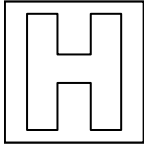


Name: _____ Class: _____



RIVER VALLEY HIGH SCHOOL
YEAR 6 Preliminary Examination II
in preparation for General Certificate of Education Advanced Level
Higher 1

ECONOMICS**8819/01**

Paper 1

12 September 2017**3 hours**

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.

Section A

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

Section B

Answer **one** question.
Start this question on a **new** sheet of paper.

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

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

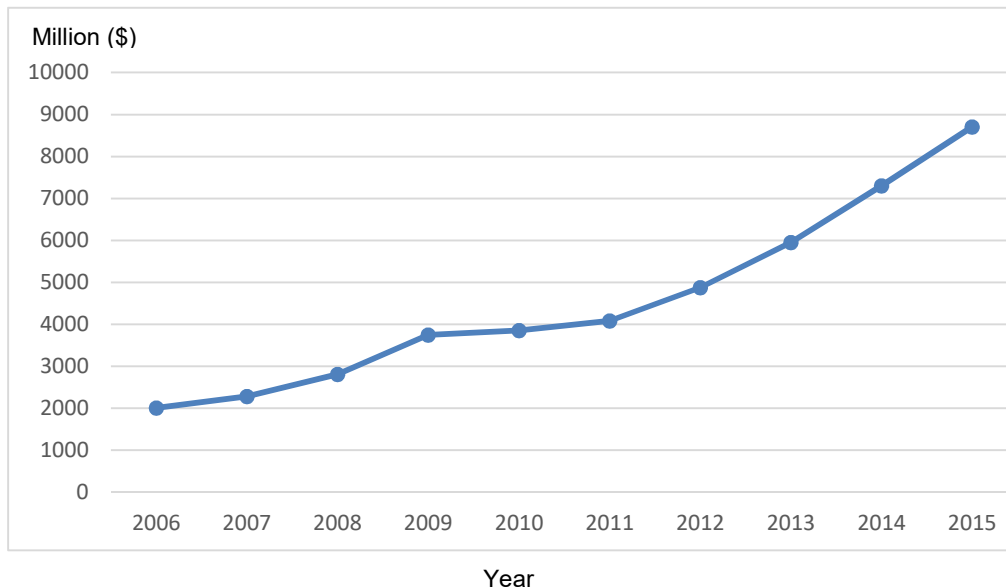
This document consists of **8** printed pages.**[Turn over**

Section A

Answer **all** questions in this section.

Question 1 Healthcare in Singapore

Figure 1: Singapore Government healthcare spending



Source: Ministry of Health, accessed 31 July 2017

Extract 1: More healthcare workers needed in Singapore

The number of elderly Singaporeans is growing faster than ever. There were 460,000 people aged above 65 in 2015. By 2020, this number will rise to 610,000.

As Singapore's population ages rapidly and more suffer from chronic age-related ailments, 30,000 more healthcare workers would be required in 2020 as compared to 2015. In addition, Singapore will also need to completely rethink the way it cares for the elderly, said Health Minister Gan Kim Yong.

These workers - including doctors who specialise in healthcare services for the elderly and highly trained nurses capable of helping clinics in primary and community health settings - will be required to staff the additional facilities on the way. These include six new polyclinics, 2,100 public hospital beds, 9,100 beds in community hospitals and nursing homes and 7,600 more places in day, home and palliative care.

Source: *The Straits Times*, 20 October 2016

Extract 2: Medical tourism ambitions under threat

Indonesians, Thais and Malaysians came in droves to receive quality medical treatment in Singapore's private hospitals. But 15 years on, Singapore's ambition to become a healthcare hub appear to be receding quietly. The region's well-to-do medical tourists are looking elsewhere for treatment, meaning that local players have had to extend their reach abroad.

The main reason Singapore is falling behind is that hospitals in countries such as Malaysia and Thailand have stepped up their game, said Mr Jean-Luc Butel, president of consulting firm K8 Global. While they may not have the state-of-the-art technology that Singapore's private hospitals possess, they can carry out standard surgery at a fraction of the cost. "This makes the competition very, very tough - our ability to attract the low- or medium-budget traveller is virtually gone." Mr Butel said.

Dr Zubin Daruwalla, healthcare director of PwC South East Asian Consulting, said that "The value of the Singapore dollar and its appreciation make us less affordable." In Singapore, a relatively low-cost simple treatment like the total hip replacement surgery at a private hospital would set a patient back around \$14,000. In comparison, the same procedure at Mahkota Medical Centre in Malaysia - which treats more than 80,000 foreign patients a year - costs the equivalent of only \$8,800.

In the face of all this, some hospitals have developed innovative ways to make medical travel more than just treatment. At Farrer Park Hospital, where foreigners make up half the number of patients, a tablet can be used to view medical records, order meals and even shop online, and have the purchases delivered to a location of the patient's choice.

"If we can manage our services and costs properly, maintain our high standards of care, there is no reason why Singapore cannot be at the forefront of not just the regional, but also the global medical tourism market," said Mr Roy Quek, chairman of Thomson Medical. He added that Singapore will always be a popular destination for complex treatments, a sentiment echoed by Dr Kelvin Loh, chief executive of Parkway Pantai's Singapore operations division.

"There is a growing trend of international patients coming to Singapore for complex medical treatment," he said, adding that its ability to handle such cases has drawn patients from new markets such as China and India.

Source: *The Straits Times*, 17 October 2016

Extract 3: Singapore's healthcare success did not come cheap or easy

Singapore's success in providing affordable and accessible acute healthcare is a result of strong controls, argues one expert.

The issue of healthcare reform has become ever more contentious, as governments look to curb spending and limit their fiscal responsibilities. In the face of anxieties over rising healthcare costs, Singapore's healthcare model has caught the world's eye, especially its medical savings account scheme, Medisave. Observers see it as a clever mechanism for reducing the fiscal obligations of the government while building households' capacity to pay for their own healthcare needs.

Singapore's healthcare system is not without its challenges. Though Singapore has managed to maintain modest overall spending, it has a rapidly ageing population and most healthcare expenditures continue to be financed out-of-pocket. Then for outpatient services, poorer and older Singaporeans are finding it increasingly unaffordable and inaccessible. Although the government maintains a safety net, Medifund, for patients who cannot cover their bills, there are still Singaporeans who struggle to afford the medicine when they need them.

