

TAMPINES JUNIOR COLLEGE
JC2 PRELIMINARY EXAMINATION



ECONOMICS

8819

Tuesday, 12 Sept 2017

Additional Materials: Writing Paper

3 hours

READ THESE INSTRUCTIONS FIRST

Write in dark blue or black pen.

You may use a soft pencil for any diagrams, graphs or rough working.

Do not use paper clips, highlighters, glue or correction fluid.

Section A (Case Study) [70%]

Answer **ALL** questions

Section B (Essay) [30%]

Answer **ONE** essay question

Submit each question separately.

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

Section A

Answer **all** questions in this section.

Question 1

Uber in Singapore

A Certificate of Entitlement (COE) represents a right to vehicle ownership and use of the limited road space for 10 years. There are 5 categories of COE for bidding – Category A to Category E. Vehicles classed under Category A are up to 1,600cc and 130bhp.

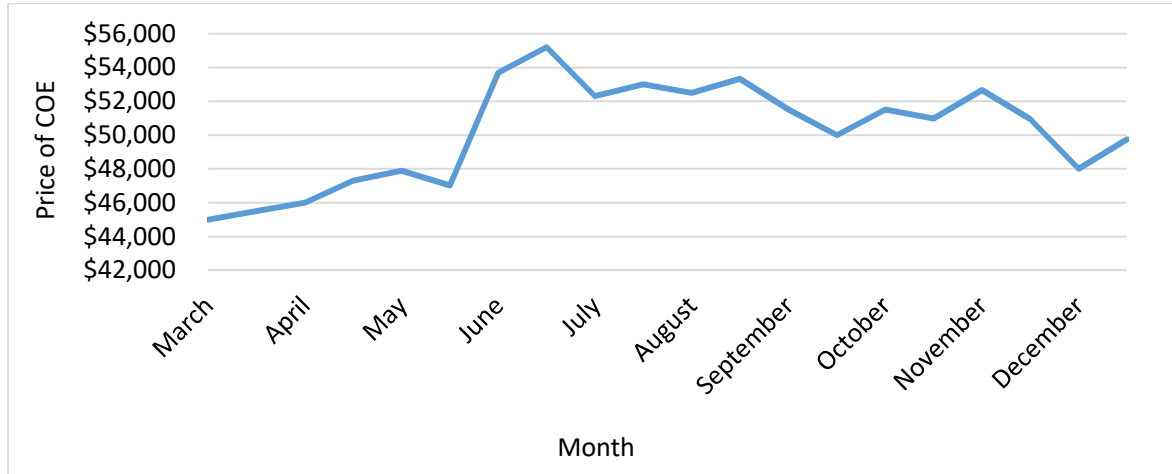


Figure 1: 2016 COE Prices for Category A (1,600cc and 130bhp)

Source: Land Transport Authority

Extract 1: Private-hire car companies join in the bid for COE

Uber-owned Lion City Rental is looking to put 1,800 new cars on the road in anticipation of growing demand. Rival company Grab is also expected to do the same. In recent months, both have started sourcing for new vehicles, and are jostling with private car owners for fresh Certificates of Entitlement (COE). Now, with the Government announcing "light touch" regulations governing third-party taxi apps, the proliferation of private-hire vehicles will accelerate. Most of the taxi companies are also starting up private-hire subsidiaries to compete with Uber, Grab and other small players like Smove and Tribecar. This will only intensify the competition for COEs. Most private-hire cars are smaller vehicles, so the pressure will be greater on COE Category A bidders (cars up to 1,600cc and 130bhp).

However, the COE quota is set to grow. The supply of COE is mainly determined by how many cars are de-registered (and either scrapped or re-exported thereafter); when one car leaves the road for good, it creates room for a fresh COE so that a new one can take its place. The COE release for passenger cars is expected to rise sharply to about 95,000, compared to about 58,000 in 2015.

Source: *Todayonline*, 16 January 2016 & *The Straits Times*, 16 April 2016

Extract 2: Regulations on private-hire cars

Private-hire car (PHC) drivers from ride-sourcing service operators such as Uber and Grab are now required to obtain a vocational licence under amendments to the Road Traffic Act. PHC drivers are required to go through a medical examination, attend a 25 hours course and pass a test. This framework will ensure the drivers are equipped with sufficient knowledge and skills to provide the service safely. Together with the existing rules that require PHCs to be

licensed as public service vehicles and to have adequate insurance, these measures help LTA better enforce against errant drivers and vehicle owners.

Source: *The Straits Times*, 10 March 2016

Extract 3: Enhancing vehicle incentive schemes for a cleaner environment

Extra miles' worth of pollution is being belched into Singapore's air every year from a traffic spike fuelled by ride-sharing apps such as Uber. The lower cost of taking an Uber is encouraging some people to step away from public transport and get into the Uber. According to figures in the past two years, Singapore fell short in meeting its targets for pollutants. The Government will hence adjust the current Carbon Emissions-Based Vehicle Scheme (CEVS) in a bid to nudge car-buyers towards cleaner and more environmentally-friendly models such as electric vehicles.

The current CEVS will be replaced with a new scheme that would consider four other pollutants which include nitrogen oxides, hydrocarbons, particulate matter and carbon monoxide on top of carbon dioxide. The National Environment Agency said rebates for environmentally-friendly car models will range between S\$10,000 and S\$20,000, depending on the vehicle's worst-performing pollutant. By including four more pollutants, the new scheme hopes to account more holistically for the health and environmental impact of vehicular emissions.

Source: *Channel News Asia*, 8 March 2017

Extract 4: Electric vehicles 'not economically feasible yet'

A study on electric vehicles (EVs) found that consumers were concerned about the purchase price of EVs as it is more expensive than a petrol-driven car even with rebates, the availability of personal and public charging infrastructure and the limitations of the technology such as the range, battery life and time taken to charge EVs. Nevertheless, the LTA and the EDB noted that similar to the development of hybrid vehicles, the prices of EVs are expected to fall as the cost of the technology continues to decline and mass production allows for cost savings from larger scale of production.

Source: *Today*, 6 July 2017

Extract 5: The unstoppable march of the gig economy

This year we saw the rise of the "gig economy", which is characterized by the prevalence of short-term contracts or freelance work. For instance, there is a flow of investments into Singapore as Uber and Grab firms established their foothold in Singapore. Even as retrenchments rose and job vacancies fell in the tepid job market this year, private-hire jobs have emerged as a bright spot. Consumers embrace having personal drivers to ferry them. Employers benefit as they could turn to hiring freelancers to reduce cost. Push factors for workers include greater work-life balance and structural challenges such as a mismatch between skills and jobs that may nudge them into temporary freelance work. Ride-sharing services may also generate positive externalities. They could reduce parking congestion. More importantly, the widespread availability of private-hire services can signal that a local economy is friendly to the high-tech industry and so can be a draw for investments.

While the gig economy has unravelled a vast ocean of opportunities for many, it also carries downsides, with the lack of benefits and protection posing headaches for policymakers. For instance, in Singapore, the lack of Central Provident Fund (CPF) contributions, a core pillar of the Republic's social security system has implications for home ownership and healthcare. Experts also expressed their concern that the gig economy may stymie workers' desire to deepen their skills.

Source: *Today Online*, 22 May 2017

Questions

- (a) Using the data from Figure 1, summarise how the price of COE had changed from March to December 2016. [3]
- (b) With reference to Extract 1, use supply and demand analysis to explain the likely impact on the price of COE. [5]
- (c) (i) Define price elasticity of supply. [1]
- (ii) Using Extract 2, explain how the price elasticity of supply for private-hire cars might have changed with the need for the drivers to apply for a vocational license. [2]
- (d) (i) Using Extract 3, explain the economic case for government intervention. [5]
- (ii) Comment on the effectiveness of rebates for environmentally-friendly car models in curbing vehicular emissions of pollutants. [6]
- (e) Extract 5 describes the introduction of private-hire car services in Singapore. [8]
In light of the above, discuss whether the advantages outweigh the disadvantages.

[Total: 30]

Question 2**Economic Woes****Table 1 Selected Economic Indicators for Singapore, 2013-2016**

	2013	2014	2015	2016
GDP growth at market prices (%)	5.0	3.6	1.9	2.0
Inflation rate (%)	2.4	1.0	-0.5	-0.5
Unemployment rate (%)	1.9	2.0	1.9	2.1
Gross fixed capital formation (annual % growth)	5.7	-1.1	1.1	-2.5
Exports of goods and services (% of GDP)	194.2	193.4	177.9	172.1
Imports of goods and services (% of GDP)	171.8	168.9	152.0	146.3

Source: <http://databank.worldbank.org>, accessed 21 July 2017

Extract 6: China announces subsidies to boost agriculture as growth slows

The Chinese government on Friday announced tax breaks and other measures aimed at creating jobs and promoting entrepreneurship, as the country seeks to boost economic growth, which slowed to 7 percent in the first quarter of 2015, its slowest rate in six years. The State Council pledged easier access to loans for start-ups and small enterprises, along with tax breaks for migrant workers who want to set up businesses in their home towns, and incentives for university graduates to work in less developed parts of the country, according to Reuters. It offered tax breaks to businesses that employ people who had been jobless for more than six months and it said companies that created significant numbers of jobs would receive priority in bids for large-scale projects.

Separately the government pledged increased agricultural subsidies to boost economic modernization in the countryside. The Ministry of Agriculture announced on Thursday that it would set aside 14 billion yuan (US\$2.26 billion) in subsidies to grain farmers, with another \$3.3 billion to promote good crop varieties and \$3.7 billion to promote grain farming by large scale family farms and cooperative societies.

Source: *International Business Times*, 5 January 2015

Extract 7: China's surprise currency devaluation

China stunned the world's financial markets on Wednesday by devaluing its currency for a second consecutive day, triggering fears its economy is in worse shape than investors believed. The move sent fresh shockwaves through global markets, pushing shares sharply lower and sending commodity prices further into reverse as traders feared the move could also ignite a currency war that would destabilise the world economy. There were widespread losses on stock exchanges in Asia, and in Europe markets. The Chinese authorities have acted after a string of poor economic figures showed that previous efforts to boost exports and growth against the headwind of an overvalued currency had failed.

One financial analyst said the devaluation, which pushed the yuan to a four-year low, heralded a tidal wave of cheap goods from Asia as other south east Asian countries followed suit. The

central bank sought to reassure financial markets that it was not embarking on a steady depreciation. “Looking at the international and domestic economic situation, currently there is no basis for a sustained depreciation trend for the yuan,” it said. But with the bank having said on Tuesday that that day’s action was a “one-off depreciation”, the rapid two-day drop in the value of the currency of about 4% dealt a blow to investors. They fear a prolonged currency war that could damage world trade should the US and Japan retaliate and drive down the value of the dollar and yen.

