Preliminary Examination
Year 6

ECONOMICS

9732/1

(Higher 2)
Paper 1

21 September 2016
2 hours 15 minutes

Additional Materials:
Writing Papers

READ THESE INSTRUCTIONS FIRST

Answer **all** questions.

Write your name and class on all pieces of work handed in.

Write in dark blue or black pen on both sides of the paper.

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

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

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

At the end of the examination, fasten all your work securely into **two** separate bundles (one for Question 1 and one for Question 2).
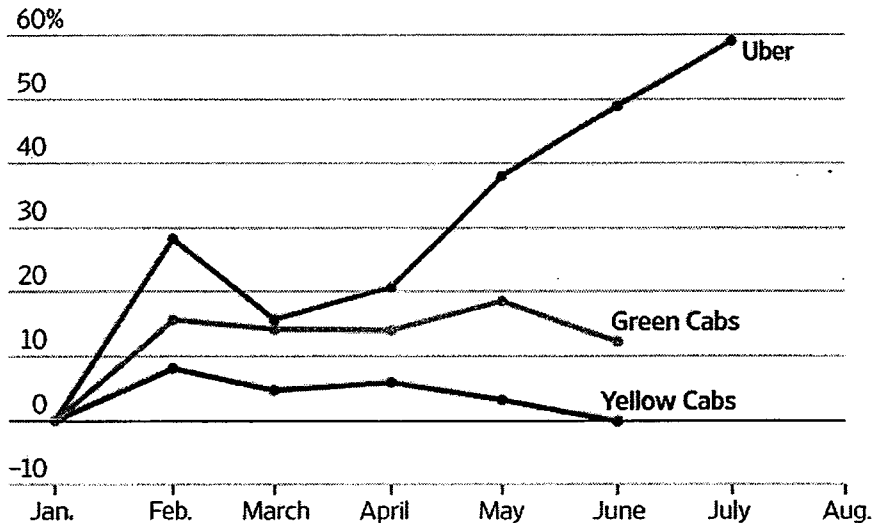
This document consists of **7** printed pages including this cover page.

[Turn over]

Question 1 **Uber's Astounding Rise – Overtaking Taxis**

Figure 1: Growth in Uber vs others in New York City, 2015 (Jan – Aug)

Source: www.wsj.com

Extract 1: Uber's Astounding Rise: Overtaking Taxis In Key Markets

It's fascinating to see how market disruption unfolds. Across business travel we have seen the strongest growth on UberX, Uber's lowest cost option. How big is the price differential from taxis?

From Downtown L.A. to Los Angeles International Airport, for example, the fare is about $22 via UberX versus $46.50 for taxi fare; a 20 percent tip bumps the cost of that taxi ride to about $56 (tipping is not customary using Uber).

That said, savings can evaporate at peak times if Uber goes into "surge pricing" mode and fares increase by at least 1.5 times.

Source: Forbes, 10 April 2015

Extract 2: Is Uber's surge pricing fair?

The ride-sharing service Uber has, once again, been getting some bad press coverage over its surge pricing. Uber increased its prices due to a surge in demand.

Whereas policymakers look at their choices through two lenses, one that focuses on efficiency and one that focuses on fairness, businesses tend to have one goal in mind: Will the decision maximise profits? Policymakers figure out whether there's a reason for the government to intervene. The policymaker simply wants to get rid of the market failure in the most efficient way possible.

Would surge pricing qualify as a market failure calling for government intervention?

It depends, which brings fairness into play. Fairness becomes an issue when the policy maker begins to take into consideration who will benefit and who will be hurt by the policy.

When Uber engages in surge pricing, it's simply a response to an imbalance between supply and demand. As Uber explains, when demand suddenly increases, Uber raises the prices for a ride as a way to get more drivers, i.e., supply, on the road. At some point, the invisible hand of the market gets the prices just right so that there are enough Uber drivers to take riders where they want to go.

<div align="right">Source: The Washington Post, 22 December 2014</div>

Extract 3: How to Speak Uber

Back in September of last year, Uber CEO Travis Kalanick claimed that Uber was creating 50,000 new jobs for drivers around the world every month.

When Uber talks about economic impact and putting people to work, it isn't actually talking about traditional employees. Instead Uber is adding contractors, most of whom are part-time. According to the most widely noted measure we use in the U.S., those aren't jobs. So long as Uber drivers are independent contractors, they're on the hook for costs incurred on the job (like gas, parking, and insurance), which seriously cut into the earnings they take home. Independent contractors also lack all sorts of basic protections afforded to traditional employees, such as minimum wage and health and safety standards.

While Uber claims that it's creating tens of thousands of jobs a month, it's actually signing up tens of thousands of independent contractors, roughly 80 percent of whom are working part-time.

Uber says in a statement that while independent contractors are not included in jobs reports, "this doesn't mean that the opportunity to work as an independent contractor is not a meaningful job opportunity. For the hundreds of thousands of driver partners who use the Uber platform and benefit from a flexible schedule, this is a real, tangible opportunity to earn a living."

In a way, what this comes down to is how we define a job. It used to be a job was 40 hours a week at a factory. Now a lot of standard employment is part-time and an awful lot of work is actually contingent, meaning workers don't have steady employment day to day.

<div align="right">Source: Slate, 14 Apr 2015</div>

Extract 4: Strategy unhealthy and unsustainable

The price war as a business strategy is "unhealthy and unsustainable" and will hit private-hire car drivers and cabbies alike, says The National Taxi Association (NTA). It has criticised the recent price cuts by app companies Grab and Uber, saying they not only hit their drivers' earnings but, if left unchecked, could also hurt the taxi industry and, ultimately, commuters.

Taxi firms, which had fares comparable to those of UberX and GrabCar before, are now under pressure. A "price war" would mean both private-hire car drivers and cabbies having to do more trips and driving longer to earn the same amount.

In Singapore, a taxi driver has to rent a taxi from any one of the six taxi operators. The rental rates vary according to the operator and the type of taxi. Meanwhile, Uber drivers can choose to drive their own car or rent a car. To keep rental cost low, companies like Uber and GrabCar have been snapping up used vehicles to grow their rental fleet. The worry is that if private-hire car firms end up dominating the market, they can then start raising prices, and charge a premium.

Currently, cab operators must factor in "compliance costs". These include the bulk of cabbies having to meet certain standards set by the Land Transport Authority, such as covering 250km each day and being on the road during peak hours. Fleets also have to be serviced regularly.

Having said that, traditional cab operators still have a key advantage – they are the only ones allowed to get flagdowns. Still, they face a tough battle. App companies are willing to lose some money now to gain market share, but the incumbents wouldn't want to do this after being profitable for so long.

Source: The Straits Times 24 April 2016

Extract 5: Taxis and Carbon Emissions

The potential entry of electric taxis is a welcome. While taxis account for just 3 per cent of the total vehicle population, they contribute to over 15 per cent of vehicle emissions because of the higher mileage they clock. Emissions from taxis could be reduced by 27 per cent in 2050 if 85 per cent of taxis go electric.

Under the revised Carbon Emissions-Based Vehicle Scheme (CEVS), all new cars and imported used cars with low carbon emissions of less than or equal to 135g carbon emissions per kilometre will qualify for rebates of between $5,000 and $30,000, which will be offset against the vehicle's Additional Registration Fee (ARF). Cars with high carbon emissions equal to or more than 186g CO_2/km, will incur a registration surcharge of between $5,000 and $30,000. As taxis generally clock higher mileage than cars, the revised CEVS rebate and surcharge for taxis will be higher by 50% to encourage taxi companies to adopt lower carbon emission models for their fleet.

Source: The Straits Times 12 June 2016 and www.lta.gov.sg

Questions

(a) Describe what happened to the growth in Uber and traditional taxi companies in New York City. [2]

(b) Explain how Uber's surge pricing strategy is able to solve the long waiting time by the road under the business model of traditional taxi companies. [4]

(c) Explain the shutdown decision of a taxi firm following the entrance of ride-sharing service, such as Uber and Grab, in Singapore. [6]

(d) Discuss whether the data provided are sufficient to assess changes in the standard of living in these cities over the period. [8]

(e) The pollution resulting over usage of vehicles running on carbon-based fuels is an example of a market failure. Explain one policy that might be used to correct the market failure identified, and discuss its likely effect on the market share of Comfort, the largest firm in the "taxi and ride sharing service (such as Uber and Grab) industry" in Singapore. [10]

[Total: 30]

Question 2   The Eurozone Economy

Figure 2: Eurozone Debt and Unemployment
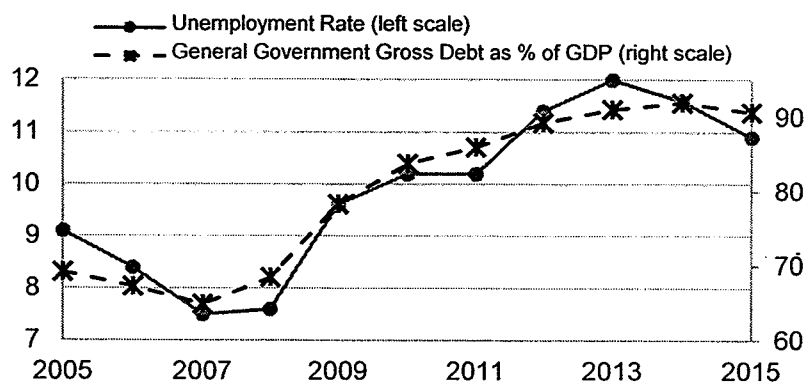
Source: Eurostat, accessed 1 September 2016

Extract 6: The Eurozone economy – frost in spring

The once-sickly Eurozone is undergoing recovery which, though feeble, has nonetheless been sustained. More importantly, there are signs that the pace may be accelerating this year.

A reassuring feature of the recovery is that it is spreading to the once-afflicted countries of southern Europe. Germany, which remains the main engine of growth in the Eurozone, is likely to have expanded strongly in the first quarter of 2014. But the recovery is also being boosted by a return to growth, albeit sluggish, on the part of both Italy and Spain, the third- and fourth-biggest economies in the Eurozone.

Despite these promising developments, there is still a concern that the recovery may have come too late and be too weak to avert the onset of deflation. Consumer prices are falling in several peripheral countries, notably Cyprus and Greece, but also now in Spain. The development has prompted the European Central Bank (ECB) to cut its key interest rate to 0.05%, a new record low.

Adapted from: (i) The Economist, 5 April 2014 and (ii) The Telegraph, 4 September 2014

Table 1: Annual Unit Labour Costs[#], 2010 = 100

Country	2011	2012	2013	2014	2015
Germany	100.7	104.0	106.0	107.9	109.9
Greece	98.7	96.7	89.6	87.3	87.6
Eurozone (19 countries)	100.6	102.5	103.8	104.8	105.5

[#] Unit labour costs measure the average cost of labour per unit of output and are calculated as the ratio of total labour costs to real output.

Table 2: Net trade in goods (value), US$ converted, seasonally adjusted (in billions)

Country	2010	2011	2012	2013	2014	2015
Germany	195.82	209.71	240.95	259.56	281.94	273.33
Greece	-39.12	-33.87	-27.75	-25.70	-28.29	-19.55
Eurozone (19 countries)	-26.28	-38.21	100.43	198.56	235.99	267.52

Source: OECD.Stat, accessed 20 August 2016

Extract 7: Is Germany's big export surplus a problem?

Germany's trade surplus – the excess in the value of its exports over its imports – hit another record in 2014. At 217 billion euros ($236 billion), it was Germany's biggest ever. Expressed as a percentage of GDP, Germany's 2014 trade surplus was 7.5 percent.

Why is Germany's trade surplus so large? Undoubtedly, Germany makes good products that foreigners want to buy. For that reason, many point to the trade surplus as a sign of economic success. But other countries make good products without running such large surpluses. There are two more important reasons for Germany's trade surplus.

Some economists point to the euro currency as a key reason for Germany's perennial export surpluses. By sharing the euro with a larger population of mostly less competitive economies, German exporters have a built-in benefit: a currency that's permanently weaker than it should be, though it may be still too strong for less competitive economies. That provides an artificial advantage to German exporters.

Second, the German trade surplus is further increased by policies (tight fiscal policies, for example) that suppress the country's domestic spending, including spending on imports.

In a slow-growing world that is short on aggregate demand, Germany's trade surplus is a problem. Several other members of the Eurozone are in deep recession, with high unemployment and with no "fiscal space" (meaning that their fiscal situations don't allow them to raise spending or cut taxes as a way of stimulating domestic demand). The fact that Germany is selling so much more than it is buying redirects demand from its neighbours (as well as from other countries around the world), reducing output and employment outside Germany at a time at which monetary policy in many countries is reaching its limits.

Sources: (i) Ben Bernanke, Germany's trade surplus is a problem, Brookings Institute, April 3, 2015 and
(ii) Nils Zimmermann, Is Germany's big export surplus a problem?, DW, April 7, 2015

Extract 8: Reconciling fiscal consolidation with growth and equity

Fiscal consolidation is a policy aimed at reducing government deficits and debt accumulation. Fiscal consolidation complicates the task of achieving other policy goals as it weighs on demand in the short term. A number of fiscal consolidation instruments can enhance the long-term level of output by improving efficiency in the economy.

Table 3: Instruments of Consolidation

Expenditure Cuts	Revenue Increases
Public consumption: education	Personal income taxes
Public consumption: health	Corporate income taxes
Cash transfers: unemployment benefits	Environmental taxes
Subsidies	Consumption taxes (non-environmental)
Public investment	Sales of goods and services

Some revenue measures can also contribute positively to long-term output when they promote more efficient use or allocation of services or resources that were previously inadequately priced. To the extent that their current levels correspond to under-pricing, higher user charges reduce the waste of economic resources, thereby boosting productivity and output. Better pricing the use of environmental services through taxation can lead to welfare gains through improved environmental amenities that are not measured in GDP.

If no action is taken, climate change can involve large losses of physical and human capital as well as reduced productivity through more frequent and intense storms, rising sea levels, additional deaths from specific diseases (e.g. malaria) and deteriorating air quality.

Spending reductions can bring about potentially large long-term losses in output when they cut into areas such as public goods or growth-enhancing services that are insufficiently produced by market forces. These include cuts in public investment or government spending on education. Cuts in health care can also reduce output per capita by reducing productivity. Through its contribution to well-being, health spending is most likely to have additional positive welfare effects that are not measured in GDP.

Most fiscal consolidation instruments are harmful for growth in the short run and aggravate income inequality. In fiscal-crisis countries, the absence of consolidation could translate into a massive loss of confidence triggering economic collapse. If it helps to avoid such extreme scenarios, consolidation may be highly expansionary.

