



Sample Answers for Case Study 1

(a)	(i)	Describe the trend in the share of total paid car rides for business commuters in the US.	[1]
		<i>The <b>proportion</b> of market share for taxi rides is falling and for Uber rides is rising. [1m]</i>	
(b)		Using economic theory, explain how the “surge multiplier” can address “an excessive number of Uber car ride requests.”	[4]
		<i>When too much demand for Uber car ride, there will be disequilibrium in the market where demand for Uber car rides will increase and a <b>shortage [1m]</b> where <b>quantity demanded exceeds quantity supplied</b> of Uber rides will be resulted at the initial price. This shortage will result to an <b>upward pressure on price</b> and this <b>increase in price will act as a signal [1m]</b> for <b>commuters to decrease their quantity demanded</b> for Uber rides. Uber car drivers, recognising the increase in price will also be more <b>incentivised to increase their quantity supplied [1m]</b> of Uber rides until the <b>new higher equilibrium is reached [1m]</b> where the equilibrium price and quantity for Uber rides increase to address the shortage.</i>	
(c)		“Taxi drivers are not happy with the impact Uber is having on their business as Uber is attacking on all fronts.”  Discuss how the combined effects of a decrease in price for Uber car rides and a fall in petrol price may affect taxi drivers’ revenue.	[8]
		<p><u>Change in demand</u> A decrease in price for Uber car rides means an increase in quantity demanded for Uber car rides. As mentioned in Extract 1, “Uber is essentially synonymous with taxis”, which means that Uber car and taxi rides are close substitutes. The XED between Uber car and taxi rides will be highly positive especially during peak hours {not required of H1 students to mention XED}. This means that there will be a more than proportionate fall in demand for taxi rides from <math>D_1</math> to <math>D_2</math> in Figures 1 and 2 below. Assuming ceteris paribus, taxi drivers’ revenue will fall.</p> <p><u>Change in supply</u> With a fall in petrol price, as petrol is needed for driving taxis, cost of production will fall and taxi drivers will be motivated to increase the number of taxi rides since there is an opportunity to make more profits (which is total revenue minus total cost) there will be an increase in supply of taxi rides from <math>S_1</math> to <math>S_2</math> as shown in Figures 1 and 2. Assuming if the demand for taxi is relatively price elastic as there are alternative transportation means such as buses, trains and Uber cars, the increase in supply ceteris paribus, will cause a fall in price of taxi rides and the quantity demanded for taxi rides will increase more than proportionately. This would mean that the total revenue for taxi drivers may increase instead.</p> <p><u>Combined effect on total revenue (TR):</u>  <b>There will be negative impact on total revenue for taxi drivers</b> if the fall in demand is greater than the increase in supply, as shown in Figure 1. The demand curve for taxi rides will therefore shift left to a greater extent to <math>D_2</math> than the increase in supply to <math>S_2</math>. The outcome in taxi rides market will be a</p>	



fall in equilibrium price to  $P_3$  and a fall in equilibrium quantity to  $Q_3$ . Hence, the total revenue for taxi drivers will fall from  $OP_1E_1Q_1$  to  $OP_3E_3Q_3$ .

**There will be positive impact on total revenue for taxi drivers** if the fall in demand is smaller than the increase in supply, as shown in Figure 2. The demand curve for taxi rides will therefore shift left to a smaller extent to  $D_2$  than the increase in supply to  $S_2$ . The outcome in taxi rides market will be a fall in equilibrium price to  $P_3$  but a rise in equilibrium quantity to  $Q_3$ . Hence, the total revenue for taxi drivers will rise from  $OP_1E_1Q_1$  to  $OP_3E_3Q_3$ .

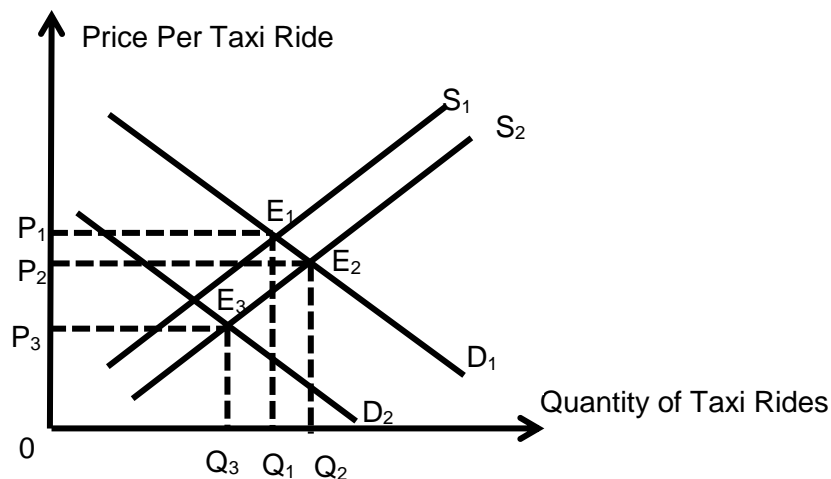


Figure 1: Market for Taxi Rides – Negative impact on TR

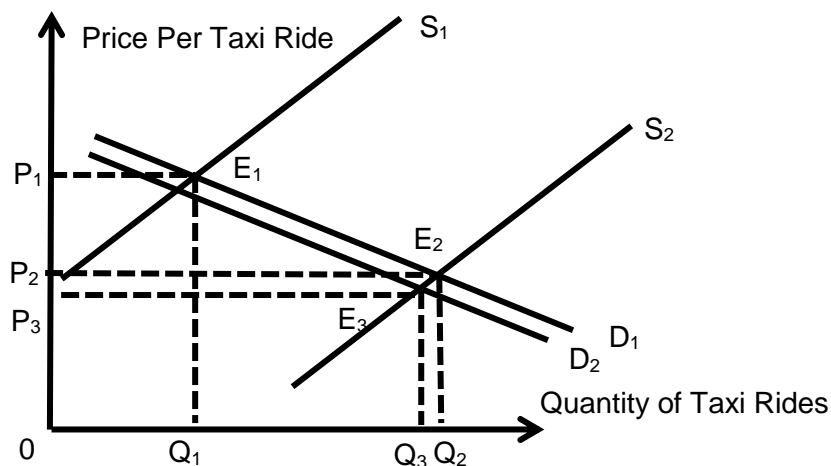


Figure 1: Market for Taxi Rides – Positive impact on TR

### Evaluation

**Make a stand on which impact is more likely:**

More likely for a fall in tax revenue because:

- Petrol price may not form the bulk of taxi driver's cost of providing the taxi service, as mentioned in Extract 2. There are other significant costs such as taxi rental and tax as mentioned in Extract 3 where taxis are



		<p>charged tax, which go to the city and the Metropolitan Transport Authority (MTA). Hence, even with a fall in petrol price, the cost of driving a taxi may not have fallen significantly and will not justify a significant fall in supply.</p> <ul style="list-style-type: none"><li>The fall in demand for taxi rides may be greater as the fall in petrol price will also increase the supply of Uber car rides, thereby further lowering the price of Uber car rides and causing further switching away from Uber car rides to taxi rides.</li></ul> <p>Other possible evaluative points:</p> <ul style="list-style-type: none"><li>On evaluation the taxi drivers' revenue may change depending on the substitutability between Uber and taxi rides. For instance, during non-peak hours, commuters might be indifferent between either travelling via Uber or taxi, and the XED value for Uber and taxi may be less positive, the demand for taxi rides may not fall as significantly even if the price for Uber rides fall. Hence, taxi drivers' revenue may not fall as significantly, <i>ceteris paribus</i>.</li><li>In addition, as the above analysis encompasses the use of demand/supply and elasticities analysis, there is a need to bear in mind that <i>ceteris paribus</i> conditions may not hold in reality and the elasticities data may not accurately portray the degree of responsiveness of all commuters. With the complexities in the real world context, the impact on taxi drivers' revenue may also be affected by other changing economic conditions such as income of individual commuters (the use of YED (for H2 students) may then come into play) and government policies.</li></ul> <table><tr><th colspan="3">Level Marks</th></tr><tr><td>L3</td><td>Good use of demand, supply and various elasticity concepts to analyse the various <u>combined</u> impacts on taxi drivers' revenue.</td><td>5-6</td></tr><tr><td>L2</td><td>An underdeveloped attempt to use the demand and supply framework to explain the <u>combined</u> impacts on taxi drivers' revenue.</td><td>3-4</td></tr><tr><td>L1</td><td>Brief explanation of demand and supply factors and its implication with errors.</td><td>1-2</td></tr><tr><th colspan="3">Evaluation Marks</th></tr><tr><td>E2</td><td>Judgement with clear justification</td><td>2</td></tr><tr><td>E1</td><td>Judgement without justification</td><td>1</td></tr></table>	Level Marks			L3	Good use of demand, supply and various elasticity concepts to analyse the various <u>combined</u> impacts on taxi drivers' revenue.	5-6	L2	An underdeveloped attempt to use the demand and supply framework to explain the <u>combined</u> impacts on taxi drivers' revenue.	3-4	L1	Brief explanation of demand and supply factors and its implication with errors.	1-2	Evaluation Marks			E2	Judgement with clear justification	2	E1	Judgement without justification	1	
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(d)	(i)	<p><b>With reference to Extract 2, distinguish the likely price elasticity of supply between taxi and Uber car rides.</b></p>	[2]																					
		<p>Supply for taxis will be <u>relatively more price inelastic than that of Uber</u>. [1m]</p> <p>This is due to <u>the PES determinant of mobility of factors of production identified in Extract 2 where it's mentioned that in order for a person (the factor of production [labor] that provides the taxi rides service,) to become a taxi driver, he has to pass a test and pay rental fee. As compared to Uber rides, a person [labour] can easily become an Uber driver without having his</u></p>																						



		license check or the need to pass any test. [1m]	
	(ii)	<p><b>Extract 3 mentioned that tax was imposed on taxis and Uber car rides respectively.</b></p> <p><b>Using your answer for (d)(i) and appropriate diagrams, explain the difference in tax burden for drivers and commuters between taxi and Uber car rides.</b></p>	[5]
		<p><i>The imposition of tax will cause the supply for taxi and Uber car rides to fall and the SS curve to shift to the left [1m] as shown on both Figure 3 and Figure 4 below for the Uber rides marker and taxi rides market respectively.</i></p> <div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="text-align: center;"> <p>Price Per Uber Car Ride</p> <p>Quantity of Uber Car Rides</p> <p>Figure 3: Tax Burden in Uber Car Rides Market</p> </div> <div style="text-align: center;"> <p>Price Per Taxi Ride</p> <p>Quantity of Taxi Rides</p> <p>Figure 4: Tax Burden in Taxi Rides Market</p> </div> </div> <p><i>*2 marks for diagram</i></p> <p><i>As the supply for Uber rides is more price elastic due to the ease of becoming Uber driver to provide the service, the supply curve for Uber market will be relatively gentler in slope as compared to that in the taxi rides market. Assuming that the demand for both Uber and taxi rides are relatively more price elastic with a gentler slope in both markets, consumer will bear a greater tax burden of <math>P_1E_2AP_2</math> to that of the Uber driver's tax burden of <math>P_2AE_3P_3</math> as shown on Figure 2 in the Uber car rides market. [1m]</i></p> <p><i>As compared, in the taxi rides market; due to the relatively more price inelastic supply curve that that of demand, the consumer will bear a lesser tax burden of <math>P_1E_2AP_2</math> than the taxi drivers' tax burden of <math>P_2AE_3P_3</math> as shown on Figure 3. [1m]</i></p>	
(e)	(i)	<p><b>Using Extract 4, explain the positive externality that may arise when commuting via Uber rides. [H1 only]</b></p>	[2]
		<p><i>As mentioned from extract 4, when commuting via Uber rides, this will incentivise consumers to purchase lesser automobiles. Third parties such as pedestrians [1m] will face with external marginal benefit of lesser likelihood of vehicle accidents and a reduction in their medical bills [1m] for treatment.</i></p>	



