

**H1 Economics
Tampines Junior College
Preliminary Examination
Suggested Answers**

Section A

Question 1 The Rise of Singapore's Integrated Resorts

Extract 1: As Casino Begins, Watch for its Social Impacts

From the inception of the idea for the first casino in 2004, it has met with much resistance among concerned citizens. Several groups, including the Muslim and Christian communities and social activists, expressed their disapproval to the casinos — a move that is both peculiar and noteworthy in apathetic Singapore society.

Despite public worries over the negative social impact of casino gambling as well as opening of doors to undesirable activities including money laundering, prostitution, and organised crime, Prime Minister Lee Hsien Loong announced in April 2005: 'After weighing the matter carefully, the Cabinet has collectively concluded that we had no choice but to proceed with the (Integrated Resorts) IRs.'

As a social safeguard to combat excessive gambling, the gambling levy was put in place, together with the setting up of the National Council on Problem Gambling and measures such as 'casino exclusion', to stop problem gamblers and those in financial difficulties from entering the casinos in Singapore.

Already, the crimes are rolling in along with the chips that the casino is raking in. It is inevitable. When you want to open something like a casino, you are really opening a can of worms. Hopefully, somehow, the money the casinos make and the shot in the arm for the tourism industry will be more than enough to cover the social costs. But how high a price can society afford to pay?

Adapted from www.globalissues.org, 9 March 2010

Extract 2: Sin Galore

Since opening last April the Marina Bay Sands (MBS) casino has become perhaps the most profitable in the world. Together with Resorts World Sentosa (RWS), another casino complex opened in Singapore and both are close to out-grossing the entire Las Vegas strip. Singapore seems to have gone from strait-laced container port to gambling mecca in one bound.

Yet no one is bragging about it. The entrance to the MBS casino is curiously hard to find, tucked away in the basement. Neither casino is advertised anywhere in Singapore. For decades Singapore's government resisted pressure to allow casinos at all, fearful of the crime and social ills they might breed. When it finally relented, it insisted that access to the casinos by Singaporeans should be controlled. Foreign tourists enter free but locals must pay a hefty S\$100. Also, the casinos must be part of larger entertainment complexes.

MBS, which is owned by America's Las Vegas Sands, markets itself as a business and convention centre. Its 57th-floor "skypod", which seems to balance precariously atop three curving towers, is widely admired. Its infinity "skypool" is now the go-to destination for starlets who wish to splash around in bikinis for the cameras. It also has the world's biggest ballroom and a perfectly humungous shopping centre. RWS, owned by Malaysia's Genting, projects itself as a family resort: it boasts a large Universal Studios set, as well as the obligatory fun rides.

An estimated 85-90% of the resorts' takings come from gambling. And those takings are sweet: Aaron Fischer, an analyst at CLSA, a broker, estimates that the two resorts raked in about \$5 billion in their first year—more than triple what some people expected. Mr Fischer predicts that this year they will take \$6.5 billion. That would be close to Las Vegas but well behind Macau, the only place in China where casinos are allowed, and which has more than 30.

Thanks to low corporate taxes—roughly 17% compared with Macau's 39%—Singapore's casinos are fabulously profitable. Mr Fischer reckons that RWS will earn \$2 billion this year, enough to pay back the costs of building the entire 47-hectare site in little more than two years. Between April and November last year the two resorts paid S\$420m in taxes. This year the island's economy is expected to grow by 6-7%, of which the resorts will account for a quarter.

Source: The Economist, 24 Feb 2011

Extract 3: One year On

Just one year after opening its first casino, Singapore has emerged as Asia's hottest new gambling capital with a revamped cityscape and billions of dollars pouring into the economy.

"Singapore has made a dramatic entry to the casino gaming market," financial consultancy PricewaterhouseCoopers said in a report estimating the city-state's casino gaming market at US\$2.8 billion (S\$3.57 billion) in 2010. The first casino opened in Malaysian-controlled Resorts World Sentosa on February 14, 2010, with US-based Las Vegas Sands following two months later as the world economy was still clawing itself out of recession.

Due to the casino complexes, tourist arrivals in Singapore last year hit 11.6 million, breaking by far the previous record of 10.3 million set in 2007. Most of the visitors came from the Asia-Pacific region, with mainland China, Australia, Indonesia and India together accounting for 53%. Tourist spending helped fuel Singapore's 14.7% gross domestic product (GDP) growth in 2010, making it Asia's fastest-growing economy, after a 1.3% contraction in 2009.

PricewaterhouseCoopers predicted that Singapore would overtake South Korea and Australia this year to become the second-largest Asia-Pacific casino market behind traditional leader Macau. "In 2011, with a full year's operation for both resorts, we expect revenues to reach US\$5.5 billion, growing to US\$8.3 billion by 2014," it said.

But the resorts have also created thousands of new jobs for Singaporeans, and tourists rave over non-gambling attractions like Universal Studios.

"Visitor arrivals have really come in stronger and I think that's a direct spinoff from having the IRs on shore," said Barclays Capital senior regional economist Leong Wai

Ho. The resorts were contributing in the region of 0.3 to 0.4 percent of GDP, with the potential for that to increase to 0.7 percent in the near future. "That's only when both casinos, both IRs are up and running fully, so we're not there yet actually. Contributions to date have been significant, but I think the potential is for more to come," he said.

Source: www.oneasianews.org, 13 February 2011

Table 1: Economic Indicators of Singapore

	2007	2008	2009	2010	2011	2012
GDP (At Current Market Prices, S\$million dollars)	268,062.2	269,658.1	274,655.3	315,921.2	334,092.7	345,560.5
GDP (At 2005 Market Prices, S\$million dollars)	247,218.4	251,538.9	249,559.8	286,446.7	301,228.4	305,201.5
Population (millions)	4.58	4.84	4.99	5.08	5.18	5.31
Inflation Rate (%)	2.1	6.6	0.6	2.8	5.2	4.6
Unemployment (%)	2.1	2.2	3.0	2.2	2.0	2.0

Source: Singapore Department of Statistics, 2012

Answers

- a) i) **Compare between the real and nominal GDP of Singapore from 2007 to 2012. [2]**

Note:

'At 2005 market prices' refers to real GDP.