Source: *Channel NewsAsia*, 24 May 2017

Extract 4: The benefits of a healthy workforce

When it comes to your workforce, the aim is to keep employees happy and motivated enough to work at maximum productivity no matter the job role or task.

The biggest benefit of a healthy workforce for an employer is undoubtedly a lower absentee rate. On average, employees in the UK lose over 2% of their working hours per year due to absence. Usually there are a number of costs associated with this, such as the cost of cover whilst the person is off, potential additional overtime costs for other employees and possible retraining depending on the terms and length of the absence.

If an employee is fit and well, their productivity is much higher than if they are working whilst ill. Also, studies have shown the link between employee engagement and their health or well-being. This means that if your workforce is generally well and healthy, they will be more engaged in their role, offering a happier and more efficient environment to work in.

Being unaware, the consumers are also not taking steps to prevent their conditions from becoming severe. The bottom line is that screening tools that can alert people in the early stages of a disease exist. Whatever the reason - fear, ignorance, lack of interest - the fact is that people aren't making use of them, even when screening programmes are free or heavily subsidised.

Source: *Glasgow Medical Rooms Journal*, 12 May 2016

Questions

- (a) (i) Describe how Singapore government healthcare spending has changed from 2006 to 2015. [2]
- (ii) Explain the change in opportunity cost given this change in healthcare spending. [2]
- (b) Extract 1 states that the number of elderly Singapore will rise to 610,000 by 2020.
- (i) Using supply and demand analysis, explain how this estimation serves to impact the market for private healthcare services. [6]
- (ii) Comment on how the above analysis might affect Singapore government healthcare spending going forward. [2]
- (c) (i) Explain how the expenditure of foreign patients seeking different types of treatment in Singapore might change given the strengthening of the Singapore dollar. [4]
- (ii) Given that “medical tourists are looking elsewhere for treatment”, explain **one** strategy private hospitals in Singapore can employ to attract them back to Singapore. [2]
- (d) Discuss whether the government should provide full subsidy for health screening. [4]
- (e) There tends to be under-consumption in the healthcare market. Discuss whether the medical saving account scheme described in Extract 3 is sufficient to tackle this under-consumption. [8]

[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.

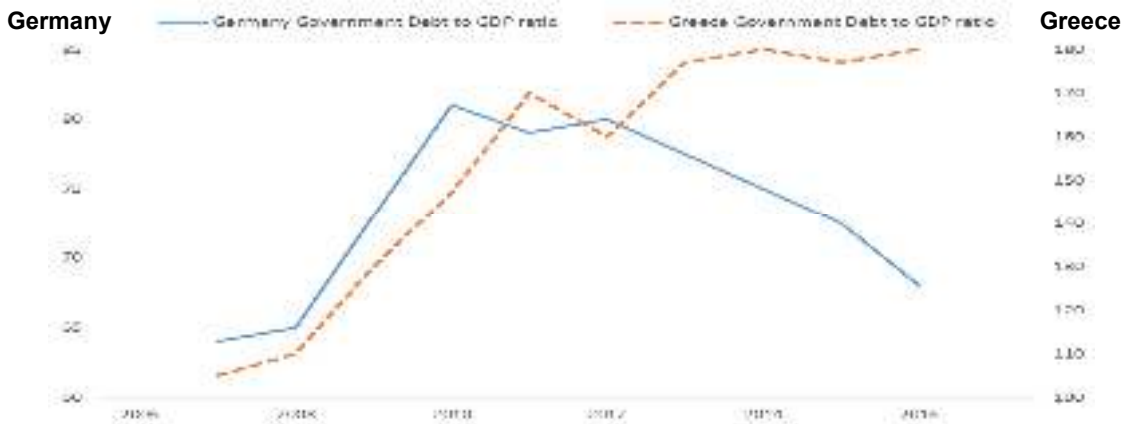
With globalisation, IMF has suggested that developing countries must be cautious about expanding their banking sectors and opening up their capital markets without tough regulation as inflows of speculative "hot money" can be dangerous. In addition, just as governments have not always been good at protecting 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 2: Debt to GDP Ratio in Germany and Greece



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

Table 1: 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 her 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.
- (i) With the help of an AD/AS diagram, explain the impact in both the short and the long run of an influx of refugees on Germany's economy. [6]
- (ii) Explain how Germany's government budget could possibly be affected with the influx of refugees. [4]
- (d) Analyse and comment on whether the problems posed by Germany's trade surplus or Greece's debt will be more serious to the European Union. [6]
- (e) With reference to the data, discuss whether the benefits associated with a less globalised world will outweigh the costs. [8]

[Total: 30]

Section B

Answer **one** question from this section.

- 3** Rational decision making involves the consideration of the marginal costs and marginal benefits of the choices available.
- (a) Using demand and supply analysis, explain how consumers and firms make rational decisions in the free market. [10]
- (b) Discuss the view that the free market inevitably fails and government intervention always leads to an improvement in resource allocation. [15]
- 4** (a) Explain the factors that will affect the external value of Singapore dollar. [10]
- (b) Discuss whether exchange rate policy is the best policy to achieve price stability in Singapore. [15]

RVHS H1 Case Q1 Suggested answer

(a)	(i)	Describe how Singapore government healthcare spending has changed from 2006 to 2015.	[2]
		It generally increases [1] at an increasing rate [1].	
		(ii) Explain the change in opportunity cost given this change in healthcare spending.	[2]
		<p>The opportunity cost increased [1] since increased number of projects in other sectors might have to be forgone or scale down given more funds have to be diverted. [1]</p> <p><i>(students can also provide specific e.g of projects in other sectors. E.g. transportation projects such as increasing the number of buses on the roads and education projects such as upgrading the existing education facilities.</i></p>	
(b)	<p>Extract 1 states that the number of elderly Singapore will rise to 610,000 by 2020.</p> <p>(i) Using supply and demand analysis, explain how this estimation serves to impact the market for private healthcare services.</p>		[6]
		<p>With ref to the diagram below, demand for healthcare increased [1] from D_0 to D_1 as the population continues to aged with more suffering from chronic age-related ailments [1].</p>	
		<p>On the other hand, this estimation will cause supply for healthcare to increase [1] from S_0 to S_1 as existing private healthcare providers expand and new players enter the market in view of the higher expected demand. [1].</p>	
			<p>Figure 1: Market for private healthcare</p>
		<p>1 mark will be awarded for the accurate drawing of the diagram.</p>	