Oil prices remained below \$50 a barrel, down from more than \$110 a barrel last summer when the slowdown in China first became apparent. The prices of key industrial and construction metals – nickel, copper and aluminium – hit six-year lows. The two devaluations come after a run of poor economic data and have raised suspicions that China is embarking on a longer-term slide in the exchange rate. The first move on Tuesday was the biggest one-day fall in the yuan since a massive devaluation in 1994. On Wednesday the yuan fell to 6.43 against the dollar, its weakest point since August 2011.

Source: *The Guardian*, 12 August 2015

Extract 8: The death of the Trans-Pacific Partnership

The Trans-Pacific Partnership (TPP) is a trade agreement intended to deepen economic ties between 12 nations, slashing tariffs and fostering trade and investment to boost growth. Members, including the United States and Singapore, also hoped to foster a closer relationship on economic policies and regulation. The agreement was designed so that it could eventually create a new single market, something like that of the European Union. Vietnam would be considered one of the biggest winners, as analysts predicted the deal would boost its growth by 11% in the next 10 years, as firms move factories to the low-wage country.

On his first day in office, Donald Trump, the President of the United States of America, pulled out of the TPP, citing that it would take away American jobs and further worsen the U.S. trade deficit. However, critics claimed that this may have been a wrong move – studies from the Peterson Institute for International Economics projected that the TPP deal would have created more than 130,000 jobs and would raise U.S. national income by \$130 billion.

Post-fallout, this leaves the remaining 11 countries to forge ahead and try to cement a free-trade deal without the U.S.

Source: *BBC News Online*, 23 January 2017

Extract 9: Trumponomics 101: “Buy American, Hire American”

Tapping into economic discontent, Donald Trump has argued for protectionism and asserted that decades of free-trade policies were responsible for the collapse of the American manufacturing industry. He has been feeding on the perception among many Americans that globalisation has brought more pain than gain, for example, by bringing cheap consumer goods into the country, costing domestic jobs and depressing wages. Outsourcing of jobs to cheaper markets has also been a concern.

The Trump administration has been aggressively pursuing an “America First” policy, which focuses on putting America’s interests first. One of the measures that has emerged is the “Buy American, Hire American” executive order. On the “Buy American” side, the order calls for the U.S. government agencies to buy more domestically produced products in order to support the domestic economy, and for firms to produce their goods locally. “Hire American” tackles the labour aspect, by reducing the ability of companies to abuse U.S. visa programmes to

bring in foreign workers on the cheap. The administration has also threatened to impose tariffs on nations that have trade surpluses with the U.S., including China and Germany.

In April 2017, global finance leaders from the G20 nations dropped their anti-protectionist commitment after opposition from the U.S. This would potentially open a protectionist Pandora's Box that could lead to an overall decrease in global trade, which undermines the current system built around the World Trade Organisation.

Source: *Various*

Questions

- (a) Using the data in Table 1,
- (i) Describe the trend in real Gross Domestic Product for Singapore from 2013 to 2016. [1]
 - (ii) Identify the year where General Price Level was the highest. [1]
- (b) What conclusion would you draw about the overall economic performance of Singapore in 2016 compared with 2013? [4]
- (c) Using elasticity concepts, analyse the incidence of agricultural subsidy on producers and consumers of grain. [4]
- (d) (i) Using AD/AS analysis, explain how 'surprise devaluation of the yuan' can reignite growth in China. [4]
- (ii) Suggest a possible reason why this policy may have limited effectiveness. [2]
- (e) Analyse the effects of the TPP fallout and China's slowdown on the Singapore economy. [6]
- (f) Extract 9 explains Trump's "America First" protectionist stance, which he claims will address the negative consequences brought about by globalisation. [8]
- Discuss whether Trump's protectionism can ever be justified.

[Total: 30]

Section B (Essay)

Answer **one** question from this section.

Begin your answer on a **fresh sheet of paper**. This section is to be submitted separately.

- 3 (a) Explain how the economic problem of scarcity could be overcome with the rise of globalisation. [10]
- (b) Discuss the view that globalisation is always beneficial to a small and open economy. [15]

- 4 India's consumer prices are on the rise. India's fast growing economy has made her an attractive destination for foreign investment. The main upward effect on inflation in India was driven by rising global crude oil prices. Economists are expecting Reserve Bank of India to hike the interest rate if inflation continues to rise further.

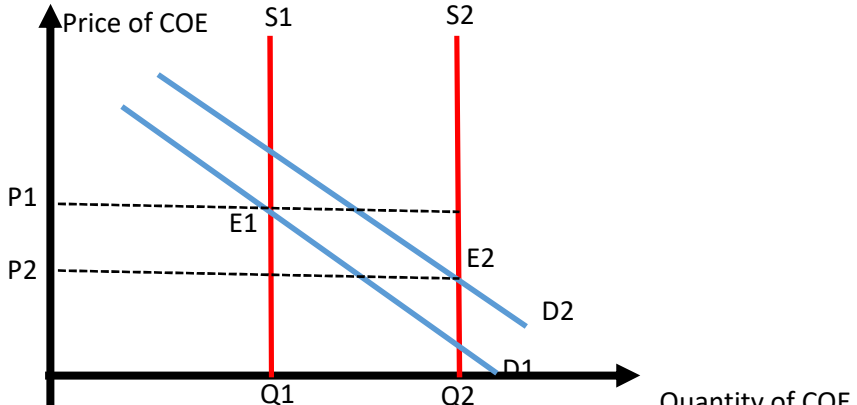
Source: *Reuters*, 14 March 2017

- (a) Explain the domestic and external causes of inflation in India. [10]
- (b) Discuss the view that a hike in interest rate is the most effective means of tackling inflation in India. [15]

END OF PAPER

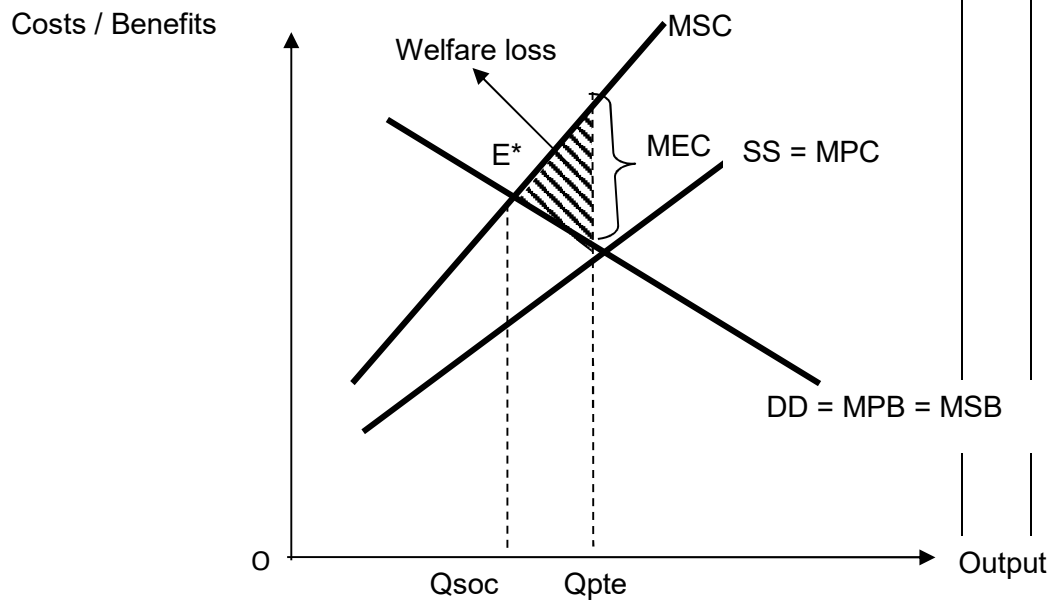
H1 CSQ 1

Suggested Answers

(a)	<p>Using the data from Fig. 1, summarise how the price of COE had changed from March to December 2016.</p>	[3]
	<p>General Trend: Overall, the price of COE had increased from March to December 2016. [1]</p> <p>Distinct Segments: The price of COE had gradually increased from March to June 2016 [1] before prices declined steadily from July to December 2016. [1]</p>	
(b)	<p>With reference to Extract 1, use supply and demand analysis to explain the likely impact on the price of COE.</p>	[5]
	<p>The price of COE is determined by the forces of supply and demand for COE.</p> <p><u>Demand factor</u> As mentioned in Extract 1, with Uber and Grab sourcing for new vehicles to be on the road coupled with minimal government intervention on 3rd party apps, the demand for private-hire cars will be on the rise. As the increase in demand for new private-hire cars will require COE, the demand for COE will increase, shifting the demand rightwards from D1 to D2, ceteris paribus. [1]</p> <p><u>Supply factor</u> Also as mentioned in Extract 1, as COE quota is set to grow, supply of COE will shift rightwards from S1 to S2, ceteris paribus. [1]</p> <p><u>Justify which curve shifts more</u> COE supply “is expected to rise sharply in 2016 to about 95,000, compared to about 58,000 in 2015” → the numbers is expected to increase by almost twice → we could justify that supply shifts by a greater extent compared to demand. [1]</p> <p><u>Diagram</u></p>  <p><u>Market adjustment process</u></p>	

		<p>At the original price P1, quantity supplied is greater than quantity demanded, this leads to a surplus and hence downward pressure on price from P1 to P2 till the surplus is eliminated. [1]</p> <p><u>Final Outcome</u> Hence, prices of COE falls from P1 to P2 and quantity of COE increases from Q1 to Q2. [1]</p>	
(c)	(i)	Define price elasticity of supply.	[1]
		Price elasticity of supply measures the degree of responsiveness of quantity supplied to a change in the price of good itself, ceteris paribus.	
	(ii)	Using Extract 2, explain how the price elasticity of supply for private-hire cars might have changed with the need for the drivers to apply for a vocational license.	[2]
		<p>As mentioned in Extract 2, the private-hire car drivers are required to apply for a vocational license where they need to go through a medical examination, attend a 25 hours course and pass a test. This makes it relatively more difficult for an individual to be a private-hire car driver and may even deter some of the private-hire drivers who drive to earn a part-time income. [1] Given an increase in price, the quantity supplied for private-hire cars increases by less than proportionate.</p> <p>Hence, the introduction for the need to apply for vocational license will make the price elasticity of supply for private-hire cars to be relatively more price inelastic. [1]</p>	
(d)	(i)	Using Extract 3, explain the economic case for government intervention.	[5]
		<p>Identify the source of market failure: Air pollution caused by cars generate negative externalities in consumption, which is a source of market failure. [1]</p> <p>Define negative externality in consumption: refers to the costs of consumption, which fall on people other than the consumers of the product, for which no compensation is made.</p> <p>Example of negative externality in consumption: From Extract 3: "health and environmental impact of vehicular emissions" → reduce the quality of the environment to the community, and may cause long-term health problems such as lung cancer to others, incurring medical costs. [1]</p>	

Elaborate on the source of MF with the aid of a diagram [3m]:



In a free enterprise economy, the price mechanism will only consider private costs and benefits, ignoring externalities. To the individual car user, the level of car usage will be at the point where $MPB = MPC$ (private efficiency). Car users do not take into account external costs generated. As such, Q_{pte} is being consumed. However, the socially optimal level of output is at Q_{soc} , where $MSC = MSB$. At Q_{pte} , the MSC is greater than MSB . One extra unit of output adds more to society's costs than to society's benefits. There is over-consumption of car usage that generates negative externalities, and hence a welfare loss to society occurs, shown by the shaded area. The market fails because economic efficiency has not been achieved at Q_{pte} . Link to q_n : Hence, the need for government intervention.