'At current market prices' refers to nominal GDP.

Similarity: Both real GDP and nominal GDP have been facing an increasing trend from 2007 to 2012.

Difference:

Nominal GDP has been increasing at a faster rate compared to real GDP.

OR

Nominal GDP is consistently on a upward trend but real GDP faces a slight variation between 2007 to 2009 before continuing its upward trend.

- ii) **Describe the trend in real GDP per capita from 2007 to 2011.** [2]

Real GDP per capita = Real GDP / Population

	2007	2008	2009	2010	2011
Real GDP per capita	53,977.82	51,970.85	50,001.98	56,387.15	58,152.80

General Trend: Generally, real GDP per capita has been on an increasing trend from 2007 to 2011.

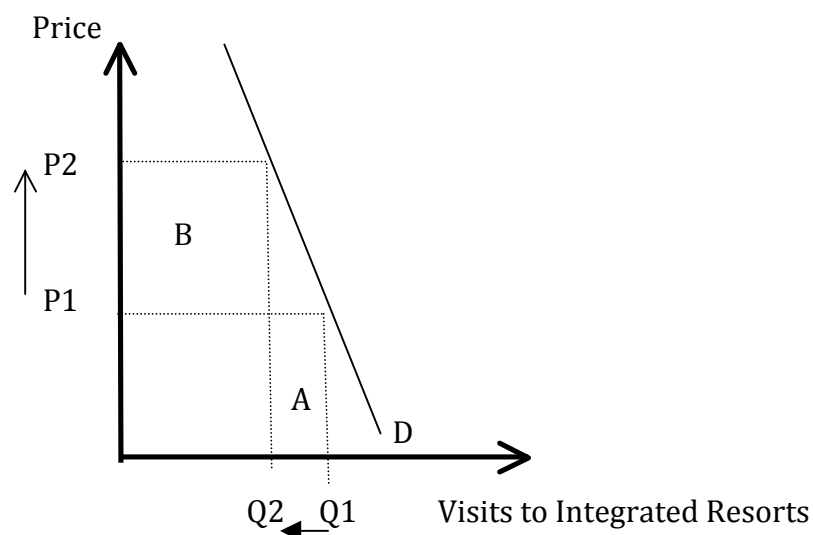
Refinement: Real GDP per capita has been falling from 2007 to 2009 before the reversal takes place.

- b) **How far can the concept of price elasticity of demand be used to explain the success of the operators of the Integrated Resorts in Singapore?** [6]

The success of the casinos operators in Singapore can be measured economically by the amount of profits they earn. The profits of the casino operators can be determined by Profits = Total Revenue – Total Costs.

The demand for Integrated Resorts is price inelastic as they position themselves to the tourists as a business, convention centre and a family resort as mentioned in Extract 2. To the tourists, the Integrated Resorts are a 'must see' attraction (necessity to the tourists) not to be missed.

Hence, to maximize total revenue, Integrated Resorts operators will raise their prices which will lead to a less than proportionate fall in the quantity demanded. The total revenue gained from the rise in price (Area B) more than offsets the total revenue loss (Area A) due to the fall in quantity demanded as shown in Figure 1 below.



Assuming total costs remaining constant, the rise in total revenue will lead to a rise in total profits, explaining the success of the Integrated Resorts.

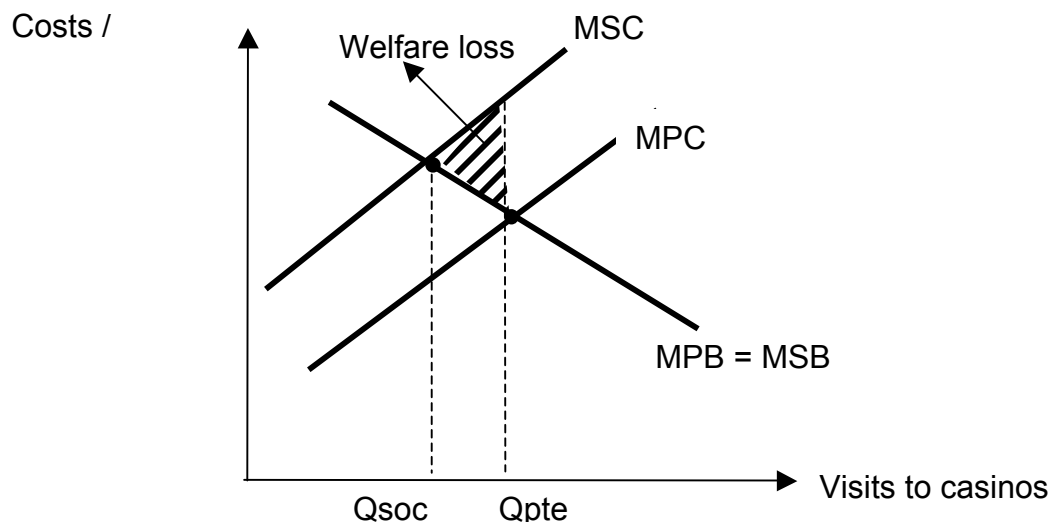
However, the pricing strategy alone is not the only contributor which explains the success of the Integrated Resorts. The recent improvement in the global economy has led to an increased income of the foreigners which makes them spend more into travelling and hence improving tourism into Singapore. With greater volume of tourists into Singapore, the increase in demand for visits to the Integrated Resorts have driven up the sales which led to higher total revenue and hence increased profits which is one of the other factors explaining the success of Integrated Resorts.

Thus, the concept of price elasticity of demand only explains the success of Integrated Resorts to a small extent. Though being one of the determinant to the success of the Integrated Resorts, price elasticity of demand is not the sole contributor to the rise in profits. The success of the Integrated Resorts is also contributed by the other factors that are in play such as the economic environment and government's policies.