	<p>Given the increase in demand and increase in supply for healthcare, equilibrium quantity of healthcare will increase from Q_0 to Q_1 [0.5]</p> <p>while equilibrium price of healthcare is uncertain [0.5] depending on the relative magnitude of shift of demand and supply.</p> <p>OR</p> <p>While equilibrium price of healthcare is likely to increase from P_0 to P_1, the increase in demand is likely to outweigh the increase in supply since the “number of elderly Singaporeans is growing faster than ever” and/or that competition for land intensified in a small country like Singapore. [0.5]</p>	
	<p>(ii) Comment on how the above analysis might affect Singapore government healthcare spending going forward.</p>	<p>[2]</p>
	<p><i>Analysis based on an increase or a decrease in price is acceptable, and any 1 of the below comments is worth 2 marks.</i></p> <p><u>(analysis based on a decrease in price)</u> The fall in price in private healthcare helps keep private healthcare affordable. (1) As such, there is no need for government to increase its spending further to ensure equity. (1)</p> <p><u>(analysis based on an increase in price)</u> Possible comments Candidates may give the following combination to get a max of 2 marks. Pt 1+2 Pt 3+4 Pt 1+3</p> <p>- In view of equity issue for healthcare which is a necessity, the Singapore government will need to do more e.g. provision of more grants and subsidies to keep healthcare affordable. (1)</p> <p>-However, given that the Singapore government has been promoting self-responsibility in the aspect of personal healthcare through compulsory healthcare savings (i.e. MediSave), the increase in government healthcare spending may not increase substantially.(1)</p> <p>- The increase in price of private healthcare will also cause consumers to switch over to public healthcare, increasing the demand for public healthcare. As such, the government will have to spend more to increase public healthcare facilities to cater to this rising demand. (1)</p> <p>-The extent will depend on the degree of substitutability of private with public healthcare. If the public hospitals are able to offer similar medical treatments with reasonable waiting time, more patients will switch over to public hospitals given the increase in price for private healthcare. As such, the government would see a larger increase in their healthcare expenditure. (1)</p>	

(c)	(i)	Explain how the expenditure of foreign patients seeking different types of treatment in Singapore might change given the strengthening of the Singapore dollar.	[4]
		<p>Given the strengthening of the Singapore dollar, the price of medical treatment in foreign currency increased.</p> <p>As such, there would be a change in the expenditure of these foreign patients seeking different types of treatment in Singapore. The change would depend on the elasticity of demand for the different types of medical treatment.</p> <p>The demand for complex medical treatment is more price inelastic due to a lack of close substitutes for complex treatment in the region. [1] When the price of such treatment increases, the quantity demanded would fall less than proportionately and hence total expenditure of patients seeking these kinds of treatment increases [1].</p> <p>However, the demand for simple medical treatment, such as the hip replacement surgery, is more price elastic as there are close substitutes available in Malaysia and Thailand etc. [1] When the price of such treatment increases, the quantity demanded would fall more than proportionately and hence total expenditure of this group of patients decreases [1].</p>	
	(ii)	Given that “medical tourists are looking elsewhere for treatment”, explain one strategy private hospitals in Singapore can employ to attract them back to Singapore.	[2]
		<p>Private hospitals in Singapore can employ both pricing and non-pricing strategies to attract medical tourists back to Singapore.</p> <p>Ans Based on part ci), the demand for simple medical treatment is price elastic. Hence, in order to attract tourists to seek treatment back in Singapore, private hospitals should decrease the price of such treatment [1]. This would lead to a more than proportionate increase in the quantity demanded for the treatment. [1].</p> <p>Alternative Ans</p> <p>Private hospitals can also employ product differentiation, specifically product promotion or product development.</p> <p>Point 1+3= 2marks Or Point 2+3= 2marks</p> <p>1) Product development is to create real differences such as those employed by Farrer Park Hospital mentioned in the extract, where services, like meals ordering for patients, are enhanced by the adoption of technology. [1]</p> <p>OR</p> <p>2) Product promotion can include publicity about the quality of medical treatment here [1].</p> <p>3) These strategies aim to change the taste and preferences of medical tourists in favour of Singapore This reduces the substitutability of the medical treatment in Singapore and make the demand less price elastic [0.5].</p>	

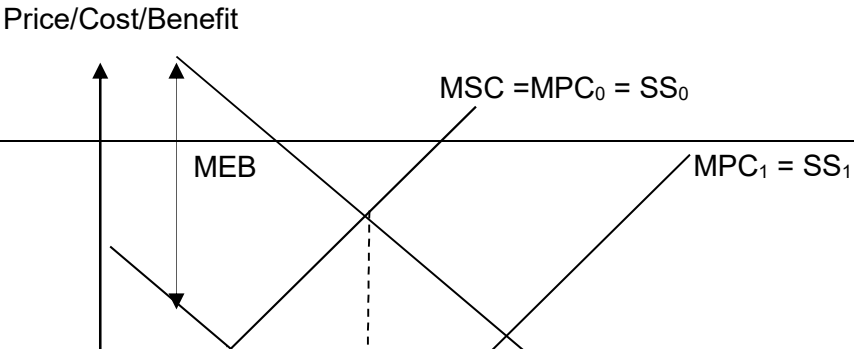
	With the demand for the simple medical treatment becoming more price inelastic, it would deter the quantity demanded to fall that significantly [0.5].	
(d)	Explain whether the government should provide full subsidy for health screening.	[4]
	<p>The government should provide full subsidy for health screening if there is complete market failure.</p> <p>However, a complete government intervention in the form of a full subsidy is not necessary because healthcare screening is a private good as it displays characteristics of rivalry and excludability. It is rival in consumption as one additional person seeking healthcare screening will deprive another patient from health screening at the same time, given the finite amount of resources and time a doctor has. (1) As such, the marginal cost (MC) is not equal to zero. For socially optimal level of consumption, price must be equal to MC. Given that MC is not equal to zero, it is possible for the market to produce at the socially optimal level since price is greater than 0. (1) Health screening is also excludable as patients who are unwilling to pay for the service will not be granted access to the doctors and given the medical reports, (1) so there will not be free-ridership problem, hence consumers will be willing to pay a fee for this medical service and the market has the incentive to provide the good.(1)</p> <p>Given the implications of the two characteristics, there is no complete market failure. Hence, there is no need for government to provide it for free.</p> <p><i>Alternative answers</i></p> <p><i>students can also start off with explaining that the market for healthcare fails because of the presence of positive externalities and as such subsidy is required.</i></p> <p>In cases where Q_s occurs at the point where MSB intersect MSC at $P=0$, full subsidies should be given.</p> <p>Price/Cost/Benefit</p> 	

