources and market failure arises. Specifically, public housing is residential properties created by the Housing Development Board of Singapore to accommodate the majority of the citizens of the country. It is a private good that has positive externalities and thus, it can be provided by the private market but there will be under-allocation of resources to the industry. As such, government intervention will be advocated and there are a few determinants that will affect a government's decision on the degree and type of intervention in the market for public housing. The government often have to weigh the costs and benefits of intervention and they will only intervene if the benefits outweigh the costs of intervention. The considerations also hinge on the conditions and characteristics of the country as well.

Degree of MEB (Benefit)

One of the important determinants of government's intervention is the degree of marginal external benefit in public housing. If the size of MEB is huge, then a significant form of intervention like a grant or subsidy might be required to deal with the under-consumption. There are positive externalities of public housing where the creation of cohesive communities helps to support national objectives such as maintaining racial harmony and stronger family ties. Third parties like the community as a whole and citizens in the neighbourhood will benefit from the peaceful surroundings and reduction in social unrest when more people buy public housing for private benefits to secure a roof above their heads. With reference to figure 1, due to the presence of MEB, MPB diverges away from MSB. As such, the level of consumption by the unregulated market is given by MPB=MPC, Qm and it is lower than the socially optimal level of consumption which is given by MSB=MSC. There is under-consumption of public housing and it results in a deadweight loss of area ABC.

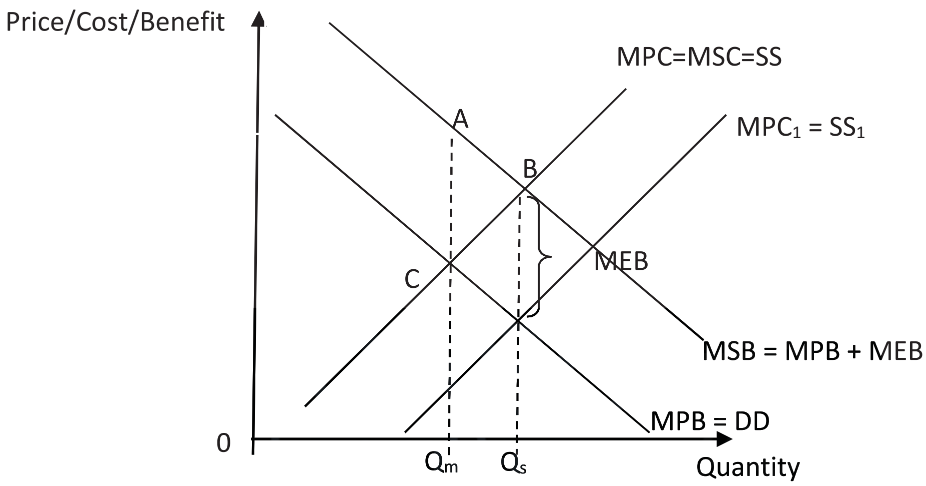

Figure 1: Market for Public Housing

Due to the under-consumption in public housing, there is a need for the government to intervene to increase the consumption of housing. The degree of market failure in the market of public housing will thus decide how much government intervention is required.

<u>Relative effectiveness of existing policies for the public housing market</u>

The next factor the government has to consider is whether they have existing and alternative feasible plans to correct the problem of under-consumption. Government will intervene in two main methods, to increase the demand for affordable housing and to increase the supply of housing at the same time. For example, the Singapore government has implemented a compulsory savings scheme in Singapore, namely the CPF savings scheme, where citizens are expected to deposit a portion of their salary into an account which can only be utilized for property purchases. This inevitably increases the demand for public properties and the level of consumption increases from Qm to Qs as citizens now find themselves more willing to spend on properties since they can only use these savings on purchases of houses.