		<p>OR</p> <p><i>As consumers commute via Uber rides and buy fewer cars, this opens up the remarkable possibility of converting parking spaces to new and environmentally sound uses. The parking spaces could be converted into parks for third parties like non-Uber users [1m] to enjoy and these non-Uber users will enjoy an external marginal benefit of healthier living with lesser pollution and a reduction in their medical bills. [1m]</i></p>	
	(ii)	<p><b>In light of the issues raised in the extracts, discuss the desirability of Uber.</b></p>	<p>H1:8</p> <p>H2:10</p>
		<p><u><i>Desirable – Greater Allocative Efficiency &amp; Consumer Welfare</i></u>  <i>In extract 1, it was mentioned that surge multiplier helps to attract more drivers to drive during peak hours. The surge multiplier works according to the theory of price mechanism and uses price as a signal to allocate resources (drivers) efficiently to meet the needs for paid car rides in the market. This may address the shortage of drivers in the short run and provides more alternatives for consumers at the market price. This raises consumer welfare and their material standard of living as there is now increase in more services available at a lower price for consumption.</i></p> <p><u><i>Desirable – Lesser Externalities from Congestion Problem in NYC &amp; creation of jobs</i></u>  <i>Extract 4 mentioned that if the commuters who substituted to using Uber are consumers who are previously using their private car for commuting, then this will reduce the congestion problem faced by NYC. The EMC such as higher medical bills from road accidents from negative externalities caused by over usage of road can be effectively reduced. The deadweight loss to society will be reduced as the society will be better off with introduction of Uber.</i></p> <p><i>In addition, the launch of Uber app also allows more existing car owners to be employed as Uber drivers as mentioned in extract 4. With rising population in NYC, this may mean that there will be more demand for travelling via paid car rides and will lead to a rise in derived demand for more Uber drivers. In addition, with more people employed, the purchasing power of consumers will be increase and consumption will increase leading to increasing in aggregate demand. This will lead to unplanned inventory depletion and assuming US is operating with spare capacity in its economy, there will be a rise in actual growth and fall in demand-deficient unemployment in the economy. Extract 4 also mentioned that Uber brings about greater productivity and efficient use of capital in the economy, this may lead to increase in both short run and long run aggregate supply of the economy and hence even greater actual and potential growth for US.</i></p> <p><u><i>Not desirable (For H2) - Market Dominance by Uber and reduction in consumer welfare</i></u>  <i>There is however, likelihood that the Uber company may act like a monopoly in future as extract 4 mentioned that Uber has the market power to compete unfairly via its use of app and surge multiplier that is not regulated by the government. Uber may end up dominating the paid car rides sector and charge a higher price of <math>P^* &gt; MC</math> when it has gained a huge enough market share as supported by the rising proportion of its share in the market on Figure 5. If this were to happen, there will be allocative</i></p>	



inefficiency in the market and deadweight loss of shaded area EBA. Consumers will then have to suffer a fall in their consumer welfare due to the higher price charged as shown on the diagram below. If the barriers to entry remains high in the future with Uber getting patent for its car-booking technology yet continue to keep their average cost minimal, they may be able to earn a supernormal profits of area  $CP^*E^*E_0$  at the expense of the riders, hence, worsening the equity issues in US.

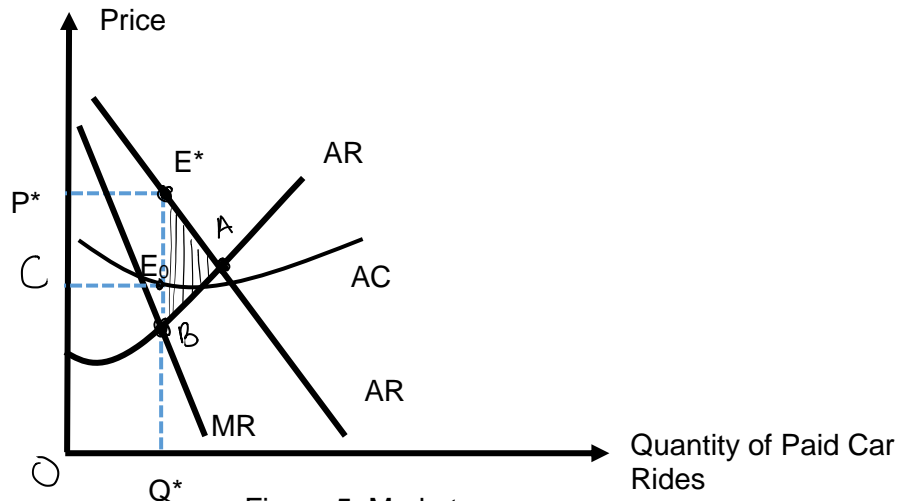


Figure 5: Market  
Dominance by Uber

Not desirable (For H2) – Lower Dynamic Efficiency and Lesser Innovation on Paid Car Rides Services

In extract 2 it was also mentioned that taxi drivers suffer a fall in revenue due to entrance of Uber. Coupled with the higher cost of providing taxi services as mentioned in the extract 2 where taxi drivers needed to incur cost of rental which may increase its average cost. And this may reduce the profits that the taxi drivers earn and will limit the ability of the taxi company to earn supernormal profits. The taxi company will be unlikely to product innovate and there will be no dynamic efficiency in the market and there will be lesser variability in terms of paid car rides services for consumers, hence reducing consumers' overall welfare. Consumers may also suffer if the taxi company decided to charge a higher price to consumers in order to prevent a further fall in TR especially if demand for taxi is price inelastic during peak hours.

Not desirable – Greater Allocative Inefficiency in Mass Transit Sector

In extract 3, it was also mentioned that Uber has caused a fall in taxi drivers' revenue as commuters substitute to commuting via Uber rides. This will mean that there will be lesser tax collected by government from the taxi drivers and lesser funds available for the public transport and infrastructures and may result to allocative inefficiency in the mass transit sector (under-production of mass transit and infrastructure services). Consumers' welfare may be compromised and less subsidy for mass transit may translate to higher price of mass transit and will lead to higher price for consumers, lowering their consumer welfare.

Evaluation

On evaluation, the existence of Uber is largely desirable as market dominance by Uber is unlikely. As cited in extract 4, the technology that





*Uber is using is not exclusive and can be easily replicated. This suggests that the paid car rides industry is highly contestable and with a relatively low barriers to entry. This will motivate more competition in the future to drive down the price of goods and services with consumers benefitting most in terms of greater variety. Society will also benefit as Uber brings about increasing rides that will lead to more sales tax collected by the government that can help improve the mass transit infrastructure in US. With more quality transit infrastructure, the non-material SOL of consumers can be further enhanced. The introduction of Uber can remain desirable as long as government regulate through stringent checks on licensing to Uber drivers. Such regulations may help address/minimise the negative externalities by ensuring that sufficient Uber drivers are providing paid car rides services by complying with safety protocols on the roads, yet not adding to the congestion problem in NYC.*

**Mark Scheme for H1**

<b>Level Marks</b>		
L3	<i>Clear discussion of desirability in terms of consumers, producers and society/government's perspectives with good reference to case evidence.</i>	5-6
L2	<i>Some two sided perspectives of desirability with some brief references to extracts.</i>	3-4
L1	<i>Brief mentioning of desirability without clear explanation or linking to context. Answer is largely one-sided with errors.</i>	1-2
<b>Evaluation Marks</b>		
E2	<i>Judgement with clear justification</i>	2
E1	<i>Judgement without justification</i>	1

**Mark Scheme for H2**

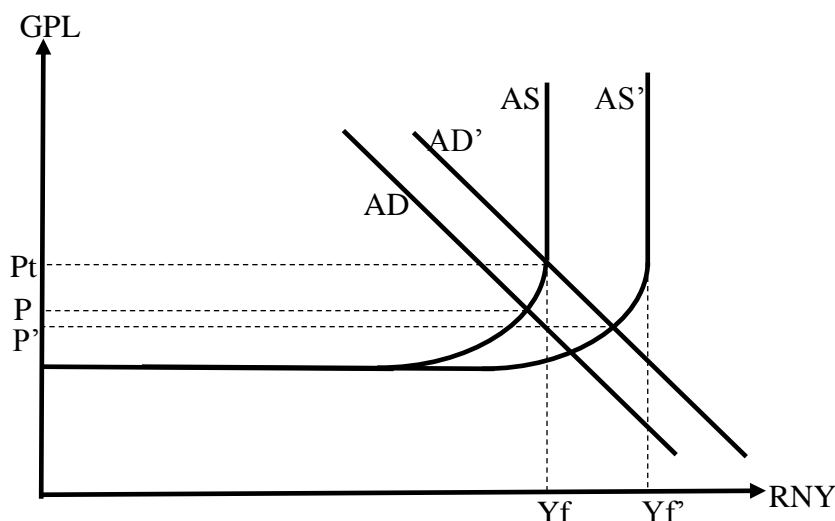
<b>Level Marks</b>		
L3	<i>Clear discussion of desirability in terms of consumers, producers and society/government's perspectives with good reference to case evidence.</i>	6-8
L2	<i>Some two sided perspectives of desirability with some brief references to extracts.</i>	4-5
L1	<i>Brief mentioning of desirability without clear explanation or linking to context. Answer is largely one-sided with errors.</i>	1-3
<b>Evaluation Marks</b>		
E2	<i>Judgement with clear justification</i>	2
E1	<i>Judgement without justification</i>	1



**Sample Answers for Case Study 2**

<b>a</b>	<b>Describe the trend in merchandise trade as a percentage of world GDP from 2000 to 2014.</b>	<b>[1]</b>
<b>(i)</b>	<i>The merchandise trade as a percentage of world GDP generally increased. (1m)</i>	
<b>(ii)</b>	<b>Using economic theory, account for the trend identified in (a)(i). (only for H1)</b>	<b>[2]</b>
	<i>There is an <b>increasing awareness</b> of the benefits of specialising based on <b>comparative advantage</b>. (1m) The theory of comparative advantage states that even if one country has absolute advantage in production of two goods, specialisation and trade will still benefit both countries as long as each has a comparative cost advantage, i.e. incur lower opportunity cost in producing one good. (1m) Increasing awareness of the benefits of specialising based on comparative advantage thus accounts for the increasing trade activity.</i>	
<b>b</b>	<b>Using the concept of opportunity cost, explain one effect on firms and one effect on the government in the home country arising from dumping by a foreign country.</b>	<b>[6]</b>
	<p><i>Effect on firms in the home country:</i>  Consumers in the home country turn to the cheaper goods dumped by the foreign country. As demand for the goods by the foreign firm is price elastic, the lower price charged will result in a more than proportionate increase in quantity demanded for foreign goods, increasing expenditure on these goods. Demand for domestically-produced goods will fall, lowering total revenue received by firms in the home country. (1m) The opportunity cost of continuing operation is forgone revenue from selling alternative goods that require similar inputs to production. (2m) <b>OR</b> the opportunity cost of shutting down operation is totally forgoing the revenue generated from selling the good and the brand image that the firms may have built up. (2m)</p> <p><i>Effect on government in the home country:</i>  As consumers spend less on domestically-produced goods, AD falls and hence real national income falls. The government will therefore receive lower tax revenue. (1m) The opportunity cost of cutting spending on infrastructure due to the lower revenue is forgoing higher rate of growth from better connectivity. (2m) <b>OR</b> the opportunity cost of imposing tariffs on the foreign goods is forgoing good trade relations between the countries. (2m)</p>	
<b>c</b>	<b>What evidence suggests that the world is heading towards deglobalisation?</b>	<b>[1]</b>
<b>(i)</b>	<i>From 2011 onwards, there is a consistent decline in merchandise trade as a percentage of GDP. (1m)</i>	
<b>c</b>	<b>With the aid of a diagram, explain why in 2015 there was deflation despite an improvement in the trade balance as shown in Table 1.</b>	<b>[4]</b>
<b>(ii)</b>	<p><i>An improvement in the trade balance, which means an increase in <math>X-M</math>, will result in an increase in AD, as illustrated by a rightward shift in AD curve from AD to AD' as shown in the diagram below. This is expected to result in an increase in GPL from P to Pt. (1m)</i></p> <p><i>However, Extract 6 implied that Singapore has been embracing globalisation and technology, and firms and workers are encouraged to improve and upskill themselves. With better productivity due to advancement of technology and better quality of labour, the country's productive capacity increases as illustrated by the shift of LRAS from AS to AS'. The deflation observed must have occurred due to the increase in LRAS outweighing the increase in AD, causing the GPL to fall from P to P'. (2m) Hence the observed deflation from P to P' occurs.</i></p> <p><i>(1m for dig.)</i></p>	





d. Discuss how the change in exchange rate in Table 1 and measures undertaken in Extract 6 might impact Singapore's export competitiveness. [8]

Table 1 showed that Singapore dollar depreciated against US dollar.