Figure 2: Providing healthcare for free

(e)

There tends to be under-consumption in the healthcare market.

[8]

Discuss whether the medical saving account scheme described in Extract 3 is sufficient to tackle this under-consumption.

What it is? How it helps? (2)

The medical saving account scheme described in Extract 3 refers to the Medisave scheme. It is a legislation which requires Singaporeans earning an income to contribute to their own Medisave accounts so as to enable them to make provisions for their personal or dependents' hospitalisation expenses. The financing framework is put in place as individuals usually underestimate the amount of money put aside for medical expenses due to imperfect knowledge. With this framework in place, Singaporeans will be able to afford medical treatments where necessary and as such, it raises the demand and hence the consumption for healthcare services.

Limitations

Although this scheme improves the ability to finance one's costs, it requires the citizens to be aware of the circumstances the savings can be tapped. Otherwise, this ignorance about the usage might still cause healthcare to be under consumed.

In addition, for the lower-income group, they might still have insufficient in Medisave account to pay for the treatments that they are required to go for.

There are various reasons for underconsumption and helping to enhance that ability is just one of them. For example, as presented in the extract, consumers might be staying away from health screening services as they are unclear of the true full benefits of pursuing a health screening. They do not appreciate the early detection of certain diseases and taking early action even if it is free. The perceived demand is therefore lower than what it could be, resulting in under-consumption. As such, measures like campaign and talk are needed to tackle consumers' ignorance, fear and lack of interest in health screening.

The increase in demand is insufficient to address the underconsumption due to various sources.

Synthesis

The Medisave scheme *by itself* is certainly not sufficient. Although the scheme is enhanced with Medisave to ensure most if not all have the ability to pay, the government *should also address the rising cost of providing healthcare*. This is especially so in view of the manpower cost that is expected to continue to rise as spell out in Extract 2. And *if the cost of funding Medifund increases significantly over time, the government should review the contribution rates* for Medisave as it might signal the amount needed to be put aside is simply too low for most Singaporeans.

In addition, there are other reasons for underconsumption due to imperfect information. As such, the government needs to *adopt measures that are beyond the affordability issue*.

Level	Description	Marks
L3	Developed explanation on how Medisave helps address under-consumption and two other reasons why it is insufficient in dealing with the under-consumption. (To get the max of 6 marks, candidate would have to use the health screening as given in the extract as an e.g. to substantiate the point)	5-6
L2	Undeveloped explanation on how Medisave helps address under-consumption and two other reasons why it is insufficient in dealing with the under-consumption. Developed explanation on how Medisave is insufficient in dealing with the under-consumption.	3-4
L1	Smattering of valid points	1-2

	E2	For an answer that explain possible ways the government can complement the medical saving account scheme.	2		
	E1	For an answer that state ways the government can complement the medical saving account scheme.	1		

2017 RVHS H1 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.

(i) With the help of an AD/AS diagram, explain the impact in both the short and the long run of an influx of refugees on the Germany's economy. [6]

The influx of refugees will lead to an increase in consumption (C) as they will also be spending on daily necessities within Germany. In addition, in order to house the refugees, the government will need to spend more on public investment expenditure (G) to construct more housing infrastructure. [1] In the short run, the increase in C and G will then lead to an increase in aggregate demand (AD) from AD_0 to AD_1 and a multiple increase in national income (NY) from Y_0 to Y_1 , as shown in Figure 1, achieving actual economic growth [1].

In the long run, the refugees will be trained and are ready to join the workforce. This increase in quantity of labour in Germany will cause an increase in long run aggregate supply from AS_0 to AS_1 as shown in Figure 1. [1] Potential economic growth is achieved as productive capacity increased from Yf_0 to Yf_1 .

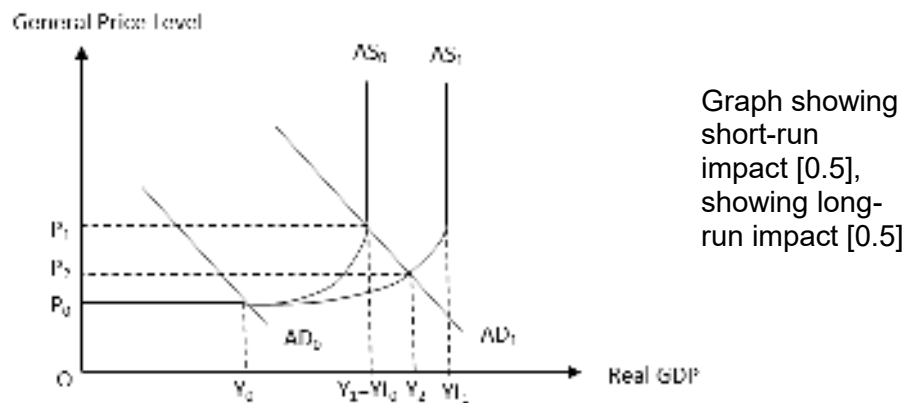


Figure 1: Impact on Germany's economy

- (ii) **Explain how Germany's government budget could possibly be affected with the influx of refugees.** [4]

Government budget position is derived from government revenue minus government expenditure.