OR

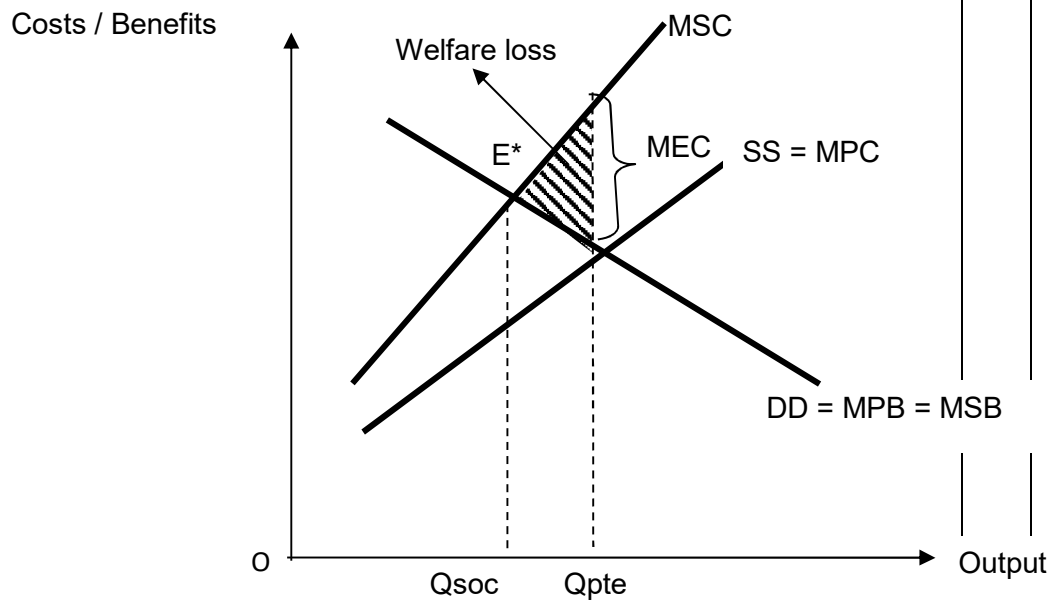
Identify the source of market failure: Air pollution caused by Uber and Grab drivers generate negative externalities in production, which is a source of market failure. [1]

Define negative externality in production: refers to the costs of production, which fall on people other than the producers of the product, for which no compensation is made.

Example of negative externality in production: From Extract 3: "Extra miles' worth of pollution being belched into Singapore's air every year from a traffic spike fuelled by ride-sharing apps such as Uber. The lower cost of taking an Uber is encouraging some people to step away from public transport and get into the Uber." + "health and environmental impact of vehicular emissions" → reduce the quality of the environment to the community, and may cause long-term

health problems such as lung cancer to others, incurring medical costs. [1]

Elaborate on the source of MF with the aid of a diagram [3]:



In a free enterprise economy, the price mechanism will only consider private costs and benefits, ignoring externalities. To Grab/Uber, the level of output will be at the point where $MPB = MPC$ (private efficiency). Grab/Uber do not take into account external costs generated. As such, Q_{pte} is being produced. However, the socially optimal level of output is at Q_{soc} , where $MSC = MSB$. At Q_{pte} , the MSC is greater than MSB . One extra unit of output adds more to society's costs than to society's benefits. There is over-production of private-hire car service that generates negative externalities, and hence a welfare loss to society occurs, shown by the shaded area. The market fails because economic efficiency has not been achieved at Q_{pte} . Link to qn: Hence, the need for government intervention.

(ii) **Comment on the effectiveness of rebates for environmentally-friendly car models in curbing vehicular emissions of pollutants.** [6]

Explain how rebates for environmentally-friendly car models curb vehicular emissions:

- From Extract 3: "The National Environment Agency is implementing rebates for environmentally-friendly car models that range between S\$10,000 and S\$20,000, to nudge car-buyers towards cleaner and more environmentally-friendly models such as electric vehicles."
- The rebates equivalent to the size of the MEB at Q_{soc} will lead to a fall in the cost of purchasing an environmentally-friendly car model. This will compensate the consumer for the

positive externalities generated. The subsidy encourages the consumer to take into account (internalise) the external benefits, raising the MPB to be at the same level as the MSB. Faced with the new demand curve, the consumer will increase consumption of environmentally-friendly car models to Q_{soc} , which is the socially efficient level. This will lead a fall in consumption of non-environmentally-friendly car models and hence a fall in vehicular emissions of pollutants as consumers switch towards environmentally-friendly car models which are cheaper substitutes with the rebates. The welfare loss to society would be eliminated.

Evaluation of rebates:

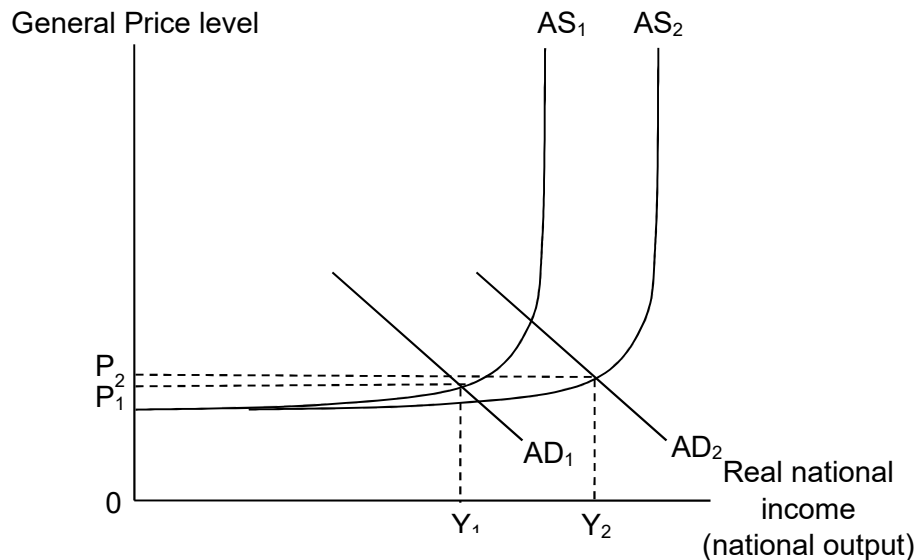
- From Extract 2: “A study on electric vehicles (EVs) has found that consumers were concerned about the purchase price of EVs as it is more expensive than a petrol-driven car even with rebates.” There is difficulty in measuring the exact value of the MEB in monetary terms, as externalities are “unpriced” effects. If the external benefits are not accurately estimated, the government could either provide too much subsidy or too little subsidy. In this case, the rebates may be too little to make consumers switch to buy environmentally-friendly car models such as electric vehicles.
- From Extract 2: “lack of personal and public charging infrastructure as well as the limitations of the technology such as the range, battery life and time taken to charge the vehicles.” → Besides cost, consumers are concerned with the infrastructure and the limitations of the technology, hence rebate alone is not sufficient to encourage consumers to switch to buying electric vehicles to curb air pollution.
- Subsidies require a high level of government expenditure; in order to provide finance for the subsidies, the government may have to impose high tax rates on citizens. This may in turn have disincentive effects on work, investment and hence adverse effects on the economic growth of the country./Opportunity cost of government expenditure. The money could be channelled to other productive purposes such as education and healthcare.

Conclusion:

- In conclusion, rebates may not be effective in encouraging consumers to switch towards environmentally-friendly cars due to the limitations mentioned above.
- As such, government will need to implement other policies such as provision of charging infrastructure and R&D to overcome the current limitations of the technology to encourage more consumption of environmentally-friendly cars to curb air pollution.

	<p>Mark Scheme:</p> <table border="1"> <thead> <tr> <th>Level</th> <th>Descriptor</th> <th>Marks</th> </tr> </thead> <tbody> <tr> <td>L2</td> <td>Two-sided answer i.e. one that explains how rebates work and explains its limitations.</td> <td>4-6</td> </tr> <tr> <td>L1</td> <td>One-sided answer i.e. one that only explains the how rebates work without explaining limitations, OR An undeveloped answer that lacks economic rigour.</td> <td>1-3</td> </tr> </tbody> </table>	Level	Descriptor	Marks	L2	Two-sided answer i.e. one that explains how rebates work and explains its limitations.	4-6	L1	One-sided answer i.e. one that only explains the how rebates work without explaining limitations, OR An undeveloped answer that lacks economic rigour.	1-3	
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(e)	<p>Extract 5 describes the introduction of private-hire car services in Singapore.</p> <p>In light of the above, discuss whether the advantages outweigh the disadvantages.</p>	[8]									
	<p><u>Thesis: Advantages of the introduction of private-hire car services</u></p> <p>1. Higher I → Sustained Positive Economic Growth and Low Unemployment + Improve capital and financial account</p> <ul style="list-style-type: none"> • Extract 5: “there is a flow of investments into Singapore as Uber and Grab firms established their foothold in Singapore.” + “More subtle but perhaps even more important, the widespread availability of private-hire services can signal that a local economy is friendly to the high-tech industry and so can be a draw for investments.” → improve capital and financial account + Increase I → increase in AD → AD shift rightwards. • Firms will experience a fall in inventories. This will signal to the firms to step up production. Firms will employ more workers leading to rising output. This results in falling unemployment and rising income. As income rises, spending by the households will increase. As one’s spending becomes another income, this rise in spending will lead to a rise in income of another group of people because of the increasing demand for the goods and services they produce. The multiplier effect is triggered off leading to a multiple increase in production, output and national income → actual economic growth, assuming the Singapore economy is operating in the intermediate range. • Increase in investment → more spending on capital goods (e.g. on machines, equipment and factory buildings) + bring about an improvement in technology, the economy’s ability to produce goods and service increases. LRAS increases and shift to the right. This will increase the potential output of the economy and results in potential growth in the long run. 										