As the demand for Singapore's exports is likely to be price elastic given the availability of substitutes in the global market, reduction in foreign price of exports due to the depreciation will result in a more than proportionate increase in the quantity demanded of exports, increasing Singapore's export revenue as our price competitiveness improve.

However, given that Singapore has limited resources, demand for imported inputs is price inelastic. As depreciation will result in an increase in domestic price of imported inputs, the increase in price will result in a less than proportionate fall in quantity demanded of inputs. This results in an increase in expenditure on imported inputs, increasing cost of production. This will result in a fall in SRAS and hence a rise in GPL. Assuming Singapore's inflation rate is higher than other countries', Singapore will lose export price competitiveness.

**EV:** Overall, the depreciation is likely to cause an improvement in Singapore's export price competitiveness. Cost of production may have risen due to increase in price of imported inputs. However, the firms' total cost of production does not only comprise cost of imported inputs – there are rental and cost of labour as well. Hence the increase in cost of production is unlikely to totally offset the reduction in foreign price of exports due to the depreciation. The increase in cost of production will **reduce the extent of fall in the foreign price of exports** due to the depreciation, hence still maintaining export price competitiveness.

Examples of the supply-side policies mentioned in Extract 6 are 'creating the basic conditions for the markets to operate properly' and the model of tripartite partnership between unions, employers and the government.

Creating basic conditions for the markets to work properly such as protection of property rights and granting of patents to R&D outcomes encourage investment. As firms are more willing to carry out investment spending, better capital equipment in the long run will reduce cost per unit of output, improving price competitiveness of exports. The same granting of patents could also encourage R&D in product innovation, improving non-price competitiveness.

However, these measures may only impact Singapore's export competitiveness in the



long run. In addition, the stated measures alone may not suffice in encouraging positive outcomes on R&D. **EV:** Other measures such as deliberate efforts to improve the quality of human capital may enhance the success of the R&D efforts.

The model of tripartite partnership between unions, employers and the government ensures that the rate of wage increase is in line with the rate of productivity improvements, hence helping to maintain competitive wages and cost and eventually, competitive prices of goods and services.

However, despite our tripartite arrangement, as stated in Extract 6, Singapore continues to face competition from both developing and developed countries. It stated that starting salaries for graduates in Japan are lower than in Singapore, making us lose price competitiveness to an extent, as our wage cost is still higher. In addition, Singapore is facing a tight labour market, making it difficult to prevent wage increases as we move towards the full employment level. Hence there is a limited extent to which such tripartite arrangement can continue to contribute to Singapore's export competitiveness.

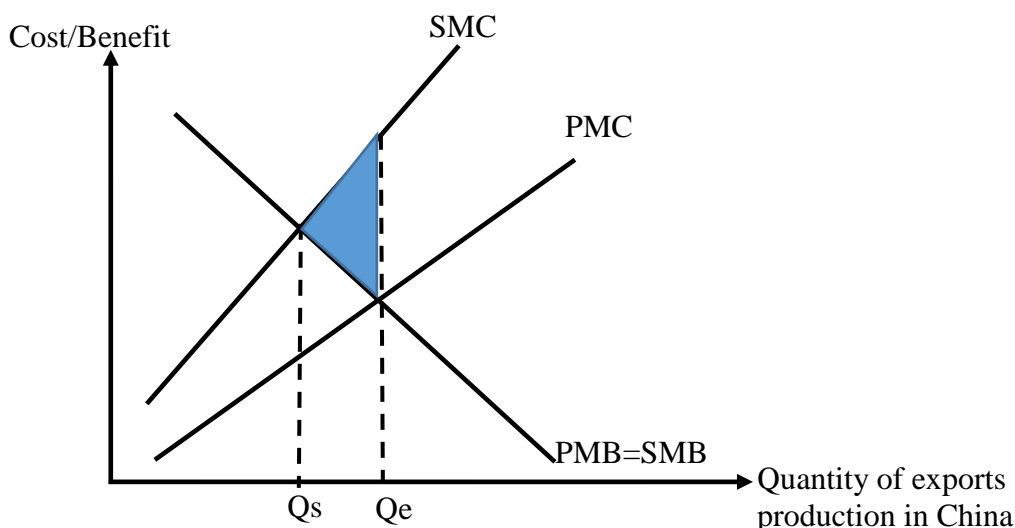
**EV:** Overall, though it has been argued earlier that depreciation may help improve Singapore's export competitiveness, particularly for the service sector, it is not a long-term measure. The supply-side policies raised may have a longer-lasting positive outcome on Singapore's export competitiveness in the long run. That being said, a range of supply-side policies should be adopted and modified to continually address the main challenges facing Singapore so as to better maintain Singapore's competitiveness in the long run.

Knowledge, Application, Understanding and Analysis		
L3	For an answer with well-balanced approach and accurate economic analysis.	5-6m
L2	For an answer that is balanced but limited/underdeveloped in explanation.	3-4m
L1	Very superficial analysis. Mere listing of points. Inaccurate knowledge of concepts. Or one-sided answer.	1-2m
Allow up to 2 additional marks for Evaluation		
	Evaluative comments with justification.	2m
	Evaluative comments, unexplained.	1m

**e. With reference to the data, do you agree that “economic decisions cannot be left to the market”? [10]**

Thesis: Certain economic decisions cannot be left to the market.

As stated in Extract 7, gases and particulates that Chinese factories pumped out in their production of export goods affected the health and well-being of many people in many countries who are not involved in the production process in China. These are the external costs that are not taken into consideration by those who undertake the economic activity. The producers in China only consider their private cost and private benefit such as the cost of raw material and expected profits from the sale of the good respectively. If left to the free market, the level of production will be at  $Q_e$ , where PMB equates PMC, as shown in the diagram below. As the producers do not take into account the external cost inflicted to third parties as a result of their production, there is a divergence between social marginal cost and private marginal cost. At  $Q_e$ , SMC is greater than SMB, indicating that society values an additional unit of the good produced less than what it costs society to produce it. The socially optimum level of production is at  $Q_s$  where SMB equates SMC. There is therefore a situation of over-production and this caused deadweight loss shown by the shaded area below. Hence there is a need for the government to intervene and regulate the industry.



Extract 6 also stated that globalisation and technological advances are disrupting industries and displacing workers. In light of globalisation, as another country acquire comparative advantage in the good that we're producing, Singapore will lose price competitiveness and our workers will be retrenched. Technological advances means that better capital equipment can now replace manual labour and employers may be willing to purchase those capital equipment as it can generate higher output per unit of time with less human error and also because of the rising labour costs in the country. If left to the free market, workers are who are displaced from their jobs will face structural unemployment due to occupational immobility. There is allocative inefficiency as the unemployed resource are not utilised to generate output. This situation may not self-correct itself in the free market due to imperfect knowledge of the areas of expansion in the economy or due to lack of financial ability to go for retraining. The government, having an overall view of the areas of expansion in the economy will need to step in to encourage retraining of workers in the relevant industries by lowering the cost of such retraining.

*Optional: Students can also talk about income inequality as a source of market failure.*

Anti-thesis: Other than intervening to address market failure, economic decisions should largely be left to the market.

Imposing quotas and tariffs to protect the local economy (Extract 5), for example will result in complacency as firms rely on the government to lower its cost and face no competitive pressure to be productively efficient. In contrast, as supported in Extract 6, with free markets, due to high degree of competition, efficiency can be attained as economic agents are under pressure to perform, and both businesses and workers have the incentives to improve. Due to the competition, firms face pressure to adopt the least-cost technique of production. This is productively efficient. As the same time, some firms may be willing to undergo R&D to improve quality of products. This will achieve dynamic efficiency.

The government may also have imperfect information in making economic decisions, possibly leading to government failure. In Extract 8, though it was stated that government funded or instigated initiatives have resulted in the emergence of successful, job-creating new industries, this approach is increasingly questioned and subjected to various cost-benefit analysis issues. As stated in Extract 8, it is difficult to determine the criteria that define sectors of high potential, difficult to identify the method to help those sectors grow, difficult to decide on the outcomes that need to be



seen to justify government funding and to hold someone accountable. All these difficulties mean that it is highly possible that a lot of government funding may be allocated to certain sectors (than is necessary) and that these sectors may not generate a high enough returns to justify the use of government revenue. And this inevitably means that the country would incur a high opportunity cost of the use of such funds, crippling the country's ability to improve other aspects of living such as spending on healthcare and education.

In addition, as stated in Extract 8, too much of government focus on short-term innovation may damage long-term ability to innovate and grow. This could possibly be due to high amount of government revenue required to fund such industries, as analysed earlier. This could 'damage long-term ability to innovate' due to either of the following reasons: the government's ability to maintain such government-driven approach is limited in the long run due to rapid use of government budget and lack of returns on funding or the fact that too much government-driven projects make it hard for innovation to come from the private sector as there isn't much support for free market innovations through appropriate grants or incentives.

Conclusion: Though there is certainly a case for government intervention in the free market especially when it comes to addressing market failure and attaining macroeconomic objectives especially in periods of poor economic outlook or in situations of unfair competition like dumping, there is a limit to which the government should intervene under other circumstances as it may still be subjected to government failure due to imperfect information. In addition, as stated in Extract 6, governments cannot generate wealth by themselves and need to use the power of free markets to their advantage. This means that certain economic decisions should still be left to the free market. Nevertheless, even so, **the government's role of creating "the basic conditions for the markets to operate properly" (Extract 6) stays.**

#### For H2

Knowledge, Application, Understanding and Analysis		
L3	For an answer with well-balanced approach. There is good reference to case material, backed with adequate economic analysis.	7-8m
L2	For an answer that is balanced but limited/underdeveloped in explanation. There is some reference to case material.	4-6m
L1	Very superficial analysis. Mere listing of points. Inaccurate knowledge of concepts. Or one-sided answer.	1-3m
Allow up to 2 additional marks for Evaluation		
E2	Evaluative comments with justification.	2m
E1	Evaluative comments, unexplained.	1m

#### For H1

Knowledge, Application, Understanding and Analysis		
L3	For an answer with well-balanced approach. There is good reference to case material, backed with adequate economic analysis.	5-6m
L2	For an answer that is balanced but limited/underdeveloped in explanation. There is some reference to case material.	3-4m
L1	Very superficial analysis. Mere listing of points. Inaccurate knowledge of concepts. Or one-sided answer.	1-2m
Allow up to 2 additional marks for Evaluation		
E2	Evaluative comments with justification.	2m
E1	Evaluative comments, unexplained.	1m