In addition, the opportunity cost of these subsidies could also be increasing, especially given today's economic climate which is full of uncertainties and the increasing need to relook into the healthcare expenditure given an ageing population. The government might be facing a budget deficit given much financial outlay to revive the economy given negative economic growth in recent years or uncertainties due to gloomy economic outlook and this will limit the government's financial ability to intervene in the housing industry. Government would have to weigh the costs and benefits carefully and prioritise their economic objectives. If it is more urgent to take care of the healthcare aspects due to the ageing population, then the government might have to reduce their amount of intervention in the housing market. **Therefore the Singapore Government needs to consider her budget position and only commit the amount of expenditure on housing if they can afford it on a sustainable level, since the citizens would have expected prices for public housing to be stabilized with the government's help of financial subsidies all this while. The government also has to relook at the contribution rate of the citizens towards their CPF accounts and examine whether Singaporeans are finding it hard to afford the houses, especially given the rising rate of structural unemployment in Singapore as we continue to restructure our economy towards a knowledge-based economy.**

<u>Conclusion</u>

It also depends on the characteristics of the economy. If the country has a high level of income inequity, it might be crucial to intervene so that the poor can also have a roof above their heads. The poor are willing but financially unable to afford basic forms of housing so the demand will be lower than what it could be, resulting in under-consumption. It is also the government's aim to ensure affordable public housing so that most Singaporeans own their own residential property so that they have a higher sense of ownership in the country. By supplementing the supply of houses in the country, the prices of house will decrease and this also helps to address the income inequality in an economy. Therefore, the economic climate projected into the future and level of income inequity of the country have a huge bearing on the government's decision too.

Whilst government should step in to provide public housing, it should also regulate and allow the development of private housing developers so as to complement its efforts. This would keep the housing market contestable and ensure a variety of housing options for potential home-buyers.

Level	Description	Marks
L3	For an answer that uses appropriate analysis to explain the determinants based on cost-benefit approach which includes why government might need to intervene in the public housing market and also considered the degree of effectiveness of the interventions.	8-10
L2	For an answer that gives a descriptive explanation of the costs and benefits that government consider when intervening in the public housing market.	5-7
L1	For an answer that shows some knowledge of the costs or benefits that governments consider when deciding to intervene in public housing.	1-4
E3	For an answer that uses analysis to support an evaluative appraisal of the determinants	4-5
E2	For an answer that makes some attempt at an evaluative appraisal of the d	2-3
E1	For an unexplained evaluative statement	1

RVHS Preliminary Exam 2. Y6H2 Economics, 2017.

<u>Question 3</u>

‘There is little difference between perfect and imperfect markets. They all have profit maximisation as an aim, they all are subject to competition and they all exploit resources to benefit the producers rather than the consumers.’

Discuss the validity of this statement. [25]

LORMS

	Knowledge, Application / Understanding and Analysis	
L3	Developed discussion of all 3 aspects of the proposition (i) objectives of firms, (ii) exposure to competition, (iii) benefits to economic agents (consumers vs producers) with a consideration of the similarities and differences of both perfect and imperfect markets. “Developed” answers are expected to show economic analysis and exemplification of situations when (aspects of) the statement might be valid or invalid.	**15-20**
L2	Undeveloped discussion or Developed explanation which concentrated probably on the differences with limited discussion of the comparability.	**9-14**
L1	Knowledge of the 3 aspects of the proposition but largely unexplained.	**1-8**

E3	Analytically well-reasoned judgement about the relative validity of the 3 aspects of the proposition, drawing to a clear conclusion.	**4-5**
E2	Some attempt at a judgement about the validity of the 3 aspects in the proposition.	**2-3**
E1	Unsupported statement about the validity of the proposition.	**1**

‘There is little difference between perfect and imperfect markets. They all have profit maximisation as an aim, they all are subject to competition and they all exploit resources to benefit the producers rather than the consumers.’

Discuss the validity of this statement. [25]

<u>Introduction:</u>

- Perfect markets: firms operating under the market structure of perfect competition
- Imperfect markets: firms operating under monopolistic competition, oligopoly and monopoly
- Perfect and imperfect markets possess both similarities and difference on the three aspects flagged out in the question:
  - (i) objectives of firms,
  - (ii) exposure to competition
  - (iii) benefits to economic agents (consumers vs producers).

<u>(i) Profit maximisation vs alternative objectives</u>

Proposition is valid: all firms whether in perfect or imperfect markets are similar in that they all have a profit maximisation as an objective.

- Marginalist principle: rational firms make output and pricing decision based on profit-maximising condition MR=MC.
- At profit-maximising level of output, Qe, the additional revenue generated for every extra unit of output produced (MR) equals the additional cost incurred from producing each extra unit of output (MC).
- This would be true across firms in both perfect and imperfect markets.