- Sustained positive EG will be attained with the economy achieving both actual growth in the SR and potential growth in the LR.



2. Improvement in non-material standard of living

- From Extract 5: “Consumers embrace having personal drivers to ferry them” → provide consumers convenience → improve nmSOL
- From Extract 5: “Greater work-life balance for workers” → more time for themselves and with their family → improve nmSOL
- From Extract 5; “Ride-sharing services may also generate positive externalities. For example, they could reduce parking congestion → easier to find parking → improve nmSOL.

Anti-thesis: Disadvantages of the introduction of private-hire car services

1. SOL worsen for workers + in the LR may lead to higher government expenditure

- From Extract 5: “lack of benefits and protection posing headaches for policymakers. For instance, in Singapore, the lack of Central Provident Fund (CPF) contributions, a core pillar of the Republic’s social security system has implications for home ownership and healthcare.”
- Grab and Uber drivers lack healthcare, retirement benefits or have insufficient savings in their CPF for retirements → lack access to affordable healthcare + harder to own a home + not enough savings when they retire → worsen their current and future mSOL and nmSOL
- In the LR, government may incur higher government expenditure to ensure that these workers have access to

housing and healthcare service and are able to retire comfortably → worsen Singapore's fiscal budget.

2. Underemployment

- From Extract 5: “structural challenges such as a mismatch between skills and jobs may nudge workers into temporary freelance work.” Private-hire car service firms such as Uber and Grab may be relying on the very people who are structurally unemployed or are suffering from demand-deficient unemployment. They are forced to take up these freelance/part-time and low-paying work because they can't find full-time jobs that make use of their skills. Underemployment occurs as they could be working fewer hours/not fully utilising their skills as they would like to.

Overall Evaluation:

- **Stand:** The advantages of the introduction of private-hire services outweighs the disadvantages in Singapore. From the economic angle, the introduction of private-hire care services clearly bring about improved consumer welfare. Furthermore, facilitated by technology, we can expect the gig economy, and the introduction of such services similar to the private-hire car services to keep growing.
- Hence, the challenge for the government is to implement policies to maximise the advantages and minimise the disadvantages. For instance, Singapore government need to ensure that employees' welfare are taken into account by reviewing its labour laws to protect the interests of workers working in the private-hire car services industry/the gig economy.

Level	Descriptors	Marks
L2	Response addresses both the advantages and disadvantages of the introduction of private-hire services. There are links made to the macroeconomic goals of the economy. Response makes good use of case study material	4-6
L1	Response only addresses either only the advantages or the disadvantages of introduction of private-hire services. Response lacks the use of case study material and has poor application to the Singapore context.	1-3
E2	Response with a justified economic reasoning	2
E1	Response without economic reasoning	1

H1 CSQ 2

Suggested Answers

(a) Using the data in Table 1,

(i) Describe the trend in real Gross Domestic Product for Singapore from 2013 to 2016. [1]

Real Gross Domestic Product for Singapore increase from 2013 to 2016. [1]

(ii) Identify the year where General Price Level was the highest. [1]

General Price Level was the highest in 2014. [1]

(b) What conclusion would you draw about the overall economic performance of Singapore in 2016 compared with 2013? [4]

Comparing between 2013 and 2016, Singapore's real GDP growth fell from 2.6% to 2.5%. This implies that its real GDP is increasing at a decreasing rate and its unemployment rate rose from 1.9% to 2.1%. The increase in unemployment reflects an increase in unutilised resources in the economy. Since GDP measures the total value of final goods and services produced within the geographical boundary of a country in a given year. A fall in Singapore's real GDP growth rate reflects a slower growth and this is supported by a -2.5% growth in its gross fixed capital formation. This signifies a fall in the level of investment in the country which is detrimental to the economy both in the short and long run. Although there is an improvement in the Balance of Trade in 2016 as compared to 2013, we have insufficient information to conclude on the overall Balance of Payment account of the country. Hence, the overall economic performance of Singapore deteriorated in 2016 compared to 2013. [1]

Any 3 indicators – 3m

State the conclusion – 1m

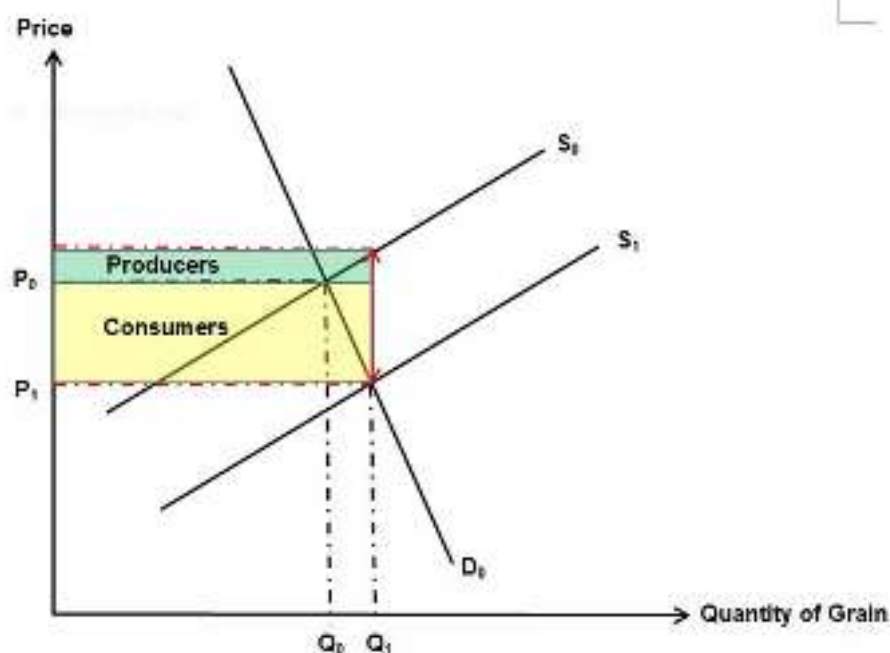
(c) Using elasticity concepts, analyse the incidence of agricultural subsidy on producers and consumers of grain. [4]

From Extract 6, Para 2 "Separately the government pledged increased agricultural subsidies...set aside 14 billion yuan (US\$2.26 billion) in subsidies to grain farmers" → Lower cost of producing grain → Supply curve shifts to the right → a fall in equilibrium price and increase in equilibrium quantity. [1]

Concept of price elasticity of demand and supply can be used to determine the incidence of subsidy that is experienced by the producer and consumer of final goods and services.

Demand for grain tends to be price inelastic due to grain being a staple in Asian country like China. Hence, degree of necessity is high. [1]

Use diagram to illustrate the incidence of subsidy on consumers and producers of grain



Since PED for grain is more price inelastic than PES for grain [1]

Where demand for grain, which is a necessity for China (since most Asian consume rice as a staple) are highly price inelastic, a fall in price leads to a less than proportionate increase in quantity demanded by consumers. As consumers are relatively less responsive to price changes than producers, producers can more easily pass on the fall in cost of production to consumers. As a result, the consumers would bear a greater proportion of the subsidy while producers bear a smaller proportion.

Evaluation: [1]

In conclusion, whether the incidence of agricultural subsidy will fall more on consumers or producer depend on the relative elasticity of demand and supply for grain.

- (d) (i) **Using AD/AS analysis, explain how ‘surprise devaluation of the yuan’ can reignite growth in China. [4]**

The aim of the Japanese government is to seek to boost economic growth which slowed to 7 percent in the first quarter of 2015 as mentioned in Extract 6, Para 1.

A ‘surprise devaluation of the yuan’ will cause China’s exports to gain international competitiveness → exports will become relatively cheaper in foreign currency → Assume demand for exports to be price elastic, a decrease in the export prices will bring about a more than proportionate increase in quantity demanded for exports (X) resulting in an increase in export revenue of China. [1]

Locals will now find imports to be relatively dearer than before in local

currency → Assume demand for imports to be price elastic and that imports and locally-produced goods are close substitutes, there will be a more than proportionate fall in quantity demanded for imports (M) resulting in a fall in import expenditure of China. [1]

Assuming Marshall-Lerner condition holds where the sum of the price elasticity of demand for imports and exports is greater than one [$E_x + E_M > 1$] [1] → increase in (X-M) → increase in AD → trigger the multiplier → multiple expansion of production, output, employment & national income [1]

(ii) **Suggest a possible reason why this policy may have limited effectiveness.** [2]

As mentioned in Extract 7, Para 1 “traders feared the move could also ignite a currency war” **OR** Extract 7, Para 2 “fear a prolonged currency war ... US and Japan retaliate” [1] → retaliation by China’s trading partner in the weakening of their currency hence, China’s exports will seem relatively dearer in foreign currency to them leading to a fall in demand for China’s export, c.p. AD ↓ → limiting the effectiveness of the policy to reignite growth in China. [1]

Any **POSSIBLE** reason may be accepted: [2]

- Demand for exports and imports are price inelastic

Demand for exports and imports may be price inelastic in the short run. There are other determinants affecting locals’ decisions to buy foreign goods and foreigners’ demand for a country’s exports (other than price considerations).

For instance, it will take some time for consumers to switch their taste and preferences. In addition, it will also take time for trading contracts between firms to expire before they can respond to the change in exchange rate and switch trading partners. Thus the aggregate demand might not rise by the full extent.

- Conflict with other macroeconomic goals

Devaluation improves the country’s export competitiveness and helps to stimulate aggregate demand and economic growth. However this could be at the expense of demand-pull inflation especially if the economy has supply bottlenecks or is operating at full employment levels. Hence, policymakers in deciding the timing and extent of growth policies have to weigh the benefits of economic growth versus the costs of higher inflation (demand-pull inflation).

However, it must be noted that China is facing economic slowdown. Hence, unless the increase in AD is substantial enough, China should not be hit with the problem of inflation.

- Ceteris paribus assumption does not hold in real life

Ceteris paribus assumption does not hold in the real world. There could be other external shocks or variables affecting the level of aggregate demand and the economy – which could cancel out the effectiveness of the implemented exchange rate policy.

- Time lags

It takes time before the economic situation is fully recognised as time is needed to gather key economic statistics and data [recognition lag].