- c) i) **With reference to Extract 1, explain how the effective working of the market mechanism is being hindered.** [4]

With reference to Extract 1, Para 2, the opening of the casino gambling has led to the unintended activities of money laundering, prostitution, and organised crime. Gambling generates negative externalities where social issues of broken families, violence upon others and robbery on innocent victims occur without any compensation made to them.

The effective working of the market mechanism is hindered (market has failed) as social efficiency is not achieved. With the presence of negative externalities, the marginal social cost is greater than the marginal private cost, as $MSC = MPC + \text{Marginal External Cost (MEC)}$.



In a free enterprise economy, private producers and consumers ignore external costs and produce at output level where $MPC = MPB$, achieving private efficiency. However, the socially optimal level of output is at Q_{soc} where $MSC = \text{Marginal Social Benefit (MSB)}$.

At Q_{pte} , MSC is greater than MSB . An additional visit to the casino adds more to social cost than to social benefit. As a result, price mechanism overallocates resources to the activity of gambling. Hence, there will be a welfare loss as shown by the shaded area and the market mechanism is hindered in efficiently allocating resources.

ii) Assess whether the policies mentioned in the extracts are adequate in reducing the welfare loss to society. [8]

Policies mentioned in extracts:

Thesis: Policies mentioned in extracts adequate to reduce welfare loss

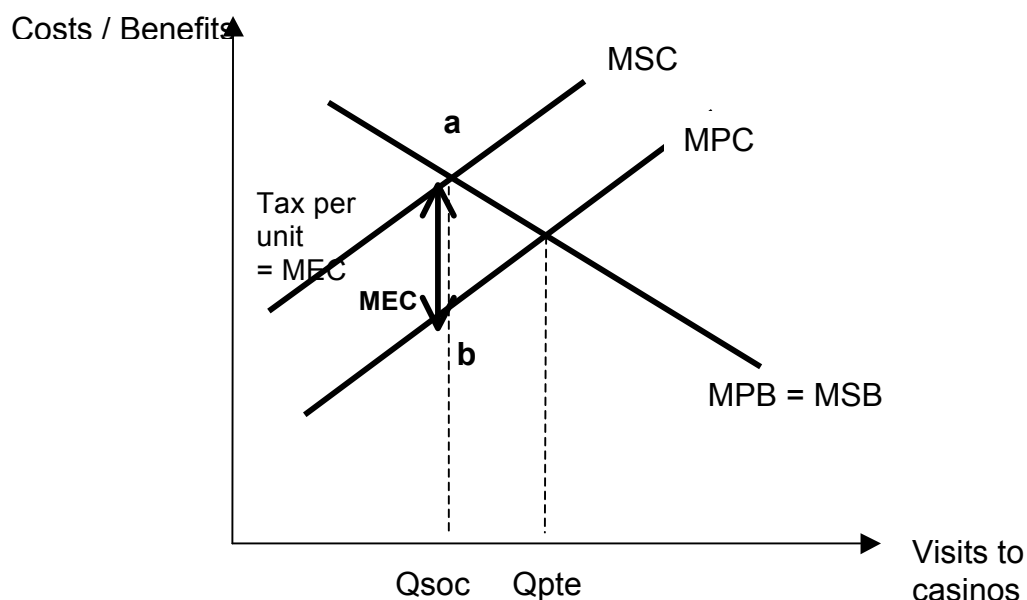
Note: Choose 2 policies from the extracts and elaborate

- Legislation → Casino Exclusion for problem gamblers & those with financial difficulties (Extract 1)

The government sets a criterion to exclude known problem gamblers from entering the casinos. Singaporeans with financial difficulties and earning lower incomes are restricted from entering. This will exclude a group of patrons into the casino which can help reduce the number of visits into the casinos to the social optimum level.

- Levy \$100 for Singaporeans (Extract 2)

This is done by placing a tax (levy) of \$100 per entry on Singaporeans to enter the casinos so as to increase the costs of the patrons. The tax is priced at Marginal External Cost (MEC) so as to correct the problem of welfare loss by forcing Singaporeans visiting the casinos to internalize their externalities.



Due to the tax which is priced at MEC at the socially optimum level, the Marginal Private Cost (MPC) curve would shift to the left from MPC to MSC and, due to the higher price, number of visits to the casinos will be reduced from Q_{pte} to the socially optimum level, Q_{soc} . Hence, this reduces the welfare loss.

However, there are many Singaporeans who may not feel that the \$100 levy is a significant amount as they are able to make use of their earnings in the casinos to offset the \$100 levy and hence may limit its effectiveness in deterring Singaporeans from entering the casinos.

- Legislation → Casino Exclusion - Credit checks and background check of Singaporeans entering the casinos (Extract 1)

Regulations should be made to ensure that only those who have a clean record and the ability to gamble are allowed into the casinos. More often than not, gamblers who are addicted to gambling and accumulated heavy debts are the main patrons into the casinos. Credit and background checks on Singaporeans who enter the casinos are to be enforced to prevent financially burdened gamblers into the casinos to reduce the risk of aggravating the financial debts of these group people.

However, it can be administratively challenging as the casinos will need to work with the banks and government to acquire the databases to enforce such checks on their patrons. The casinos will also need to employ and train more manpower to help conduct the checks and to prevent patrons who do not fulfill the requirements of the credit / background checks from entering the casinos.

- Legislation → No advertising to be done for casinos and for casinos to be part of the entertainment complex (Extract 2)

As the government does not encourage Singaporeans to visit the casinos, any form of advertising on the casinos are disallowed. This is to reduce the emphasis on the casinos. Furthermore, to reduce the awareness of the existence of the casinos, casinos will need to be part of the entertainment complex rather than a standalone. This helps to reduce its overall exposure and hopefully reduce the number of visits to the casinos to the optimal level.

Linking bridge to Anti-thesis (Evaluation)

The above mentioned policies only sufficient to act as a deterrence to reduce the possibility of Singaporeans visiting the casinos which will lead to the reduction in welfare loss.