Proposition may be invalid: firms may have alternative aims other than the profit motive.

- These include objectives to (a) protective or gain market share or (b) objectives based on the managerial theories of firms.
- (a) Some firms may choose not to profit-maximise in order to protect or gain market share. E.g. firms deliberately charging lower price to deter potential entrants into the market or to drive rival firms out of the market.
- (b) managerial theories of firm: in large, professionally-managed organisations, there is separation of control (by professional managers) and ownership (by shareholders) which leads to a deviation between objectives of the owners vs the managers.
- E.g. managers might focus on sales-maximisation rather than profit-maximisation as an objective especially for sales managers and commissioned-based employees because their salary are often linked to sales target.

<u>(ii) Exposure to competition</u>

Proposition is valid: both perfect and imperfect markets are similar since they are all subject to competition

- In traditional theories of firm: perfect competition is subject to the highest level of competition, making its performance in terms of allocative, productive efficiencies a yardstick against which other market structures are measured.
- However, in the theory of contestable markets, all firms even those in imperfect markets such as oligopoly and monopoly can be subject to competition.
- Contestable market: market in which there are only a few firms such as monopolies and oligopolies, because of the threat of new entrants, behave in a competitive manner.
- When oligopoly and monopoly firms are seen to be making supernormal profits, the existence of potential short term entrants of competitors will drive down prices and return profits to normal levels.

Proposition is invalid: perfect and imperfect markets are subject to different levels of competition (high vs low/no competition)

- Traditional theory of firms: Firms in perfect market i.e. perfect competition are subject to the high competition due to lack of barriers to entry
- At the other end of the spectrum, firms in imperfect markets e.g. Monopoly faces no competition due to high barriers to entry.

(iii) benefits to economic agents (consumers vs producers).

Proposition is invalid: that firms in perfect and imperfect markets all exploit resources to benefit the producers rather than the consumers.

- Firms in perfect markets i.e. perfect competition due to their characteristics of large numbers of firms, homogenous products and perfect information, have no market power or control over price i.e. they are price takers. No barriers to entry also means perfectly competitive firm only earn normal profit in the long run.
- These led to all perfect competition being allocative efficient (P=MC) which maximises societal welfare, i.e. consumer and producer surplus are both maximised.

- In contrast, firms in imperfect markets e.g. monopoly has high market power to set prices since they are the dominant firm selling unique products without close substitutes in markets with imperfect information. Their ability to erect strong barriers to entry also means monopolies can continue to earn supernormal profits in the long run.
- These led to allocative inefficiency where the prices charged by monopolies are above the MC of production (P>MC) leading to deadweight loss to society. Consumers are made worse off with the higher price, lower output and consumer surplus are captured by the producers.
- This problem may be amplified in cases where firms have market power to price discriminate, resulting in further net reduction in consumer welfare.
- However, the supernormal profits earned by firms in imperfect markets provide the financial resources for firms to engage in innovation, improving dynamic efficiency and consumer choices of quality and variety of goods and services.
- Hence, the proposition whether the producers have all the benefits are debatable depending on the degree of market power and possible government intervention.

2017 RVHS Y6 H2 Prelims II Essay Question 4 Answer

The prospect that the US Federal Reserve will decide to start raising interest rates has raised fears about the effects it will have on the economies of emerging markets.

(a) Explain how the decision to raise interest rates in the US might affect the economic agents in the domestic sector and its economy. [10]
(b) Discuss whether the fears are justified. [15]

Suggested Answer for part (a)

The interest rate is defined as the cost of borrowing, typical expressed as an annual percentage of an outstanding loan. The decision to raise interest rates, a form of contractionary monetary policy, can be used to slowdown the increase in AD and thus dampen inflation. It also has wide-ranging effects on the different economic agents, consumers, firms and the government, and consequently the domestic economy itself.

The increase in interest rates will discourage consumers to spend. With an increase in interest rates, consumers are likely to decrease consumption and increase saving as the reward of saving increases. Consumers will also be discouraged from spending on big-ticket items such as cars, as the purchase of such goods are typically financed on loans which are affected by the increase in interest rates. Furthermore, consumers with outstanding mortgages would have to make higher payments, reducing disposable income for consumption.