<div align="right">Adapted from: OECD Economic Studies, 05 Feb 2014</div>

Questions

(a) **(i)** Identify the relationship between unemployment rate and general government debt. [1]

(ii) How does the above relationship explain the workings of the automatic fiscal stabiliser? [3]

(b) **(i)** Using the AE-Income approach, explain the effect of the monetary policy adjustment of the European Central Bank (ECB) on the equilibrium national income of the countries in the Eurozone. [5]

(ii) Explain why the above policy could be ineffective in averting the onset of deflation in the Eurozone. [2]

(c) **(i)** Compare the trends in the annual unit labour costs in Germany and Greece. [1]

(ii) Discuss the significance of the trends in **(c)(i)** in accounting for the observed changes in these countries' trade balances. [8]

(d) In the light of the various challenges that countries in the Eurozone face, assess whether fiscal consolidation should be implemented. [10]

<div align="right">**[Total: 30]**</div>

Prelim Examination 2016

**Year 6 H2 Economics 9732 Paper 1
Case Study Questions**

Answer and Mark Schemes

Preliminary Examination
9732 / H2 Economics Paper 1 CSQ
Suggested Answer and Mark Scheme

Case Study Q1: Uber's Astounding Rise – Overtaking Taxis

(a) Describe what happened to the growth in Uber and traditional taxi companies in New York City. [2]

Uber => increasing growth rate
Traditional taxi => decreasing rate / yellow cabs => zero growth

(b) Explain how Uber's surge pricing strategy is able to solve the long waiting time by the road under the business model of traditional taxi companies. [4]

Either demand / supply analysis OR firm analysis
DD/SS: During peak hour => normal price is 'under-priced' => with surge pricing strategy, it moves towards new equilibrium, solve the long waiting time.
Firm: AR, MR increase during peak hour, P & Q increase => able to reduce the long waiting time
Correct diagram (1m)
Explanation (3m)

(c) Explain the shutdown decision of a taxi firm to following the entrance of ride-sharing service, such as Uber and Grab, in Singapore. [6]

Before the entrance of ride-sharing service => taxi companies are earning supernormal profit
With the entrance of ride-sharing service => AR falls and more price elastic
(might bring in increasing AC => not a requirement but marks will be awarded)

Shut down condition => minimise lose, in the short (4m) and long run (2m)

If a taxi firm decides to produce output, it will select the quantity of output that maximizes its profit (or, if positive profit is not possible, minimises its loss). Its subnormal profit will then be equal to its total revenue minus total cost.
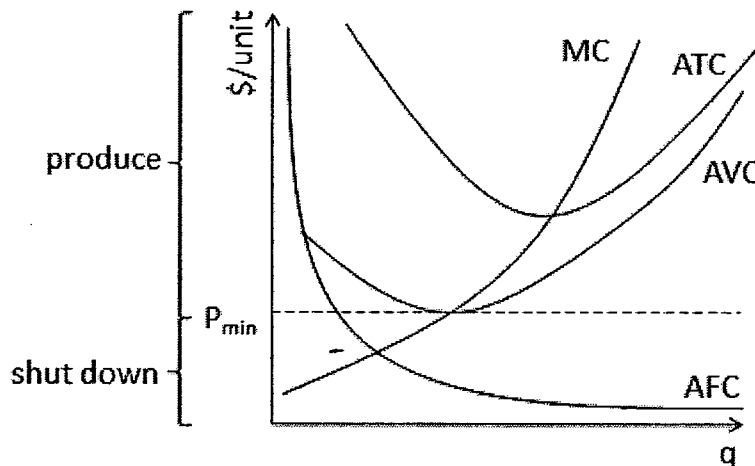
Economists distinguish the short run from the long run among other things, noting that in the short run taxi companies that have decided to enter an industry have already paid their fixed

costs and can't fully exit an industry. For example, over short time horizons, taxi companies are committed to paying a lease on office or buying taxi and must do so regardless of whether or not they rent out the taxi. If the taxi firm decides to shut down and not produce any output, its revenue by definition is zero. Its variable cost (e.g. wages, utilities) of production is also zero by definition, so the firm's total cost of production is equal to its fixed cost. The firm's profit, therefore, is equal to zero minus total fixed cost.

The taxi firm will want to produce if the price it receives for its output is at least as large as its average variable cost of production at the profit-maximising quantity of output, as shown above. This is simply the result of the fact that marginal cost intersects average variable cost at average variable cost's minimum.

The observation that a firm will produce in the short run if it receives a price for its output that is at least a large as the minimum average variable cost it can achieve is known as the *shut-down condition*.

Long run => TR must cover TC. In the long run, all factors of production are variable, it is better to earn nothing than to incur losses, which is in line with producers' profit maximising rationale.
Diagram is not required for this question

(d) Discuss whether the data provided are sufficient to assess changes in the standard of living in these cities over the period.   [8]

Define SOL => both material and non-material aspects
Assess changes => likely to be an increase in SOL in New York, LA and Singapore due to the entrance of the new ride-sharing service, assuming ceteris paribus in other economic indicators

Thesis: data provided are sufficient:
- Fig 1 & Extract 1: Increase demand for taxi & ride-sharing service => imply an increase in income level => improvement material SOL
- Extract 3 & 4: New form of employment opportunities in US and Singapore; "tangible opportunity to earn a living" => link to material and non-SOL (such as lower stress level)
- From consumers' view point => cheaper and easier to travel around compare to the past

Anti-thesis: data provided are not sufficient
- No data on the change in the income level, income distribution etc
- With more cars on the road, will negative externality might increase

Conclusion & evaluation

Marks Scheme:

L3 (6 – 7)	- Sufficient depth/ scope - Apt reference to case evidence
L2 (4 – 5)	- Balanced answer - Insufficient depth/scope, only refer to one city - Some application to context/case
L1 (1 – 3)	- One-sided answer - No application to context/case
EV (1m)	- Evaluative assessment supported by economic analysis

(e) The pollution resulting over usage of vehicles running on carbon-based fuels is an example of a market failure. Explain one policy that might be used to correct the market failure identified, and discuss its likely effect on the market share of Comfort, the largest firm in the "taxi and ride sharing service (such as Uber and Grab) industry" in Singapore.

[10]

1st part: Over-usage of vehicles running on carbon-based fuels – negative externalities => explain with a diagram why this will result in a deadweight loss to the society

Government Intervention:
From extract 5: Carbon Emissions-Based Vehicle Scheme (CEVS), all new cars and imported used cars with low carbon emissions of less than or equal to 135g carbon emissions per kilometre will qualify for rebates of between $5,000 and $30,000, which will be offset against the vehicle's Additional Registration Fee (ARF). As taxis generally clock higher mileage than cars, the revised CEVS rebate and surcharge for taxis will be higher by 50% to encourage taxi companies **to adopt lower carbon emission models** for their fleet.

How will this reduce the MEC=> how to reach the optimal output, so as to eliminate DWL

2nd part: Economic Framework: imperfect market structure
Thesis: Increase the market share of Comfort
- Other smaller firms, without the financial resources, might not able to compete => need to purchase new cars that meet the new requirement.
- AR increases, and less price elastic, AC & MC increase => show output increase

Anti-thesis: Market share of Comfort might not increase
- The ride sharing service => need not purchase new cars. Extract 4: Uber and Grab drivers can choose to drive their own car or rent a car. Thus to meet the new requirement, these ride sharing companies need not spend such a large amount as compared to Comfort.
- Due to the increase competition, Comfort's AR might fall => especially with fierce price competition => output falls

Evaluation & Conclusion
Will government intervene? What are the other new policies?

L3 (6 – 8)	- Clear use of economics framework
	- Sufficient depth/ scope
	  o Clear explanation of the type of market failure
	  o Clear explanation of the policy
	  o Balanced discussion on Comfort's market share due to the new policy implemented
	- Apt reference to case evidence

L2 (4 – 5)	- Clear explanation of how the policy works and its effectiveness - Insufficient depth/scope - Some application to context/case - Max 4m without a balanced answer on the changes in Comfort's market share.
L1 (1 – 3)	- Lack economics framework in analysis especially in explanation of the type of market failure and the working of the policy - Conceptual error in the explanation for changes in Comfort market share in 'this' industry - No application to context/case
EV (1m)	- Unexplained assessment made, merely stating synthesis
EV (2m)	- Evaluative assessment supported by economic analysis, i.e. suggestion of alternative policies and the need for them.

Case Study Q2: The Eurozone Economy

(a) (i) Identify the relationship between unemployment rate and general government debt. [1]

- Direct or positive relationship [1]
- As unemployment rose, general govt debt rose as well [1] or [0]?
- No marks given for directly proportionate or linear relationship

    (ii) How does the above relationship explain the workings of the automatic fiscal stabiliser? [3]

- Automatic fiscal stabilisers are inherent features of the fiscal policy built into an economic system that automatically work to dampen fluctuations brought about by the business cycle. No direct government intervention nor explicit policy action is needed on the part of the government, via the progressive personal income tax structure and transfer payments.
- As the unemployment level in Eurozone ↑ (2008 – 2014), more workers faced ↓ factor incomes. More households' incomes end up falling below a minimum level, which qualifies them to receive unemployment benefits and/or some form of transfer payments from the govt → ↑ in govt spending.
- Simultaneously, due to progressive income tax ⇒ households' nominal incomes fall to a low income tax bracket, thus they pay a lower % of income tax now → ↓ govt tax revenue.
- More govt transfer payments and lower income tax paid due to ↑ UN → ↑ in govt debt → exhibits direct relationship. Also, this leads to a smaller ↓ in disposable income, and hence income-induced consumption ↓ by a smaller extent → moderates the contraction in AD and actual EG, thereby stabilising the economy.
- The converse holds true when the economy faced ↓ unemployment rate (2005 – 2008) and ↓ govt debt (exhibits direct relationship), where the automatic fiscal stabiliser works to dampen AD to prevent overheating of the economy.

(b) (i) Using the AE-Income approach, explain the effect of the monetary policy adjustment of the European Central Bank (ECB) on the equilibrium national income of the countries in the Eurozone. [5]

From Ext 6, ECB cut its interest rate to 0.05%. As i/r falls, this reduces:
- cost of borrowing relative to expected ROR on I → incentivises firms to ↑ I level
- cost of borrowing for big-ticket items → ↑ C of domestically produced g&s
- opportunity cost of using savings for consumption → ↑ C of domestically produced g&s
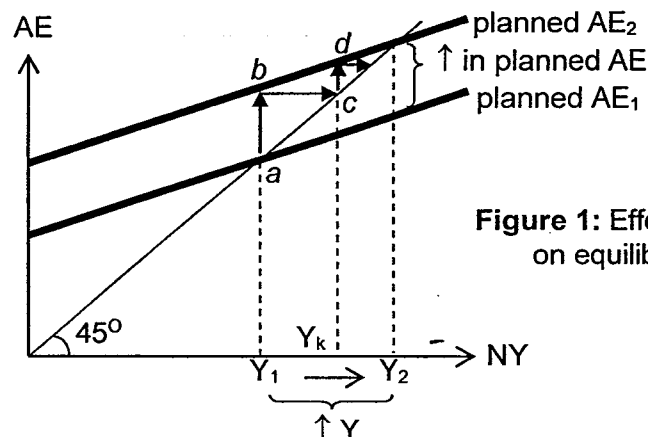- ↑ C and ↑ I → ↑ autonomous AE

Figure 1: Effect of ↑ in AE on equilibrium NY

- Referring to Figure 1, as autonomous AE ↑, at the initial level of NY Y_1, AE > Y_1 creating a shortage 'ab', causing firms to deplete inventories (unplanned disinvestment). This induces

firms to step up production in the next production cycle, leading to ↑ employment of workers, who receive factor incomes. As NY ↑ to Y_k, more domestically produced goods & services will be consumed (↑ income-induced C), causing planned AE to ↑.

- Since households will not spend all of their ↑ in income, choosing to save some of it, having to pay taxes and spend some on imports (collectively known as withdrawals), the ↑ in planned AE (due to ↑ income-induced C) is less than the ↑ in NY. At Y_k, planned AE is dY_k while NY is cY_k, a shortage of cd continues to exist.
- Thus, firms continue to expand production → ↑ NY further. This is the multiplier effect and the cycle repeats itself until initial ↑ in AE = total ↑ in withdrawals OR until Y_2 is reached where NY = planned AE, i.e. firms' output exactly matches the planned AE leaving neither shortages nor surpluses and hence no further adjustment pressure.
- In total, the ↑ in equilibrium level of NY to Y_2 will be > initial ↑ AE (AE_1 to AE_2).

(ii) Explain why the above policy could be ineffective in averting the onset of deflation in the Eurozone. [2]

From Ext 6, the recovery may have come too late and be too weak. In addition, there is high and rising general govt gross debt as % of GDP over the years (Fig 2). [1] Thus, there is still weak economic sentiments / poor consumer and investor confidence in the Eurozone. Hence, the cut in i/r may still bring about an insignificant ↑ in C and I → ineffective in raising AD to avert the onset of deflation (i.e. AD still falls, causing deflation to occur). [1]

(c) (i) Compare the trends in the annual unit labour costs in Germany and Greece. [1]

In general, from Table 1, annual unit labour costs rose in Germany but fell in Greece.

(ii) Discuss the significance of the trends in **(c)(i)** in accounting for the observed changes in these countries' trade balances. [8]

Thesis: changes in annual unit labour costs of Germany and Greece are significant in affecting trade balances of Germany and Greece

By economic theory, there should be an inverse relationship between changes in annual unit labour costs and the corresponding effect on trade balance.
- ↑ (↓) in unit labour costs → ↓ (↑) profit margins of firms in Germany (Greece) → partially pass on the ↑ unit COP / cost savings as ↑ (↓) prices to consumers respectively. Assuming trading partners' unit labour costs remain unchanged, ↑ (↓) price of Germany's (Greece's) exports relative to trading partners
- Price of domestically produced goods in Germany (Greece) also ↑ (↓) relative to imports
- Assume demand for exports is price elastic and demand between domestic goods and imports is cross-price elastic → more than proportionate ↓ (↑) in quantity demanded for Germany's (Greece's) exports and more than proportionate ↑ (↓) in demand for imports into Germany (Greece) → ↓ (↑) in export revenue and ↑ (↓) in import expenditure in Germany (Greece) → trade balance worsens (improves) for Germany (Greece)
- Table 2 generally supports this economic theory for the case of Greece, where its annual unit labour costs fell and trade balance improved over the years, except 2014 and 2015.

However, from Table 2, trade balance has also improved in Germany, despite a rise in annual unit labour costs → could be due to reasons as follows:

AT: changes in annual unit labour costs of Germany and Greece are insignificant in affecting trade balance of Germany and Greece

AT1: there are **other factors that affect firms' unit COP** apart from labour costs
- Annual unit labour costs only accounts for part of firms' unit COP → rental costs could have ↓ by a greater extent than ↑ in annual unit labour costs → ↓ in firms' unit COP to cause an improvement in trade balance in Germany
- If firms in Germany engage in process innovation that bring about ↑ productivity by a large extent such that firms' unit COP ↓ despite annual unit labour costs ↑ → improvement in trade balance in Germany
- Above analyses could also apply to the case of Greece

AT2: annual unit labour costs only affect price competitiveness of goods, but fail to consider **non-price competitiveness** of goods that also affects trade balance
- If firms in Germany engage in product innovation, as seen from 'Germany makes good products that foreigners want to buy' in Ext 7 → **new products** created and/or **quality improvements** of products via such R&D → caters to consumers' tastes and preferences → ↑ DD for Germany's exports by foreigners and ↓ DD for imports by Germans as consumers switch towards Germany's goods → Germany's trade balance improves

AT3: apart from annual labour costs, there are **other factors that affect trade balance**
- From Ext 7, a **shared euro currency** that is permanently weaker than it should be provides an artificial advantage to German exporters → Germany's perennial X surpluses
- From Ext 7, implementation of **'tight fiscal policies'** → ↓ AD → fall in NY → ↓ purchasing power → 'suppress the country's domestic spending, including spending on imports' → Germany's trade balance improves, ceteris paribus.
- Insufficient data – only reflects annual unit labour costs of Germany and Greece, but they have trading partners beyond what is shown in Table 2 → annual unit labour costs could have risen by a greater extent in **other countries** → trade balance of Germany and Greece improve as well

Evaluation: whether changes in annual unit labour costs are significant in affecting trade balance depends on:
(a) how labour intensive the production process of the goods is → in turn affects how much labour costs take up as a proportion of firms' unit COP
(b) how far other factors change at the same time, which if significant, can outweigh changes in annual unit labour costs, in turn affecting trade balance

L3 (6 – 7)	- Balanced approach, with sufficient breadth and depth → must cover the two 　o Countries → Germany and Greece 　o Components of trade balance → export revenue and import expenditure - Good reference to case evidence.
L2 (4 – 5)	- Balanced answer. - Insufficient depth or scope → only covers 1 country and/or 1 aspect of BOT - Some reference to case evidence.
L1 (1 – 3)	- One-sided answer that is largely descriptive and/or contains substantial conceptual flaws - No reference to case evidence at all → theoretical arguments only
EV (1m)	- Reasoned judgement as to whether changes in annual unit labour costs are significant in affecting trade balance.