However it is inadequate as it may not solve the root cause of the problem. Issues are more pertinent with compulsive gamblers and social awareness needed for the public / future generations to be aware of the social ills. Gamblers who are addicted to gambling may

not see the mentioned policies as a form of deterrence.

Anti-thesis: Policies mentioned in extracts inadequate to reduce welfare loss and hence proposing other solutions

Note: Suggest 1 policy and elaborate for anti-thesis

- Legislation → Age limit and restrictions to who can enter the casinos.

Entry to the casinos should be limited only to adults at the age of 21 years old and above. In a family trip to the Integrated Resorts, parents are not allowed to bring their children into the casinos to prevent exposing the young child's mind to such social vices at an early stage. Adults are deemed to be more mature and having the ability to weigh the costs and benefits of gambling for themselves.

- Campaigns → Voluntary self-exclusion

Gamblers who are unable to control their addiction can voluntarily choose to be on the scheme of self-exclusion to prevent their entry into the casinos. However, the effectiveness can be limited as it requires the strong commitment of the gamblers to take the self-initiative to put themselves in this programme.

- Education → Awareness to the public

Advertisements and documentary shows can be introduced to show the social ills of gambling and real life cases of people who fell victim to gambling in Singapore's casinos. This will create awareness to the public and allow them to weigh between the short-term gratifications of gambling versus the long-term costs of gambling should they lose their wealth in their addictions.

Also, education which reinforces on the social ills of gambling should be taught to the younger generation before they get to be exposed to the vices in the early stages of their lives.

However, education though provides the awareness to the public cannot ensure that all will be equally receptive to the message delivered to them.

Conclusion: The policies mentioned in the extracts serve to mainly act as a deterrence to reduce the number of Singaporean visitors into the casinos. However, much of the welfare loss in society are contributed by gamblers who are addicted and make repeated return visits to the casinos. Hence, these policies alone are inadequate to solve the root of the problem and the government will need to couple other policies which specifically targets and help reduce the gambling addiction of these group of gamblers.

The Singapore government will need to reduce the number of Singaporeans visiting the casinos through 3 main methods: To educate

its citizens of the social ills of gambling from a young age, providing the social support to prevent addicted gamblers from worsening their financial situation and to provide regulations / legislations which deters visitors from visiting the casinos.

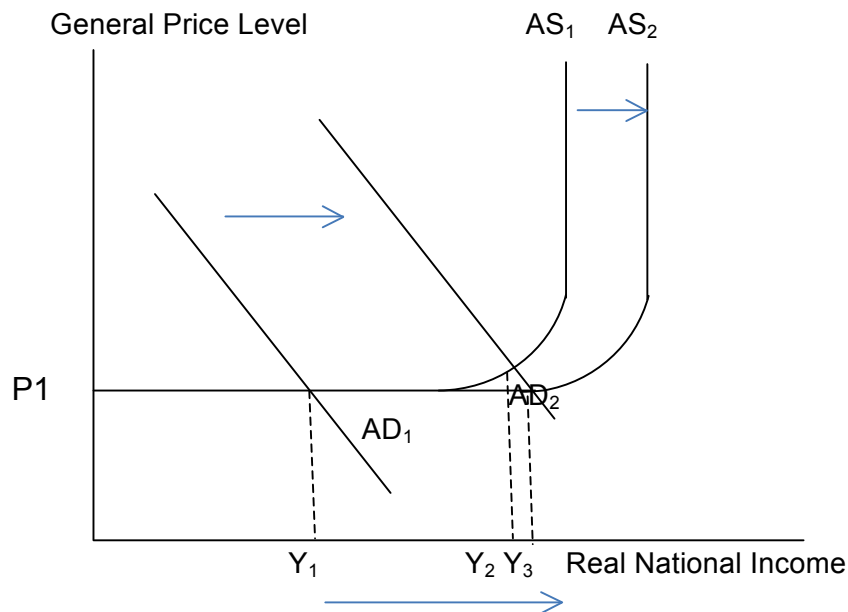
Level	Descriptors	Mark
L2	A discussion which assess the policies mentioned in the extract and recommends other policies to reduce welfare loss from gambling.	4-6
L1	One sided discussion that only focuses on assessing the policies mentioned in the extract	1-3
Evaluation		
E1	Taking a stand and understanding why the policies mentioned in the extracts are insufficient	1-2

d) Coment on how the construction and development of the Integrated Resorts affect Singapore's standard of living.

[8]

The development of the Integrated resorts has led to locals visiting the malls in the IR which contributes to an increase in consumption (C). FDIs were attracted in as foreign companies saw the potential in the development of the tourism hotspot such as restaraunts and entertainment outlets that led to an increase in investments (I) and tourists were attracted into Singapore to visit its first casino and their purchases in Singapore led to the increase in tourism expenditure (X) and hence leading AD to shift rightwards from AD1 to AD2. With AD increasing, firms will experience a fall in inventories. This will signal to the firms to increase production. Firms will hire more workers leading to increasing output This results in falling unemployment and increasing income from Y1 to Y2. As income increases, spending by the households will increase. As one's spending becomes another income, this increase in spending will lead to an increase in income of another group of people because of the increasing demand for the goods and services they produce. The multiplier effect is triggered off leading to a multiple increase in production, output and national income. The increase in real GDP is seen in Table 1. Singapore faces higher economic growth of 14.7% in 2010 (Extract 3) accompanied by higher real GDP per capita which represents higher disposable income of the individuals where they are able to purchase more goods and services both locally and from abroad which increases the variety of goods enjoyed that raised their material standard of living (SOL).

The development of the Integrated Resorts has also led to the creation of more jobs for Singaporeans as mentioned in Extract 3. Job creations were especially evident in the tourism industry such as the hotel managers, croupiers, cleaners and this helps to raise employment level in the economy which provides stability in the country as most workers are being employed improving the material and non-material standard of living. These workers will have to undergo trainings in order to take on their respective jobs. These trainings will increase the skills sets of the workers and raise their efficiency and productivity capacity which enhances their mobility to take on different roles in their jobs in future.