The increase in interest rates will also discourage firms from investing. An increase in interest rates will increase the cost of borrowing for firms. As a result, projects that were initially viable due to lower interest rates are now unviable, leading to a decrease in investment.

The increase in interest rates will also affect the consumption and investment by the government. The increase in interest rates will increase debt payments on US government debt, which is incurred financing government fiscal policies, and such spending will become further constrained, such as by delaying public infrastructure projects.

The effects on the economic agents have consequent effects on the US domestic economy. Consumption, investment and government spending are all components of aggregate demand (AD). With a decrease in all three components, AD will fall from AD_0 to AD_1 as shown in Figure 1. This would lead to a fall in national income through the multiplier effect. More likely, the decrease in consumption and investment is coupled with the an increase in both due to strong economic conditions, leading to a dampening of actual economic growth.

With a fall in investment, potential economic growth will also be dampened. If firms and the government reduce investment, there will be a fall in capital growth. If the rate of capital growth falls below the replacement rate (due to depreciation and wearing out of capital), the productive capacity of the economy will be reduced. This leads to a fall in aggregate supply (AS) and potential economic growth.

At the same time, with a fall in AD, the general price level falls from P_0 to P_1 as shown in Figure 1. A fall in aggregate demand leads to firms reducing production and thus competing less for resources for production. This leads to a fall in prices of raw materials and consequently the general price level. This lowers the inflation rate and ensures price stability for the US domestic economy.

Finally, with a fall in AD, unemployment may increase. A fall in aggregate demand leads to firms reducing production which leads to firms reducing employment of labour for production. This may lead to a rise in unemployment in the US domestic economy.

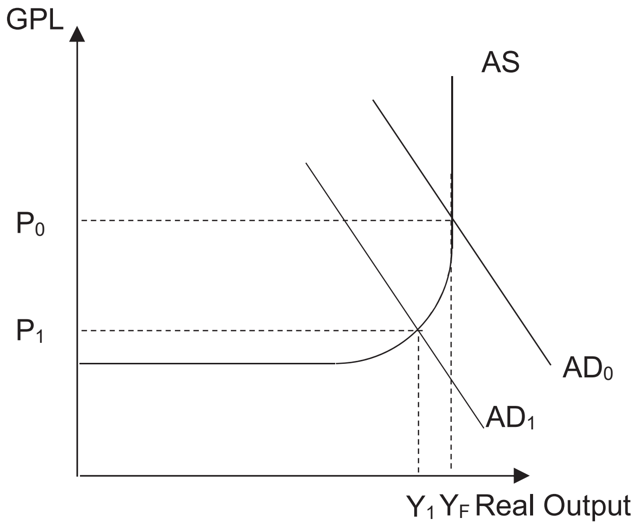

Figure 1: Increase in real GDP through increase in AD

Marking Scheme

Knowledge, Application, Understanding and Analysis		
L3	Consequences on **all three** economic agents as well as **at least two macroeconomic goals** well explained in the context of the **US domestic economy**.	**8-10**
L2	Consequences on **at least two** economic agents as well as **at least one** macroeconomic goal well explained. OR Consequences on **all three** economic agents as well as **at least two macroeconomic goals** explained but with errors or descriptively explained.	**5-7**
L1	Smattering of points	**1-4**

Suggested Answer for part (b)

Emerging economies, such as the BRICS economies (Brazil, Russia, India, China and South Africa), have significant economic links with the US. Globalization has led to greater exports to developed economies such as the US, leading to economic growth for the emerging market economies. For example, China holds a significant trade surplus against the US. Thus, the increase in interest rates in the US may have significant impact on these economies and their macroeconomic goals.

The rise in interest rates will cause hot money inflows into the US by investors seeking higher returns, leading to an increase in demand for the US dollar. This leads to an appreciation of the US dollar and thus a depreciation of the currencies of the emerging market economies. With an increase in the value of the US dollar vis-à-vis the currencies of the emerging economies, exports from the emerging economies become relatively cheaper compared to domestic goods in the US. This would lead to an increase in demand for exports from emerging economies by US consumers, increasing net exports for emerging economies. An increase in net exports would increase AD for emerging economies, leading to an increase in demand-pull inflation.