(d) In the light of the various challenges that countries in the Eurozone face, assess whether fiscal consolidation should be implemented. [10]

From Ext 8, fiscal consolidation is a policy aimed at reducing government deficits and debt accumulation → likely to be austerity → contractionary fiscal policy (F/P) of govt expenditure cuts and tax increases as seen from Table 3

Challenges that countries in the Eurozone face:
- Fig 2: generally moderately high and rising unemployment rate (although it fell slightly after 2013) as well as high and rising general govt gross debt as a % of GDP
- Ext 6: consumer prices are falling in several peripheral countries → onset of deflation as recovery came too late and too weak
- Ext 7: several other Eurozone members are in deep recession, with high unemployment and with no "fiscal space"

Thesis: fiscal consolidation should be implemented as it can help to address the various challenges that countries in the Eurozone face

T1: fiscal consolidation helps to restore confidence, thus stimulating EG, reducing UN and govt debt + prevent onset of deflation → addresses various challenges in the **medium term**
- From Ext 8, fiscal consolidation is necessary in fiscal-crisis countries (which is the case for many countries in Eurozone), as it can help to avoid a massive loss of confidence triggering economic collapse, which may thus be highly expansionary on the economy in the medium-term.
- Such contractionary F/P → ↓ govt deficit and debt to more sustainable levels → in the medium term, restores investors' and consumers' confidence as govt is able to control its debt level. In contrast, high unsustainable govt debt level → firms and HHs may expect austerity measures in future to repay debt → withhold current investment and spending.
- Thus, in the medium term, fiscal consolidation helps ↑ AD → ↑ actual EG and ↓ demand-deficient UN via k effect. With ↓ UN → ↓ govt debt as explained in (a)(ii).
- Also, ↑ AD → ↑ competition for FOPs as derived DD for FOPs ↑ → pass on ↑ unit COP as ↑ prices → demand pull inflation.
- <Explain the above arguments with the use of AD/AS graph>

T2: fiscal consolidation helps to address challenges in the **longer term**
- Furthermore, in the longer term, as I ↑ → AS ↑ due to greater capital accumulation due to ↑ quantity and quality of resources → potential EG
- From Ext 8, fiscal consolidation can enhance the long-term level of output by ↓ wastage of economic resources via environmental taxes and/or cut subsidies → firms' COP ↑ → firms' profits ↓ → existing firms have to ↓ X-inefficiency and boost productivity levels to maintain profit margins → ↑ productive capacity when these firms engage in R&D and/or training of workers → potential EG
- Also, inefficient firms that continue to earn subnormal profit due to environmental taxes and/or lack of subsidies exit the industry → frees up resources that can be utilised for more productive uses, e.g. R&D, training → boosts productivity and output → potential EG
- Cuts in UN benefits and transfer payments to households → ↑ incentive to work harder and → ↑ productivity → ↑ competitiveness and thus stimulate EG into the long term
- As the countries in Eurozone attain potential EG → sustained economic recovery and can further ↓ govt debt → address various challenges into the longer term

EV: difficult to find any strong evidence of the direct correlation between investors' + consumers' confidence levels and govt debt levels. Their confidence levels may be based on more immediate factors, like short-term EG rates, real wages etc. than govt debt levels.

CSQ Suggested Answers

AT: fiscal consolidation should not be implemented due to the detrimental impact on the various challenges that countries in the Eurozone face

AT1: fiscal consolidation worsens EG, ↑ UN and exacerbates govt debt as % of GDP + hastens the problem of deflation in the **short term**
- From Ext 8, 'most fiscal consolidation instruments are harmful for growth in the short run as it weighs on demand in the short term' → contractionary effects on the economy
  ➤ <Explain how fiscal consolidation brings about contractionary effects> ↓ G expenditure on infrastructure e.g. schools and hospitals and ↓ public investment → ↓ AD
  ➤ ↓ govt spending on UN benefits → ↓ disposable income → ↓ consumption → ↓ AD
  ➤ ↑ personal income taxes → ↓ disposable income → ↓ consumption → ↓ AD
  ➤ ↑ corporate income taxes → ↓ post-tax profits → disincentive to invest → ↓ I → ↓ AD
  ➤ ↑ environmental taxes → ↑ firms' COP → ↓ firms' profits → ↓ I → ↓ AD
  ➤ With the ↓ AD → ↓ actual EG and ↑ demand-deficient UN via k effect. With ↑ UN → ↑ govt debt as explained in (a)(ii). Also, ↓ AD → ↓ competition for FOPs → ↓ prices → speeds up pace of deflation that has already occurred in Cyprus, Greece and Spain

AT2: fiscal consolidation may aggravate challenges into the **longer term**
- If the govt cuts spending and/or raises taxes in the wrong areas such as 'public goods or growth-enhancing services that are insufficiently produced by market forces' → can undermine long-term growth
  ➤ Cuts in essential health care services e.g. ↓ vaccination services → ↓ productivity as workforce fall sick more easily → ↓ output per capita and slowdown in growth of productive capacity as quality of resources ↓ → undermine potential EG
  ➤ ↓ G expenditure on education → ↓ workforce productivity → undermine potential EG
  ➤ ↑ personal income tax → disincentive to work harder especially for higher income workers → ↓ workforce productivity → undermine potential EG
  ➤ ↑ corporate income taxes → ↓ I → hinders potential EG due to ↓ capital accumulation
- As the countries in Eurozone experience slower potential EG → 'potentially large long-term losses in output' → aggravate challenges into the longer term

Evaluation: whether fiscal consolidation should be implemented depends on:
(a) how fiscal consolidation is being carried out, i.e. the specific areas / aspects that the govt cuts spending and raises taxes on → e.g. cuts in UN benefits, transfer payments to households and cuts in firms' subsidies → stimulate EG into the long term → address challenges. However, cuts in healthcare, education → undermine potential EG → worsen challenges.
(b) timing of the fiscal consolidation plans, which in turn depends on prevailing economic conditions of the economy → fiscal consolidation implemented on countries that are performing relatively worse than counterparts, i.e. with more economic challenges of deeper severity may end up being detrimental and self-defeating, since the austerity measures are likely to further worsen the gloomy economic outlook / impede the feeble recovery of Eurozone (Ext 6) → ↓ govt tax revenue and ↑ govt spending on UN benefits and transfer payments → fail to achieve aim of fiscal consolidation and worsen economic challenges that Eurozone are currently facing. The best way is to aim for actual EG in the short term, but in the long-term review govt spending commitments and ↓ govt debt as % of GDP to sustainable levels.
(c) magnitude of govt debt as % of GDP → for countries with debt of unsustainable levels, it is much more difficult to ↓ govt debt and likely takes a much longer time as well as a combination of policies / multi-pronged approach to contain govt debt to sustainable level, so as to restore investors' and consumers' confidence → address challenges.

L3 (7 – 8)	- Balanced approach, with sufficient breadth and depth
	  o Clear identification of the various challenges that countries in the Eurozone face
	  o Clear discussion of how fiscal consolidation helps to address and worsen challenges → covered all 3 challenges (moderately high and ↑ UN, ↑ general govt gross debt as a % of GDP and deflation)
	- Rigorous economic analysis with the use of economics framework.
	- Good reference to case evidence.

L2 (4 – 6)	- Balanced answer. - Insufficient breadth or depth → covers only 2 challenges or uses economic framework but lacks rigour in explanation - Some reference to case evidence.
L1 (1 – 3)	- One-sided answer that is largely descriptive and/or contains substantial conceptual flaws. - Insufficient breadth and depth. - Lacks economics framework in analysis. - No reference to case evidence at all → theoretical arguments only
EV (1m)	- Unexplained judgement as to whether fiscal consolidation should be implemented.
EV (2m)	- Reasoned judgement as to whether fiscal consolidation should be implemented, supported by economic analysis.

Name:		Index Number:		Class:	

Preliminary Examination
Year 6

Economics

Paper 2 Essay Questions

Additional Materials:
Writing Papers

9732/2

13 September 2016
2 hours 15 minutes

READ THESE INSTRUCTIONS FIRST

Write your name and civics class in the spaces provided on the answer paper.

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

Write your answers on the separate writing paper provided.

Write in dark blue or black pen on both sides of the paper.

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

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

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

At the end of the examination, fasten all your work securely into <u>three</u> separate bundles, one for each question.

Please indicate all questions attempted in the boxes below.

Section A			Section B		
Q1	Q2	Q3	Q4	Q5	Q6

This document consists of **2** printed pages including this cover page.

[Turn over]

Answer **three** questions in total.

Section A

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

1   In 2014, global GDP growth was 2.6%. Productivity in the Singapore hotel industry grew at a compound annual rate of 5.8% from 2010 to 2014.

   (a)   Explain how elasticities of demand can assist in understanding the effect of each of these changes on the hotel occupancy of luxury and budget hotels in Singapore. [12]

   (b)   In addition to the above events, Chinese tourists cancelled trips to Singapore following a serious air traffic accident in 2014.

   Discuss how the above developments would affect the revenue of luxury and budget hotels in Singapore. [13]

2   **(a)**   In what circumstances may price discrimination be beneficial to consumers? [10]

   (b)   Assess the extent to which price discrimination is the main profit generator for firms in different market structures. [15]

3   Explain the reasons for government intervention in the provision of key facilities such as defence and medical services and discuss the extent to which such intervention meets the microeconomic objectives. [25]

Section B

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

4   **(a)**   Explain the economic indicators that can be used to measure the performance of an economy. [10]

   (b)   Discuss whether market-oriented supply-side policies is the best way to spur economic growth in view of a gloomy outlook. [15]

5   **(a)**   Explain the economic factors that affect domestic and foreign investments into a country. [8]

   (b)   Assess the view that governments should prioritise low unemployment over the achievement of other macroeconomic goals. [17]

6   Globalisation brings about trade-offs between governments' economic objectives. In view of these trade-offs, discuss whether economies should continue to embrace globalisation. [25]

Prelim Examination 2016

Year 6 H2 Economics 9732 Paper 2
Essay Questions

Answer and Mark Schemes

Suggested Answers

1 **In 2014, global GDP growth was 2.6%. Productivity in the Singapore hotel industry grew at a compound annual rate of 5.8% from 2010 to 2014.**

    (a) **Explain how elasticities of demand can assist in understanding the effect of each of these changes on the hotel occupancy of luxury and budget hotels in Singapore.** **[12]**

    (b) **In addition to the above events, Chinese tourists cancelled trips to Singapore following a serious air traffic accident in 2014.**

        Discuss how the above developments would affect the revenue of luxury and budget hotels in Singapore. **[13]**

Price elasticity of demand (PED) is a measure of the degree of responsiveness of the quantity demanded for a good to a change in the price of the good itself, ceteris paribus.

Budget hotels
1. Demand is said to be price elastic when a given change in price of a good results in a more than proportionate change in quantity demanded in the opposite direction, ceteris paribus.
2. Substitutes are easily available: Airbnb or hostels. Consumers of budget hotels are not particular of access to amenities services provided.

Luxury hotels
1. Demand is said to be price inelastic when a given change in price of a good results in a more than proportionate change in quantity demanded in the opposite direction, ceteris paribus.
2. Fewer substitutes available as consumers of luxury hotel are concerned of the access to amenities provided within the hotel compound and personalised butler services. This is a part of the production process of luxury hotel which Airbnb cannot replicate easily and compete with.

Productivity growth of the hotel industry will see a lowering of marginal COP. Supply will increase because firms are more willing and able to increase Qss at each and every price level. At the current price level of P0, there exist a surplus, Qss is greater than Qdd. Firms will reduce prices to remove the surplus. Quantity demanded rises as utility-maximising consumers, constrained by their budget, are now willing and able to buy larger quantities, but the units of output that are produced at higher marginal cost become unprofitable at lower prices. Profit-maximising firms cut back output to avoid the marginal losses, reducing quantity supplied. This process will continue until the surplus is eliminated at the new equilibrium point. However, the extent of increase in Qdd is dependent on the PED for luxury hotel and PED of budget hotel.

Budget hotel: PED>1 and so the fall in price will lead to a more than proportionate increase in Qdd from Q0 to Q2
Luxury hotel: PED<1: and so the fall in price will lead to a more than proportionate increase in Qdd from Q0 to Q1
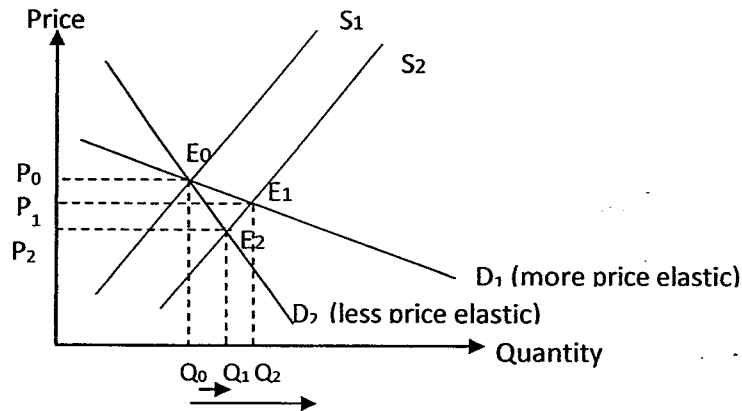
Figure 1: Changes in sales volume of different types of hotel

The income elasticity of demand (YED) is a measure of the responsiveness of demand to changes in income, ceteris paribus.