Possible impact on government revenue

In the long run, as mentioned in part ci, as more refugees become educated and join the workforce, they will also be contributing income tax. Assuming that there is no change in government's expenditure, government's budget position is likely to improve. [2]

Possible impact on government expenditure

In the short run, government expenditure is likely going to increase as more funds will be spent to build more housing infrastructure for the refugees. Thus assuming no change in government revenue collected, government's budget position is likely to worsen. [2]

Note: 2 marks for each possible impact. To obtain the full 4 marks, both government expenditure and government revenue needs to be mentioned (even if it's assuming that either of them remain constant).

- (d) **Analyse and comment on whether the problems posed by Germany's trade surplus or Greece's debt will be more serious to the European Union.** [6]

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

Impact on BOP position of Germany's trading partners in the EU

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.

Impact on economic growth and unemployment of other EU countries

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.

Impact on economic growth and general price level of other EU countries

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.

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

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

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.

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

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.

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

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	<p>Developed analysis 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.</p> <p>Developed analysis: coverage of 2 reasons in total (1 for thesis and 1 for anti-thesis 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.</p>	3-4
L1	<p>Undeveloped analysis 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.</p> <p>Undeveloped analysis 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:</p> <ul style="list-style-type: none"> • coverage of 2 reasons in total (1 for thesis and 1 for anti-thesis without links explicitly made to other EU countries' macroeconomic goals) • 2 reasons for thesis or 2 reasons for anti-thesis 	1-2
Evaluation		
E2	An explained comment that is supported with economic analysis.	2
E1	An unexplained comment.	1

- (e) **With reference to the data, discuss whether benefits will outweigh costs with a less globalized world economy.** [8]

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.

Anti-Thesis: Costs associated with a less globalized world economy

Negative impact on amount of goods and services that a country can enjoy

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.

Negative impact on a developing country's employment level

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.

Synthesis (whether benefits will outweigh costs with a less globalized world economy)

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
L3	Developed discussion of whether benefits outweigh costs with a less globalized world economy. (Developed discussion includes one well-explained benefits and one well-explained cost, with reference to the extract.)	5-6
L2	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, without reference to the extract.) Or Developed explanation of two benefits or two costs of a less globalized world economy.	3-4
L1	Smattering of valid points	1-2

In addition, up to 2 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.

Rational decision making involves the consideration of the marginal costs and marginal benefits of the choices available.

(a) Using demand and supply analysis, explain how consumers and firms make rational decisions in the free market. [10]

(b) Discuss the view that the free market inevitably fails and government intervention always leads to an improvement in resource allocation. [15]

Suggested answer for part (a)

In economics, the rational decision-making is a process based on the marginalist principle. That is, it is based on a comparison of the marginal benefits and marginal costs of a particular activity, which in this case, refers to the consumption and production.

Consumers decide how much to consume by comparing the private benefits which they derive with the opportunity cost for each unit of the good. The private benefits can be depicted by the demand curve as the curve shows the maximum price that consumers are willing and able to pay. In Figure 1 below, the private benefit is P_1 for the Q_1^{th} unit.

The opportunity cost is the benefits of the next best alternative forgone which can be depicted by the price that he has to pay, which is P_e based on Figure 1.

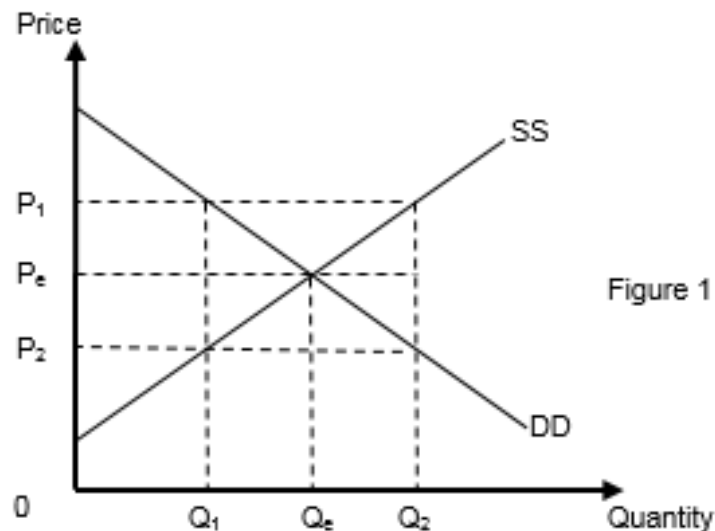


Figure 1

Rational consumers will buy the unit as long as the marginal benefits surpass the marginal costs. Since P_1 surpasses P_e , consumers will buy this unit, Q_1 . In fact, consumers will buy up to the point Q_e since for all units before Q_e , the additional benefits surpass the additional costs. However, it is irrational to consume beyond this unit as the additional costs surpass the additional benefits. For example, for the Q_2^{th} unit, the costs, P_e , will surpass the benefit, P_2 , thus it is better for the consumers to forgo this unit. As such, the quantity that consumers eventually buy is given by the equilibrium quantity, Q_e .

Likewise for producers, they decide how much to produce by comparing the private benefits which they can derive with the opportunity costs for each unit of the good they produce, so as

to maximise their profits. With reference to Figure 1, the private benefits can be depicted by P_e , which is the payment they would receive for each unit produced. For Q_1^{th} unit, the private benefits is P_e . The opportunity costs for the producers are given by the supply curve.

Like the consumers, rational producers will produce the unit so long as the additional benefits surpass the additional costs. Using Figure 1, for Q_1^{th} unit, the opportunity costs to producers is P_2 . Since P_e surpasses P_2 , producers will produce this unit. In fact, the producers will produce up to Q_e since for all units before Q_e , the additional benefits surpass the additional costs. However, it is to be noted that it is irrational to produce beyond Q_e as the additional costs surpass the additional benefits. For example, for the Q_2^{th} unit, the costs, P_1 , will surpass the benefit, P_e , thus it is better for the producers to forgo this unit. As such, the quantity that suppliers eventually produce is given by the equilibrium quantity, Q_e .

In conclusion, the use of marginalist principle does help consumers and firms make rational decisions.