Central banks also need time to make decisions and implement the appropriate monetary policy [implementation lag].

There is also a time lag for the monetary policy to affect the economy and inflation [impact lag].

Owing to the time lag associated with the working of monetary policy, the depreciation of exchange rate may take effect at a time when the economy may have already recovered from the economic recession, thus resulting in the economy overly expanding and facing inflationary pressures instead.

- Uncertainty

There is uncertainty to the extent and duration of the macroeconomic problem – recession – at hand. Governments do not have perfect information as to the degree and duration to weaken the exchange rate.

(e) **Analyse the effects of the TPP fallout and China's slowdown on the Singapore economy.** [6]

Effects of TPP fallout on SG economy:

- TPP was intended to be a multilateral FTA among a number of countries, aimed to create freer trade and investment flows among these countries → increase (X-M) and increase I → link to actual and potential growth → sustained EG
- Benefits of TPP cannot be reaped (Extract 8: "fostering trade and investment to boost growth")
- Lack of increase in (X-M) to increase AD, and lack of increase in I to increase AD and LRAS
- Inability to achieve sustained economic growth (stagnation) and reduce cyclical unemployment
- If there is a decrease in investor confidence, might even result in a decrease in I → lower AD and AS → fall in sustained growth

Effects of China's slowdown on SG economy:

- China's slowdown → Chinese economy growing at a slower rate (i.e. slower pace of increase in economic growth)
- Slower rise in incomes than before (or lower than expected increase in incomes)
- Adverse effect on purchasing power
- Chinese consumers will spend on fewer goods and services, including imports from Singapore
- Fall in Singapore's export demand
- Fall in Singapore's export revenue
- Assuming Singapore's import expenditure remains unchanged, there will be a fall in net export revenue (X-M)
- Adverse effect on BOP: Lower (X-M) → BOT, current account and hence BOP worsens
- Adverse effect on EG and unemployment: Lower (X-M) → lower AD → multiplier process → decrease in real NY → fall in actual growth in Singapore; fall in derived demand for labour → rise in cyclical

unemployment (AD/AS diagram)

Evaluation:

All in all, both events have had adverse impacts on the Singapore economy, in terms of worsening or stunting her economic performance. However, the death of TPP is likely to have a more substantial impact on the Singapore economy than China's slowdown, as although Chinese economic growth is slowing, there is still positive growth. Hence, the loss of confidence due to the death of TPP leading to adverse impacts on C and I would probably have more severe impacts on the SG economy.

L2	For a developed answer that explains the impact of both the TPP fallout and China's slowdown on the Singapore economy, with links to Singapore's macroeconomic goals and/or standard of living	4-6
L1	For an undeveloped answer that describes/states the possible impacts of the TPP fallout and China's slowdown on the Singapore economy, with lack of economic reasoning or significant missing links OR For an answer that only addresses the impact of either the TPP fallout or China's slowdown on the Singapore economy	1-3

Extract 9 explains Trump's "America First" protectionist stance, which he claims will address the negative consequences brought about by globalisation.

(f)

[8]

Discuss whether Trump's protectionism can ever be justified.

Introduction (and brief explanation of protectionism in U.S. context)

Protectionism involves measures taken to partially or completely protect domestic industries from foreign competition in domestic markets. According to Extract 9, Trump's protectionism policy, "Buy American, Hire American", involves incentivising firms to use domestic factor inputs (e.g. raw materials, assembly parts, labour) instead of imported inputs, and getting the U.S. government to purchase locally produced goods and services as opposed to imported ones. In doing so, this would reduce America's import demand and hence import expenditure.

T1: Trump's protectionism may be justified – helps to reduce structural unM

One argument to justify protectionism may be that it helps to reduce structural unemployment. According to Extract 9, globalisation has brought "cheap consumer goods into the country, costing domestic jobs". This could imply that the U.S. has lost its comparative advantage in the production of certain goods and services (sunset industries), due to the emergence of countries which can produce these same goods at a lower cost of production (e.g. emerging economies such as Vietnam and China

being able to produce low-end manufactured goods at lower prices due to their lower labour costs). Since globalisation involves the freer flow of goods and services, households around the world will tend to buy the relatively cheaper goods and services from other countries. As a result, U.S. firms' product demand and hence revenue will fall due to the lack of competitiveness. Subsequently, if they earn subnormal profits in the long run, they will shut down and leave the industry. This may lead to structural unemployment as U.S. workers in these sunset industries may not have the relevant skills to work in other industries (occupational immobility), which in turn has adverse effects on material and non-material standard of living.

As a result, protecting domestic industries in the above-explained ways would help to boost demand and revenue for local firms, preventing them from shutting down. This helps to avoid structural unemployment.

AT1: Limitations of above argument that protectionism can help reduce structural unemployment

However, the above argument has its limitations. Importantly, protectionism does not solve the root cause of the problem when it comes to structural unemployment. The U.S. is losing its comparative advantage because of the emergence of low cost competitors that are more efficient in production. Protectionism merely artificially protects the U.S. from competition with the rest of the world, but does nothing to solve the problem of inefficiency/lack of competitiveness. What should probably be done instead is to implement supply side policies to improve productivity/efficiency in production, or for the U.S. to bite the bullet and develop new areas of comparative advantage instead.

Furthermore, such protectionist policies are at the expense of households' standard of living, as they will be denied access to cheaper foreign imports. This not only reduces the quantity of goods and services available to them, but also reduces the variety of goods they get to enjoy, hence worsening material standard of living.

T2: Trump's protectionism may be justified – helps to protect domestic workers

Extract 9 also mentions that there has been "outsourcing of jobs to cheaper markets". In these cheaper markets, the lower cost of labour leads to lower cost of production. However, many a time, workers in these countries are being exploited by producers, or are being treated unfairly by labour laws deliberately keeping the cost of production low. This lowers the material and non-material standard of living of the workers in such low-cost labour countries. Hence, one argument by Trump might be that protectionism is justified in shielding the U.S. from such imports produced via exploitation of labour.

AT2: Limitations of above argument that protectionism can help protect domestic workers

However, wages in developing countries are usually low because of the abundance of labour (large labour pool). Labour productivity is also usually

relatively low in such countries due to the relatively lower education and skill levels, thus explaining their relatively lower wages compared to that in developed countries, where higher skilled workers command a higher wage. As such, if lower labour costs are due to these reasons, then the argument that workers in developing countries are being exploited is moot.

Furthermore, as argued earlier, the U.S. should instead upgrade their factors of production (especially labour and capital) such that they have a comparative advantage in certain types of goods, so that they can increase their wages in the long run, rather than trying to sustain current wages by protecting their domestic industries.

(Other possible arguments: protection against unfair foreign competition i.e. dumping, protection to achieve self-sufficiency, protection to develop infant/strategic industries)

AT3: Protectionism: beggar-thy-neighbour policy → could invite retaliation

Worse still, protectionism is well known as a beggar-thy-neighbour policy i.e. an economic policy where one country (in this case, the U.S.) attempts to solve its economic problems by means that worsen the economic problems of other countries. With this in mind, other countries might retaliate against the U.S. and implement similar protectionist measures against U.S. exports too. If this were to happen, the lower export revenue in the U.S. would lead to lower AD, and via the multiplier effect result in a multiple decrease in real national income, adversely affecting economic growth. The balance of payments could also worsen because the worsening balance of trade (lower $(X-M)$) would worsen the current account. Ultimately, retaliation by the U.S.'s trading partners would result in the U.S. economy being negatively impacted.

Retaliation by U.S. trading partners would also mean that import controls/restrictions are being implemented across countries. This would lead to an all-round contraction of world trade, which goes against the principles of free trade being mutually beneficial to all countries.

Evaluative Conclusion

It is unlikely that protectionism can ever be justifiable because no matter what arguments are provided by governments to justify their protectionist actions, there are loopholes to these arguments that either render the argument moot or suggest that other policies may be more appropriate instead.

In the case of the U.S., which is a large economy with many trading partners, protectionism is a hostile anti-trade policy to adopt. Besides worsening U.S. economic performance in the current period, the souring of trade relationships with her trading partners might lead to worsening economic performance in the future if the U.S.' trading partners decide to trade less with the her.

As such, it is better for the U.S. to implement other policies to deal with the economic problems that they are facing instead – for instance, if faced with structural unemployment due to loss of comparative advantage, the U.S. should probably adopt supply-side policies i.e. education and

retraining/skills upgrading to help displaced workers develop relevant skills so that they can transit to other jobs instead.

L2	For a developed answer that discusses reasons why protectionism may and may not be justified, with the use of economic reasoning and evidence from the case material. Links to economic goals and standard of living should be drawn	4-6
L1	For a one-sided answer that explains why that protectionism can (or cannot) be justified OR For an undeveloped or descriptive answer that discusses whether protectionism can ever be justified, without economic reasoning and application to context	1-3
E2	For a reasoned conclusion using economic reasoning, and with application to the U.S. context	2
E1	For a conclusion stated without economic reasoning used in justification	1

H1 EQ3

Suggested Answers

- 3 (a) Explain how the economic problem of scarcity could be overcome with the rise of globalisation. [10]
- (b) Discuss the view that globalisation is always beneficial to a small and open economy. [15]

Suggested answer for (a):

Introduction:

- **Define globalisation** → Globalisation is defined as the increasing integration of economies around the world especially through various forms like:
 - Free flow of goods and services (*free trade*)
 - Free flow of capital and investment (*financial flows*) → emergence of world financial markets & rapid movement of financial capital & rise and expansion of multinational corporations (MNCs) internationally
 - Free flow of people (*labour migration*)
 - Free flow of ideas and knowledge (*technology*)

Define economic problem of scarcity → Unlimited wants and limited resources → resulting in scarcity → thus required to make choices between competing uses → incur opportunity cost, which is the next best alternative forgone.