Furthermore, the development of the Integrated Resorts has helped to make Singapore a more vibrant and beautiful city with improved scenic view. With the huge amount invested into the development of the Integrated Resorts, much have been done to improve the outlook where the glistering lights of the IR which are shown at night helps to enhance the night life of the Singapore city. The IR also provides an outlet for leisure with its Universal studio and entertainment complex which help to strengthen family bondings and relieve stress of individuals from a hard day's work.

However, in the development of the IRs during its construction phase, there were environmental issues which led to the generation of negative externalities. The air pollution has worsened due to the movement of heavy vehicles transporting materials to build IR and affected the health of those within the vicinity. Noise pollution was also evident due to heavy vehicles movement and issues of traffic congestions led to reduced efficiency in the short run. These issues resulted in welfare loss for the Singaporeans during the short term and lowers the non-material SOL.

After the completion in the development of IR, negative externalities took a different form where issues of higher crime rates, broken families and stress level to people who take up loans and end up in debts due to gambling in the casinos of the IRs arose which affected the peaceful state of Singapore.

Overall, the benefits in the development of the IR has brought about both material and non-material gains to Singapore. The development of the IR provides a mean and solution for Singapore to attain sustainable economic growth and to continue to position Singapore as a tourists attractions to compete with its neighbouring country. However, the non-material standard of living of the people in

Singapore took a toll with the rise in crime rates and violence due to gambling issues. To further improve the non-material standard of living of the people in the long term, the government will have to make use of its tax gains it achieve from the profits of the IRs to be channeled to devising measures which will help to rectify and reduce the issues related to gambling in casinos.

Level	Descriptors	Mark
L2	A two sided discussion which adequately addresses how the material and non-material standard of living of Singapore has been affected.	4-6
L1	One sided / Underdeveloped discussion that focuses on the material standard or non material standrd of living of Singapore.	1-3
Evaluation		
E1	Taking a stand on whether the standard of living in Singapore has improved with the construction and development of IR.	1-2

Question 2 Unemployment in Greece

Extract 4: Greece's unemployed young

Jobs of any kind are scarce in today's Greece. In a country of 11 million people, the economy lost more than a million jobs as businesses shut their doors or shed staff. Meanwhile, cuts to Greece's bloated public sector are dumping ever more people onto the job market.

Studies of joblessness in the U.S. and Japan have shown that extended periods of unemployment in the early years of a worker's career can depress earnings for decades. Greek society and the education system have done a dismal job preparing citizens to compete in a globalized, technology-driven economy. Up until the crisis, it was the dream of every parent to have their child become a doctor or a lawyer. Now the country has an excess of both. Meanwhile, with the public sector sweeping up many recent graduates, there was little incentive for universities to offer the technical skills companies now demand. The Greek government, prompted and assisted by the EU, has started to roll out measures intended to reduce youth unemployment, including training programs, grants for small businesses, and subsidies for companies that hire young people. But those policies are unlikely to do much as long as the economy continues to sink. "I admit there are structural problems in Greece," says Theodoros Ampatzoglou, governor of the Greek Manpower Employment Organization, the government agency in charge of tackling unemployment. "But the basic problem isn't matching labor supply and labor demand. The problem is that there's very little demand."

Source: www.businessweek.com, 25 July 2013

Extract 5: Migrants stay busy as unemployed Greeks spurn menial jobs

There are just over 500,000 immigrants living in Greece legally, but it's estimated that there are at least as many undocumented migrants. While illegal immigration has

been a concern for years, it's become a hot-button issue now that there are 1.3 million Greeks out of work. Still, despite claims by some politicians—notably those from the far-right—that migrants are stealing jobs, locals are wary of farm work and other labor-intensive jobs, although the country has endured a deep recession since 2008. Strawberry pickers, for example, are paid between €20 and €25 a day (\$26 to \$33) for around 10 hours' work. They live mostly in makeshift huts cobbled together from plastic sheeting and pieces of wood, and have no access to toilets.

The bottom line: Even with unemployment at 27.2 percent, most Greeks won't consider taking on work now performed by illegal migrants.

Source: www.businessweek.com, 25 April 2013

Extract 6: Greek crisis and the future of the European Union

Monetary union was meant to bring the chain of 16 resilient economies closer together, sturdily linked for a globalized world. It was supposed to offer greater stability than could be achieved from disparate currency regimes built on national financial discipline and also offer the world a strong alternative to the dollar. Unity was seen as strength. The financial probity preached by Germany, the strongest member of the zone, would be adopted by other member states as virtue prevailed and laxity was banished. The euro would emerge as a second great world currency alongside the dollar.

The Greek crisis has brought the pressure of global financial markets to bear, with the inevitable potential for contagion. What the Greek crisis has shown is that union is not everything and that membership of the zone does not protect weak states from the pressures of international finance. Countries still issue their own bonds, even if they are denominated in euros, so they remain vulnerable to attacks by investors betting that these instruments will decline in value. In putting a premium on loans to Greece, governments in the euro region acknowledged that some member states are less creditworthy than others.

The respectable path generally recommended for countries with unrepayable debt and its associated problems is currency devaluation. The devaluation option is available only to countries, such as Britain, which have retained their own national currencies. However, Greece, like most other European Union (EU) member-states, has long since adopted the euro as its currency. Thus, whatever may be the merits of devaluation, that option is not available to Greece.

However, a recent suggestion from Germany that repeat offenders against the euro's rules should be forced to exit the EU, might change that.

Sources: <http://yaleglobal.yale.edu>, 05 May 2010
and www.newsweek.com.au, 29 May 2010

**Table 2: Unemployment Rate
Euro Area vs Greece, 2008 – 2012**

	2008	2009	2010	2011	2012
	Euro Area				
Youth Unemployment	15.8	20.1	21.1	21.4	23.0
Overall Unemployment	7.6	9.6	10.1	10.2	11.4
	Greece				
Youth Unemployment	22.1	25.8	32.9	44.4	55.3
Overall Unemployment	7.7	9.5	12.6	17.7	24.3

Answers:

- (a) (i) Define the term “unemployment”. [1]**

Unemployment (of labour) refers to the number of people who are actively looking for work, i.e. those who are willing and able to work at the current wage rate but are without a job.