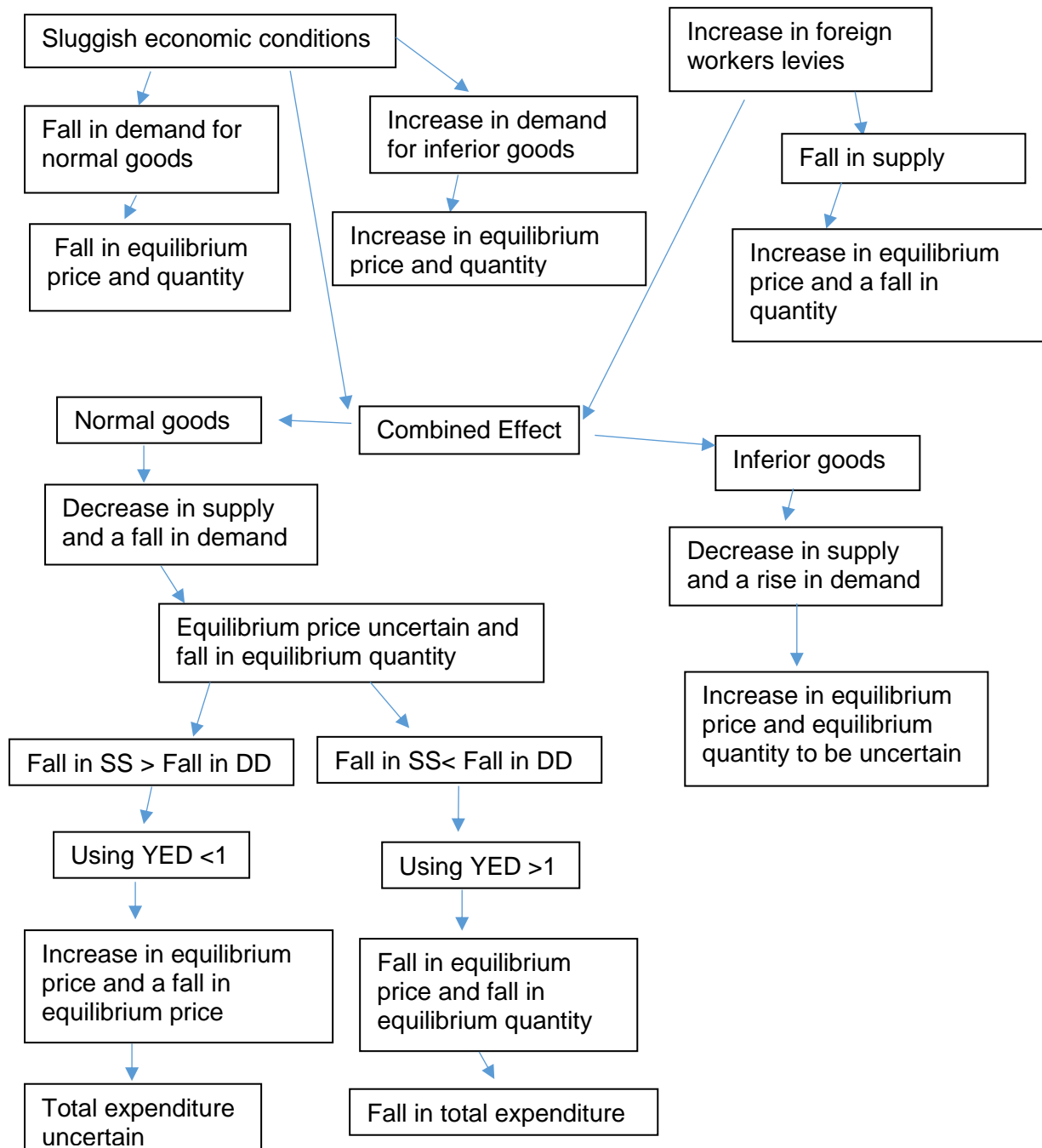


### Essay Q1

1. Singapore is experiencing sluggish economic conditions. In addition, foreign worker levies will go up across the board from July 2014 and it will affect some businesses more than others.

Discuss how a rise in foreign worker levy and sluggish economic conditions will impact the various markets for goods and services in Singapore. [25]

#### Schematic Plan for Question 1





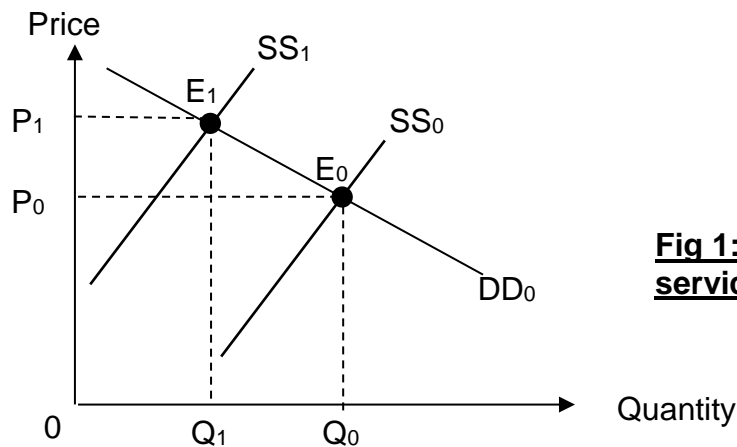


### Intro

- Define demand and supply
- Define income elasticity of demand
- State that there are many possible effects when looking at combined effects of sluggish economic conditions and a rise in foreign workers levy.

### Main Body

- **Increase in foreign worker levy affect supply of goods and services**
- Explain how rise in foreign worker levy cause a fall in supply of both goods and services
- With a rise in foreign worker levy, there will be a rise in cost of production, and a fall in profits.
- Profit-maximising producers are less willing and able to supply goods and services that will in turn result in a fall in supply.
- This is represented in Figure 1 by a fall in supply shown by the leftward shift of the supply curve from  $SS_0$  to  $SS_1$ .



**Fig 1: Market for goods and services**

- Price adjustment process [only need to do it once!]
- With a fall in supply, this would lead to a shortage in the free market, hence consumers would bid up prices and place upward pressure on prices on goods, such as higher goods prices.
- As price rises, quantity demanded falls while quantity supplied rises.
- Price in the free market keeps on rising until shortage is eliminated and there will be a fall in equilibrium quantity from  $Q_0$  to  $Q_1$ .
- Impact on both goods and services will be a rise in equilibrium price and a fall in equilibrium quantity.
- **Sluggish economic conditions affect the demand for goods and services**
- **Explain how sluggish economic conditions will lead to a fall in demand for normal goods**
- With sluggish economic conditions, economy is not picking up and it might lead to a fall in national income
- It might lead to a fall in purchasing power of consumers
- Thus, this leads to a fall in demand for normal goods and services
- Impact on normal goods and services will be a fall in both equilibrium price and equilibrium quantity



- **Explain how sluggish economic conditions will lead to an increase in demand for inferior goods**
  - As with the fall in purchasing power of consumers
  - They will opt for inferior alternative to replace their existing purchases
  - Thus, this will lead to an increase in demand for inferior goods and caused an increase in equilibrium price and equilibrium quantity.
- 
- Having seen the effects on single shifts, now we will proceed to explain effects on combined effects of double shifts.
- 
- **Looking at context of inferior goods, there will a rise in demand a fall in supply**
  - Using the example of 2<sup>nd</sup> hand car markets,
  - With the sluggish economic conditions, there will be a rise in demand for 2<sup>nd</sup> hand cars as it is a cheaper alternative to new cars and at the same time, there will be fall in supply as cost of productions have increased
  - Thus, with the combined effects of these two shifts, the final outcome will be increased in equilibrium price for sure and uncertain effect on equilibrium quantity.
- 
- **Looking at context of normal goods, there will be fall in both demand and supply**
  - **Looking at the context of necessities**
  - With the sluggish economic conditions, there will be small fall in demand and a bigger fall in supply in the context of new HDB flats
  - The YED value will be less than one as the demand for HDB flats are income inelastic and causing a small fall in demand for HDB flats
  - The effect of the increased in foreign workers levy is greater as the construction of these new HDB flats requires many foreign workers
  - Thus, the fall in demand is less than the fall in supply as shown in fig 2 below.

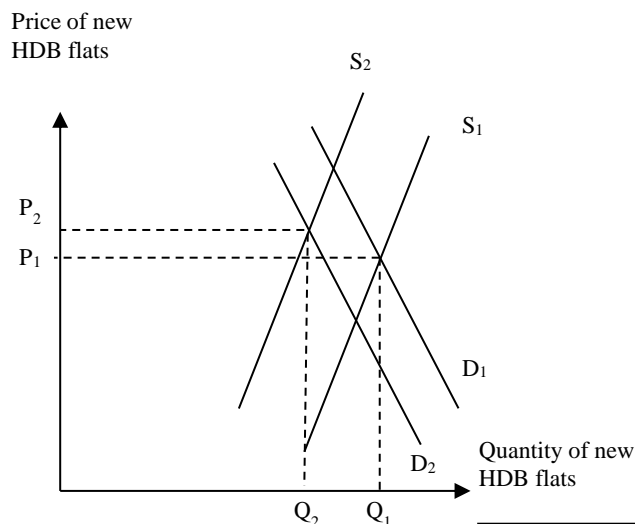


Fig 2: Mkt for new HDB flats

- Effect on this market as shown above, there will a fall in equilibrium quantity from Q<sub>1</sub> to Q<sub>2</sub> and an increase of equilibrium price from P<sub>1</sub> to P<sub>2</sub>. As the same time, there will be a fall in total revenue.



- **Looking at context of normal goods, there will be fall in both demand and supply**
- **Looking at the context of luxury goods**
- Looking at 5 stars hotel services
- Due to a large fall in demand as the demand for luxury hotel is income elastic and a smaller fall in supply as foreign workers are not the only cost consideration for hotels.
- Hotel still need to account for electricity bills, food costs and land rental costs and foreign worker levy might be just a small part of their total cost.
- Impact: fall in both equilibrium price and quantity and a fall in total revenue as shown in fig 3.

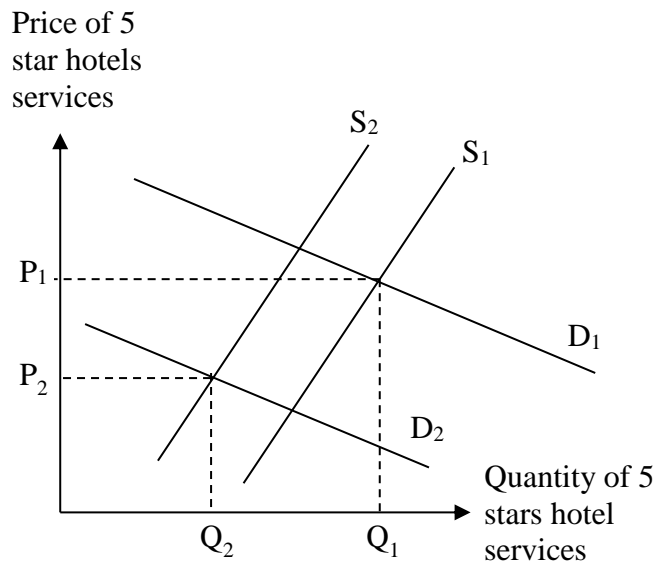


Fig 3: Mkt for 5 stars hotel services

- **Various factors in SG impact different markets differently.**
- Luxury goods experience a fall in equilibrium price and quantity, while inferior goods experience the opposite.
- The equilibrium quantity of necessities fall but the equilibrium prices increase.
- While the extent of the changes in price and quantity in the different markets differ due to the differences in elasticities, the markets that depend heavily on foreign workers are likely to be affected more than markets that do not.
- **In the long run**, the impact on different markets is also likely to vary due to changes in other factors, such as possible government intervention.
- With a further worsening of economic conditions, it is likely that demand for all goods and services in SG will fall due to worsening consumer confidence.
- Thereby negatively reducing price and quantity, as well as total revenue.
- Or the impact might not hold true as elasticity values are based on past surveys and might not get true response
- Thus, without accurate and reliable data from elasticity values, the various effects might not hold true.