Budget hotel

An inferior good is one whose demand changes in the opposite direction as the change in income, ceteris paribus. While rising incomes give them greater purchasing power, consumers' willingness to purchase inferior goods fall as they are now able to switch to goods that are able to give them higher levels of utility. Demand for inferior goods will, as a consequence, fall and YED of inferior goods negative (YED < 0). A surplus exists at current price level and the new equilibrium point is established at E2, whereby both equilibrium price and quantity is lower than before.
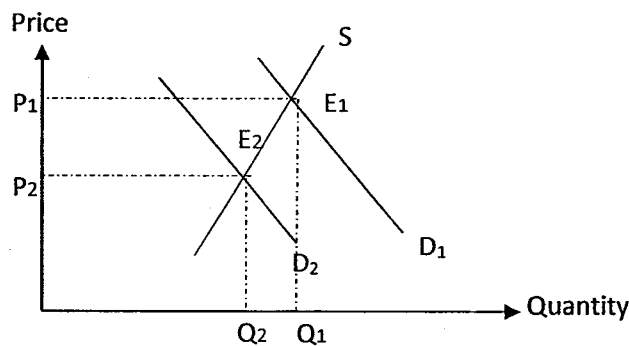

Fig 2: Demand curve shifts in response to increase in income for inferior goods

Luxury hotel

A normal good is one whose demand changes in the same direction as the change in income, ceteris paribus. Consumers, seeking to maximise their utility, will increase their demand for normal goods when their higher incomes give them greater purchasing power. Therefore, the YED of normal goods is positive (YED > 0). Luxury goods such as luxury hotels tend to have high YED. These goods are consumed only after the expenditure on necessities has been accounted for. When income rises during economic growth for instance, it is the demand for luxuries that is often the first to be rise. Ceteris paribus, when the rise in quantity demanded is more than proportionate to the rise in income, YED value is not just high but greater 1, i.e. demand is income elastic. Thus, the increase in demand is also higher from D1 to D3 instead of D1 to D2. A shortage exists at current price level and the new equilibrium point is established at E3, whereby both equilibrium price and quantity is higher than before.
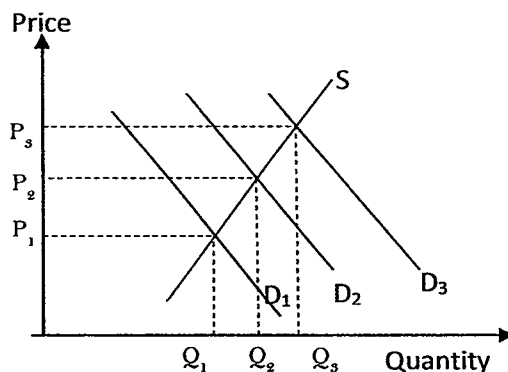
Suggested Answers

Fig 8b: Demand curve shifts in response to
increase in income for normal goods

Marks Scheme

Level	Descriptors
L3 10-12	• Good exemplifications • Uses a good economics framework with well explained diagrams • Points raised are well-elaborated & based on the different relevant elasticities concepts
L2 7-9	• Points raised lack elaboration/ exemplification • Explain the different elasticities concepts but did not link to how the different elasticities concepts will affect the equilibrium quantity of hotel
L1 1-6	• Attempted analysis is limited • Conceptual misunderstandings of the different elasticities concepts tested are evident • There is lack of understanding of the question requirements.

Suggested Answers

Part (b)

		Upscale hotel market: MBS, W Hotel, RWS	Budget hotel market: Fragrance Hotel, Hotel 81
Impact on demand	Changes on demand	1. Increasing income: higher purchasing power for normal good • Upscale hotel market will see a more than proportionate increase in demand (YED>1) • However, the extent of increase in demand for luxury market is dependent on the income level of consumers. The higher the income level, the more luxury hotels are perceived to be a necessity. • The growing middle class in Asia and Southeast Asia countries will still view luxury hotel as a luxury good. The increase in income growth is a recent phenomenon, thus the consumption of luxury goods is not part of their daily lifestyle. 2. Falling taste and preference for tourists to travel to Singapore • MH370 → consumers derive lower utility from air travel, thus they also consume less hotel services Overall: SR → demand might fall as the fear of air travel outweighs the rising income effect. LR → with time, consumers might slowly forget about the tragic accident and regain confidence in air travelling again, thus increase their consumption of hotel rooms.	1. Increasing income: higher purchasing power for normal good • Budget hotel market might see a fall in demand as it is considered an inferior good (YED<0) • However, this might not be true. As income in developing countries in Southeast Asia grow (e.g Myanmar), they will consume more travel packages, including budget hotels in Singapore. Budget hotels in the POV of tourists from developing Southeast Asian countries are viewed as normal goods. 2. Falling taste and preference for tourists to travel to Singapore • MH370 lowers consumers utility from air travel, as such they also consume less hotel services Overall: demand for budget hotel will fall significantly The increase in income growth of Southeast Asian tourists might not be sufficiently large to overcome the falling demand from China.
Impact on supply	Changes on supply	1. Increasing supply (overall): rising productivity will lead to lowering of marginal COP • Affects the total revenue to fall, PED<1: substitutes available for hotels like Airbnb, mid-tier hotels • However, PED for upscale hotel are more inelastic: alternatives like Airbnb and mid-tier hotels isn't a strong substitute for upscale hotel, whose consumers prefer the amenities (gym and pool) and personalised service (butler) available. • Total revenue will fall as the increase in Qdd is less than proportionate given a fall in price: PED<1	1. Increasing supply (overall): rising productivity will lead to lowering of marginal COP • Affects the total revenue (TR will increase), PED>1: substitutes available for hotels like hostels • Budget hotels are more easily substitutable away with hostels. Demand is more price elastic due to consumers are more willing to pay a lower price to stay in a hostel and does not mind using a common bathroom and entertainment room.

7

Suggested Answers

| Net impact on equilibrium price, qty and total revenue | **_SR_**: demand has decreased but supply has increased
• Equilibrium price will decrease, however, impact on, equilibrium qty depends on the relative magnitude of decrease in demand and increase in supply
• The fall in demand is likely to outweigh the increase in supply → consumers with rising income and the fear for flying are more incentivised to cancel their trips → total revenue will fall
_LR_: demand and supply have increased
• Equilibrium qty will increase, however, impact on equilibrium price depends on the relative magnitude of increase in demand and supply
• The increase in demand is likely to outweigh the increase in supply → total revenue will increase | Demand has decreased but supply has increased
• Equilibrium price will decrease, however, impact on equilibrium qty depends on the relative magnitude of decrease in demand and increase in supply
• The increase in income growth among consumers from developing countries is significant, they do not see budget hotel in Singapore as inferior good but normal good, able to cushion the overall fall in demand→ total revenue will increase |

Marks Scheme

Level	Descriptors
L3 7-9	• Good discussion of how the above developments affect the luxury and budget hotels market and its total revenue differently • Points raised are well-elaborated & based on economics concepts. • Good exemplifications
L2 4-6	• Attempted at discussing how the above developments affect the luxury and budget hotels market and its total revenue differently • Points raised were insufficiently elaborated or lack economic analysis • There were attempts to exemplify
L1 1-3	• Attempted analysis is limited, conceptual misunderstandings are evident and there is lack of understanding of the question requirements.
E1 1-2	For well-supported judgment
E2 3-4	For unexplained judgment without supporting analysis

8

2   (a) In what circumstances may price discrimination be beneficial to consumers?
[10]
(b) Assess the extent to which price discrimination is the main profit generator for firms in different market structures.   [15]

2a)

Introduction
- Define price discrimination
  - Price discrimination is defined as the selling of the same good at different prices for reasons <u>not associated with differences in cost of production.</u>

- Beneficial to consumers => increase satisfaction level =>(i) price and non-price: (ii) quality, (iii) variety aspects

Body
- Explain any 2 circumstances => with economic framework and diagram/s

- Case 1 => continue production even if the company is having subnormal profit:
  - Perfect PD – continue to production under perfect PD
    Price discrimination can be an advantage to the community in those situations where an essential good like medical services is not commercially viable if a single price were to be charged.
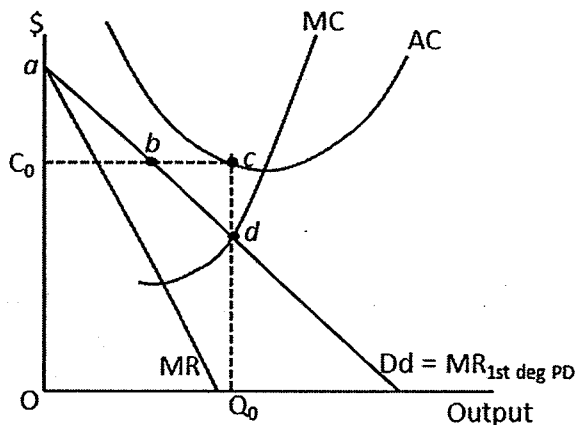

Figure 1: First Degree Price Discrimination

Referring to Figure 1, a doctor may not be able to supply his medical services to a rural town if he were to charge a single price because the demand curve lies entirely below his average cost curve. However, if the doctor were to engage in 1st degree price discrimination and charge each patient according his maximum ability to pay.

- Profit-maximising output = Q_0 where MC = $MR_{1st\ degree\ PD}$
- TR with 1st degree price discrimination = area under dd curve = $OadQ_0$
- TC = AC × Q = OQ_0cC_0
- As long as area $aC_0b \geq$ area bcd, the firm is able to at least break even. The market is able to supply the good even in the absence of government intervention.

- Case 2 => produce more output in the market, and consumers with price elastic demand can purchase the good or service at a lower price level.
- 3rd degree => higher consumer surpluses for consumers with price elastic demand

Suggested Answers

An example of third degree price discrimination by Universal Studios Singapore

	Adult (Age 13-59)	Child (Age 4-12)	Senior (Age 60 and above)
1-Day Pass	$74	$54	$36
RWS Invites Attractions Season Pass	$98	$88	$88

a) Market A with relatively inelastic demand

b) Market B with relatively elastic demand
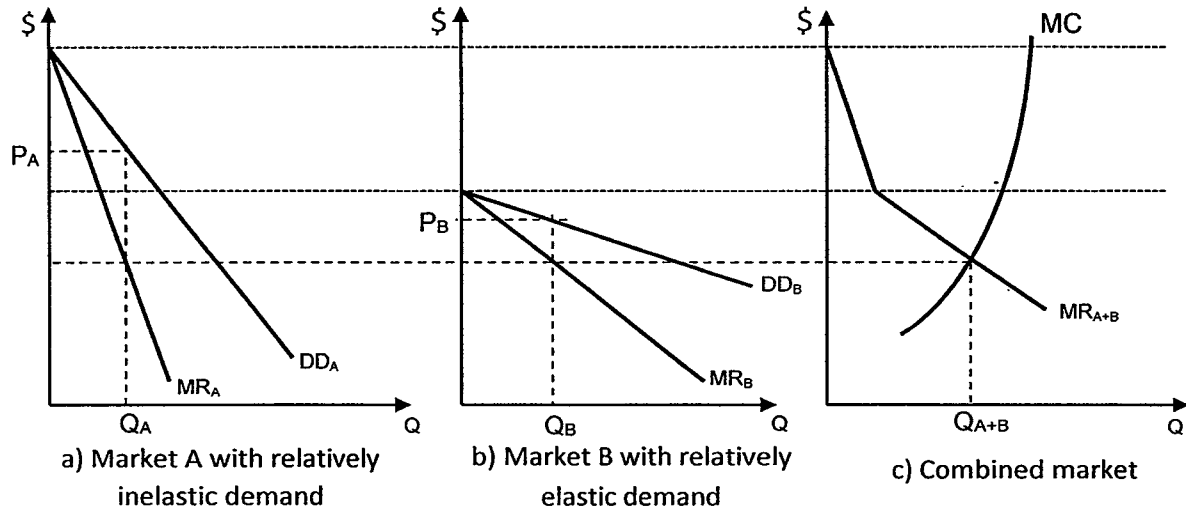
c) Combined market

Figure 2: Charging different prices in different markets

In Figure 2c, the market marginal revenue curve here is the summation of the marginal revenue curves in Figure 2a and Figure 2b horizontally at each and every price level.

To determine the total output, the monopolist will produce that level of output where the MC equals the combined MR (MR$_{A+B}$) in Figure 2c. Having decided on the total output, the firm will now have to consider how to divide the output between the 2 markets. The monopolist maximises profits by equating the firm's MC with individual MR curves in the 2 markets, i.e. MC = MR$_A$ = MR$_B$. If the MR in the 2 markets are not the same, the monopolist could increase profits by transferring output from the market where MR is lower to the market where MR is higher. Once the output in the individual markets have been determined, the price to set is simply read off the demand curve for each market – the highest price that consumers in each market is willing and able to pay for the allocated output.

The impact of 3rd degree price discrimination varies across the different groups of consumers. Those consumers with a more price inelastic demand are charged a higher price than those with a more price elastic demand. Those paying a higher price might feel this system of pricing is unfair. However, those charged a lower price may thereby be able to obtain a good or service they previously could not if a single price was charged by the monopolist. 3rd degree price discrimination is likely to increase output and make the good or service available to more consumers.

Note: candidates may explain using 2nd degree PD

Conclusion
The extent to which price discrimination will be in consumer's interest depends on the nature of the industry, the type of product sold, degree of openness to foreign competition, degree of government regulation/clamp down on abuse of market power, etc.

Suggested Answers

Level	Descriptors
L3 7-10	Consumers benefits – cover both price and non-price Uses a good economics framework with well explained diagrams Points raised are well-elaborated & based on economics concepts.
L2 5-6	Points raised lack elaboration/ exemplification. Explain the different types of PD but did not link to how these benefited the consumers
L1 1-4	Attempted analysis is limited, conceptual misunderstandings are evident and there is lack of understanding of the question requirements.

(b) Assess the extent to which price discrimination is the main profit generator for firms in different market structures. **[15]**

Introduction
- Profit maximisation condition
- Different Market structures
- Why PD can only be practiced in imperfect competition

Body
Thesis
PD is the main profit generator for firms
Diagram is not required, candidates can refer to figure 1 to 3 in part a.
Explain why profit is higher than a firm charging a single price
Exemplification => from any imperfect market structure

Antithesis
PD may not be the main profit generator for firms in different market structures.
Explain any 2 cases:
- Firms in oligopoly => **collusion**. Need not charged lower prices for markets with PED>1
- Explain either explicit collusion – cartels or tacit collusion - price leadership

- MPC => product differentiation => niche market to earn higher profit level
  Product differentiation can increase a firm's profits in three ways:
  - increase the demand for it its goods directly
  - demand relatively more price inelastic. Differentiating its product from its competitors' gives the firm more pricing options (i.e. greater market power). For example, successful product differentiation allows firms to charge higher prices and earn higher profit. Recall that when demand is price inelastic, an increase in price brings about a smaller than proportionate reduction in quantity demanded which then contributes to higher total revenue. This in turn helps the firms to avoid cut-throat price competition which is crucial during times of rising cost of production.
  - reduce the degree of substitutability between its goods and its competitors' goods (cross elasticity of demand for the good is reduced). This in turn reduces its susceptibility to competitors' price cuts.