The increase in capital outflows would also worsen the balance of payments (BOP) for the emerging economies. The balance of payments records capital flows under the financial account. Thus, with an increase in capital outflows, the financial account and consequently the BOP would also worsen.

Fears of inflation may be dampened by the fact that the policy would have contractionary effects on the US economy. Over time, as interest rates continue to increase, there would be a moderation in the economic growth of the US, thus reducing the increase in demand of US consumers for exports from emerging economies.

However, there may also be benefits for emerging economies. The increase in demand for emerging market exports by US consumers would lead to an increase in AD and consequently an increase in national income through the multiplier effect. This would lead to actual economic growth for the emerging economies. Demand for coffee from Brazil would thus increase, increasing AD and economic growth in Brazil.

Similarly, the increase in AD would lead to an increase in employment in the emerging market economies. The increase in demand for emerging market exports would increase production by the export sectors in these countries, leading to firms in these sectors employing more labour for production. As these labour earn income, through the multiplier effect, production and thus employment in other sectors of the economy would also increase. This leads to an overall fall in unemployment for the emerging market economies.

The improvement in the BOP is dependent on the relative elasticities of the exports and imports of the emerging market economies. In this case, it is likely that the demand for emerging market exports is price elastic, as they have many substitutes. For example, Brazil exports only accounts for 15% of the world's coffee exports, signifying that there are many substitutes from other countries.

The increase in inflation can be weighed against the increase in economic growth and employment due to an increase in net exports. Both factors are dependent on the size of the export sector in these economies, which are significant as a proportion of national income at the moment, but may decrease over time as the economies mature. For example, the Chinese government has implemented policies to focus on domestic consumption and thus domestically driven economic growth in the future.

Marking Scheme

Knowledge, Application, Understanding and Analysis		
L3	Both thesis and anti-thesis addressed, covering **at least three** macroeconomic goals (BOP must be included), well explained and developed.	**8-10**
L2	Both thesis and anti-thesis addressed, covering **at least two** macroeconomic goals, well explained OR Both thesis and anti-thesis addressed, covering **at least three** macroeconomic goals, explained but with errors or descriptively explained. (One-sided argument – capped at 5 marks)	**5-7**
L1	Smattering of points	**1-4**
Allow up to 5 additional marks for Evaluation		
E3	For an evaluative assessment on the impacts on the emerging market economies, well justified based on economic analysis.	**4-5**
E2	For an evaluative assessment of various points that is based on economic analysis	**2-3**
E1	For an unexplained judgement, or one that is not supported by analysis	**1**

2017 Y6 H2 Prelim II Essay Q5 (Section B)

Economists often distinguish small and open economies, such as Singapore, from large and less open ones. **(a) Explain how size and openness could account for why economies pursue policy mix to different extent. [10]** **(b) Discuss how far the size and openness of Singapore have influenced her choice of policies to achieve price stability. [15]**

Suggested Mark Scheme

(a)	Knowledge, Application/ Understanding and Analysis	
L3	Developed explanation of how size & openness <u>influence the effectiveness of DD-mgmt policies</u> and thus account for why economies rely on policy mix to different extent *'Developed':* (i) Use multiplier process as a tool of analysis to illustrate how size & openness affects k (ii) Highlight how differing values of k determine the effectiveness of DD-mgmt policies and thus the need for other policies	**8-10**
L2	Undeveloped explanation of how size & openness influence the effectiveness of DD-mgmt policies and thus account for why economies rely on policy mix to different extent *'Undeveloped':* (i) Missing assumptions/ incomplete or superficial explanation for multiplier process (ii) Fail to link back to the question by contrasting between economies with different k and what this implies about the extent of policy mix pursued	**5-7**
L1	Smattering of valid points **Answers without explanation of multiplier process will only be in Level 1*	**1-4**

(b)	Knowledge, Application/ Understanding and Analysis	
L3	Developed discussion of at least 2 factors (including size & openness) that have influenced Sg's choice of policies to achieve price stability '*Developed*': Explicit link between (i) Small & open economy to the use of XΔ rate policy + inability to use conventional MP (Thesis) (ii) Causes of inflation to appropriate policies e.g. SSP/ Macro prudential policies (Anti-thesis)	**8-10**
L2	Undeveloped discussion OR developed explanation for one side (either thesis or anti-thesis) '*Undeveloped*' – Superficial link between factors and policies to achieve price stability	**5-7**
L1	Smattering of valid points	**1-4**