Level of Response Marking Scheme (LORMS)		
L3	Developed explanation of how consumers and firms use marginalist principle to make rational decisions. Graphs are properly drawn and explained.	8 – 10m
L2	Undeveloped explanation of why consumers and firms make rational decisions. OR Developed explanation of why consumers or firms make rational decisions (cap at 6m)	5 – 7m
L1	Smattering of valid points	1 – 4m

Suggested answer for part (b)

Allocative efficiency is achieved when the current combination of goods and services produced and consumed maximizes societal welfare. It occurs at the point where marginal social benefit (MSB) = marginal social cost (MSC) at Q_e as shown in Figure 2.

The free market will be able to achieve allocative efficiency if the following criteria are satisfied. Firstly, there is the absence of externalities. Secondly, there is perfect information present and thirdly the good is not a public good. Assuming in a free market where the 3 criteria are satisfied, the equilibrium price and quantity is determined by the intersection between demand and supply.

With reference to figure 2, at a price above P_e e.g. P_1 , quantity supplied is more than quantity demanded. This creates a surplus in the free market. Producers will respond to the surplus by reducing price. When price decreases, quantity supplied falls while quantity demanded increases. This continues until the equilibrium price P_e and equilibrium quantity Q_e where the surplus is eliminated.

Similarly at a price below P_e e.g. P_2 , quantity demanded is more than quantity supplied. This creates a shortage in the free market. Consumers will respond to the shortage by offering a higher price. When price increases, quantity demanded falls while quantity supplied increases. This continues until the equilibrium price P_e and equilibrium quantity Q_e where the shortage is eliminated.

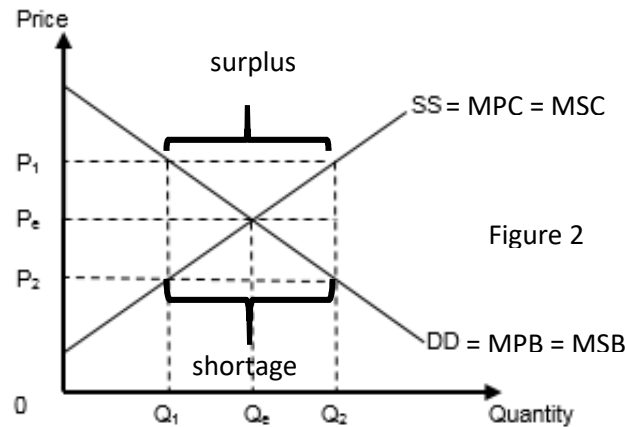


Figure 2

Thus when the 3 criteria are satisfied, the free market will adjust itself to achieve allocative efficiency at Q_e through the price mechanism and that government intervention is not necessary. However, if any of these criteria is not satisfied, the free market will fail to achieve allocative efficiency and this necessitates government intervention.

Using merit good as an example. A merit good is a good that is deemed socially desirable by the government and yet perceived by the government to be under-consumed. This under-consumption can be attributed to individuals disregarding positive externalities and/ or under-estimating their private benefits of consuming the good. One example of a merit good is immunization. Some consumers may ignore the external benefits of immunization. External benefits are beneficial side-effects of producing / consuming a good on third parties who are not involved in the production / consumption of the good. Third parties like the family members and the co-workers enjoy the external benefits of immunization even though are not immunised. They are less likely to catch contagious disease from the person who was inoculated. When external benefits are ignored by consumers, under-consumption results.

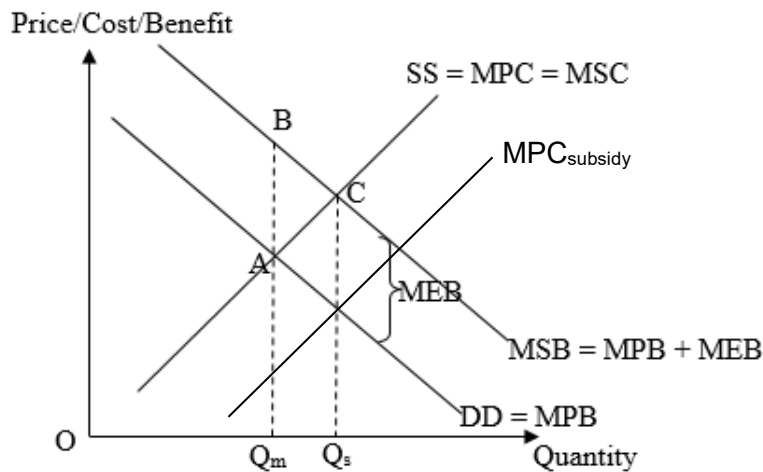


Figure 3

With reference to Figure 3. The existence of external benefits cause the marginal social benefit (MSB) to be higher than the marginal private benefit (MPB). The market output of the merit

good is Q_m , given by the intersection of demand and supply (or marginal private benefit MPB, and marginal private cost MPC). The external benefits on third parties (i.e., marginal external benefits, MEB) are not considered when consumers decide how much of the good to consume. However, the socially optimal level of the good is Q_s , given by the intersection of marginal social benefit (MSB) and marginal social cost (MSC), since society's welfare is maximised when $MSB=MSC$. Since $Q_m < Q_s$, there is under-consumption of the good. The welfare loss to society (i.e. deadweight loss) is given by Area ABC. Society's welfare can be increased by increasing Q_m towards Q_s .

One method to move towards a position of greater economic welfare is for government to provide subsidies to producers of healthcare like subsidizing doctors' training costs or hospitals operation cost. This will lower MPC to $MPC_{subsidy}$ in Figure 3, making healthcare available at a lower price and thereby encouraging consumption. This increase the consumption of healthcare and move equilibrium quantity of healthcare consumed towards the social equilibrium level of healthcare in Figure 3. If the subsidy per unit is equal to the MEB at the social equilibrium output of Q_s , then the welfare of the society will be maximized. This shows that government intervention can lead to an improvement in the allocation of resources in an economy.

However, it is hard to determine the required size of subsidy as it is difficult to calculate the MEB derived from consumption of healthcare by the society as government have information failure. If the amount of MEB is under-estimated, subsidies may not be adequate to push equilibrium quantity to the social optimum level as some individuals are still unable to afford healthcare. If the amount of MEB is over-estimated, it will lead to over-consumption and substantial wastage of resources, which can result in an even greater welfare loss than without government intervention.