- Candidates may explain any other strategies, such as advertising, predatory pricing, limit pricing that lead to higher profit levels

Conclusion & evaluation
- Well-explained judgement
- Considered the conditions and characteristics of the market structures/ industries
- Any form of government intervention in a particular economy

Suggested Answers

Level	Descriptors
L3 7-9	Good discussion on the strategies to increase profit levels Good discussion on PD and any 2 other strategies Points raised are well-elaborated & based on economics concepts.
L2 4-6	Good discussion on how to increase the profit levels – is PD the best strategy? Points raised were insufficiently elaborated or lack economic analysis.
L1 1-3	Attempted analysis is limited, conceptual misunderstandings are evident and there is lack of understanding of the question requirements.
E1 1-2	For well-supported judgment
E2 3-4	For unexplained judgment without supporting analysis

3   Explain the reasons for government intervention in the provision of key facilities such as defence and medical services and discuss the extent to which such intervention meets the microeconomic objectives.   [25]

Question can be sub-divided into 2 questions:
Explain the reasons for government intervention in the provision of key facilities such as defence and medical services
And
Discuss the extent to which such intervention meets the microeconomic objectives.
Note: candidates can approach the questions in either ways
a) explain in why government intervene in provision of public and merit goods +
how this intervention may/may not lead to achieving efficiency and equity
OR
b) Why the government provide public goods, can this meet the microeconomic objectives +
Why government provide merit goods can this meet the microeconomic objectives

Reasons for government intervention in provision of key facilities:
i)   Defence serices: A private good and public good are distinguished by the features of excludability and rivalry.

Excludability:
<Definition> A public good has to be non-excludable in consumption, meaning that it is impossible or prohibitively expensive to exclude non-payers from consuming the good.
<Exemplification> An example would be national defence. The sense of security brought about by a robust national defence system is shared by everyone in the nation, regardless of nationality or whether they pay taxes. A tourist would feel the same sense of security as a citizen who has paid 20 years' worth of taxes. As such, national defence is non-excludable. Contrast that with a private good like movie screenings. The movie screen is enclosed in a room of which there are limited entrances and it is not exorbitantly expensive to hire staff members to be at the entrances to check if someone has a ticket, which has already been paid for. Anyone without a purchased ticket would be excluded from enjoying the movie screening.

<Elaboration> The problem of non-excludability as mentioned above would lead to the "free-rider" problem. A "free rider" is anyone who receives the benefits from a good or service without having to pay for it. This is exemplified by the tourists who enjoy the sense of security from national defence without paying regular income tax. Since anyone can enjoy the benefits of a pure public good without paying for it, there will be an absence of a price signal and thus producers will not supply this good. A producer of a private good like movie screenings on the other hand has no such problems because only those willing and able pay the ticket price will purchase a ticket to enjoy the movie.

Rivalry:
<Definition> A public good also has to be non-rival in consumption. This means that the consumption of a good by additional individuals will not reduce the utility (quantity and quality) derived from consuming the good.
<Exemplification> For example, the sense of security an individual enjoys from national defence does not make another individual feel less secure for any period of time. Private goods on the other hand are rivalrous in consumption. When an individual consumes a hamburger, that unit of hamburger is gone and not available for consumption by the next individual.

<Elaboration> As a result of non-rivalry, no additional unit of a public good needs to be produced for additional consumption. This results in the marginal cost for an additional unit of consumption to be zero. The cost expended on national defence to make 3 million

people feel safe is the same as the cost needed to make 3.5 million people feel safe, ceteris paribus. In the traditional theory of the firm, a firm's profit maximising output is achieved when MR=MC. Since MC = 0 in the case of non-rivalry, the condition would result in MC=0=MR and no self-interested, rational firm would price its good at zero price (assuming PC firms who are price takers and P=MR), thereby resulting in a missing market. In contrast, producers of a private good like hamburgers will simply price their goods at marginal cost (assuming PC) and be able to make normal profits, ensuring the survival of the firms and thus the market.

- Why the provision of this service meets government microeconomic objectives
  - o Important service to the society
  - o Non-provision in free market
  - o Equity issue – only the very rich can afford
  - o Antithesis => can provision of this services worsen the efficiency and the equity of the society?
  - o Other key facilities may not be under public goods
    - Key facilities are private good that are rivalrous and excludable eg. Airports and seaports
    - Excludability: The air travellers need to pay airport tax or fee in order to use the facilities provided inside the transit area, for example the aerobridge and other amenities. On the other hand, ships would require paying docking fees to the port authorities in order to have their cargo unloaded.
    - Rivalry: The use of an airline of a particular berth at the terminal diminished the amount that other airlines could use. Likewise, for the ships.
    - Hence the private sector is able to develop and provide the services, e.g. smaller airports in United States are that privately owned and operated. The profit is provided by charging the users of facilities.
    - Government need not intervene, to meet the microeconomic objectives.

ii) **Medical Services:** A positive externality is also known as an external benefit, whereas social benefits include both external benefits and private benefits. Presence of imperfect information and equity issues

<**Elaboration with exemplification**> An external benefit refers to the benefit from production or consumption experienced by third parties but not by the producers or consumers themselves and thus not accounted for by the price mechanism. In the context of medical services, a healthy labour force can increase efficiency for the employer. It may also produce other important external benefits, such as lower medical cost and improve international competitiveness for the country.

Draw the graph to illustrate the potential deadweight loss due to positive benefit and imperfect information

Explain why merit good deemed by the government to be under consumed, thus resulting in DWL

Why government intervene => how to eliminate the DWL

How to meet the 2 objectives => efficiency in resource allocation and equity
E.g. to develop medical services, such as hospital, requires high capital outlay that may be a barrier to entry to a private firm. Hence government would be the natural choice to cough up the initial investment.
Equity: to ensure the lower income group get access to medical facilities and care

Suggested Answers

Antithesis
- Why DWL might even increase with government intervention?

- Can the free market be better in achieving the microeconomic objectives?
  - Civil servants in a bureaucratic setting may be X-inefficient when it comes to running of these facilities. There may not be sufficient incentives for them to be as productive efficient compared to the running of the facilities by the private sector, who are profit-driven.

- How about PPP, a better way in meeting the microeconomic objectives?
  - A public–private partnership (PPP) is a government service or private business venture which is funded and operated through a partnership of government and one or more private sector firms.
  - PPP involves a contract between a public sector authority and a private party, in which the private party provides a public service or project and assumes substantial financial, technical and operational risk in the project. In projects that are aimed at creating infrastructure such as hospitals and public transport infrastructure (in Singapore, 2016), the government may provide a capital subsidy in the form of a one-time grant, so as to make it more attractive to the private investors. In some other cases, the government may support the project by providing revenue subsidies, including tax breaks.

Conclusion and Evaluation
- Well explain judgement
- Considered the conditions and characteristics of the economy, governments' budget

Level	Descriptors
	L1 Knowledge/ Recognise (Description)
L1 (1-9)	• Answers are descriptive and largely irrelevant • Concepts are descriptive or explained with many errors • Poor use of examples • Weak or inappropriate applications of the concepts.
	L2 Consolidate (Add some detail – application)
L2 (10-16)	• At least 2 concepts, public and merit goods were explained adequately • Balance approached – why government intervention may or may not meet the government microeconomic objectives; with some lapse in explanation • Adequate attempt at exemplification • Some attempt at providing other reasons or other forms of intervention
	L3 Elaborate (Extend to include analysis)
L3 (17-21)	• Clear economic explanation of 2 concepts, public and merit goods • Good use of examples to explain the free-rider problem, missing market problem (MC=0) and how social benefits = private + external benefits, imperfect information = difference between perceived and actual demand • Excellent use of examples to explain the free-rider and missing market problem (MC=0) and how private goods do not have these problems • Excellent use of examples to illustrate that social benefits = private + external benefits & imperfect information. • Good discussion how government intervention achieve/ may not achieve microeconomic objectives, efficiency and equity.
Evaluation	
E1 (1-2)	• Able to make some evaluation or limitations of the use of the market failure concepts in the context
E2 (3-4)	• Good evaluations and/or conclusions based on the ability to see the crux of the issue is not merely that of private vs merit good

4 (a) Explain the economic indicators that can be used to measure the performance of an economy. [10]

(b) Discuss whether market-oriented supply-side policies is the best way to spur economic growth in view of a gloomy outlook. [15]

(a) In order to access the full 10 marks, candidates should mention at least three indicators with economic growth rate as a compulsory indicator. What students should focus is not just on the explanation of the economic indicators but to explain how they help to measure economic performance. Candidates also need to show awareness that any individual indicator alone is insufficient to measure economic performance; overall economic performance requires all indicators to provide a more complete / holistic picture.

To measure economic performance → measure the extent to which the 4 macroeconomic goals have been achieved: (1) high and sustainable economic growth, (2) low inflation, (3) low unemployment as well as (4) healthy BOP

Explanation of economic indicator	Analysis of how each economic indicator measure economic performance
Economic growth rate → use % △ in GDP - Define GDP. - Alternative indicator: GNP - Further breakdown of GDP figure e.g. proportion of each component that makes up GDP (C vs. I as % of GDP)	Explain how the value of GDP / GNP growth rate indicate the economic performance of an economy. - A positive (negative) value means ↑ (↓) in a country's national output → ↑ (↓) in economic activities in the country → economic performance improves (worsens) - While the GDP growth rate figure on its own may not shed much light on future growth, more detailed analysis of the GDP figure can help to measure economic performance, e.g. a ratio weighted towards investment suggests that the economy is competitive in attracting I → indicates potential EG of a country * Recognise that EG rate is usually the most important indicator to measure economic performance.
Inflation rate (%) → use % △ in CPI - Inflation rate measures the general price level of g&s within a country - 2 types of inflation → demand pull or cost push	Explain how the value of inflation rate indicate the economic performance of an economy. - ↑ positive inflation rate means small ↑ in GPL, which likely indicates ↑ in economic activities → competition for FOPs → ↑ unit COP → firms pass on as ↑ prices to consumers ⇨ The above assumes demand-pull inflation and coupled with strong GDP growth figure → overheated economy + indicates demand-pull inflation → improvement in performance - If country is able to maintain low and stable positive inflation (coupled with positive EG) over time → able to attract investments → achieves potential EG and generates more employment opportunities
To measure the actual EG of an economy → better to use **% change in real GDP** over time to measure △ in the **volume** of economic activity, while maintaining relative prices constant, i.e. removes the effect of price changes. In this way, it reflects the economic performance more accurately than using % △ in nominal GDP.	
Unemployment rate (%) - Define UN rate. - Briefly explain that demand-deficient and structural unemployment are	Explain how the value of unemployment rate can be used to measure economic performance. - A low and ↓ UN rate likely indicates ↑ in economic activities, which require FOPs including labour being hired → ↓ DD-deficient UN - A low UN rate also represents a productive and efficient economy which makes fuller and more efficient utilisation of its current resources → achieves productive efficiency and economy is able

the more important sources of unemployment	to maximise its output → strong economic performance - A low UN rate helps ensure the internal stability of an economy due to less social issues in terms of crimes like robbery, thefts → improvement in economic performance ⇨ Coupled with a high GDP growth figure → suggests that economy is operating at or close to full employment → ↓ demand-deficient UN → improvement in performance - If country is able to maintain low and stable UN (coupled with positive EG) over time → able to attract I → achieves potential EG and creates more jobs → improvement in economic performance
BOP status → **surplus or deficit** - BOP measures a country's external performance → very important for small and open economies like Singapore and Hong Kong, which are highly X-oriented and M-dependent. - Briefly explain the 2 components of BOP. - Explain what it means when a country has a BOP surplus or a deficit.	Explain how the BOP statistics can be used to measure economic performance. - If constant BOT surplus over the years → suggests high export competitiveness → implies injection into the local economy that can boost its EG → improves economic performance - If constant capital and financial account surplus over the years → suggests economy is attractive to foreign investors → may imply a boost in potential EG if the surplus is a result of foreign MNCs investing in the country + creates more job opportunities that ↓ demand-deficient UN → improves economic performance - For SG → consistent current account surplus adds to foreign reserves → maintains exchange rate stability → helps to: ➢ prevent speculative attack on S$ ➢ curb imported inflation via a relatively strong S$, which is particularly important for SG given its lack of natural resources ➢ provide a conducive environment for I and trade → ↑ EG, ↓ UN ⇨ improves economic performance - However, countries running current account deficits may have strong economic performance / GDP growth → ↑ import expenditure. Thus a current account deficit could possibly reflect high incomes → strong economic performance - Also, a country may run a temporary current account deficit due to importing of capital goods → contributes to future growth

L3 7 – 10	- Well-developed explanation of at least 3 economic indicators (BOTH internal and external) and how they measure economic performance. - Max 8m – if only two indicators are explained (with EG rate as an indicator) - Max 9m – if candidate did not explain both internal and external - Analysis is supported with the use and explanation of economic framework - Use of relevant real world examples such as countries in euro area and emerging economies as poor and strong economic performance respectively
L2 5 – 6	- Addresses only 1 aspect of the question: ➢ explanation of economic indicators OR ➢ analysis of how the economic indicators measure economic performance - Max 5m – if answer is purely on the meaning of economic performance with some incidental mentioning of economic indicators. - Max 6m – if two or more indicators are explained, but without EG rate
L1 1 – 4	- Mere listing of the indicators or largely irrelevant answer such as how economic performance affects SOL or largely descriptive answer. - Max 4m – if answer is on economic goals only OR describes economic indicators without any link to how they measure economic performance.

Suggested Answers

Discuss whether market-oriented supply-side policies is the best way to spur economic growth in view of a gloomy outlook. **[15]**

Candidates should recognise that there are different types of policies that can be used to spur EG. These policies include market oriented supply-side policies (as stated in the question), interventionist supply-side policies and demand management policies. Then, candidates are to assess these policies using the FRESH criteria, before coming to a reasoned judgement on which is the best way to spur EG in the context of a gloomy outlook.