E3	Arrives at an analytical, well-reasoned judgement about the relative importance of various factors (including size & openness) in influencing policy choice to achieve price stability	**4-5**
E2	Makes some attempt at a judgement about how important the size & openness of Sg is in influencing policy choice to achieve price stability	**2-3**
E1	Unsupported statement about the importance of size & openness in influencing policy choice	**1**

Suggested answer points: (a)

<u>Intro</u>

- State the implication of being 'small, open economies'. Specifically, for a country like Spore:
  - Small domestic mkt
  - Lacking in natural resources such as land
  - Implication: Need to be open to trade, capital and labour flows
- In contrast, state the implication of being 'large & less open economies'. Specifically, for a country like US:
  - Larger domestic mkt
  - Likely to be endowed with more natural resources
  - Implication: Less reliant on trade and capital flows
- **Overview:** One key determinant for the difference in extent to which a policy mix is pursued is the size & openness of the economy, which in turn depends on the nature of the economy

<u>Development</u>

- More evident during situations where the government undertakes DD-management policy to achieve certain macro aims e.g.: During a recession (Alternative: Students can also look at achieving other macro aims)
- Students are to give a detailed explanation of the multiplier process to illustrate the role played by size and openness
  - Assumptions
    (Idle resources need to be available; values of marginal propensity to consume, withdraw etc.)
  - Explain at least 3 rounds
    (Suppose government expenditure G increases by $100m, what happens subsequently)
  - Highlight how different values of the multiplier can give rise to different increase in national income
    (if k=2.5 vs k=5, how would this affect the final increase in national income)

(i) For small, open economies

- Small value of multiplier due to large marginal propensity to import
  → A rise in AD leads to small increase in NY
- Likely to rely less on DD-management policies (e.g., FP/ MP) to achieve the desired Δ in NY; may need to make use of other policies such as exchange rate policy and supply side policies

(ii) In contrast, for large & less open economies

- Larger value of multiplier due to smaller marginal propensity to import
  → A rise in AD leads to a bigger increase in NY
- Likely to rely more on DD-management policies to achieve the desired Δ in NY; no/ less need to make use of other policies such as exchange rate policy and supply side policies

<u>Conclusion</u>

- Between small, open economies vs large and less open economies, the former is more likely to use a policy mix to a larger extent due to their smaller value of multiplier

Suggested answer points: (b)

Introduction

- Attainment of 'price stability' → Ensuring low & stable inflation
- **Overview:** Size & openness of Singapore do influence her choice of policies to achieve price stability to a large extent, although other factors also play a part depending on the situation

Development

Thesis: Yes, size & openness of Singapore do influence her choice of policies to achieve price stability. How so? Why?

- Sg: Small, open, import reliant → Implication:
  - Open to trade flows
  - Open to capital flows
  - Global financial centre
  - Rely heavily on exports and FDI as growth engines

① More strategic to use exchange rate policy as the 'key' policy to achieve price stability

- Explain how keeping Singdollar on a gradually appreciating stance helps to achieve price stability
  (i) More expensive exports help to deter exports and hence prevents AD from rising excessively
  (ii) Cheaper imports keep out imported inflation
- Environment of price stability attracts FDI

∴ Price stability is pre-requisite before X and FDI can serve as growth engines

② Cannot use contractionary monetary policy

- Explain why it is ineffective to ↑ i/r to achieve price stability i.e.
  (i) Any Δ i/r will be negated by hot money flows
  (ii) Δ i/r have minimal impact on I

Anti-thesis: No, other factors influence Singapore's choice of policies to achieve price stability. Such as?

① Causes of inflation/ px instability

- If ↑GPL stems from domestic sources, then 'size & openness' is less important in determining the policy to use. Instead, the choice of policy depends on the root cause of inflation
- E.g.: Hikes in foreign worker levy → ↑ COP → ↑ GPL
- In this case, the government may need policies that address this problem i.e.