Also, the opportunity costs for providing subsidies needs to be considered too as these funds can be channelled to other purposes like building new infrastructure or enhancing education. Hence, the government needs to conduct the cost-benefit analysis of subsidizing healthcare and should only proceed if the benefits outweigh the costs of doing so.

In conclusion, whether the free market inevitably cause market failure depends on whether the 3 criteria are satisfied. Should any of it is not satisfied, government intervention is required and the degree of government intervention depends on the degree of market failure present in the free market.

Level of Response Marking Scheme (LORMS)		
L3	Developed discussion on the view that the free market inevitable fails AND how government intervention can lead to improvement in resource allocation. Relevant diagrams are drawn to support analysis.	9 – 11m
L2	Undeveloped discussion on the view that the free market inevitable fails AND developed discussion on government intervention can lead to improvement in resource allocation. Or	5 – 8m

	Developed discussion on the view that the free market inevitable fails AND undeveloped discussion on how government intervention can lead to improvement in resource allocation. Relevant diagrams are drawn to support analysis.	
L1	Smattering of valid points	1 – 4m

Evaluation		
E2	Insightful evaluation which considers the limitation and implication of government intervention which is well justified.	3 - 4m
E1	For an evaluative statement without justification.	1 - 2m

2017 RVHS Prelims II (Y6 H1 8819)

- a) Explain the factors that will affect the external value of Singapore dollar. [10]
- b) Discuss whether exchange rate policy is the best policy to achieve price stability in Singapore. [15]

- a) Explain the factors that will affect the external value of Singapore dollar. [10]

Introduction

The external value of Singapore dollar (SGD) (also referred to as the exchange rate of SGD) is the amount of foreign currency that can be exchanged for SGD. The external value of SGD is determined by the demand and supply of SGD.

Body

One of the factors affecting the external value of Singapore dollar is the amount of goods and services internationally traded. For example, with an increase in income and a change in taste and preferences towards goods and services from Korea like overseas trip to Korea, that will lead to an increase in supply of SGD from S_0 to S_1 in exchange for Korean Won as shown in Figure 1. At the same time, an increase in demand for Singapore exports like an increase in demand for electrical machinery from Korea will lead to an increase in demand for SGD from D_0 to D_1 as shown in Figure 1. As seen, it is the intersection of demand and supply of SGD that determines the external value of SGD. As the increase in demand is more than the increase in supply of SGD in this case, SGD appreciates from E_0 to E_1 .

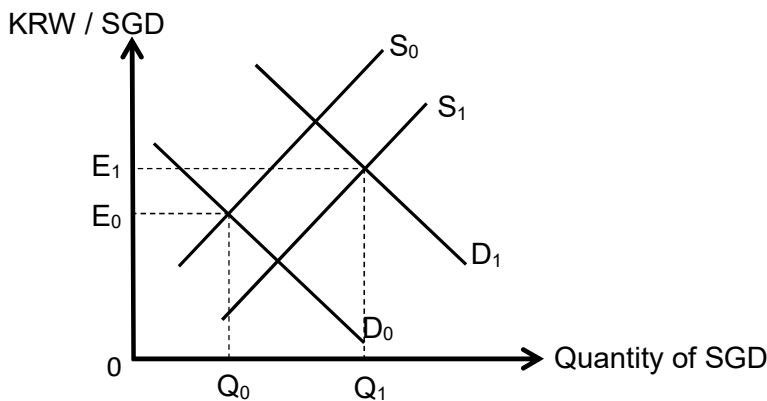


Figure 1: Determination of the external value of SGD

Another factor affecting the external value of Singapore dollar is the amount of capital flows into and out of Singapore. As Singapore does not determine her own interest rate and is an interest rate taker, interest rate in Singapore is likely to increase with US interest rates on the upward trend. Comparing to countries where interest rates is lower e.g. Japan, this will lead to hot money inflows into Singapore. This will lead to an increase in demand for SGD and will cause SGD to appreciate.

Another factor is the type of exchange rate regime in Singapore. Singapore adopts a managed float exchange rate regime and the characteristics of Singapore exchange rate are basket, band and crawl. MAS conducts direct interventions in the foreign exchange market to maintain the exchange rate within an undisclosed policy band. For example, if

the exchange rate falls below the lower support limit, MAS will then intervene by buying SGD using its foreign reserves, this will increase the demand for SGD in the foreign exchange market so that SGD falls within the band again.

Illustrated above are some factors that will affect the demand and supply of SGD and thus, the external value of SGD.

Knowledge, Understanding, Application & Analysis		
L3	<p>Developed explanation, with examples, on three factors that will affect the external value of SGD.</p> <p>[Developed explanation includes examples given in the context of Singapore and just <u>one</u> diagram explaining how the external value of SGD is determined by the demand and supply of SGD.]</p>	8-10
L2	<p>Undeveloped explanation on three factors that will affect the external value of SGD, with no examples given in the context of Singapore.</p> <p>OR</p> <p>Developed explanation, with examples, on two factors that will affect the external value of SGD.</p>	4-7
L1	Smattering of valid points; Undeveloped explanation on factors that will affect the external value of a currency, with no reference made in the context of Singapore.	1-3

b) Discuss whether exchange rate policy is the best policy to achieve price stability in Singapore. [15]

Introduction

Price stability refers to the situation whereby the general price level of goods and services in an economy either change very slowly or do not change at all. Exchange rate policy is important to achieve price stability in Singapore.

Thesis: Exchange rate is the best policy to achieve price stability in Singapore

Given that Singapore has to import virtually everything, Singapore usually adopts a gradual appreciating stance relative to a basket of currencies. By allowing the SGD to appreciate, imports into Singapore will now be relatively cheaper in terms of SGD, which means that we will now need to pay less SGD for the same amount of imports. This will in turn help to maintain costs of production low for firms who rely on imported inputs and subsequently keep the price of end-products / finished goods competitive. This helps to prevent the fuelling of cost-push inflation and also help to maintain Singapore's export competitiveness given the high import content for the exports. Moreover, in times of demand-pull inflation caused by external factors, keeping a stronger exchange rate is also helpful as it increases the prices of exports in terms of foreign currency and moderates the external demand for our goods and services. Since the Marshall-Lerner condition is satisfied in Singapore, net exports will fall, which triggers a fall in aggregate demand (AD) and thus, helps to curb demand-pull inflation.