- (ii) With reference to Table 2, compare youth and overall unemployment in the Euro Area with that in Greece. [2]**

Similarity: For both the Euro Area and Greece, youth unemployment is higher than overall unemployment.

Difference: Overall unemployment rose faster (216%) than youth unemployment (150%) for Greece (216% vs 150%), whereas for the Euro Area, overall unemployment rose at about the same rate as youth unemployment (50% vs 46%).

- (b) (i) Using the information available, explain the possible causes of unemployment in Greece. [4]**

‘Recession’ (Extract 5) + ‘little demand’ (Extract 4) → Cyclical/demand-deficient UnM
Lack of ‘technical skills’ (Extract 4) → Structural UnM

- (ii) Examine the effectiveness of the identified measures in Extract 4 in reducing unemployment in Greece. [5]**

Identification of measures: “training programmes, grants for small businesses and subsidies for companies that hire young people” → supply-side policies

How the measures work:

“training programmes”: Develop technical skills in youths to complement university education which had ‘little incentive to offer the technical skills’ → improve match between technical skills which ‘companies now demand’ and skills offered by youths → reduce structural UnM

“grants for small business and subsidies for companies that hire young people”: Reduce cost of production for firms → increase production and output → hire more workers → reduce structural UnM

How well the measures work:

(+): They target youth unemployment which contributes significantly to overall unemployment (Table 2 shows youth unemployment is more serious than overall unemployment). Hence reducing youth unemployment will reduce overall unemployment as well, c.p.

(-): Youths may be unreceptive to training to improve their technical skills. From Extract 5, Greeks in general “spurn” “labour-intensive”, hands-on work – the kind of jobs that demand technical skills.

(-): Grants and subsidies provided by the government might worsen the “unrepayable debt” (Extract 6) that Greece suffers from since it can hardly be financed by increasing taxation on an increasingly unemployed (Table 2) Greek population → panic over inability to repay debt → spread to global banking system → uncertainty over future economic outlook → loss of business confidence → fall in I and net exports → $\downarrow AD \rightarrow \downarrow Y$, output & employment

(iii) Other than the measures mentioned in Extract 4, comment on another policy option to reduce unemployment. [4]

Expansionary FP

- How it works: $\uparrow G$ (public projects to generate employment) & $\downarrow T$ (reductions in income and corporate tax rates) → $\uparrow AD \rightarrow \downarrow$ Demand-deficient UnM

- How well it works: Worsen ‘unrepayable debt’ (Extract 6). C & I unresponsive to tax cuts due to dismal outlook

OR

Expansionary MP

- How it works: $\downarrow i/r \rightarrow \uparrow C \& I \rightarrow \uparrow AD \rightarrow \downarrow$ Demand-deficient UnM

- How well it works: $\downarrow i/r \rightarrow$ speculative capital (hot money) outflow → compounds debt problem as need to repay loan made on speculative capital. (Moreover, single currency (Euro) mandates that Greece loses autonomy over monetary policy.)

(c) Given that Greece’s exit from the European Union does take place, analyse the likely impact of currency devaluation on the Greek economy. [6]

Explain impact on Greece of devaluing her currency:

Explain impact on 4 macro goals:

- Devaluation → $\downarrow P_x$ in foreign currency & $\uparrow P_m$ in local Greek currency → $\uparrow Q_{tydd}$ for exports & $\downarrow Q_{tydd}$ for imports → Assuming M-L condition holds → Improvement in net exports → improvement in current a/c and BOP, c.p. + $\uparrow AD \rightarrow \uparrow Y$, output & employment by the K process → EG + \downarrow UnM

- GPL may increase but since Greece is undergoing recession → Keynesian range → demand-pull inflation unlikely

Evaluate impact:

- Currency devaluation reduces demand-deficient UnM but does little to reduce structural unemployment

- M-L condition may not hold in the short-run due to prior contractual agreements and importers being unable to find domestic substitutes for the higher-priced imports in the short-run → $E_{px} + E_{pm} < 1 \rightarrow$ Greece’s economic problems may worsen instead of improve in the SR

- If Greek debt (Extract 6) is denominated in foreign currency (most likely the case as borrowing was from abroad), weakening the Greek currency will inflate the debt → cause more bankruptcies + loan defaults → wide-spread closure of businesses and firms → worsen unemployment, income and output → negative growth

(d) Discuss how the trend towards globalization could affect Greece's economic growth and its balance of payments. [8]

INTRODUCTION

- **Define globalisation**

Increasing integration of economies around the world especially through

- Free flow of goods and services (free trade)
- Free flow of capital and investment (financial flows)
- Free flow of people (labour migration)
- Free flow of ideas and knowledge (technology)

- **Summarise the driving forces behind the trend of globalization**

Globalisation is driven primarily by the gains from the theory of comparative advantage, and enhanced by the advances in technology which made it easier for firms to set up production facilities in the country which enjoys CA in the production of the goods. The opening up of markets and the general reduction in trade barriers has been supportive of this growing trend.