Body/Essay Development:

- ➔ **Free flow of goods and services**
 - With globalisation → Free flow of goods and services hence this allow consumers to gain access to goods and services internationally and even those that are not available in these home country → Resulting in an increases in quantity, quality and varieties → Thus increases consumers' utilities and reduces the economic problem of scarcity, i.e. there are unlimited wants but limited resources to produce where the domestic country might not have the resources to do so, such as lack of knowledge, skills and technology etc. Hence with the rise of globalisation, the country can now consume beyond the production possibility curve (PPC).
- ➔ **Free flow of capital and investment**
 - Globalisation opens up the country and results in an increase in the level of competition → In order to remain competitive in the international market, country would need to specialise in the production of goods that it has comparative advantage in i.e. lowest opportunity cost → Increasing both individual as well as world output → allowing countries to consume beyond their PPC → Thus, reduces the problem of scarcity.
 - At the same time, specialisation allows the countries to be more productive and efficient → Leading to better allocation of resources → Increasing quality and quantity of resources → Increases productive capacity → PPC shifts to the right/LRAS shifts to the right → Reducing the problem of scarcity.
- ➔ **Free flow of people/Free flow of ideas and knowledge**
 - Globalisation increases cross-border transfer of resources, in terms of labour, capital and technology & knowledge.
 - **Labour** → Increase quantity of labour in the countries, with highly skilled labour, it will also increase in quality of work force → Enhance productivity. Influx of low skilled foreign labour will also lead to an increase in quantity of FOPs → Increasing productive capacity → Shift PPC or

LRAS to the right → Hence reduce the resource constraints face by a country → Reduce problem of scarcity.

- **Capital and technology transfer** → Increase capital inflow and efficiency → FDI increases thus lead to increase quality and quantity of resources → Helping the country boost its productive capacity → Shift PPC or LRAS to the right → Hence reduce the resource constraints face by a country → Reduce problem of scarcity.
- With the rise of globalisation → More goods and services being produce, increase in labour, capital inflow and technology transfer → both AD and AS rises → increase real NY via the multiplier process → Country achieve both actual growth and potential growth → Achieving sustained economic growth → speed up economic growth → leading to more and greater utilisation of resources.

Conclusion:

Globalisation allows the economy to better utilise their resources due to the theory of comparative advantage. It also allows them to increase world output, thus reduces the 'limited resources' constraint. At the same time, with more goods and services available for consumption, it can also satisfy more wants, thus able to tackle the problem of 'unlimited wants'.

Marking Scheme for (a)

Knowledge, Application, Understanding and Analysis.		
Level	Descriptor	Mark Range
L3	<ul style="list-style-type: none"> • Well-developed answer using real-life examples to explain and illustrate how globalisation is able to reduce the problem of scarcity. • Minimum 3 aspects of globalisation covered, i.e. goods and services, labour, capital and technology linking clearing how it can reduce the problem of scarcity of BOTH unlimited wants and limited resources. • Max. 7m for theoretical answer without using any example(s) for illustration purpose. 	7 – 10
L2	<ul style="list-style-type: none"> • Sound explanation of only 2 aspects of globalisation with no clear link to the problem of scarcity. Or answer that only focus on unlimited wants or limited resources. Insufficient or inadequate examples given to support the analysis. • Max 5m: only 1 aspect of globalisation but well-explained with clear link to the problem of scarcity. 	5 - 6
L1	<ul style="list-style-type: none"> • Smattering of points. • No link of globalisation to reduce the problem of scarcity. Superficial analysis with limited economic concepts and framework. • Presence of major conceptual errors and inaccuracies. • High L1: only 1 aspect of globalisation well-explained with clear link to only unlimited wants or limited resources 	1 - 4

Suggested answer for (b):

Introduction:

- **Define globalisation** → Define globalisation: the process through which an increasingly free flow of ideas (exchange of knowledge), people, goods and services (trade), and capital leads to the integration of economies and societies.
- **Define small and open economy** → Example: Singapore is a relatively small economy with domestic markets that are limited in size and is an open economy where trade to GDP ratio exceeds 300%, amongst the highest in the world. Other economies, such as the US and Indonesia, have large domestic markets and are less open as trade to GDP ratio is much lower, at about 28 and 53% respectively.
- Explain that globalisation benefits economies when they help the countries achieve their micro and macroeconomic goals (Economic growth, low inflation, full employment, healthy BOP position, efficiency and equity)

Body/ Essay Development

1. THESIS: Globalisation is always beneficial to a small & open economy

- Small economies such as Singapore and Hong Kong depend heavily on trade and FDI to drive economic growth → globalization which brings about increased trade and foreign investment will allow significant benefits to be reaped by small economies
- Explain the extent of increase in AD via trade is greater for smaller economies.

2. ANTI-THESIS 1: Globalisation is not always beneficial to a small and open economy → Possible dangers from globalisation to small and open economies which large and less open economy could be less susceptible to

- Possibility of dd-pull inflation when export industries do not have pdtn capacity (i.e. small economy faces labour shortages and infrastructural inadequacies) to cope with rising AD → could erode X competitiveness → Hurting EG

3. ANTI-THESIS 2: Large & less open economies may also benefit from globalisation → may be more able to withstand downsides of globalisation

- Domestic firms are larger and likely more productive efficient due to int. EOS. Free movement of gds & svs increase availability of export markets to them. Their firms more able to penetrate markets of small and open economies more effectively for greater profit, which when remitted improve BOP via the CA.

1. THESIS: Globalisation is always beneficial to a small & open economy (contd)

- Both large and small economies gain access to other economies. → But globalisation allows small and open economies to overcome the limited domestic market size to grow. For large economies, the gain to access markets in small economies may be insignificant. Also, Spore is able to benefit in terms of cheaper raw materials and intermediate products to be used for pdtn, exporting domestic goods to more countries and hence improving X comp.

For eg. Spore could capture the refined petroleum market in China of 1.3 billion population, dd for Singapore's refined petroleum will experience a huge increase and output can be increased to reap greater internal Economies of Scale (EOS) since the domestic market in Spore was previously too small to gain enough EOS to lower cost. Sporean firms enjoy greater profit margin since revenue will become higher and cost will be lowered. On the other hand, if China produced clothes and shoes for Spore, there will not be as much increase in dd and not much EOS to be reaped by Chinese firms given that Spore's market size for shoes and clothes is relatively small (5 million) compared to that of China. Therefore, not much profit can be gained by Chinese firms. That is why small countries will gain more when signing FTA with big countries, since AD will increase more and greater EOS can be reaped

2. ANTI-THESIS 1: Globalisation is not always beneficial to a small and open economy

→ Possible dangers from globalisation to small and open economies which large and less open economy could be less susceptible to (contd)

- **Greater possibility of imported inflation** (especially for small and open economies which lack natural resources) and depend heavily on imported goods and services.
- **Increase in vulnerability to external shocks & more volatile EG as compared to large and less open economies who can depend on domestic C and I**

3. ANTI-THESIS 2: Large & less open economies may also benefit from globalisation

→ may be more able to withstand downsides of globalisation (contd)

Many MNCs are from countries that are large and less open as the large domestic market enables their expansion

E.g. With the onset of globalisation and market liberalisation by China, this has led to FDI inflow into China to tap on their relative abundance in unskilled/semi-skilled workers → China gained CA in low end/labour intensive manufacturing → Singapore increasing imports from China such goods like food, textile, consumer electronics → China has become Singapore's 2nd largest trading partner in 2010.

- **Able to tap on small and open economies to invest in and export to neighbouring hinterlands like HK for China and Spore for Asia.**
- **Large and "less open" economies may benefit more since less subjected to vulnerability in external shocks** such as global downturn due to its large domestic demand. Less open economies can fall back on protectionism cushion global shocks though protectionism is likely to lead to contraction in world trade and making all countries worse off).

1. THESIS: Globalisation is always beneficial to a small & open economy (contd)

- Explain other benefits through freer movement of capital investment → LRAS (potential growth). Which may not be possible with a small domestic market -> local SMES may be inadequate to drive economic growth → Knowledge and transfers of technology via foreign MNCs based in Singapore.

FDI inflows help to increase domestic fixed capital formation and promotes capital widening and deepening

E.g. Singapore's push to attract FDI in the biomedical sciences industry since 2000 has attracted 11 of the world's leading pharmaceutical and biotechnology companies such as GlaxoSmithKline (GSK), Lonza, Merck & Co, Novartis and Sanofi-Aventis to produce medical equipment, vaccines, etc. Coupled with generous research grants to top scientific talents, have helped to grow her biomedical industry → Biomedical export is a top export of Singapore and this industry is the second-largest contributor to Singapore's GDP within the manufacturing sector.

- Explain benefits of improvement in CA and KA a/c (external impacts)

2. ANTI-THESIS 1: Globalisation is not always beneficial to a small and open economy

→ Possible dangers from globalisation to small and open economies which large and less open economy could be less susceptible to (contd)

- Remittances of wages by foreign workers and profits by foreign MNCs may worsen invisible balance of current a/c → worsening BOP

3. ANTI-THESIS 2:

Large & less open economies may also benefit from globalisation
→ may be more able to withstand downsides of globalisation (contd)

- “Less open” economies may still benefit more if economy is relatively closed to flows of labour migrants → would be able to reduce the extent of competition at low skilled workers and highly skilled workers → reduce the degree of income inequality somewhat. Evaluation of extent of benefits: However if they are large and less open economies like China where there are wide disparity in the destination of FDI in China provinces, there could still be increasing inequality between local workers in the urban and rural areas.

Evaluation of extent of benefits:

- However globalization does not necc imply it will benefit the large and less economy especially if it has lost its CA in trade and investment arena. For instance, US who has lost CA in manufactured activity has seen rising trade deficit, falling AD and economic growth. Possibility of structural UN+.
- Environmental concerns in developing countries like China and India arise with the inflow of FDI.

1 THESIS: Globalisation is always beneficial to a small & open economy (contd)

- **Explain benefits via increased labour pool and reduction in local COP**

Openness of the economy allows for free movement of labour resulting from globalization, both highly skilled as well as lowly skilled. This augments the quantity and quality of labour, thus helping to overcome labour constraints of small economies. This compares to large countries where there is larger pool of talent which already ensures a larger productivity capacity.

For instance, as labour force increase through high and lowly skilled immigrants (i.e. 1 million foreign population in Spore), this increase the quantity and quality of labour → raising productive capacity → raises potential growth → thus achieving non-inflationary EG and falling unemployment.

2. ANTI-THESIS 1: Globalisation is not always beneficial to a small and open economy

→ Possible dangers from globalisation to small and open economies which large and less open economy could be less susceptible to (contd)

- **Increase in income inequality and rising competition for services like public housing, transport and education** → competition from locals and foreign workers for domestic jobs and services

Conclusion

- Globalisation has served as both a platform for greater opportunities as well as increased challenges for all countries, though it can be said that in some countries, the level of challenges faced as a result of globalisation to be greater than the opportunities presented.
- It is not true that globalisation is always beneficial to small and open economy, though small and open economy tend to gain more from the increase in export market and can circumvent the limitations imposed by their small domestic markets in achieving their macroeconomic objectives. This is because globalisation enables them to trade with the world, attract foreign workers and FDI. Such limitations are faced by large and less open economies to a smaller extent given their larger domestic demand.
- Given the problems brought about by globalisation, small and open economy need to be able to mitigate its costs in order to ensure that they benefit. Need to assert greater control over their external environment – through exchange rate policies. This requires them to build up sizeable reserves to manage their exchange rate for better stability. Signing FTAs with a larger number of countries to reduce the risk of external fluctuations.