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Sample Answers

Levels	Descriptors	Marks
L1	Some explanation of demand and supply changes without looking into elasticity concepts.	1-9
L2	Sufficient explanation of demand and supply changes impacting at least 2 markets and some attempt at looking into elasticity concepts	10-14
L3	Detailed explanation of demand and supply changes impacting 3 markets, looking into goods and services markets. Good attempt at explaining impact using at least 2 elasticity concepts.	15-21
E1	Mainly unexplained judgement	1-2
E2	Judgement based on analysis	3-4



## Essay Q2

2. The table below shows a sampling of ticket prices at Odeon, a cinema operator in the United Kingdom (UK).

	Standard Ticket Price
<b>Off-Peak (2D Movies)</b> Tuesday, Wednesday, and Thursday before 5pm	£6.90
<b>Peak (2D Movies)</b> Tuesday, Wednesday, and Thursday after 5pm All day Friday through Sunday	£8.40
<b>Peak (3D Movies)</b> Tuesday, Wednesday, and Thursday after 5pm All day Friday through Sunday	£10.40

Source: <http://www.movietheaterprices.com/>, accessed on 18 August 2016

**(a) Explain whether this pricing policy is an example of price discrimination. [10]**

Definition of price discrimination: when a producer charges different prices for different units of the same commodity for reasons not associated with differences in cost.

Conditions for price discrimination to occur: market power, markets must be separate and no resale of the good should be possible, price elasticity of demand must differ in each market.

**P1: The pricing policy is an example of price discrimination**

The cost of providing 2D movies is the same whether it is during the peak period or off-peak period. The costs include the rental for the cinema space, the payment for rights to the movie, and for general upkeep of the cinema.

There is market power because there are, presumably, only a few, large operators. The high start-up costs involved result in high barriers to entry and a lack of competition. These operators would have price-setting ability.

The markets can clearly be separated according to timing, and no resale is possible because a ticket to a particular show cannot be used to gain entry to another show at a different time.

The demand for movies during off-peak periods would usually come from students or adults with flexible working hours. Thus, their demand is price elastic as their schedule allows them to choose many other movie timings (large availability of substitutes). The demand for movies during peak periods on the other hand would come from students or adults with fixed schedules that do not allow them the flexibility of watching movies before 5pm on Tuesdays to Thursdays (few substitutes available).

Hence, there is price discrimination between the different show times for 2D tickets.

**P2: The pricing policy is not an example of price discrimination**

2D and 3D movies can be considered as different commodities. 3D movies provide users with a more realistic experience of the movie by allowing viewers to perceive depth as well. The costs of screening 3D movies are also higher because of the more advanced projectors





required. Hence, the price difference between 2D and 3D movies are justified and not due to price discrimination.

The price difference between peak and non-peak periods can also be justified by differences in costs. During peak periods, cinema operators will need to hire more manpower thus the marginal cost is higher.

The higher price for peak period tickets may be due to higher demand. More consumers would be available to watch a movie after 5pm and during the weekends compared to before 5pm on weekdays. This results in a higher equilibrium price during peak periods. Hence, the price difference between different show times for 2D movies is due to market forces and is not a deliberate business practice (not price discrimination).

### **Conclusion**

In conclusion, there is sufficient reason to believe that the price differences are not a result of price discrimination. (Students can also conclude otherwise or state that it depends on certain factors).

<b>Knowledge, Application, Understanding and Analysis</b>		
L3	Use of economic analysis to give a balanced answer why this is and is not a case of price discrimination with good application of theory to the context of the question set	7 – 10m
L2	Some attempt to use economic analysis to give a balanced answer but analysis is lacking or undeveloped. Weak application to context.	5 – 6m
L1	Largely descriptive answers of price discrimination theory and mere listing of the conditions for price discrimination	1 – 4m



(b) Discuss if price discrimination is beneficial.

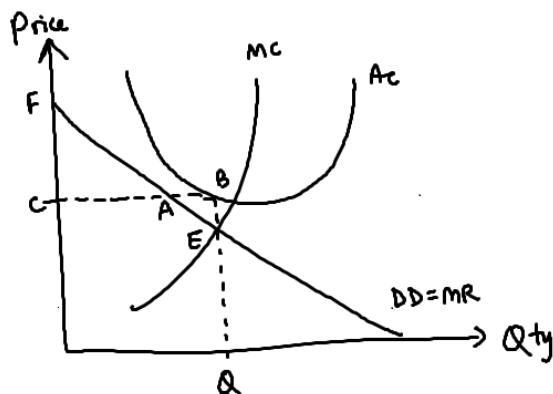
[15]

Briefly explain the three types of price discrimination and state that the benefits and disadvantages of price discrimination will be analysed based on its impact on consumers, producers and society.

**P1: Price discrimination is beneficial**

Price discriminating firms may produce goods or services which would otherwise not have been produced by a single-price monopolist.

- If average cost is higher than revenue at all levels of output, a single-monopolist would not want to produce. In the case of perfect price discrimination, in which every unit is sold at a different price, the MR curve will now be identical to the DD curve. The firm will produce up to the quantity of output where  $MC = MR$  (the same quantity of output as the firm in perfect competition).
- Firms would produce as long as  $ACF > ABE$  (total revenue exceeds total cost) → consumers welfare increase because of the increase in variety of goods and services available and producers gain profits which would not have been possible without discrimination. [Alternatively, students may show how charging different prices to different groups under third degree price discrimination leads to an overall increase in total revenue.]



- These profits could then be used to innovate and improve the quality of goods/variety of goods → consumer welfare increases.

Price discriminating firms may lead to output being produced at the allocatively efficient level.

- Since output is at the point at which  $P=MC$ , it is at the allocatively efficient level. Therefore, price discrimination is beneficial to society.

The discriminating firm can charge a lower price for some people which would otherwise not be possible under a single-price monopoly. Inequity can be reduced.

- For some consumers, the price of the good may take up a large proportion of income. Eg for students, the price of movie tickets would take up a large proportion of their allowance. Under price discrimination, they would be charged a lower price of £6.90 instead of £8.40 since their demand for movies is price elastic. Hence, consumer



surplus for this group increases. They might have been unable to afford the movie tickets if they were sold at a single profit-maximising price.

- Consumers with price inelastic demand would pay a higher price. Eg working adults for whom the tickets take up a small proportion of their income. The consumers who are better able to afford the good are charged a higher price → more equitable.

Output under price discrimination will generally be larger than under a single-price monopoly.

- With larger levels of output, firms are also able to reap more significant economies of scale → average cost of production decreases → increase in profits and reduction in productive inefficiency.

## **P2: Price discrimination is not beneficial**

The ability to charge multiple prices gives the firm the opportunity to capture some or the entire consumer surplus (shaded areas).

- The more different prices that can be charged, the more the firm will be able to increase total revenue at the expense of consumers.



- Even though it is allocatively efficient, consumer surplus is completely transferred to the producer. Firms experience an increase in profits at the expense of consumers. This is an undesirable redistribution of income in society.
- Resources are also wasted as producers segregate markets eg manpower required to check details of tickets and ensure that the correct tickets are used to gain entry.
- Some consumers would have to pay higher prices than under a single-price monopolist → consumer surplus falls for this group.

Price discrimination in international markets can lead to a loss of consumer welfare in the long run.

- Dumping is where exports are sold at prices below the marginal costs of production. Consumers in the domestic market of foreign firms will pay a higher price than those in the overseas market. Firms in the overseas market would be driven out of the market. Once the foreign firms gain monopoly power, they may raise prices in order to maximise profits in future. Consumers would experience a fall in consumer surplus and consumer welfare.



### **Evaluation**

The desirability of price discrimination depends on the good in question. In the case of medicine, for instance, it would be more desirable to allow firms to price discriminate because poorer consumers would otherwise be deprived of better health.

Price discrimination is desirable from the firm's point of view. For consumers, price discrimination tends to be undesirable in the short run due to the loss of consumer surplus. However, with improvements in technology and reduction of barriers to entry, firms face more competition nowadays. This would incentivise them to invest their supernormal profits in improving the quality of their products and processes. Thus, consumers can benefit from price discrimination in the long run.

Any other well-supported insight on this issue.

<b>Knowledge, Application, Understanding and Analysis</b>		
L3	A balanced answer that covers the positive and negative impacts on consumers, producers and society. Answer is well-developed and supported by economic analysis.	9 – 11m
L2	For a balanced answer that shows some scope of coverage but does not cover all groups. Answer is undeveloped but conceptually sound.	6 – 8m
L1	One-sided answer which is mainly descriptive or has conceptual errors. Largely descriptive answers of price discrimination theory and mere listing of the conditions for price discrimination	1 – 5m
E2	Evaluative comment that is justified.	3 – 4m
E1	Evaluative comment that is not justified.	1 – 2m



**Essay Q3**

**3. Street lighting and the early morning rides on the Mass Rapid Transit (MRT) into the city area are provided free by the government in Singapore.**

**(a) Explain the economic case for the free provision in each of the above markets. [10]**

**(b) Discuss the limitations of providing MRT rides for free to achieve an efficient allocation of resources. [15]**

(a) Introduction

A government may provide a good or service without charge because it improves resource allocation in the market.

Street lighting

- Street lighting is a public good with the two properties of non-rivalry in consumption and non-excludability.
- Property of non-rivalry in consumption: Additional users of street lighting do not diminish the benefit to other users. This also implies that the total cost of lighting remains the same whether one or more users use the light ie the marginal cost (MC) to society of an additional user is zero.
- Property of non-excludability in consumption: street lights shine for all. It is impractical to allocate lighting only to people who pay for it. The cost of implementing such an arrangement if at all possible, will be too costly to be feasible.

Implications

- There is no market for street lighting. Due to non-excludable nature, everyone will wait for someone to pay for street lighting (free-rider problem). Thus there is no effective demand to spur firms to supply street lighting.
- Since the MC of lighting to an additional user is zero, the efficient price is zero. Reason: Even if a price could be imposed upon users, it would deter some from using street lighting that does not impose any further cost to society. A potential gain in consumer welfare is not realised: society is not maximising its welfare if a price is charged because consumption is inefficiently restricted.
- Hence, for the above reasons, there is an economic case for government to provide street lighting free.

Early morning rides

- Commuters taking early morning train rides generate positive externalities beside private benefits (more comfortable ride due to less crowding and higher chance to find a seat)
- Positive externalities: early commuters generate sales for shops (3<sup>rd</sup> party) located near work places as they are likely to have breakfasts before reporting for work or do some shopping.

Implications

- A subsidy equal to EMB to increase consumption to  $Q_s$  where  $MSB=MSC$  will improve allocative efficiency.
- If EMB equal to  $ab$  as in figure 1, then a subsidy equal to  $ab$  will shift PMC curve to  $PMC=SMC$  with subsidy, and the efficient price will be zero and  $Q_s$  where  $SMB=SMC$  will be consumed. This is the economic case for zero pricing for early MRT rides.



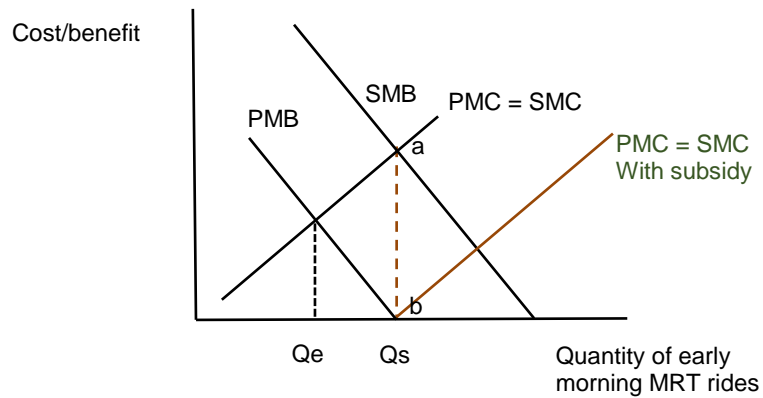


Figure 1

Knowledge, Application, Understanding and Analysis		
L3	Both the cases for street lightings and free MRT rides are well-explained and justified. Diagram for zero pricing of early MRT rides	7 – 10m
L2	Both the cases for street lightings and free MRT rides are explained and justified. No diagram for zero pricing of early MRT rides	5 – 6m
L1	For an answer that contains conceptual errors and some irrelevant points.	1 – 4m



**(b) Discuss the limitations of providing MRT rides for free to achieve an efficient allocation of resources.** [15]

Introduction

- There are some limitations of providing MRT rides for free to achieve an efficient allocation of resources.
- (i) Due to imperfect knowledge on the part of government the positive externality could be significantly over-estimated (*estimated ab versus actual bc*). Reason: Hard to assess divergence between PMB and SMB due to changing demand condition in the rail transport market eg external benefit of ac difficult to assess due to uncertainty over the extent commuters will shop/have breakfast. A subsidy of ac causes over-consumption by  $Q_1$ - $Q_s$  resulting in a deadweight loss (area abd) greater than the deadweight loss at  $Q_e$  without subsidy which is the area edf. In this case, there is no improvement in the allocation of resources.