BODY

Globalization improves the BOP & boosts economic growth

i) Globalization drives trade and investment

- Globalization → increase in trade & investment
- Other economies becoming more open due to globalization → easier for export penetration into these economies and also to invest in them due to greater profitability of investments with rising exports → net X and FDI increase → improvement in both the current and financial account would cause BOP to improve + AD increase → economic growth

(ii) Globalization boosts tourism

- As unemployment rises and competition for jobs intensifies, wages fall resulting in falling costs of production and falling prices of goods and services → low prices attract tourists to culturally and historically rich Greece (globalization is characterized by free flow of people) → boosts employment in tourism and hospitality industries (one of the few thriving industries in present-day Greece) → improves the current account → improves the BOP + helps with economic recovery

Globalization worsens the BOP & economic growth

(i) Outflow of incomes from the country

- Outflow of interest, dividends and profits from speculative gains and FDI worsen the current account → worsens the BOP

(ii) Globalization results in ↑ vulnerability

- Globalization increases integration of Greece with the world and increases its vulnerability to external shocks like oil shocks and financial meltdown in US → Increases the volatility of net X & EG → worsens current account & slows down economic growth

- Free flow of capital and investment which characterizes a globalized economy →

implies increased susceptibility to destabilizing capital and investment flows when an economy such as Greece faces problems and investor confidence plummets → worsens existing problems as foreign investors may easily relocate to other investment locations with better prospects → production and employment levels will fall causing widespread unemployment. Capital flight worsens debt problems as speculators pull out funds → worsens capital and financial accounts + business closures and widespread unemployment → slowdown in EG

(iii) Globalization results in brain drain

- As technology makes it easier for people to flow between countries, the most talented and resourceful of Greeks will also be the most mobile – they are likely to migrate to other countries in search of work which is difficult to find in present day Greece → brain drain → reduce productive capacity for Greece, slowing down potential growth

(iv) Globalization hampers economic recovery of Greece

- Economic integration of Euro area countries → single currency → lose autonomy over MP → one less policy option to improve BOP & EG

CONCLUSION

Stand: It appears that globalization has done more harm than good to Greece's BOP & EG.

Justification: Globalization has compounded the problems that Greece faces, and made their impact felt in the rest of the world like a 'contagion' (Extract 6). Greece's "unrepayable debt" has led to panic over her inability to repay her debt which spread to the global banking system and resulted in uncertainty over the economic outlook for the future, triggering capital outflows and hampering trade and investment in Greece, worsening her current, capital and financial accounts, as well as her economic growth.

Evaluative comments: Yet since globalization is a phenomenon that is unlikely to stop, it is important for economies to use appropriate policies to leverage on this phenomenon to maximize its potential benefits, and to minimize the costs. The painful recovery process that Greece is currently undergoing is necessary in order that she acquires 'financial discipline and probity' alongside 'banished laxity'. The increase in efficiency and cutting out of financial excesses will eventually benefit her as economies become increasingly integrated.

Level	Descriptors	
L1	Listing of some ways in which globalization can worsen or improve BOP & EG for Greece	1-2
L2	An explanation of only how globalization can worsen BOP & EG for Greece OR An explanation of only how globalization can improve BOP & EG for Greece OR An explanation of globalization can worsen and improve BOP & EG with no application to context	3-4
L3	A rigorous and balanced discussion of how BOP & EG c an worsen and improve for Greece	5-6
Evaluation		
E1	Evaluative stand/judgement of whether globalization improves or worsens BOP & EG for Greece	1-2

Section B

3. An exceptionally large number of new homes are currently being built as part of the cooling measures for the housing bubble. The housing bubble benefits no one and hurts many when it bursts. This allocation of land would hopefully moderate housing prices, so that it would remain affordable for most residents.

Source: Minister Khaw Boon Wan on Housing Policies, Budget Debate 2013

- (a) Distinguish between public and private goods, and determine if public housing is a public good. [10]
- (b) Using concepts of scarcity, opportunity costs and production possibility curves, discuss if the allocation of land use for public housing is justified. [15]

Suggested answer

a) Distinguish between public and private goods, and determine if public housing is a public good. [10]

	Public Goods	Private Goods
1. State Definition	<ul style="list-style-type: none"> Non-rivalrous Non-excludable 	<ul style="list-style-type: none"> Rivalrous Excludable
2. List Examples	<ul style="list-style-type: none"> Street lights, lighthouses, pavement, flood-control dams, public drainage, public services such as national defence and police 	<ul style="list-style-type: none"> Education, Healthcare, housing, cars, alcohol
3. Explain characteristics in relation to example	<p><u>Example of Street light</u></p> <p>i. Public goods are non-rivalrous in consumption (i.e. quantity available for consumption does not diminish with more users) → consumption of the street light by one person does <u>not</u> deprive others from consuming it → It does not matter if 1 individual, 10, 100 or 1000 individual utilizes the streetlight → cost of providing the good to 100 people is the <u>same</u> as the cost of providing the good to 1,000 people → quantity of lighting remains</p>	<p><u>Example of Public housing</u></p> <p>i. Private goods are rivalrous in consumption (ie. Quantity available for consumption <u>diminishes</u> with more users) → consumption of housing by one person deprive others from consuming it.</p> <p>ii. Private goods are excludable in consumption (it is possible to exclude a non-payer consuming the good) → Individuals will need to pay the unit before receiving their keys.</p>

	<p>unchanged regardless of the number of users</p> <p>(ii) Public goods are non-excludable in consumption. (it is impossible to exclude a non-payer consuming the good) → Individuals can free-ride and utilize the streetlight once it is installed without need of payment</p> <p>(iii) Gives rise to issue of free-ridership → there is no expression of demand, $P=0$. Price mechanism fails, there is no signal to producers and no incentive for producers to produce.</p>	<p>(iii) Housing is considered a private good by the government of Singapore → since it is both excludable and rivalrous in consumption.</p>
<p>4. Highlight problem if left to the free market (private sector)</p>	<ul style="list-style-type: none"> ∴ If left to the free market, there would be nil provision of public goods. Hence there is a <u>missing market</u> for public goods. The market has failed because no resources will be allocated to the production of public goods like street lights. Complete market failure → justify a greater extent of govt intervention 	<ul style="list-style-type: none"> ∴ If left to the free market, there would be production/consumption of private goods.

Public housing is a private good.

- Consumption is rivalrous, since a consumer's consumption would reduce amount of flats available for the next consumers.
- Furthermore, there are regulations restricting the consumption of public housing. In Singapore, public housing is only available for married couples or singles above the age of 35, with combined monthly income below SGD 10,000.

Singapore government intervene in the market of housing because they perceive there is market failure in the provision of housing. Housing could foster sense of belonging to Singapore, and promote racial harmony among its diverse population. These external benefits suggest that consumption of housing could be viewed as having positive externality on the economy. Thus, the government would intervene in this market.