Explain how market oriented SS-side policies work → free up the markets by ↓ distortions of current policies on prices and incentives, encourage private enterprise and improve market efficiency → ↑ AS <explain with AD/AS diagram>

(i) To ↑ productive capacity → ↑ AS (shifts downwards and rightwards) → encourage potential growth / non-inflationary growth
   - Fiscal reforms: ↓ red tape, ↓ corporate income taxes e.g. Singapore ↓ CIT from 20% (2005 to 2007) to 18% (2008 to 2009) and to 17% (from 2010 onwards)[1] as well as removal of other impediments to investment and risk taking e.g. establish intellectual property rights (IPRs) → ↑ firms' incentive to undertake investment projects and engage in process innovation → capital accumulation and ↑ productivity → ↑ AS
   - Fiscal reforms: ↓ personal income taxes → ↑ incentive to work harder → ↑ work effort → ↑ productivity → ↑ AS
   - Cutting back govt spending e.g. firms' subsidies that distort markets → free up resources for the private sector which, subjected to the discipline of market competition, tend to be more efficient than the public sector → ↑ AS

(ii) To ↑ AS (shifts downwards) → ↑ actual EG
   - Flexible labour policies → ↑ SS of labour → ↑ competition in the labour market → downward pressure on wages → ↓ firms' unit COP → pass on as ↓ prices → ↑ AS
   - Trade liberalisation exposes domestic producers to competition from imports → check complacency → ↓ X-inefficiency → keep unit cost down to remain competitive → ↑ AS.
   - Privatisation → transfer of a state owned (natural) monopoly run by the govt to the private sector or introduce private services into the public sector → introduction of competition and removes non-profit motive → ↓ X-inefficiency → ↑ AS. Examples include privatisation of:
     ➢ Royal Mail (2014)[2] and British Telecom (1984)[3] in the UK
     ➢ SMRT, Singapore Airlines, Sembcorp Industries in Singapore[4]
   - Deregulation → govts remove, reduce, or simplify restrictions on firms → fewer and simpler regulations → ↑ level of competitiveness by encouraging the efficient operation of markets → spurs innovation → productivity gains → ↑ AS
   ⇨ As domestic firms face ↑ competition → encourage adoption of better technology and spur greater innovation as domestic firms need to improve productivity → ↑ AS

Possible strengths of market oriented SS-side policies in spurring EG

- For PIT cuts: effectiveness in stimulating greater work effort depends on the relative magnitude of the substitution and income effects of the ↑ in disposable wages. During

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[1] https://www.iras.gov.sg/irashome/Businesses/Companies/Learning-the-basics-of-Corporate-Income-Tax/Corporate-Tax-Rates--Corporate-Income-Tax-Rebates--Tax-Exemption-Schemes-and-SME-Cash-Grant

[2] http://www.thisismoney.co.uk/money/markets/article-3270365/Royal-Mail-fully-privatised-time-500-year-history-Government-divests-final-14-cent-stake.html

[3] http://www.instituteforgovernment.org.uk/sites/default/files/british_telecom_privatisation.pdf

[4] http://www.businesstimes.com.sg/opinion/whats-driving-the-privatisation and www.oecd.org/dataoecd/8/35/2730964.ppt

gloomy outlook → job insecurity → employed workers are likely to work harder so that they do not lose their current jobs → ↓ PIT could be effective in ↑ productivity → ↑ EG

- For privatisation: nationalised industries can be inefficient → high cost to the govt → selling off such loss-making industries can ↓ govt's budget deficit. In view of **gloomy outlook**, which is especially crucial for the govt to prioritise EG above the other goals and spend its funds wisely, privatisation:
  - ➤ helps the govt to avoid larger budget deficits since during poor economic times, govt budget is tighter due to ↑ govt spending on UN benefits, transfer payments and ↓ tax revenue due to ↑ UN.
  - ➤ allows the govt to use the 'extra' revenue gained from selling off the industries and the originally intended funds 'saved' (if the industries were still nationalised) to stimulate EG via demand-management policies
- The cutting back on govt spending e.g. subsidies to firms → govt can reallocate such funding to stimulate EG via demand-management policies, which is especially pertinent during **gloomy outlook** as explained above
- As domestic firms face ↑ competition due to above policies → engage in product innovation → ↑ variety and quality of products → ↑ non-price competitiveness of goods that cater to consumers' tastes and preferences → ↑ demand for g&s → ↑ AD → ↑ EG

Limitations of market oriented SS-side policies in spurring EG

- For fiscal reforms (↓ red tape, ↓ corporate income taxes etc). to attract I: still depends on investors' confidence in the economy, which could be affected by external economic conditions, i.e. with **gloomy economic outlook** → expected ROR on I is still low → ineffective in ↑ I → ineffective in spurring EG
- For privatisation: privatised firms often retrench workers to cut waste → in view of **gloomy outlook**, likely to meet with strong resistance from the population, especially the retrenched workers. In countries with strong labour unions, this policy may backfire as riots and protests may ensue → further deters I and worsens EG
- For privatisation, deregulation and trade liberalisation: long gestation period before full benefits can be realised → ineffective in stimulating EG in the short run → inappropriate for govts to implement such policies alone, because in view of **gloomy outlook**, the recession may deepen into a depression

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Explain how interventionist SS-side policies work → to counteract deficiencies of markets to provide the necessary conditions for EG <explain with AD/AS diagram>

(i) Infrastructure development → govt spending on:
- Transport and communication – e.g. extension of MRT network to cover Bukit Timah Line, North-South Expressway in Singapore → ↑ accessibility and speed of getting to workplace → ↑ productivity, high-speed Next Generation Nationwide Broadband Network → ↑ connectivity and workers' productivity
- Business parks for various industry clusters e.g. Biopolis, Jurong Island, Data Centre Park, Seletar Aerospace Park

⇨ ↑ quantity and quality of resources (via ↑ productivity) → ↑ productive capacity → ↑ AS (shifts downwards and rightwards) → encourage non-inflationary growth

(ii) Human capital development → govt spending on education, training, retraining: e.g.
- Singapore govt ↑ spending to expand the capacity of the Continuous Training and Education (CET) training infrastructure in the key growth areas identified by the govt such as aerospace, precision engineering and process manufacturing. There is also enhanced funding support for adult learners enrolled in the CET courses.
- SkillsFuture Credit → all Singaporeans aged 25 and above received an opening credit of S$500 from January 2016 that can be used for programmes to upgrade their skills.

⇨ These initiatives aim to ↑ productivity → non-inflationary growth

(iii) Enhance productivity and innovation → govt spending to ↑ productivity and R&D
   - In Singapore, the Agency for Science and Technology (A*STAR) was set up in 2000 to build up Singapore's capabilities in science, engineering and technology; topping up the National Research Fund (NRF) by $1 billion in 2015

⇨ These initiatives aim to ↓ cost of innovation / R&D → ↑ firms' incentive to engage in R&D → ↑ process and product innovation → ↑ AD & ↑ AS → ↑ EG

Limitations of interventionist SS-side policies in spurring EG

(i) For human capital development:
   - In times of **gloomy outlook** that is primarily caused by demand shocks, it is not about structural rigidities / bottlenecks that prevent EG from being sustained, but rather the lack of jobs in the labour market. Even if workers are imbued with the right attitude and aptitude / receptive towards training and are indeed successfully trained, if gloomy outlook still persists, EG will still not ↑.

(ii) For productivity and innovation: apart from the uncertainty in achieving breakthrough in research (hence ineffective in ↑ EG), in view of **gloomy outlook** → ↓ incomes → consumers still lack the ability to purchase the g&s despite being relatively cheaper (process innovation) and better (product innovation) → ineffective in ↑ EG

(iii) For all the 3 aspects:
   - Involve large amounts of govt expenditure → in view of gloomy outlook where govts' budget become tighter, countries may be less able to implement such interventionist SS-side policies as they lack the financial means to do so →˙may inject lesser funding → less effective in ↑ EG. This is especially so for countries with high govt debt e.g. PIIGS in the euro area → unable to ↑ EG via this policy.
   - In view of current **gloomy outlook**, since interventionist SS-side policies involve long time lags to generate the expected productivity growth → ineffective in ↑ EG in the short run, it may not be apt for govts to implement such policies alone, because the recession may deepen into a depression.

Explain how demand management policies ↑ EG <explain with AD/AS diagram>

(i) Expansionary F/P → e.g. US, Japan govt spend on welfare pay-outs and UN benefits → ↑ households' disposable income → ↑ in C → ↑ AD → ↑ actual EG

(ii) Expansionary M/P → e.g. ↑ money supply to ↓ i/r → explain how ↓ i/r leads to ↑ C and ↑ I → ↑ AD → ↑ actual EG

(iii) Expansionary M/P (SG context) → depreciate S$ via the sale of S$ by MAS → ↑ price competitiveness of SG exports relative to other foreign goods. As S$ depreciates against foreign $, prices of SG's X ↓ in foreign $ terms, while prices of M ↑ in S$. Marshall-Lerner condition (sum of price elasticities of demand for X and M exceed one) will hold true, since the demand for SG's X are price elastic due to the many available substitutes in the global market → S$ depreciation induces sufficiently large changes of X and M in the opposite direction such that X revenue ↑ relative to M expenditure → BOT improves. Also, ↑ import prices induce local consumers to switch to domestic g&s and assuming close substitutability between imports and domestically produced g&s → large ↑ in C_D. Coupled with BOT improvement → ↑ in AD → ↑ actual EG

Suggested Answers

Limitations of demand management policies in spurring EG

In general, the effectiveness of all demand management policies depends on the:

(i) prevailing economic conditions / outlook → in times of **gloomy outlook**, welfare pay-outs or transfer payments (for exp. F/P) is less effective in stimulating spending by lower income households. Similarly, ↓ i/r is also less effective in stimulating consumers' spending and investments. Correspondingly, despite ER depreciation causing X to be relatively cheaper, foreigners still lack the purchasing power due to ↓ incomes → ineffective in stimulating EG, because of limited ↑ X. Faced with an impending recession, there is a loss of consumer and investor confidence. Households are less willing to spend their additional disposable income, preferring to ↑ precautionary savings. Likewise, the expected rate of return on investment remains depressed and a cut in i/r rate might not be sufficient to incentivise local firms to ↑ I. As such, demand-management policies are likely to be ineffective in stimulating EG.

(ii) relative share of the different AD components, which in turn could also be influenced by the characteristics of the economy. For small and open economies (large and less open economies), expansionary M/P centred on ER (i/r) could be more effective than expansionary F/P in stimulating actual EG, since the respective policies target largest components that contribute to AD for the respective types of economies → overall ↑ in AD is larger. G is often one of the smaller, if not the smallest component of AD.
   ⇨ In SG's case, G is about 5% the size of X. A small ↓ in X e.g. by 10% will require a doubling of the govt's spending to counter the effects, but ↑ in govt spending of such magnitude is unfeasible → expansionary F/P is likely to be ineffective in ↑ EG. However, in times of **gloomy outlook**, some cushioning is better than no cushioning at all to mitigate ↓ in EG.

Candidates can also explain on the specific limitations of individual demand management policy, for instance,
- For expansionary F/P: crowding out effect (but may be less applicable in times of **gloomy outlook** where the govt is spending on behalf of consumers and investors)
- For expansionary M/P centred on i/r: interest inelasticity of C and I
- For ER depreciation and protectionism: in view of **gloomy outlook** → similar retaliatory measures of currency depreciation or tariffs undertaken by other govts → worsen EG. E.g. currency war during the Global Financial Crisis when competitive devaluations occurred

Evaluation → which is the 'best' policy to spur EG?

Consider prevailing economic conditions → in times of **gloomy outlook**,
- Many policies are likely to be ineffective, it is better for the govt to use a combination of policies to complement each other so as to ↑ overall effectiveness in ↑ EG → no 1 single best policy
- Some policies are likely to be faced with backlash and thus backfire → e.g. market-oriented SS-side policies such as flexible labour policies, privatisation etc. may result in huge resistance from the population (labour union members receive lesser incomes and some workers may be structurally unemployed because of restructuring due to privatisation) → strikes and riots may ensue which could further worsen the poor economic outlook situation
- Better to adopt policies with a shorter time lag so as to avert a deep recession that may end up being a depression. Some policies have a longer gestation period than others e.g. interventionist SS-side policies usually have a much longer gestation period than market-oriented SS-side policies and demand management policies → to ↑ EG in the SR, the govt should consider adopting the latter policies instead

- Choose the right type of policy that addresses the root cause: if the economy is facing stagflation (a situation with inflation and UN). If the AS curve shifts upwards ($\downarrow$) due to $\uparrow$ in unit COP (e.g. food price inflation in the early part of 2008) $\rightarrow$ $\uparrow$ in GPL and $\downarrow$ EG. Stagflation cannot be solved via demand-management policies as policymakers will be caught in a conundrum: $\uparrow$ AD to $\uparrow$ EG but worsen inflation, or combat inflation by $\downarrow$ AD but worsen EG? $\rightarrow$ SS-side policies are preferred as it could be one of the few tools left.

Consider country's context in terms of the following:
- budget / fiscal position $\rightarrow$ does the country have sufficient funds to implement the policy, especially since during times of gloomy outlook, govts have a tighter budget? For e.g. interventionist SS-side policies and expansionary F/P requires govt expenditure, unlike market-oriented SS-side policies and expansionary M/P
- monetary policy trilemma / impossible trinity: economies in monetary union do not have an independent M/P $\rightarrow$ each country is unable to alter i/r or ER on its own to $\uparrow$ EG
    <Exemplification> Portugal, Italy, Ireland Greece and Spain (PIIGS) are members of the Eurozone. Without their own currency, these countries cannot rely on monetary policy. Similarly, policies such as exchange-rate depreciation which may induce an increase in AD are out of the question in view of the common currency in the EU. Fiscal policy is also severely limited by high levels of sovereign debt in addition to the fact that the IMF has forced these countries to undertake contractionary fiscal policy. Since demand-management policies have lost their effectiveness, supply-side policies are preferred as it is among the last available tools.
- characteristics of the economy in terms of its size and openness $\rightarrow$ influence size of k. SG or Hong Kong (HK) has a small k size due to its openness to import flows and lack of natural resources $\rightarrow$ high MPM. In contrast, large and less open economy like US, UK and Japan have comparatively larger k size. The smaller the k size, the more ineffective demand management policies are in stimulating EG, since the overall $\uparrow$ in AD is smaller. As such, small and open economies may have to adopt more of SS-side policies that do not work through the k process or adopt expansionary F/P but with a SS-side bias $\rightarrow$ overcome the limitation of small k $\rightarrow$ $\uparrow$ effectiveness in $\uparrow$ EG

Consider SR vs LR $\rightarrow$ in the long run, SS-side policies are preferred as it is compatible with the government's macro objectives

L3 9 – 11	- Well-developed discussion of all 3 types of policies to spur EG - Analysis is supported with the use and explanation of economic framework - Use of relevant real world examples - Application to the context of gloomy outlook
L2 6 – 8	- Balanced approach → thesis and anti-thesis - Lacks breadth (addresses only 2 types of policies) or lacks depth (undeveloped explanation / lacks rigour in analysis despite some use of economic framework) - Max 8m – if answer discusses only 2 types of policies → 1 must be market-oriented SS-side policies - Some use of relevant examples - Limitations of policies may go off-track e.g. side effects / trade-offs in other goals instead of focussing on EG - Limited application to the context of gloomy outlook
L1 1 – 5	- Mere descriptive knowledge of market-oriented SS-side policies or largely irrelevant answer that focuses on other macroeconomic goals instead of EG - Does not consider other types of policies - Limited use of relevant examples
E2 3 – 4	- Reasoned judgement on the best policy to spur EG in view of a gloomy outlook, supported with economic analysis → e.g. shows some comparison of the different types of policies or any other relevant evaluative argument
E1 1 – 2	- Unsubstantiated stand on the best policy to spur EG in view of a gloomy outlook

Suggested Answers

5 (a) Explain the economic factors that affect domestic and foreign investments into a country. [8]

(b) Assess the view that governments should prioritise low unemployment over the achievement of other macroeconomic goals. [17]

Domestic and foreign investments are incentivised by profit motive, i.e. influenced by factors affecting revenue and costs. Factors that affect both domestic and foreign investments are:

(i) Government policies that **influence revenue or cost**, e.g.
- microeconomic policies such as indirect taxes (subsidies) → ↑ (↓) firms' **marginal cost of production** respectively → ↓ (↑) firms' profits respectively → ↓ (↑) investment
- macroeconomic policies such as expansionary demand management policies that aim to ↑ EG → ↑ firms' revenue due to ↑ demand for g&s → ↑ **expected ROR on I** <explain with MEI graph – see below>
- macroeconomic policies such as ↓ corporate income taxes (CIT) e.g. Singapore ↓ CIT from 20% (2005 to 2007) to 18% (2008 to 2009) then to 17% (from 2010 onwards)[5] → ↑ firms' **post-tax profits**

(ii) Prevailing economic conditions that **influence firms' expected ROR on I**
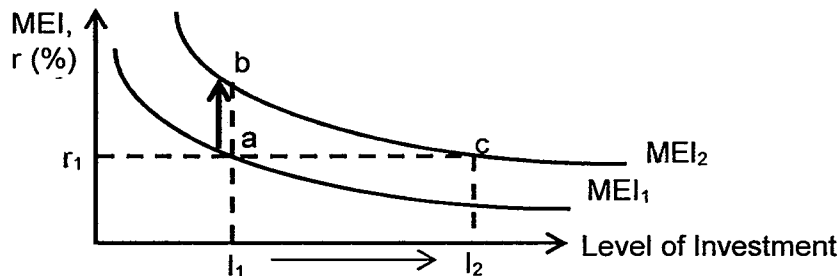
E.g. Vietnam's relatively strong EG between 1991 and 2010 averaged 7.5% each year and, despite the many difficulties the country faced between 2011 and 2013, GDP growth still rose by 5.6%[6] → ↑ foreign I inflows due to ↑ MEI from MEI_1 to MEI_2. At investment of I_1, the last dollar invested now yields a higher rate of return bI_1. Holding interest rate unchanged at r_1, for each additional unit of investment between I_1 and I_2, the returns from investment exceed the interest rate r_1, and the area abc shows the expected net return for investment between I_1 and I_2. By the marginalist principle, firms will ↑ investment up till I_2, whereby the rate of return (cI_2) = interest rate r_1.