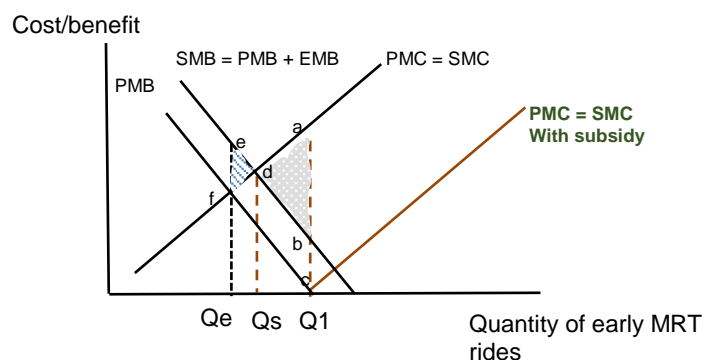


Figure 2

- (ii) The subsidy uses tax revenue that could be used for spending in other areas (eg healthcare). The opportunity cost of forgone healthcare services could be greater than the benefits of removal of the deadweight loss caused by the externality of early morning rides. This results in loss of allocative inefficiency.
- (iii) The government may be compelled to raise taxes (eg GST) to finance the subsidy but then this cause supply curves to shift left in other markets and create deadweight losses. Thus create inefficient outcomes in other markets. And moreover, it conflicts with the goal of equity if the poor are disadvantaged by the relatively higher tax burden on them.
- (iv) Even if the government early morning free-ride scheme works to improve efficiency of use of train services, it does not however incentivise the rail transport providers to provide better/improved services (eg increase supply of carriages) or to innovate to reduce congestion during peak hours.

Conclusion

- Free MRT rides for early morning travel may or may not achieve an efficient allocation of resources in the market for rail transport. It depends on ability of the government to assess benefits and costs reliably. Moreover, achieving allocative efficiency may conflict with the goal of equity if taxes have to be raised to sustain the fiscal burden. However, this is not necessarily inevitable: if the economy continues to grow, higher tax revenue collection can fund the train subsidy without a trade-off (ie without sacrificing other areas of government spending).



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Sample Answers

- To avoid paying for the scheme and the distortionary effects of the taxes, perhaps the government should extract a larger portion of the rail transport providers' profit as tax as a means to fund the free early morning ride scheme or specify (regulate) that the firms set aside a certain portion of their profits aside to fund the free-ride scheme.
- A sustainable solution might be for the government to encourage more firms in the city area to begin work earlier than the usual starting 9am time period. This will help increase the efficient use of train services as the passenger load is spread out over a longer duration of time period.

<b>Knowledge, Application, Understanding and Analysis</b>		
L3	Discussion of the free early ride scheme covers at least 3 points of limitations (scope) and well-explained (depth). Accompanying diagram is well-labelled and referred to as part of an analytical answer.	9 – 11m
L2	Discussion of 2 points of limitations is adequately made and analysis applied mostly in a relevant way. Diagram may be missing.	6 – 8m
L1	A limitation identified with some explanation hampered by incorrect content knowledge. Wrong QA.	1 – 5m
<b>Allow up to 4 additional marks for Evaluation</b>		
E2	Judgment is based on economic analysis and adequately substantiated	3 – 4m
E1	For an unexplained assessment, or one that is not supported by economic analysis.	1 – 2m



### Essay Q4

4. A successful economy has been traditionally characterised by sustained positive growth rates, low inflation rates, low unemployment rates and a healthy balance of payments.
- (a) Explain the domestic and external causes of a high rate of inflation for an economy. [10]
- (b) Discuss whether the above traditional measures of success are sufficient for an economy today. [15]

(a)

#### Possible domestic causes

- Demand-pull inflation (diagram)
  - Rapidly rising domestic income
    - E.g., China and its high growth
    - Significant rise in C as a result of higher income + consumer optimism → coupled with rise in I in response to + in anticipation of high C
    - If economy is near or at full-employment → significant upward pressure on prices of scarce resources → higher prices of g/s → increase GPL significantly
- Cost-push inflation (diagram)
  - Implementation of / A significant rise in GST
    - E.g., Malaysia implement GST across many g/s in 2015
    - Increases all firm's production costs → passed on in the form of higher prices of g/s → increase GPL significantly
  - Domestic government policies
    - E.g., Singapore tightened foreign worker policies in recent years
    - Increase in foreign worker levies + reduction in Dependency Ratio Ceiling (DRC) → higher cost of labour → higher COP → Singapore's falling birth rate and increasing reliance on foreign workers → significant impact expected for increase in COP → passed on in the form of higher prices of g/s → increase GPL significantly
    - Heightened restrictions in entry requirement for foreigners → fall in SS of workers in Singapore → drive up wages → higher COP → passed on in the form of higher prices of g/s → increase GPL significantly

#### Possible external causes

- Demand-pull inflation (diagram)
  - Global economic recovery
    - E.g., Post-Global Financial Crisis of 2008/09
    - Economies around the world start to pick up in their economic growth → rising incomes around the world → rising X of countries such as Singapore → small and open economy → significantly drives up AD → assuming near or at full-employment → increase GPL significantly
  - Rapidly rising income of other countries
    - E.g., emerging economies like China and India
    - Significant rise in M as a result of higher income + consumer optimism → significant rise in X for countries exporting to such economies → significantly drives up AD → assuming near or at full-employment → increase GPL significantly



- Cost-push inflation (diagram)
  - Increase in oil prices
    - E.g., sky-high oil prices in 2008
    - High price of oil → fuel for power generation + fuel for most transportation + factor of production for many g/s → rise in COP of most g/s → increase GPL significant (imported inflation) for countries which are net oil-importers (e.g., Singapore)
  - Similarly, rises in other commodity prices

Other acceptable answer includes:

-An increase in FDI (external cause) leading to investment in capital goods may bring about an increase in AD assuming economy operating at full employment level.

<b>Knowledge, Application, Understanding, Analysis</b>		
<b>L3</b>	A well-developed explanation of at least 3 causes, which encompasses both domestic and external causes. There is also consideration of both demand-pull and cost-push inflation. Diagrammatic analysis and concrete examples are also used. There is clear attempt to explain why “high”.	<b>7-10</b>
<b>L2</b>	An underdeveloped consideration of at least 2 causes, with at least one domestic cause and one external cause. There might be inconsistent/incomplete attempts to use diagrammatic analysis and/or concrete examples.	<b>5-6</b>
<b>L1</b>	A weak explanation overall. May be lacking in scope and depth. Multiple errors may be present. May have rehearsed answers to the question as a “demand-pull” vs “cost-push” question for this question. No use of diagrams and examples.	<b>1-4</b>





(b)

### Introduction

- “Traditional measures of success” → growth rates, inflation rates, unemployment rates and balance of payments
- However, today more measures of success are needed, e.g., measurements of income distribution (e.g., Gini coefficient) and non-material SOL (e.g., pollution level, literacy rates, life expectancy, etc)

### Thesis: Traditional measures of success continue to be useful.

- Measure of economic growth
  - Definition of economic growth (actual and potential)
  - How is it measured?
    - Typically measured using GDP
      - Define GDP (per capita)
    - Typical target: sustained + positive
  - Why is measuring economic growth important?
    - Related to SOL
      - “Positive” → indicates increase in amount of g/s produced for an economy → more g/s available for consumption → improve mSOL
      - “Positive” → also means rising household incomes → greater purchasing power to satisfy material needs → improve mSOL
      - “Sustained” → actual and potential growth in tandem → continued consumption levels over time
      - May have some impact on nmSOL too → if greater tax revenue collected and channelled towards sectors like education and healthcare
    - Positive impact on other macroeconomic indicators
      - Reduces demand-deficient unemployment with actual growth
      - Reduces demand-pull inflation with potential growth
  - Therefore, measuring economic growth continues to be useful
- Measure of unemployment
  - Definition of unemployment
  - How is it measured?
    - Typically measured using unemployment rate
      - Define labour force: available for and actively searching for work
      - Define unemployment rate
    - Typical target: low
  - Why is measuring unemployment important?
    - Related to SOL
      - “Low” → minimise wastage of human resources → production as close to the PPC as possible → maximise production of g/s in an economy → ensures mSOL not compromised
      - “Low” → reduce government payment of unemployment benefits + allow more tax collection → reduce strain on scarce government resources + channel towards sectors (e.g., education, healthcare) that may yield positive outcomes on nmSOL
    - Positive impact on other macroeconomic indicators
      - High unemployment rates often related to social unrest → “low” will help maintain social stability → may be attractive to foreign investors → positive impact on growth (through FDI, I and AD)
  - Therefore, measuring unemployment continues to be useful



- Measure of inflation
  - Definition of inflation
  - How is it measured?
    - Typically measured using inflation rate
      - First CPI, then changes in CPI over time
    - Typical target: low
  - Why is measuring inflation important?
    - Related to SOL
      - “Low” → income more likely to rise faster than price levels → increase in real GDP (per capita) → value of money is maintained → able to enjoy more g/s
    - Positive impact on other macroeconomic indicators
      - “Low” → reduces uncertainty in decision making → firms can make investment plans more accurately → investor confidence → further stimulate growth (through FDI, I, AD) and unemployment
  - Therefore, measuring inflation continues to be useful
- Measure of BOP
  - Definition of BOP
  - How is it measured?
    - Typically measured using BOP
    - Typical target: healthy (i.e., not large and persistent BOP deficit)
  - Why is measuring BOP important?
    - “Healthy” → indication of external stability (long-term goal) + avoid the problems of large and persistent BOP deficit (example)
    - Positive impact on other macroeconomic indicators
      - Improves investor confidence → further stimulate growth (through FDI, I, AD) and unemployment
  - Therefore, measuring BOP continues to be useful

**Antithesis: Not enough to rely on traditional measures; other supplementary measures are needed**

- Measure of income distribution
  - Definition of income inequity
  - How is it measured?
    - Gini coefficient (briefly describe what it is)
    - Should aim for: low value
  - Why is measuring income distribution important today?
    - ***Why traditional measures of success may be too narrow:*** success of an economy may not mean an even distribution of benefits across individuals in the country → income growth concentrated in the hands of a minority
    - ***Why important today:*** globalisation → increased trade, capital and labour flows → further aggravates the income gap (e.g., between workers in sunrise/sunset industries, between low-skilled and high-skilled workers)
    - Price mechanism allocates g/s to those who are willing and able to pay → resources will inevitably be channelled to production of g/s demanded by the rich while the poor may be unable to meet even basic needs
    - Extreme income inequity can lead tensions in society between the haves and the have-nots → social stability and impact on FDI
  - Therefore, measuring income distribution should supplement traditional measures of success