More importantly, using the exchange rates is more of a necessity than a choice in Singapore's context. This is because, our openness to capital flows implies that any attempts to change interest rates to tackle inflation will be negated by hot money inflows/outflows, thus rendering the traditional tools of monetary policy ineffective.

Anti-Thesis: Exchange rate is NOT the best policy to achieve price stability in Singapore

Nonetheless, in the short term, the Marshall-Lerner condition might not be satisfied. This is because it may take some time before importers can really 'benefit' from the stronger SGD. For example, if importers have previously signed long-term contracts to import a certain quantity of goods at a fixed price in Singapore dollars, this implies that the import expenditure to be paid (in terms of SGD) is likely to remain constant even though it could have dropped given that SGD is now stronger.

Another limitation of having a strong SGD is that Singapore's exports will now become more expensive in terms of foreign currency (i.e. less competitive compared to other countries' exports). Even though, this loss in export competitiveness due to the strong SGD will be mitigated by the lower cost of production because of cheaper imported raw materials to some extent, net exports might fall by too much if SGD appreciates by a large extent. The fall in net exports will lead to a fall in AD and a multiple fall in national income (NY). This will have an adverse impact on Singapore's economic growth if we are not experiencing demand-pull inflation. With a fall in national income, unemployment will also increase subsequently.

In addition, exchange rate policy will not really help to tackle inflation if it arises due to internal sources. For example, if there is an increase in domestic wages arising from government policies like an increase in foreign worker levy which results in cost-push inflation, then exchange rate policy will not be able to help. In addition, exchange rate policy will also not help if there is demand-pull inflation which arises due to an increase in domestic consumption and investment because of an optimistic economic outlook.

One other policy to achieve price stability in Singapore:

As exchange rate policy will not really help to tackle inflation that arises due to internal sources, other policies are needed. One alternative policy will be supply-side policies. Supply-side policies aim to increase long-run aggregate supply so as to mitigate the effects of inflation. Examples of supply-side policies include lowering personal income and corporate income tax rates. Lowering personal income tax will attract foreign talent, prevent brain drain and increase the incentive to work while lowering corporate income tax rates attract foreign and local investments. As such, lowering taxes help to raise the aggregate supply (AS) curve in the long run since they increase the quantity and quality of resources. As shown in Figure 2, with supply-side policies in place, AS will increase from AS_0 to AS_1 and this will help to reduce general price level from P_0 to P_1 thus reducing any inflationary pressures and achieve price stability.

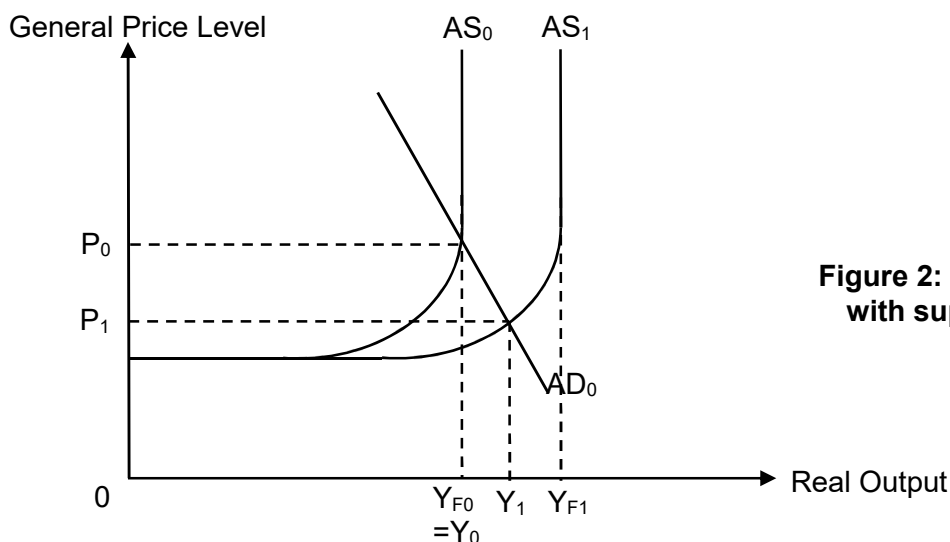


Figure 2: combating inflation with supply-side policies

Although supply-side policies can help curb inflation, they are not without limitations. Most importantly, such measures take a relatively long time before its effects can be felt, and even then, the results are not guaranteed. As such, by the time they really take effect, it might be too late to curb inflation in a prompt manner. Also, such measures are likely to be costly for the government to fund and even then, the 'take-up' rate may be unsatisfactory if workers or firms are reluctant to undergo training or undertake R&D to increase productivity.

Conclusion

In sum, our heavy reliance on external trade (and thus exposure to hikes in global commodity prices) as well as openness to financial flows necessitate the use of exchange rates, and in many circumstances, make it the 'best' policy to tackle inflation. Nonetheless, given that inflation is usually multi-faceted in nature, simply relying on the exchange rates may not be the best nor sufficient. Instead, it should be complemented with other policies

that aim to tackle inflation arising from the various sources and achieve price stability in Singapore.

Knowledge, Understanding, Application & Analysis		
L3	Developed discussion for both sides, with good reference <u>to the context of Singapore</u> (relevant examples are provided to substantiate points) + well evaluated limitations.	9-11
L2	Able to explain exchange rate policy and one other policy (together with limitations) to tackle inflation. However, explanations did not link to Singapore's context.	7-8
	Able to explain exchange rate policy and one other policy (without limitations) to tackle inflation.	4-6
L1	Smattering of valid points.	1-3

Evaluation		
E2	Able to provide a clear and meaningful conclusion to the overall issue, indicating the stand on whether the use of exchange rates is the best policy while recognizing that the choice of policy depends largely on the characteristics of the country. In addition, the reasons for arriving at such a conclusion drawn are clearly explained and well justified.	3-4
E1	Able to provide a reasoned evaluation of specific policies but has not addressed the overall issue i.e. has not come to a conclusion whether the use of exchange rates is the best policy.	1-2