(iii) External economic environment / conditions → such as:
- ↓ **MEI** in the event of global recessions → footloose MNCs pull out and ↓ domestic I
- other countries offer better investment conditions e.g. relatively lower **labour costs** in developing countries than developed countries → offshoring to developing countries

Factors that affect domestic investments include monetary policy that affects interest rate → e.g. US central bank, FED tightens monetary policy → ↑ i/r → ↑ **cost of borrowing** relative to expected ROR on I <can explain with MEI graph> ↓ incentive to take up loans to undertake investment projects as it is costlier to finance the loan → ↓ domestic investments.

* Accept any plausible answer as long as candidate addresses question

[5] https://www.iras.gov.sg/irashome/Businesses/Companies/Learning-the-basics-of-Corporate-Income-Tax/Corporate-Tax-Rates--Corporate-Income-Tax-Rebates--Tax-Exemption-Schemes-and-SME-Cash-Grant
[6] https://www.weforum.org/agenda/2014/05/foreign-investment-booming-vietnam

L3 6 – 8	- Well-developed analysis of at least 2 economic factors that covers both breadth (domestic AND foreign investments OR revenue AND costs) and depth - Analysis is supported with the use and explanation of economic framework - Use of relevant real world examples in analysis
L2 4 – 5	- Lacks breadth (addresses only 1 aspect → domestic or foreign investments OR revenue or costs) or lacks depth (undeveloped explanation / lacks rigour in analysis despite some use of economic framework) - Uses economic framework in answer but lacks rigour in explanation - Limited use of real world examples
L1 1 – 3	- Mere listing of the factors or largely irrelevant answer e.g. non-economic factors - Lacks economic framework in answer - Lacks real world examples in analysis

Assess the view that governments should prioritise low unemployment over the achievement of other macroeconomic goals. **[17]**

The 4 macroeconomic goals are: low unemployment, sustained economic growth and healthy balance of payments. Low unemployment is often considered to be achieved when unemployment rate is at 2 – 3%.

> **Thesis: it is important for govts to achieve low unemployment due to the benefits of low UN / costs of high UN and the pursuit of low UN helps to attain other macroeconomic goals at the same time**

(i) Pursuing low unemployment helps to prevent / avoid the issue of:
- ↓ **material SOL**: low UN → workers receive factor incomes → able to buy g&s to satisfy their needs and wants → derive utility
- ↓ **material SOL** and **loss of potential national output** that could have been gained: when an economy experiences UN, it is producing within the boundary of PPF → economy's actual output < potential output → under-utilisation of resources / idle resources → loss of potential output and productive inefficiency. High UN → economy loses a large amount of output → opportunity cost to society (loss of economic welfare) since smaller output means fewer needs and wants can be satisfied → ↓ SOL
- ↓ **non-material SOL**:
  ➢ low UN → able to pay for better quality education, healthcare → improves wellbeing
  ➢ high UN → the longer each individual is out of work, the greater the loss in self-esteem → depression → worsens health → worsens wellbeing
  ➢ high UN → ↑ social costs in the form of crimes
- **hysteresis**: prolonged recession → longer-term UN discourages workers from job search (lose motivation), accelerates skills loss → some may end up leaving the labour market prematurely → erosion of work skills and other important attributes → in the long run, productivity ↓ and the PPF shift inwards → ↓ **potential EG**
- **worsening fiscal / budget position**: with greater UN → govt loses tax revenue and ↑ govt spending in terms of administrative costs of running welfare programmes esp. in countries which give out UN benefits

(ii) Pursuing low unemployment **enables other macroeconomic goals to be achieved**.

Low demand-deficient UN → achieves the other macroeconomic goals
- ↓ demand-deficient UN → workers receive factor incomes → ↑ purchasing power → ↑ demand for g&s → ↑ C → ↑ AD from AD_1 to AD_2 → firms deplete inventories (unplanned disinvestments) and then step up production in the next production cycle → ↑ real national output from Y_1 to Y_2 → ↑ **actual EG**

Suggested Answers
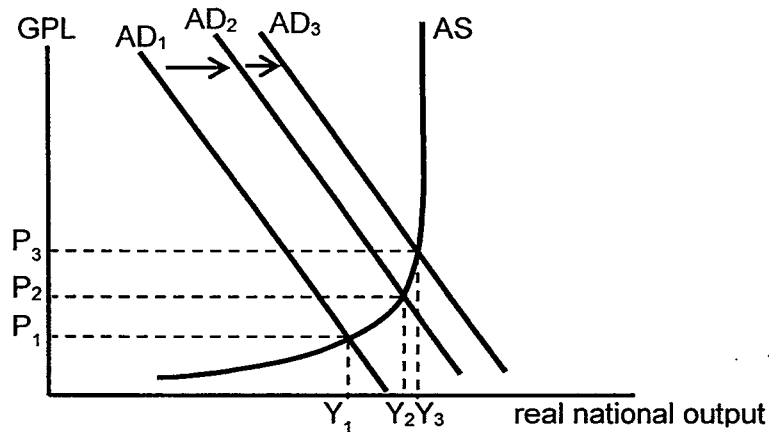
EV: depends on whether the economy is operating with or without existence of spare capacity, i.e. as the economy reaches full employment, real output can ↑ only by a smaller extent (Y_2 to Y_3) → smaller ↑ in **actual EG**

- From above, keeping demand-deficient UN low → maintain consumers' confidence and the ↑ actual EG helps to ↑ investors' confidence → acquisition of capital goods → ↑ capital accumulation and productivity gains → ↑AS → allows economy to continue to achieve sustained / **non-inflationary EG** <explain with AD/AS graph>; ↑ foreign I inflows → improves financial account → **improves BOP**

Low structural UN → achieves the other macroeconomic goals
- Structural UN occurs when economy faces structural change and workers laid off due to redundancy are unable to gain employment in other industries due to geographical or occupational immobility.
- The pursuit of low structural UN via govt expenditure (G) on education, training and retraining → ↑ employability and labour productivity → ↓ unit cost of production → ↑ AS + ↑ AD due to ↑ G → improves **actual EG**. Also, improvement in quality of workers → **non-inflationary EG** (contributing to **sustained economic growth** and **low inflation**). In addition, it allows economy to gain greater export competitiveness in new industries → **improves BOP.**

Anti-Thesis: governments should not prioritise low unemployment over the achievement of other macroeconomic goals due to its trade-off with other macroeconomic goals and the importance of achieving other macroeconomic goals
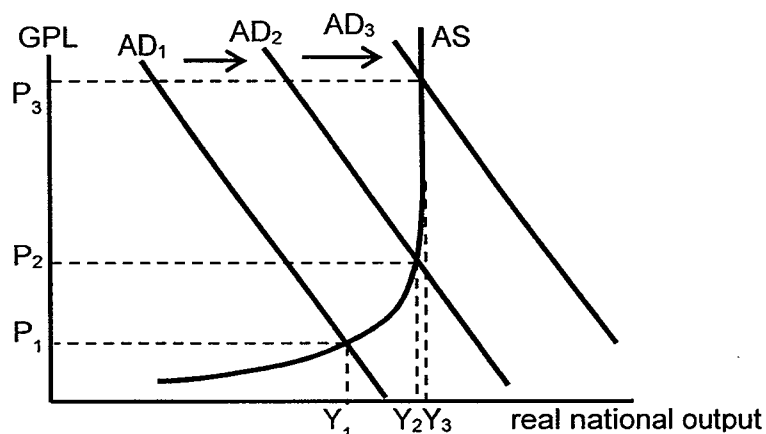

(i) Conflict / trade-off with other macroeconomic goals

- Prioritise low demand-deficient UN regardless of existence of spare capacity → ↑ **demand-pull inflation** if economy is operating near full employment, due to acute shortage of FOPs → intense competition for FOPs bids up factor prices → ↑ unit COP → firms pass on as ↑ prices to consumers → sharp ↑ GPL from P_2 to P_3 (instead of P_1 to P_2 when more idle resources are available, despite the same magnitude of ↑ in AD) <Example: China's overheated economy stoked fear of inflation in 2011>[7]

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[7] http://www.nytimes.com/2011/04/16/business/global/16yuan.html?_r=0 and
http://www.independent.co.uk/news/business/news/chinas-overheating-economy-stokes-fears-for-global-inflation-2190283.html

Suggested Answers

- Prioritise low demand-deficient UN → **worsens BOP**: ↓ UN → ↑ income → ↑ demand for imports → ↑ import expenditure → worsens BOT
- From above → inflation erodes export competitiveness → ↓ X revenue assuming price elastic demand for X. Also, demand for M ↑ as they are relatively cheaper than domestic goods, assuming M and domestic goods are close substitutes. As such, BOT worsens. Also inflation → investors find it difficult to predict future streams of revenue and costs with certainty → ↑ risks of investments → deters foreign I → worsens financial account → **worsens BOP**

(ii) Importance of achieving other macroeconomic goals, due to their benefits
- Low inflation may help to achieve EG, low UN and healthy BOP <explain>
- Non-inflationary EG → achieves low UN and healthy BOP <explain>
- Healthy BOP → accumulates foreign reserves → maintains ER stability → curbs imported inflation while preventing loss of X competitiveness to achieve EG and low UN (e.g. SG modest and gradual appreciation over the years) <explain>

Point Evaluation: achieving EG may not necessarily lead to lower UN →
- Despite ↑ in job vacancies due to ↑ EG, the unemployed workers may lack the skills needed for the jobs (occupational immobility). There is thus a mismatch of skills and opportunities due to the structure of the economy changing → structural UN
- Productivity-driven growth achieved via automation / mechanisation (for mass production manufacturing) → jobless growth since less labour as a derived demand will be employed → ↑ UN

Evaluation → whether govts should prioritise low UN over the achievement of other macroeconomic goals depends on:

- Prevailing economic conditions → to consider the duration and severity
  ➢ E.g. for the case of European economies that are facing recession, with some facing deeper and more prolonged recession than others → govts ought to tackle the problem of ↑ UN first to restore consumer and investor confidence.
  ➢ If country is facing hyperinflation (e.g. Zimbabwe) → govt should prioritise the problem of inflation over the other goals first

- Characteristics of economy → to consider size and openness
  ➢ Small, open and resource-scarce economies rely on export-driven growth and foreign I. Thus it is relatively more important for such economies (compared to those which are bigger, relatively less open and have more resources to rely on) to ensure domestic price levels are stable to prevent loss of X competitiveness and foreign I inflows.
  ➢ For small, open and resource-scarce economies, domestic price stability is likely to be the pre-requisite before other macro aims can be achieved → failure to keep domestic

price levels stable or being constantly subjected to erratic fluctuations in price will prevent the other macro aims from being achieved.

In general, if the economy is doing well with no major crisis, sustainable EG should be the macroeconomic priority of the govt because achieving sustainable EG is complementary with other macroeconomic goals.

L3 10 – 13	- Balanced approach, with thesis and anti-thesis + both breadth and depth - Well-developed discussion of why govts should and should not achieve low unemployment, covering both demand-deficient (cyclical) and structural UN + at least 2 other macroeconomic goals (1 of which must include healthy BOP) - Analysis is supported with the use and explanation of economic framework - Use of relevant real world examples - Max 11m – if answer fails to analyse the external goal of healthy BOP
L2 6 – 9	- Balanced approach → thesis and anti-thesis - Lacks breadth (addresses only 1 type of UN or 1 other macroeconomic goal or fails to analyse healthy BOP) or lacks depth (undeveloped explanation / lacks rigour in analysis despite some use of economic framework) - Max 9m – if answer discusses only 2 macroeconomic goals → 1 must be low UN - Some use of relevant examples
L1 1 – 5	- Mere descriptive knowledge why govts should achieve low unemployment OR why govts should achieve other goals - Lacks the use of economic framework in analysis - Limited use of relevant examples
E2 3 – 4	- Reasoned judgement on whether govts should prioritise low unemployment over the achievement of other macroeconomic goals, supported with economic analysis based on well-explained criteria
E1 1 – 2	- Unsubstantiated stand on whether govts should prioritise low unemployment over the achievement of other macroeconomic goals

6 Globalisation brings about trade-offs between governments' economic objectives. In view of these trade-offs, discuss whether economies should continue to embrace globalisation. **[25]**

Globalisation is the increasing integration of economies around the world, particularly through the movement of goods, services, capital, people (labour) and knowledge (technology) across international borders. Globalisation brings about many challenges and opportunities for all economies.

What comes with globalisation?
- ↑ in international trade at a much faster rate
- ↑ in international flow of capital
- ↑ in movement of labour across boundaries
- ↑ in international outsourcing and offshoring by multinational corporations (MNCs)

Trade-offs between govts' economic objectives as a result of globalisation

(1) Globalisation allows small and open economies to achieve greater EG, lower UN and improvement in BOP, but could lead to greater demand-pull inflation

TRADE FLOWS
- Globalisation → ↓ trade barriers → ↑ access to foreign markets for X → ↑ DD for X → ↑ AD → via the multiplier effect → further ↑ income-induced consumption → AD and NY ↑ even more → ↑ actual EG and ↓ UN <explain with use of AD/AS>
- ↑ DD for X → ↑ export revenue → improves BOT (assume ↑ import expenditure is smaller) → improves BOP
- Especially pertinent for small and open economies like Singapore and Hong Kong which are limited by their small domestic market sizes, without globalisation, their economies are less able to achieve high EG, low UN and healthy BOP.