- Measure of extent of negative externalities generated
  - Definition of negative externalities
  - How is it measured?
    - Depends on what the negative externalities are, e.g., level of pollution
    - Should aim for: low value
  - Why is measuring extent of negative externalities generated important today?
    - **Why traditional measures of success may be too narrow:** success of an economy can come at the expense of environmental well-being, e.g., resource-depletion, pollution
    - **Why important today:** increasingly materialistic society → rising demand for ever more g/s (globally) → translates into ever-rising demand for non-renewable resources + massive rise in production of g/s which may produce negative externalities
    - Increasing global economic activity is placing heavy stresses on the Earth's natural systems → rapidly rising carbon emissions + global warming at alarming levels + depletion of natural resources → negatively impacting nmSOL
  - Therefore, measuring extent of negative externalities generation should supplement traditional measures of success
- Measure of extent of healthcare provisions
  - How is it measured?
    - Life expectancy; infant mortality rates
    - Should aim for: high; low
  - Why is measuring extent of healthcare provisions important today?
    - **Why traditional measures of success may be too narrow:** traditional measures tend to focus more on mSOL and emphasise less on nmSOL
    - **Why important today:** people living longer due to rising global incomes and access to better nutrition → people are living longer lives → quality of life can only be enjoyed with a long, healthy life → quality of healthcare matters now more than before
    - Poor healthcare provision may result in chronic illness and spread of diseases → need to measure standard of healthcare available to individuals in an economy to get a full picture of SOL
    - Healthcare is also a fundamental driver of economic growth → high level of productivity + attractive to FDI → increase both AD and AS → further augment mSOL
  - Therefore, measuring extent of healthcare provisions should supplement traditional measures of success
- Other possible measures:
  - Access to education (literacy rates)
  - Composition of GDP ( for example, defence expenditure as percentage of GDP)
  - Level of crime and social unrest
  - Level of political stability and democracy/freedom
  - Amount of leisure hours
  - must use the same stems of elaboration

### Conclusion/Evaluation

- Make a stand: traditional measures of success continue to be relevant, but one should also consider supplementing them with other measures for a more holistic picture of a country's development



Anderson Junior College – H2 Economics Preliminary Examinations  
Sample Answers

- Justify: traditional measures tend to be rather narrow in scope and tend to neglect income distribution and aspects of nmSOL, the latter two of which are gaining traction in the form of “inclusive growth” and “sustainable development”
- Extension
  - Weigh importance of measures
    - Developing countries may still continue to place more emphasis on traditional measures, since they tend to be still struggling to keep these stable and favourable in the longer term
    - Developed countries, having achieved long-term stability in traditional measures, may turn their focus away from “growth at all cost” towards a more socially-responsible trajectory of development
  - Recommendation
    - Composite measures that aim to marry both traditional and updated measures of success may be more appropriate, e.g., HDI aims to capture both mSOL (through PPP-adjusted real GNI per capita) and nmSOL (proxied by life expectancy at birth, mean of years of schooling for adults and expected years of schooling for children), though it is limited by a lack of measure of income distribution

<b>Knowledge, Application, Understanding, Analysis</b>		
<b>L3</b>	A well-developed and balanced discussion. Consideration of at least 3 traditional measures and at least 3 other measures of success for the top marks in this range. Explicit mention on what the specific “measures” of success might be. There should also be clear explanations of why the traditional measures may be inadequate, and why alternative/supplementary/complementary measures may be needed <u>today</u> .	<b>9-11</b>
<b>L2</b>	An underdeveloped but balanced explanation which seeks to explain why the various measures of success may be valid. There is attempt to explain what to measure, how to measure (must link to macroeconomic indicators) and why the need to measure (can be linked to macroeconomic goals).	<b>6-8</b>
<b>L1</b>	A cursory explanation overall. Multiple conceptual errors may be present. One-sided.	<b>1-5</b>
<b>Allow up to 2 additional marks for Evaluation</b>		
<b>E2</b>	Explained assessment based on economic analysis	<b>3-4</b>
<b>E1</b>	Unexplained assessment not supported by analysis	<b>1-2</b>



### Essay Q5

**“Inclusive growth is economic growth that creates opportunities for all segments of the population and distributes the dividends of increased prosperity, both in monetary and non-monetary terms, fairly across society.”**

Source: <http://www.oecd.org>, accessed on 10 July 2016

- (a) Explain why a government might aim to achieve inclusive growth. [10]
- (b) Evaluate the measures adopted by the Singapore government to achieve inclusive growth. [15]

#### Introduction:

Governments are concerned about achieving sustainable economic growth, full unemployment, low inflation, a healthy balance of payment (BOP), efficiency and equity. By aiming to achieve inclusive growth, countries are likely to achieve these economic objectives.

#### Body:

##### Higher employment and productive efficiency

- Inclusive growth means sustainable growth by creating job opportunities for all. This means reducing both demand deficient unemployment and structural unemployment.
- An increase in actual growth due to inclusive growth indicates an increase in aggregate demand (AD). In order to meet the increase in AD, firms will have to employ more factors of production including labour. This leads to an increase in demand for labour and a fall in demand deficient unemployment.
- In the pursuit of inclusive growth, the government focuses on investing in human capital so as to create opportunities for all segments of the population, reducing structural unemployment.
- The government will also subsidise programmes to upgrade the skills of the workers so as to create a more productive workforce and retrain workers whose skills are redundant so that they can take up jobs in other sectors.
- By ensuring that there is productive employment for all, this means **that scarce resources are fully utilized**, allowing the economy to operate closer to the maximum output it can achieve, leading to productive efficiency.

##### Low inflation

- Inclusive growth leads to non-inflationary growth, which includes both actual and potential growth. Inflation refers to a sustained increase in general price level. As inclusive growth focuses on the pace of growth, the increase in AD is in tandem with the increase in aggregate supply (AS). As the increase in general price level is now matched with an increase in real national income, inflation rate remains low as there is spare capacity to produce more goods and services in the economy.
- To achieve inclusive growth, the government focuses on policies to increase labour productivity. This will mean a fall in the unit cost of labour, an increase in short-run AS (SRAS), bringing about a fall in wage push inflation in the country.

##### High standard of living and more equitable distribution of income

- Inclusive growth is economic growth that creates opportunities for all segments of the population and distributes the dividends of increased prosperity, both in monetary and non-monetary terms, fairly across society.
- Economic growth is defined as an increase in Gross Domestic Product (GDP), which



is the total monetary value of the final goods and services that is domestically produced within a year.

- An increase in real GDP means more goods and services are produced. At the same time, there is an increase in households' income leading to higher purchasing power and more consumption of goods and services leading to a higher **material** standard of living.
- With higher economic growth, the government is able to generate more tax revenue. By aiming to achieve inclusive growth, the government is likely to spend more on education subsidies as a means to create productive employment and more on healthcare programs so as to redistribute wealth by making these merit goods more affordable to lower-income households. This contributes to a higher literacy rate and life expectancy, leading to a higher **non-material** standard of living.
- At the same time, the distribution of increased prosperity means that the standard of living for every individual is likely to increase and the value of the Gini coefficient falls.

### Healthier BOP

- BOP is a record of a country's economic transactions between its residents and the rest of world over a period of time, usually a year.
- Inclusive growth requires government to increase productivity, which helps to lower unit cost of input, making exports more price competitive. Assuming demand for exports to be price elastic, a fall in the price of exports will lead to a more than proportionate increase in the quantity demanded for exports, leading to an increase in total revenue from exports, which improves the current account.
- In addition, a more productive workforce is likely to attract FDI to the country. This increase in long-term capital inflow brings about an improvement in capital account, *ceteris paribus*.
- Overall, the BOP position is likely to improve when the government aims to achieve inclusive growth.

### Conclusion

In recent years, governments aim to achieve inclusive growth because there is no inherent trade-off in economic policymaking between the promotion of social inclusion and that of economic growth and competitiveness; it is possible to be pro-equity and pro-growth at the same time.

Other acceptable answers:

-Students can explain how in the pursuit of inclusive growth, policies to reduce income gap can also help to reduce distributive failure and therefore, achieve allocative efficiency.

-Students can explain that rapid growth or "grow at all costs" may increase negative externalities and explain the need to aim for inclusive growth to reduce the divergence between SMC and PMC so as to improve the living standards of the third parties (people living around areas with high levels of pollution).

Knowledge, Application, Understanding and Analysis		
L3	Thorough explanation of why government aims to achieve inclusive growth, covering the macroeconomic and microeconomic goals.	7 - 10
L2	An under-developed explanation of why government aims to achieve inclusive growth, covering some macroeconomic and microeconomic goals.	5 - 6
L1	Descriptive explanation on why government aims to achieve inclusive growth, with minimal linkage to macroeconomic/microeconomic goals.	1 - 4





(b)

### Introduction:

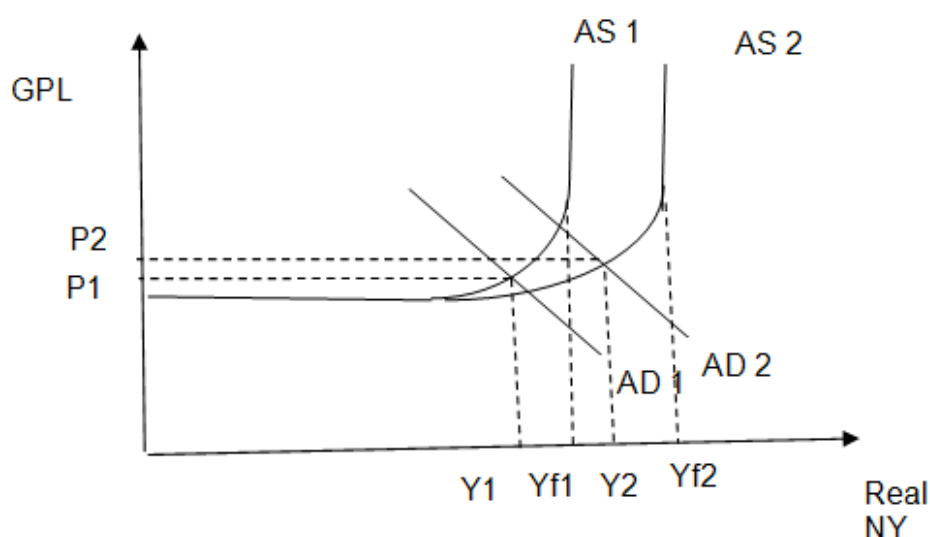
To achieve inclusive growth, the Singapore government emphasize on improving the productive capacity of individuals and creating conducive environment for employment and on income redistribution as a means of increasing incomes for excluded groups.

Measures to achieve inclusive growth include:

- Fiscal Policy
- SS-side policies
- Progressive Tax system

### Fiscal Policy to achieve economic growth and reduce income gap

- $\uparrow$  in  $G \rightarrow \uparrow$  in AD assuming economy operating below full employment level, via multiplier  $\rightarrow \uparrow$  **actual growth**, reduces demand deficient unemployment.
- For example, \$8 billion Pioneer Generation Package. It helps citizens aged 65 and above in 2014 meet their healthcare costs for life, with further subsidies on healthcare services and medicines.
- $\rightarrow \uparrow$  **affordability** of healthcare services for senior citizens, **reduce the effects of income inequality**.
- Wage Credit Scheme launched in 2013, which has seen more than \$2.2 billion handed out to help local businesses subsidise wage increases for low-income workers. This helps to maintain employment and prevents the increase in income gap between low income workers and high income workers.
- $\downarrow$  corporate tax rates from 20% to 17%  $\rightarrow \uparrow$  in after tax profits  $\rightarrow \uparrow$  investment local business and foreign firms  $\rightarrow \uparrow$  AD shifting to the right from AD1 to AD2  $\rightarrow \uparrow$  **actual growth** from Y1 to Y2.
- $\uparrow$  in investment  $\rightarrow \uparrow$  productivity  $\rightarrow \uparrow$  LRAS shift to the right from AS 1 to AS2  $\rightarrow \uparrow$  **potential growth** from Yf1 to Yf2.