→ mitigate cost push inflation

- Over the long term: use supply side policies to:

→ moderate DD-pull inflation (show diag)

- Alternatively, if high property prices or car prices are the source of inflation, then other policies will need to be used

② Other considerations

- Government may consider the opportunity cost of a policy or concerns about long term growth
- For e.g., if undertaking a certain policy leads to high opportunity cost, then the government will unlikely choose that policy to achieve price stability

Conclusion

- Size and openness is just one factor that determines policy choice; depending on circumstances, other policies may be chosen instead

Discuss how far government policies adopted in Singapore affect the economy's pattern of trade. (25)

Pattern of trade of an economy refers to the composition, direction and volume of trade. Specifically, what goods an economy exports and imports, whom the economy trade with as well as the level of exports and imports. Government policies, primarily supply-side policies, trade policy and exchange rate policy, affect the economy's pattern of trade. However, there are other determinants for pattern of trade.

<u>Policies</u>

Supply-side policies
Refer to policies that attempt to increase the productive capacity of the economy.
E.g. keeping the economy's corporate tax competitive can increase firms' incentive and ability to invest in new capital goods.
The use of these new capital goods might either bring about lower production costs or better products, thereby changing the composition and volume of trade.

Singapore's trade policy
Signing of FTAs
Lower trade barriers for Singapore exports, thereby changes the direction and volume of trade.
The increase in volume will boost price competitiveness, due to firms better able to reap further economies of scale, which can further alter the pattern of trade.

Exchange rate policy
a managed float exchange rate regime whereby the Singapore dollar (S$) is managed against a trade-weighted basket of the currencies of its major trading partners
The policy helps to maintain price competitiveness of exports.
E.g. specifically, a gradual appreciation of the Sing dollar is adopted in good times to keep out imported inflation
This managing of exchange rate does alter the volume of trade.

<u>Limitations</u>

The examples above suggest government policies adopted in Singapore do affect the economy's pattern of trade. However, its impact depends very much on the effectiveness of these policies.

For instance, it may be increasingly difficult to maintain a competitive corporate tax rate given rising expenditure due to ageing population.

For trade policies, as Singapore has already signed FTA with most major trading partners, the room to exploit economies of scale in this aspect might be limited. Although, new trade relations can be established with countries further away, the higher transport costs might reduce the benefits of such an agreement.

Other factors

Besides the effectiveness of government policies, there exists other factors that determine Singapore's pattern of trade. These include factor endowments, income of our trading partners and any other factor that might promote greater ease of movement of goods and services.

First, the pattern of trade, specifically the composition and direction of trade, is primarily determined by the comparative advantage of the economy, which is largely attributed to the country's factor endowment.

(Explain briefly the theory of CA)

Second, the economic performance of her export market. Singapore top export economies are China, Hong Kong, Malaysia, Indonesia and the United States. If these economies are growing strong, there will likely be more intermediate products and finished goods being exported to these economies. As such, the direction and volume of trade is likely to change.

Thirdly, technological developments. Advancement in modern transportation especially in aviation and shipping enables vast quantities of goods and commodities to be transported at lower cost, thereby making trade between distant markets became more economically viable. This in turn changes the direction and volume of trade.

Conclusion

There are numerous policies that can affect pattern of trade. Some of which affect primarily the direction and volume of trade while others affect primarily the composition of trade. As observed, although the government policies currently affect the economy's pattern of trade, the influence is likely to be less significant in the time to come. Although other factors have been stated, the government can influence many of these factors to a certain extent.

	Knowledge, Application/Understanding and Analysis	
L3	For an answer that gives a developed explanation on government policies and how they affect pattern of trade and uses appropriate analysis to explain the extent. The analysis must include the concept of theory of CA. For an answer that gives a developed explanation on government policies and how they affect pattern of trade and a descriptive explanation of the limitation of the policies in influencing pattern of trade and other factors.	15-20 (18)
L2	For an answer that gives a developed explanation on government policies and how they affect pattern of trade and a descriptive explanation of the limitation of the policies in influencing pattern of trade and other factors	9-14 (12)
L1	For an answer that gives a developed explanation on government policies. However, the link to pattern of trade is not that evident.	1-8 (5)