However, the above analysis assumes that the economy operates with existence of spare capacity / idle resources available. As AD ↑ → more resources are being utilised and economy operates closer to full employment level → ↑ shortage of FOPs → intense competition for FOPs → bids up factor prices → ↑ firms' unit COP → firms pass on as ↑ prices to consumers → sharp ↑ GPL from P_2 to P_3 (instead of P_1 to P_2 when more idle resources are available, despite the same magnitude of ↑ in AD)
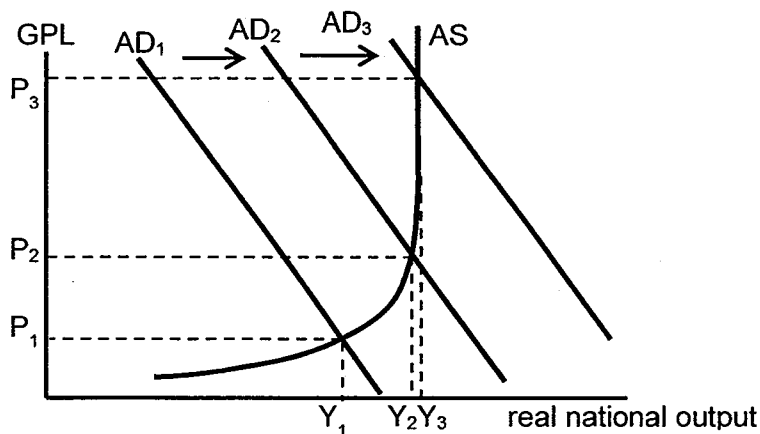
(2) Globalisation allows developed countries (DCs) to achieve lower UN in industries that it has CA in but could lead to structural unemployment in industries that it has lost its CA & widening income gap

<u>TRADE FLOWS</u>
- Globalisation → specialisation based on comparative advantage (CA), DCs e.g. US produce goods that they incur lower opportunity costs than trading partners and export them in exchange for goods that they incur relatively higher opportunity costs than trading partners, i.e. import goods that they lack CA in from trading partners e.g. Vietnam
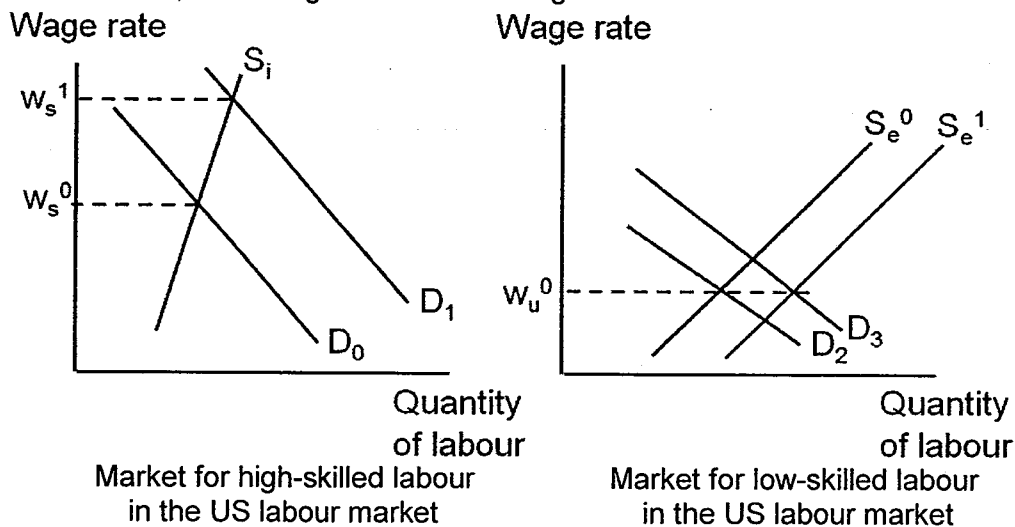<Exemplification>
- US incurs lower opportunity costs in the production of higher-end value-added knowledge-intensive and capital-intensive g&s such as aircraft, integrated circuits, non-electrical machinery[8] (compared to Vietnam).
- Vietnam incurs lower opportunity costs in the production of lower-end land- and labour-intensive g&s such as rice compared to US.
- This is due to US' factor endowment in high-skilled labour and technology (that Vietnam lacks in) as well as Vietnam's abundance in low cost low-skilled labour and land, in which US lacks such factor endowment respectively.
- Via specialisation and trade in the respective goods in the different countries → stimulate X → ↓ UN in the exporting industries of the 2 countries (aircraft industry in US and rice industry in Vietnam)
As a result of globalisation that may lead to rapid economic changes → DCs e.g. US are likely to face UN in the sunset industries that have lost CA in the production of labour-intensive goods like rice to low cost competitor, Vietnam. This is because low-skilled workers in the US textiles industry are unable to move into growing / sunrise industries (e.g. aircraft) due to a mismatch of skills between the 2 different industries → occupational immobility as farmers are not equipped with the relevant skills to make an aircraft → ↑ structural UN in US

<u>LABOUR FLOWS</u>
- Globalisation → ↑ labour mobility due to ↓ foreign labour restrictions → ↑ SS of low-skilled workers in DCs (US) due to influx of low-skilled workers from the developing countries
- From the above aboe, in the US, high-skilled workers e.g. aircraft technicians → ↑ derived demand for their services, but low-skilled workers e.g. farmers → slower ↑ derived demand for their services → sharp ↑ wages for aircraft technicians as SS is inelastic in the short run, as they need undergo many years of education and training before being certified as a qualified technician, while wages for farmers stagnate.

Market for high-skilled labour
in the US labour market

Market for low-skilled labour
in the US labour market

[8] http://global.oup.com/us/companion.websites/9780199397129/student/chapt7/pdf/ch7.pdf

- DD for high-skilled labour ↑ from D_0 to D_1. However, the long period of training involved in acquiring the specialised skills means that SS of high-skilled workers tends to be inelastic in the short run. With an inelastic supply S_i, the shortage created by the ↑ in demand requires a sharper ↑ in wage (W_s^0 to W_s^1) for quantity supplied to ↑ sufficiently for the labour market to clear.
- In contrast to high-skilled labour, the SS of low-skilled labour is more elastic – without any special training required, quantity supplied of such workers can be ↑ readily in response to wage ↑. Demand for low-skilled labour experiences a smaller ↑ (from D_2 to D_3). Coupled with ↑ in supply (from S_e^0 to S_e^1) following the influx of migrant workers from developing countries, wages of low-skilled workers stagnate at W_u^0.
  The sharply ↑ wages of the high-skilled workers contrasts with the stagnating wages of the low-skilled workers leads to a widening of income gap in many developed countries.

(3) Globalisation achieves greater efficiency but could lead to worsening structural UN and BOP and widening income gap in DCs

TRADE FLOWS AND CAPITAL FLOWS
- Globalisation → ↓ trade barriers → influx of cheap imports of manufactured goods into DCs e.g. clothing, shoes and bags → such industries in DCs are unable to compete with these developing countries → inefficient industries shut down → frees up resources that can be better allocated to other productive uses → improves allocative efficiency
- Furthermore, with ↑ competition from imports (and foreign firms due to ↓ investment barriers) → ↑ market contestability → firms are likely to ↓ X-inefficiency thus ↑ productive efficiency, as well as engage in process and product innovation that ↑ dynamic efficiency   .

However, as a result of ↑ competition → shut down of inefficient firms → ↑ structural UN, since displaced workers do not possess the relevant skills to move into the sunrise industries which are likely to be knowledge and capital intensive, for e.g. finance and biotechnology → ↑ income inequality

CAPITAL FLOWS
- Globalisation → ↓ investment barriers → offshoring and outsourcing → more operations hollowing out of DCs into developing countries (for e.g. call centres in India and iPhone manufacturing in China) → shut down of these low-end industries in DCs → frees up resources from these low-end industries that DCs lose CA in to be reallocated towards high-end industries that DCs possess CA in → improves allocative efficiency
- However, workers in the low-end industries end up being structurally in DCs.
- Also, with foreign investment outflows → worsens financial account → worsens BOP

(4) Globalisation achieves greater EG, lower UN and improves BOP but could lead to increase in allocative inefficiency in developing countries

TRADE FLOWS AND CAPITAL FLOWS
- Globalisation → ↓ trade and investment barriers → ↑ X and offshoring to developing countries e.g. China → ↑ AD in the SR and ↑ AS in the LR → ↑ actual EG and ↓ demand-deficient UN via the multiplier effect in the SR as well as non-inflationary EG in LR <explain with use of AD/AS diagram>.
- Also ↑ X revenue and ↑ foreign investment inflows improve current and financial account respectively → improves BOP

However, ↑ X and offshoring → production way beyond socially optimal output levels → ↑ negative externalities, especially since they usually lack strict environmental regulations →

worsens allocative inefficiency → especially true for the case of China <explain with use of market failure diagram>

Despite trade-offs, economies should still continue to embrace globalisation as govts can implement policies to mitigate the trade-offs → benefits of globalisation outweigh costs (choose 1 or 2 policies)

Policies	Comments
<u>Contractionary demand-management policies to mitigate demand-pull inflation</u> Govts can implement contractionary demand-management policies <explain how policies work> to dampen the ↑ in AD due to globalisation. As AD ↑ by smaller extent → less intense competition for FOPs → smaller ↑ GPL <explain with use of AD/AS diagram>	<u>Contractionary demand-management policies → ineffective in ↓ demand-pull inflation</u> - Strong EG → strong consumers' and investors' confidence. Thus, despite ↑ i/r or ↑ taxes → small ↓ C and ↓ I → small ↓ in AD → small ↓ in demand-pull inflation <u>Contractionary demand-management policies → more adverse unintended consequences</u> - Time lags that may further destabilise the economy when economy slips into recession because of vulnerability to external shocks due to globalisation
<u>Protectionism and interventionist SS-side policies to mitigate structural UN</u> - In the SR, govts in DCs may need to protect their sunset industries via use of tariffs <explain with tariff diagram> and concurrently retrain these workers to equip them with the relevant skills to work in sunrise industries that the DC has CA in. - The protectionism policy 'buys time' for the workers to trained, as training takes time. - Via the use of interventionist SS-side policies (retraining of workers) → better match of skills and jobs available, while speeding up restructuring of the economy. - Ensures that structural unemployment is ↓ when the DC undergoes restructuring process.	<u>Protectionism → more adverse unintended consequences</u> - Protectionism → beggar-thy-neighbour policy → tit-for-tat retaliation which may bring about even more adverse consequences via reverse multiplier effect → all-round economic stagnation <u>Training → ineffective in ↓ structural UN and ↓ income inequality</u> - Uncertainty in the effectiveness of training programmes as they depend largely on the attitude and aptitude / receptiveness of the workers. Training could still be ineffective if workers are slow in learning or are still unable to apply the skills after they have undergone the training programme - Also depends on the literacy rate of the low-skilled workers - If there is only one sole breadwinner for the family, during the course of training, the family may have to live on savings as there is no income received. Thus, employees may not be willing to take up the training course. - Esp. since training takes time to be completed → ↑ reluctance of the unemployed to go for training. - Long gestation → policy will likely be ineffective in the SR
<u>Training of low-skilled workers to mitigate widening income inequality</u> - To solve the root cause of the problem due to lack of relevant skills in the growing industries, preventing them from moving into these industries to earn higher incomes → govts should raise public awareness of the benefits of upgrading their skills to encourage workers to voluntarily attend training courses	
<u>Progressive income taxes and transfer – payments to low income workers to mitigate widening income inequality</u> - E.g. US's PIT is progressive, i.e. higher income earners pay a proportionately higher tax, while the lowest income workers	<u>Redistributive policies → more adverse unintended consequences</u> - Such redistributive policies → disincentive to work and save → discourages work effort and may cause high-skilled workers to move to other DCs with much lower PIT that leads to brain

do not pay any income tax → ↓ disposable income (Y_d) of high-income earners by a greater extent. The highest income earner pays PIT of 39.6%. - Transfer payments to low-income workers → helps to ↑ Y_d of low-income earners - Together → ↓ (↑) Y_d of high-income (low-income) earners → ↓ income gap	drain → ↓ productivity → hinders potential EG - In order to minimise the moral hazard associated with unconditional transfers to the poor, Singapore has adopted a *Workfare* model that *ties govt transfers to work* instead of a *Welfare* model. Working as a negative income tax, *Workfare* benefits are targeted at low-wage workers.
<u>Pigouvian taxes to ↓ allocative inefficiency</u> - Govts in developing countries can impose pigouvian taxes to force firms to internalise the MEC of over-production by ↑ MPC → ↓ production to socially optimal output level → ↓ allocative inefficiency <explain with graph>	<u>Pigouvian taxes → ineffective in ↓ allocative inefficiency</u> - Imperfect information about the monetary value of the MEC → underestimation by the govt does not fully correct the problem <u>Pigouvian taxes → more adverse unintended consequences</u> - Imperfect information about the monetary value of the MEC → overestimation by the govt may even cause govt failure - Pigouvian taxes → ↓ firms' profits → potentially deter foreign I → hinder potential EG

Despite trade-offs, economies should still continue to embrace globalisation as the globalisation is also part of the solution to the problems it creates

- With inward investment + exposure of domestic firms to competition → increase factor quantity and quality → increase AS in the LR → relieve globalisation-related inflation
- Globalisation → countries gain access to green technology → reduce the negative externalities of globalisation-led growth

Despite trade-offs, economies should still continue to embrace globalisation, just that they should do so selectively

Examples? Justification?

Evaluation → whether economies should continue to embrace globalisation depends on:
- Characteristics of economy → to consider size and openness
  - Small, open and resource-scarce economies are export-oriented and import-dependent. They rely a lot on X and foreign I to propel EG. Also, since they lack resources, they depend on imported raw materials and basic necessities to minimise inflation. Thus it is relatively more important for such economies (compared to those which are bigger, relatively less open and have more resources to rely on) to **embrace globalisation** due to the benefits of globalisation that are likely to outweigh the costs of globalisation, which could be mitigated with the use of policies.

- Ability of the govt to implement effective policies to mitigate the trade-offs in economic objectives due to globalisation, which could in turn be influenced by:
  - budget / fiscal position → does the country have sufficient funds to implement the policy e.g. retraining programmes to ↓ structural UN?
  - monetary policy trilemma / impossible trinity: economies in monetary union do not have an independent M/P → each country is unable to alter i/r or ER on its own → less able to ↓ DD-pull inflation

Suggested Answers

L3 15 – 21	- Balanced approach, with thesis and anti-thesis + both breadth and depth - Well-developed analysis how globalisation brings about trade-offs between govts' economic objectives AND discussion of why economies should or should not continue to embrace globalisation in view of trade-offs - Addresses all 3 aspects of globalisation and trade-offs in BOTH micro- and macro-economic objectives due to globalisation - Analysis is supported with the use and explanation of economic framework - Use of relevant real world examples - Max 19m – if answer fails to incorporate both micro- and macro-economic objectives OR if answer only incorporates the 2 aspects of globalisation – trade and capital flows
L2 10 – 14	- Balanced approach → thesis and anti-thesis - Lacks breadth (addresses only 2 aspects of globalisation OR trade-offs in macro-economic objectives only) or lacks depth (undeveloped explanation / lacks rigour in analysis despite use of economic framework) - Max 12m – if answer only addresses how globalisation brings about trade-offs between govts' economic objectives - Max 14m – if answer makes some incidental link to how globalisation brings about trade-offs between govts' economic objectives and then analyses why economies should or should not continue to embrace globalisation in view of trade-offs - Some use of relevant examples
L1 1 – 9	- Mere descriptive knowledge of how globalisation brings about trade-offs between governments' economic objectives OR largely irrelevant answer e.g. benefits and costs of globalisation but does not address how globalisation brings about trade-offs in govt economic objectives - 1-sided answer - Limited use of economic framework in analysis - Limited use of relevant examples
E2 3 – 4	- Reasoned judgement on whether govts should continue to embrace globalisation in view of the trade-offs in economic objectives due to globalisation, supported with economic analysis based on well-explained criteria
E1 1 – 2	- Unsubstantiated stand on whether govts should continue to embrace globalisation