### Appropriateness:

- In view of an ageing population in Singapore, direct income redistribution as a means of increasing incomes for this group is an immediate solution.
- As Singapore is a small and open economy that is vulnerable to external shock, the wage scheme credit that mitigates the negative impact of business cycles is essential to prevent deskilling. Deskilling would reduce productivity level making it more





challenging to achieve inclusive growth. As such, the wage credit scheme is much needed as it creates an incentive to stay in the workforce as compared to unemployment benefits.

- Corporate tax rate is one of the most important factor in attracting FDI in Singapore. FDI makes up a large proportion of GDP in Singapore given the nature of the economy. The move to reduce corporate tax rate is effective in attract foreign firms to invest in Singapore.

**Limitations:**

- Size of multiplier is small. As MPM is large (import reliant) in Singapore, MPS is large due to high CPF savings. Large leakages in the circular flow of income will result in a small increase in real national income.
- Strained government budget. In the long run, the Singapore government might have to adopt “growth at all cost” instead of inclusive growth to generate tax revenue in order to sustain her fiscal position.
- Singapore’s corporate tax rates are competitive, therefore, further cuts would need to be compensated by an increase in GST which is regressive by nature. This will limit the scope for inclusive growth.

**SS-side policies to enhance productivity for sustainable growth**

- Improvement in Infrastructure in Jurong Island, Biopolis → ↑external EOS→ ↑productivity  
The Productivity and Innovation Credit Scheme (PIC) scheme was introduced by the government to encourage productivity and innovation in Singapore. It creates the incentive to invest in areas to improve their productivity. Businesses enjoy 400% tax deductions/allowances if they qualify.  
The increase in investment → ↑ productivity → ↑AD and AS → ↑sustainable growth.

**Appropriateness:**

- PIC support local businesses which might not enjoy internal EOS due to the small domestic market and therefore, cannot compete with foreign firms in the global market.

**Limitations:**

- Expensive to fund and costly to monitor the appropriate use of the PIC.
- Higher global economic uncertainty, leaving little impetus for firms to invest in productivity-enhancing capital despite these SS side policies.

**SS-side policies to reduce income gap**

- Education subsidy making it affordable to low income family → ↑ labour productivity → ↑demand for labour → ↑wages → reduce income gap
- The Continuing Education and Training Masterplan, aims to ensure a competitive and career resilient workforce. It enables working adults, regardless of their starting qualifications, to continue to build and deepen their skills and competencies, throughout their careers.
- This reduces occupational immobility and helps workers to stay relevant in view of changing demands in the job markets.
- Allows workers in all sectors to remain relevant and generate stable incomes.
- Increases productivity growth which is essential for inclusive growth.

**Appropriateness**

- Singapore being a small economy, lack resources which results in a tight labour market. Hence, it is critical to increase productivity to match with the increase in wages.
- The openness of the Singapore economy allows free mobility of capital. This leads to increase in the pace and frequency of structural changes in the economy.



- Therefore, policies focusing on reducing occupational immobility is instrumental to achieve inclusive growth in Singapore as direct income distribution is not sustainable.

**Limitations:**

- Time lag between reforms and outcomes. For example, there is a time lag between the time when investments in education are made and the time when returns from improved labor skills are collected.

**Progressive Tax System**

Singapore's personal income tax rates for resident taxpayers are progressive. This means higher income earners pay a proportionately higher tax, with the current highest personal income tax rate at 20%. Tax revenue generated are redistributed as subsidies to make healthcare, education and housing affordable to all. **One limitation** for a more progressive tax system is that it creates a disincentive to work and deter foreign talent, this might lower the quality of labour, reducing potential growth.

*Other possible answers:*

*Exchange rate policy*

*Wage policy*

**Conclusion:**

Suggested evaluation:

Upon evaluation, government policies focusing on income redistribution to achieve inclusive growth is necessary in the short run but may not be sustainable, especially for a small and open economy like Singapore. As such, SS side policies that focus on productivity growth and productive employment will remain to be the most important approach to achieve inclusive growth in Singapore as it mitigates the negative impact of structural changes and her vulnerability to external shocks.

Knowledge, Application, Understanding and Analysis		
L3	For a thorough and well-balanced answer that evaluates the policies with good application to the Singapore economy.	9 - 11
L2	For a balanced but limited and undeveloped answer that has some application to the Singapore economy.	6 - 8
L1	For an answer that is largely descriptive and lacks a clear structure. Simple listing of policies to achieve inclusive growth.	1 - 5
Allow up to 4 additional marks for Evaluation		
E2	Judgment is based on economic analysis and adequately substantiated	3 - 4
E1	For an unexplained assessment, or one that is not supported by economic analysis.	1 - 2



## Essay Q6

Singapore's pattern of trade with the world has changed significantly both in terms of the countries we trade with as well as the type and volume of goods and services we trade in.

Discuss the factors that have resulted in the changing pattern of trade of Singapore with the rest of the world. [25]

### Introduction

Identify the changing pattern of trade of Singapore with the rest of the world

- Pattern of trade should be changing in terms of:
  - o The types of goods/services
    - Increasingly, services are taking up a larger percentage of total trade
    - Increase in exports of higher end manufactured goods
    - Top exports: Refined Oil, Electronic Equipment, Machines/Engines, Pharmaceuticals, Medical Equipment
    - Top imports: Electronic Equipment, Oil, Machinery, Gems and Precious metals, Vehicles
  - o The volume of goods and services
    - General increase in the volume of trade
  - o The import origins and export destinations
    - China experienced the greatest extent of increase in volume of services exported (rose by 10 times from 2000-2014)
      - From 4% (6<sup>th</sup>) of total exports to 12% (2<sup>nd</sup>)
    - USA was top export destination in 2000 (19%) but sixth in 2014 (4.8%)
    - Japan was top import origin in 2000 but sixth in 2014 (replaced by China who was 4<sup>th</sup> previously)
      - Top import from Japan was integrated circuits (22%) but in 2014, Japan's share of integrated circuits import was only 3.5%.
    - In 2000, Asian economies received 60% of exports from Singapore (North America- 20%, Europe- 16%) but in 2014, Asian economies received 74% of exports from Singapore (North America- 6.4%, Europe- 10%)

### Body

<p><b>Factor 1 (Internal/Supply):</b> Government policies (signing of FTAs)</p>	<p><i>(there are more recent FTAs that have been agreed and signed but it is unlikely that these will account for the changing POT)</i></p> <p>China-Singapore FTA signed in Jan 2009. Comprehensive Economic Cooperation Agreement (CECA) (FTA with India) signed in Jan 2005.</p> <p>With more FTAs → removal of tariffs on Singapore exports (GCC: Tariff elimination on approximately 98% of Singapore's exports to the GCC → lowers the distortion of opportunity costs → allows firms to tap on Singapore's CA → this accounts for the increase in export volume with these regions (also accounts for the changing destination for our exports)</p> <p><i>[More FTA → Trade creation between new trading</i></p>
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	<p><i>partners → Changing export destinations (USA was top export destination in 2000 but sixth in 2014)]</i></p> <p>Some countries have experienced major recessions in recent years (EU and US) that has affected Singapore (e.g. Singapore was the first Asian economy to suffer from the 2009 Global Financial Crisis) → there might be a deliberate action by the Singapore government to reduce its dependency or vulnerability to such external shocks by signing more FTAs with countries from other parts of the world → Changing export destinations (USA was top export destination in 2000 but sixth in 2014). However, it is impossible to decouple from the USA as her GDP is still the largest as percentage of World's GDP.</p> <p>Increase in the number of ASEAN members → increase in export destinations → increase in market size and hence demand for exports → account for the increase in trade volume with Asian economies (changes in export destination)</p>
<p><b>Factor 2 (External/Demand):</b> Different rates of growth experienced by different countries</p>	<p>China has experienced rapid economic growth. With rising income in China, Chinese citizens and firms will be demanding more imports as purchasing power increases, some of which are produced in Singapore. This contributes to an increase in export volume to China as well as an increase in total export volume.</p> <p>With rising income in China, this may also correspond with an increasingly consumerist culture (MPC increases) → higher income induced consumption. Also, with China being more open, her MPM increases as well → contributes to an increase in X from Singapore</p> <p>Relative to China, other countries have grown at a slower rate and hence contributed to their decrease in share of total exports → total X has continued to increase but China is rising to become one of the top trading partners</p>
<p><b>Factor 3 (External/supply):</b> Foreign governments changing the structure of their economy (e.g. rise of China as a manufacturing powerhouse)</p>	<p>Other neighbouring economies are increasingly producing higher quality goods and services and moving along the value chain → China is increasingly developing new areas of CA (low-end manufactured goods → high-end manufactured goods and capital machineries) → as Singapore economy does not have to import low-end capital goods from North America or Japan → decrease in % of M from Japan/NA and increase % of M from China</p>
<p><b>Factor 4 (Internal/Supply):</b> Changing domestic CA (link to changing domestic factor endowments) → changing opp costs → changing areas of specialisation)</p>	<p>Government policy to invest in education (encourage different specialisations at university, especially science and engineering courses) → labour becomes more skilled → increases the opportunity cost of dedicating labour to low skilled jobs → CA in Singapore changes from production of low-end manufactured goods to high end</p>



	<p>manufactured goods and capital goods → results in changing types of exports/imports</p> <p><i>[e.g. In 1980s, CA was in low end manufactured goods (textiles) due to the relatively higher opportunity cost in producing high end goods as compared to developed countries → Singapore largely exported textiles and imported high end manufactured goods (usually from the West). However, as Singapore upgraded the skills of the labour force → opportunity cost in producing high end goods became relatively lower → Singapore started importing textiles (from emerging/developing economies) instead and exported these high end manufactured goods]</i></p> <p>Government policy to develop more factor endowment (SS-side policy to develop infrastructure such as biopolis and Jurong Island) → shifting from providing engineering services to bio-pharmaceutical sector/ petrochemical industry → results in changing CA as Singapore now enjoys a lower opportunity cost of producing goods and services in these industries → pharmaceutical/petrochemical products as % of X increases</p>
<b>Factor 5 (Internal/Demand):</b> Changing tastes and preferences	<p>Increasing intra-industry trade: More variety required</p> <p>Increase in ease of access to foreign markets online that caters to varied tastes and preferences: Chinese retailers on Taobao as opposed to retailers on established online e-commerce platforms i.e. ebay and amazon → increases in volume of imports as well as the variety of import</p>
<p>Students can also mention other factors such as:</p> <ul style="list-style-type: none"> <li>- changing transportation costs</li> <li>- changing exchange rates</li> </ul> <p>Any other factors are acceptable as long as it is linked to a stated change in the pattern of trade of Singapore with the rest of the world.</p>	

### Conclusion + Evaluation

*Students can evaluate by explaining what is the most important factor attributing to the changing pattern of trade of Singapore with the rest of the world.*

Time Period: In the SR, may be taste and preferences as government policies to change CA and negotiate FTAs have a long time lag.

Situation: Singapore's heavy reliance on trade means that the government has a major role to play in international trade and ensuring the relevance of Singapore exports to the global economy. Hence, government intervention may be the most significant factor.



<b>Knowledge, Application, Understanding and Analysis</b>		
<b>L3</b>	For a thorough and well-elaborated answer that shows a range of factors that may have accounted for the changes in the patterns of trade experienced by the Singapore economy. There is good application to the Singapore economy and precise identification of significant changes to the patterns of trade, in view of external and internal factors.	<b>15-21</b>
<b>L2</b>	For an undeveloped answer that shows some understanding of a few factors that may have accounted for the changes in the patterns of trade experienced by the Singapore economy.	<b>10-14</b>
<b>L1</b>	For an answer that does not address the question requirement and did not account for the changes in the patterns of trade of Singapore. The answer is largely descriptive and lacks a clear structure.	<b>1 - 9</b>
	<b>Allow up to 4 additional marks for Evaluation</b>	
<b>E2</b>	Judgment is based on economic analysis and adequately substantiated	<b>3 - 4</b>
<b>E1</b>	For an unexplained assessment, or one that is not supported by economic analysis.	<b>1 – 2</b>