Marking Scheme for (b)

Knowledge, Application, Understanding and Analysis.		
Level	Descriptor	Mark Range
L3	<ul style="list-style-type: none">Well-developed answer that explains and illustrates the benefits and costs of globalisation to small and open and large and compares them with less open economies using clear economic frameworks.Answer is thoroughly evaluated with constant use of real world examples applied to the context.	8 – 11
L2	<ul style="list-style-type: none">For an under-developed answer that explains and illustrates the benefits and costs of globalisation to small and open and largeAnswer has some attempt at evaluation and limited usage of real world examples to the context.Max 7m for a one-sided answer.	5 - 7
L1	<ul style="list-style-type: none">Mere listing of the benefits and costs of globalisationSome conceptual misunderstanding	1 - 4

Evaluation		
Level	Descriptor	Mark Range
E2	Economic judgement <u>with justification</u> using clear economic framework. Candidates need to present their own opinion backed up by economic theories.	3-4
E1	Economic judgement with justification but lacking in economic reasoning. A mere presentation of personal opinions <u>without</u> substantiation using economic theories.	1-2

H1 EQ4

Suggested Answers

India's consumer prices is on the rise. India's fast growing economy has made her an attractive destination for foreign investment. The main upward effect on inflation in India was driven by rising global crude oil prices. Economists are expecting Reserve Bank of India to hike the interest rate if inflation continues to rise further.

Reuters, 14 March 2017

a) Explain the domestic and external causes of inflation in India. [10]

b) Discuss the view that a hike in interest rates is the most effective means of tackling inflation in India. [15]

Suggested Answer for part (a)

Introduction:

Define inflation: Inflation can be defined as a situation in which there is a sustained increase in the general (average) price level.

Indicated by an increase in CPI, which measures the average price level of a basket of goods and services

2 main types of inflation: demand pull and cost-push

Cost push inflation

- A situation when there is a sustained ↑ in the cost of production.

Factors leading to cost-push inflation in India: [use the preamble where possible]

External Cause: Rising global oil prices

Import-price-push inflation

- Increase in global oil prices
 - 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 India which is a net oil-importer
- Higher prices of oil means higher costs of production for businessmen, higher prices of finished goods and higher costs of living to consumers, setting off an inflationary spiral.

Domestic Cause: India government policy to raise minimum wage to get trade unions to call off their proposed nationwide strike.

- India government policy to raise minimum wage to get trade unions to call off their proposed nationwide strike. This may lead to large increase in wages without corresponding rises in productivity. When trade unions ask for a rise in the wages of workers which is greater than the rate of inflation, bosses oblige as they think they can pass the extra costs to consumers. The higher prices in turn mean that trade unions will ask for even higher wage rise to maintain the real income of its members. Thus,

we get the wage spiral – one group of workers obtains a wage increase and then the next group follows and so on → drive up wages → higher COP → passed on in the form of higher prices of g/s → increase GPL significantly. This led to a leftward shift in aggregate supply from AS1 to AS3 as depicted in Figure 1.

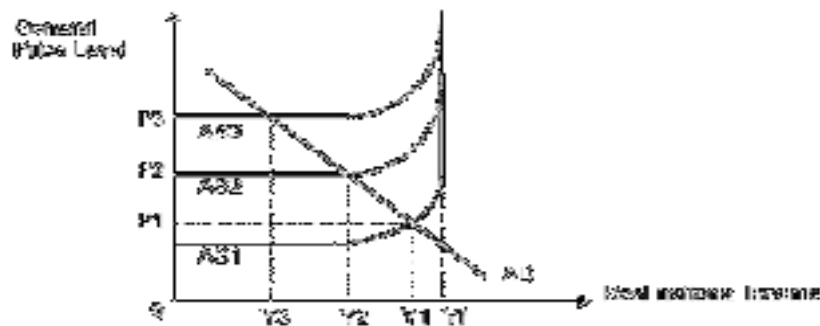


Figure 1

As depicted in Figure 1, the above factors led to a rise in cost of production and a **leftward shift in short run aggregate supply** from AS1 to AS3. Firms raise prices of goods and services [P1 to P3] as well as cut back on production [Y1 to Y3]. The extent by which firms can raise prices or reduce output levels depends on the shape of the aggregate demand. The more inelastic (i.e. steeper) aggregate demand is, the greater will be the rise in the general price level.

CPI Inflation

Domestic Cause: Rising food prices with India's late monsoon

- India's late monsoon → fall in supply of food → increase in food prices
- Households in India spend a greater percentage of their income on food (meaning that they have a much larger weighting of food in their CPI basket).
- Rising food prices → raises the **Consumer Price Index (CPI)** which measures the cost of purchasing a basket of goods and services by a typical household during a time period relative to the cost of the same basket during a base year. The items within the basket of goods and services include transportation, housing, food, insurance, electrical appliances and furnishing etc.
- Increase in CPI index → higher inflation in India → higher cost of living

Demand-pull inflation

Domestic Cause:

- Positive economic outlook as India is one of the fastest growing emerging economies → increase investors' confidence level in the economy → "topmost attractive destination for foreign investment" → attract greater inflow of FDIs → increase in I → Increase in AD
- Positive economic outlook as India is one of the fastest growing emerging economies → improvement in consumers' confidence + expect future wages to increase → increase C → increase in AD

External Cause:

- China's economy is slowing down + rising labour costs in the manufacturing sector (China's hourly manufacturing wages is 5 times hourly manufacturing wages in India) → makes India a relatively more attractive destination for foreign investment → attract greater inflow of FDIs → increase in I → Increase in AD

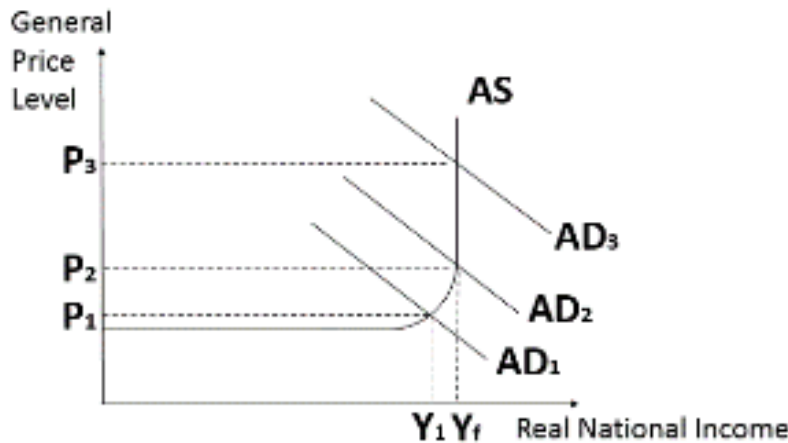


Fig 2: Demand-pull inflation

Diagram explanation:

- The factors above lead to a rise in aggregate demand as shown by a rightward shift of AD curve from AD₁ to AD₃ as seen in Figure 2. India is most likely to be operating at the intermediate range. When AD increases at the intermediate range (from AD₁ to AD₂), firms respond to the deficiency in aggregate supply partly by raising general price level (P₁ to P₂) and partly by raising output (Y₁ to Y_f). When AD continues to increase at full employment (AD₂ to AD₃), output cannot increase due to resources being fully utilised. Households are willing to pay more for the limited supply and firms take advantage of the shortage by increasing general price level sharply from P₂ to P₃. The persistent increase in the general price level services from P₁ to P₃ depicts demand-pull inflation.

Knowledge, Application, Understanding, Analysis		
L3	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".	7-10
L2	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.	5-6
L1	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.	1-4

Suggested Answer for part (b)

Candidates are expected to look at various policies that a government can implement to tackle inflation and come to a conclusion if monetary policy is the best policy to tackle inflation.

Introduction:

- Briefly explain the benefits of low inflation: In the long run, with stable prices maintained in the economy, this can bring about greater economic certainty and hence help to promote greater investments. This will help to boost actual and potential economic growth in the country.
- In order to achieve this, governments can employ a range of policies
- In this essay, we will be evaluating various policies to assess if a rise in interest rate is the best way to reduce inflation in India.

Body:

- **Thesis: Yes, control of interest rates can be considered the best way to tackle inflation if the economy is operating near full-employment and encountering demand-pull inflation (i.e. increase in AD) or imported inflation**
 - o Governments can choose to increase interest rates to decrease the rate of inflation.
 - o Households: With higher interest rates, it raises the cost of borrowing to households (more costly to obtain loans from banks). Purchasing goods and services on credit have become more expensive. Consumers may have to cut back on their consumption expenditure on cars and renovation works for the house. In addition, with higher interest rates, the opportunity cost of spending the money is higher since savings in a bank offers higher returns now. This will lead to a fall in consumption as household portions higher ratio of their income for savings. With a fall in consumption (C), holding other components of aggregate demand (AD) constant, AD falls.
 - o Firms: With higher interest rates, it raises the cost of borrowing to firms. This leaves fewer investment projects with expected rate of return high enough to cover the higher cost of borrowing in order for profits to be made. In other words, a rise in interest rate leads to a reduction in investment on capital goods by firms. With a fall in investment (I), AD falls, ceteris paribus.
 - o When interest rates increase, cost of borrowing increases and thus leads to lower levels of C and I as there will be reduced borrowing to consume and invest.
 - o This leads to a fall in AD which would mitigate the initial increase in AD and thus brings about a slower increase in GPL, assuming c.p./ The fall in AD leads to a decrease in the general price level and thus offset inflationary pressures. In this case, the aggregate demand of the economy has been lowered from AD3 to AD1 through contractionary monetary policy, and this lowers the price level from P3 to P1.(ref to fig 2 in part a)
 - o This is effective if India is experiencing high demand-pull inflation as the policy will cut down domestic demand.
- **Anti-Thesis: However, control of interest rates may not be effective due to its limitations:**
 - o However, the fall in AD could also bring about a fall in growth as real NY would fall via the multiplier effect, if the economy was operating within the intermediate range of AS. It could result in falling economic growth and rising demand-deficient unemployment if the fall in AD is overly excessive. The lower

level of consumption and investment gets translated into lower demand for labour services which results in job losses. This is the classic inflation-unemployment trade-off.

- Consumption and/or investment may be interest inelastic, i.e. changes in interest rate do not affect consumption and investment by households and firms very much. Other determinants of consumption and investment include: the economic outlook and how it affects consumers' and investors' confidence. For instance, if consumers and producers are optimistic and confident of rising streams of income and profits, consumers and producers will persist in borrowing from the banks despite the higher interest rate. This undermines the effectiveness of the contractionary monetary policy in curbing demand pull inflation.
- In addition, the higher interest rate will lead to an increase in the inflow of hot money and would increase domestic money supply and this increase in money supply would lead to a fall in interest rates which mitigates the initial increase in interest rates.
- Control of interest rates may only be effective to reduce demand-pull inflation. If inflation is due to supply side factors, interest rate policy may be ineffective.

Anti-Thesis: Alternative Policy 1: Exchange rate policy

(1) Other underlying root causes e.g. rising global crude oil price

- Appreciation of Indian Rupee → decreases the price of imports in India, which counters the rising global oil prices. The decrease in P_m decreases the costs of imports used as raw materials in production, and this decreases the unit costs of production of a firm. With a sustained rightward shift of the SRAS curve from AS_3 to AS_2 to AS_1 , imported inflation will be curbed as inflationary pressures are reduced from P_2 to P_1 (reference to Fig 1 in part a).
- Imported inflation can also come from higher prices of final goods and services, and this may lead to greater consumer price index (CPI) inflation. Appreciating the SGD will also help to lower CPI inflation through lower prices of imported final goods and services. It also pressures the prices of domestic goods and services to fall to remain competitive against cheaper imports. Overall, this decreases domestic consumer prices.

Evaluation: This is effective if the main source of inflation in India is due to imported inflation from rising global crude oil prices.

- An appreciation of the currency which adversely affects the country's export competitiveness. This again hurts the country's current account and the balance of payments, which is a conflict of macroeconomic objective.
- The appreciation of the exchange rate raises the prices of domestically-produced goods and services relative to foreign-produced goods and services. If we assume Marshall Lerner condition holds, where the sum of price elasticities of demand for exports and imports is greater than 1, the appreciation of Indian Rupee will lead to fall in net exports and hence a fall in AD. However, the fall in AD could also bring about a fall in growth as real NY would fall via the multiplier effect, if the economy was operating within the intermediate range of AS. It could result in falling economic growth and rising demand-deficient unemployment if the fall in AD is overly excessive. The lower level of consumption and investment gets translated into lower demand for labour services which results in job losses. This is the classic inflation-unemployment trade-off.

Anti-Thesis: Alternative Policy 2: Supply-side policy

(2) Other underlying root causes e.g. Structural Rigidities – Cost-push inflation

High inflation can be caused by problems of structural labour rigidities, leading to cost-push inflation. Interest rate policy will be ineffective in addressing this root cause as a supply-side policy such as education & retraining will be required to resolve the issue to improve labour productivity to justify the rise in minimum wages.

Explain how supply-side policies work:

The India government also conducts supply-side policies such as education and training of workers. Examples: The Central Board for Workers Education (CBWE) provides subsidised training and education for the workforce. Education and training enhance workers' productivity. Workers will be able to produce more output per man hour resulting in a lower unit cost of production. This increases individual market supply curves. If enough individual market supply curves are impacted, total output that the economy can produce increases. This raises the productive capacity of the economy, causing a rightward shift of the AS curve, further decreasing inflation as GPL falls from P_1 to P_2 (fig 3).

With the increase in productivity, labour resources are able to produce more goods and services per unit time and thus lowers the average cost of production, bringing about an increase in the SRAS and thus addresses cost-push inflation. (refer to fig 1 in part a)

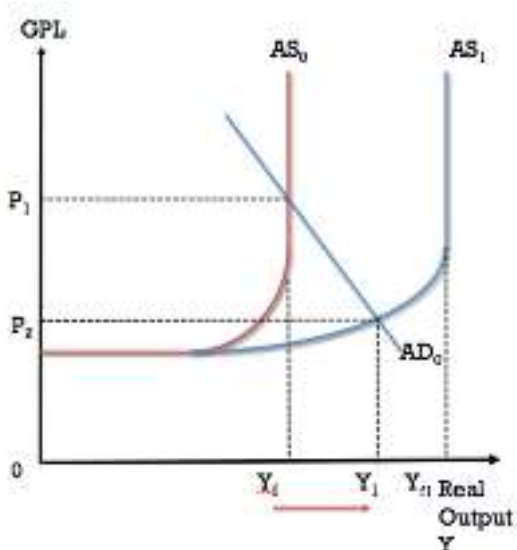


Fig. 3 – Supply-side Policies

Evaluate effectiveness of policy:

- (1) Leads to improvement in other macroeconomic goals
 - increases in labour productivity \rightarrow decrease unit COP \rightarrow increase price-competitiveness of goods and services made in India \rightarrow decrease P_x \rightarrow increase X rev (assuming $PED_x > 1$) and at the same time, lowered prices of domestic goods \rightarrow switch consumption away from relatively more expensive imported goods (assuming domestically produced goods are close substitutes with imported goods) \rightarrow increase C_d \rightarrow increase in AD \rightarrow increases actual growth and employment
 - increases in X and fall in M will also lead to an improvement in balance of trade, hence improving the overall balance of payments, ceteris paribus

- increase in no. of skilled workers able to be employed in expanding industries → reduce structural employment

Evaluate limitations of the policy:

- Outcome of the policy is uncertain as the effectiveness of the policy is dependent on the ability of the workers to be re-trained. Also, it depends on the receptivity of employers to send their workers for such courses as it leads to a trade-off of decreased man-hours at work, lowering revenue levels. Workers may be resistant to retraining due to their advancing age, limitation in aptitude and less than forthcoming attitude towards retraining.
- Takes a long time to take effect as training takes time and no guarantee that training will necessarily lead to increase in labour productivity.
- SS-side policies such as education and training are likely to be costly → imposes high opportunity cost in terms of the allocation of govt resources → lesser resources available to be channelled for other government projects.

Anti-Thesis: Alternative Policy 3: Contractionary fiscal policy

(3) If increase in inflation is due to demand-pull arising from domestic factors

High inflation can be due to domestic factors, leading to demand-pull inflation.

Contractionary fiscal policy

Explain how it works:

- A decrease in government expenditure directly decreases the aggregate demand of the economy.
- An increase in taxes can be examined through changes in the personal and corporate income taxes. An increase in personal income taxes will reduce disposable income, and that leads to a fall in domestic consumption. The increase in corporate taxes will decrease post-tax profits, and that causes firms to decrease investment expenditure. The fall in both consumption and investment expenditure thus leads to a fall in AD.
- The fall in AD leads to a decrease in the general price level, and sustained contractionary fiscal policy will thus offset inflationary pressures. The main objective of the policy is achieved, as demand-pull inflation will be curbed as inflationary pressures are reduced. In this case, the aggregate demand of the economy has been lowered from AD3 to AD1 through contractionary fiscal policy, and this lowers the price level from P3 to P1.(ref to fig 2 in part a)

Evaluate limitations of the policy:

- Households and firms may not be responsive to an increase in taxes, and may continue to spend.
- The decrease in government spending may compromise socio-economic and political goals.
- And again, inflationary pressures need to be pre-empted as fiscal policies, like any other policy, will face time lags in implementation.
- If I and Cd make up a small proportion of AD, then when I and Cd decrease, AD may not decrease significantly. As a result, decrease in general price level is also not significant.

Anti-Thesis: Alternative Policy 4: Trade policies

Trade policies: The government may choose to sign **Free Trade Agreements (FTAs)** with countries that are an important source of imported raw materials and food products e.g. ASEAN, Australia, Brazil, Saudi Arabia, Canada and United Arab Emirates. Through these trade partnerships, India is able to diversify its sources of imports. Should there be disruptions in the supply of these raw materials or commodities in a particular foreign market, e.g. food products or oil, India is able to import them from other countries instead and this helps to minimise imported inflation. As the fall in price of imported raw materials reduces cost of production of firms, SRAS curve shifts rightwards and thus tackle cost-push inflation.

Evaluate limitations of the policy:

- Excessive rise in import expenditure (M)

FTA could lead to an increase in import expenditure as the consumers spend more on foreign goods and services and less on locally-made import substitutes, such that it could lead to a fall in AD and therefore affect economic growth for the country as local firms suffer from greater competition. As there is an increase in import expenditure, this could result in a worsening of current account deficit.

- Dumping and unfair foreign competition to local firms

FTA would introduce foreign competition (imports) to domestic market. These imports could be heavily subsidized by the foreign countries or government such that the prices could be lower than those of the domestic products. This is perceived to be dumping into the domestic market. Furthermore, foreign competition could jeopardise the development of home industries before the industries could realize its potential. These infant industries could have the potential to be more efficient compared to the foreign firms. The hampering of the development of these industries could precipitate long run welfare loss. Production of commodities, especially strategic goods, makes a country overly dependent on other countries.

Synthesis/Conclusion:

- The government has many policy tools at its disposal but each has its own merits and costs.
- Each policy tool is also more suited to tackle specific sources of inflation and thus there is no best policy to tackle inflation. As an economy can suffer from high inflation due to several sources, a government should consider implementing a mix of policies. Furthermore, it could implement complementary policies to address the trade-offs that are brought about by the policy to tackle inflation while keeping in mind the other macroeconomic goals.
- India government has to diagnose and ascertain the type of inflation that the countries and implement policies that address the root cause of the inflation problem. For example, the main cause of inflation in India is due to rising global prices, hence the government can implement exchange rate policy alongside trade policies so to reduce COP and tackle imported inflation.
- Also, a combination of polices is better as LR policies such as supply side policies need to be complemented with SR policies such as contractionary monetary policy and contractionary fiscal policy in order to deal with inflationary pressures more effectively.

Level (Marks)	Descriptors
L3 (9 – 11)	<p>Answer provides clear analysis of at least 3 policies that a government can employ to tackle inflation with examples. One of the policies MUST be interest rate policy as in the question requirement.</p> <p>Answer must encompass policies to address BOTH demand-pull and cost push inflation.</p>
L2 (5 – 8)	<p>Answer provides an undeveloped analysis of at least 2 policies to tackle inflation. One of the policies MUST be interest rate policy as in the question requirement.</p>
L1 (1 – 4)	<p>Answer shows some knowledge of the policies to tackle inflation but lacks of scope and depth.</p>
Evaluation	
E2 3-4	<p>An evaluative assessment on the limitations of the policies based on sound economic analysis. Evaluating and ranking the appropriateness of the policies.</p>
E1 1-2	<p>Mainly unexplained judgment based on analysis.</p>