Synthesis

Government tend to intervene in the markets for both public and merit goods since both these goods provide substantial benefits to the society. In the context of

Singapore, the government has stepped in to provide for these goods directly as can be seen from its allocation of resources to national defence and public housing.

Level	Descriptors	Marks
L3	Elaborated and rigorous explanation detailing the differences between public and private goods. Good analysis of whether public housing is a public good.	7-10
L2	Comparison made between public and private good. Analyse if public housing is public good.	5-6
L1	Attempt to explain public and private goods with little/no comparison made. Did not identify if public housing is public good.	1-4

b) Using concepts of scarcity, opportunity costs and production possibility curves, discuss if the allocation of land use for public housing is justified. [15]

Dissecting the preamble

An exceptionally large number of new homes are currently being built as part of the cooling measures for the housing bubble. The housing bubble benefits no one and hurts many when it bursts. This allocation of land would hopefully moderate housing prices, so that it would remain affordable for most residents.

Points we can learn from preamble:

- 1) there is a large increase in supply of public housing in current time period → does not address current shortage/problem
- 2) There is a problem of housing bubble → unsustainable increase in housing prices → detrimental effects on the economy if it was to burst → unemployment, loss of savings/wealth/assets, recession, worsen investors/consumers' confidence
- 3) there is a need to ensure housing prices remains affordable to most residence → equity issue

Introduction

- **Scarcity refers to the situation where there are limited resources which cannot satisfy unlimited wants.** As such, there is a need for choices to be made.
- This gives rise to the concept of **opportunity costs, which refers to the next best alternative forgone.** When choices are made, there will be opportunity costs incurred, since there are alternatives forgone.
- Opportunity costs could be represented as implicit and/or explicit costs.
- Implicit costs refer to costs which cannot be expressed in monetary terms such as time wasted. Explicit costs are costs that can be represented in monetary terms such as prices of goods.
- In allocating land to be used for construction of public housing, the government would have necessarily made choices and forgo certain alternatives. Through examining some of the choices forgone, it can shed lights on whether the choice to allocate land for public housing is justified.
- The presence of a housing bubble has garnered concern from the government. The bubble would cause property prices to rise rapidly, pricing it out of affordability for Singaporeans and residents. This suggests that there is a **shortage of housing in the market, since scarce commodity would experience increase in prices.** The act of allocating land to public housing would have meant that there are alternatives forgone.

- These choices could be analysed through the use of **production possibility curves [PPC]**, which illustrates the maximum amount of 2 goods an economy can produced, assuming that this is within the same time period, using the same level of technology, the same amount of resources and that all resources are fully and efficiently used.

Main body

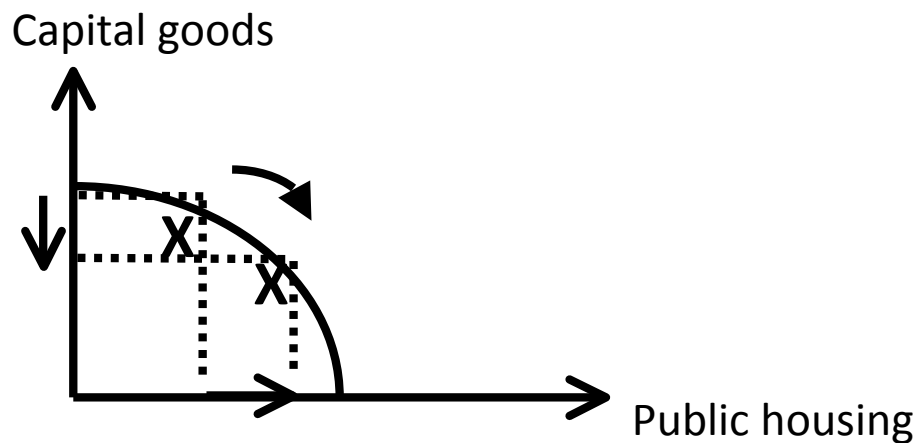
In the following analysis, we shall proceed with the **assumption that all resources are fully and efficiently used in the Singapore economy.**

Thesis → the allocation of land to public housing is justified

1) Cooling measures for housing bubble

- Singapore has been experiencing a housing bubble → phenomenon whereby the prices of public housing have been driven sharply, partly due to speculations. → there is **scarce amount of housing** available for the consumers.
- Consumers have **the expectations that future prices would be even higher** → reinforces the increase in prices → self-fulfilling prophecy.
- Public housings can be considered to be **an asset for retirement for many Singaporeans** → the bursting of the housing bubble would have detrimental effect on the economy → wipe out of retirement funds → govt would have to intervene by relying on reserve → **implicit opportunity costs if govt does not intervene**
- Consider other **implicit and explicit opportunity costs of bursting of bubble** [if govt does not intervene] → rising unemployment in construction sector, recession, worsening economic outlook, loss of assets/savings/wealth.
- Consider the **opportunity costs of allocating land to public housing** there is **scarcity of land in Singapore** → Assuming land use is maximized → Govt could have leased the land for commercial purposes, instead of public housing → generate revenue from the lease of land and increase job creation in the economy as more offices are available. Consequently, there will be increases in AD and therefore national income as productive capacity increase → income at full employment increases → factor quantity of capital/offices increases.
- Weighing the choices → **trade-off between improvement in productive capacity and attracting FDI against aversion of housing bubble and associated economic shock** → Prudent nature of SG government → more risk adverse → more inclined to deter the development of housing bubble → **higher opportunity costs of remedying the economy should the bubble bursts** → recession, unemployment in construction sector, worsening BOP due to pessimism of economy. Factor quality of resources would suffice to attract FDI and stimulate AD as well → highly skilled labour force.
- Allocation of land to build more housings would be an effective method to increase supply of housing and cater to rising demand
- This is illustrated in Figure 1 below, where the allocation of land towards public housing would indicate a trade-off in the provision of capital goods → **movement along PPC curve** → since all resources are fully and efficiently used.

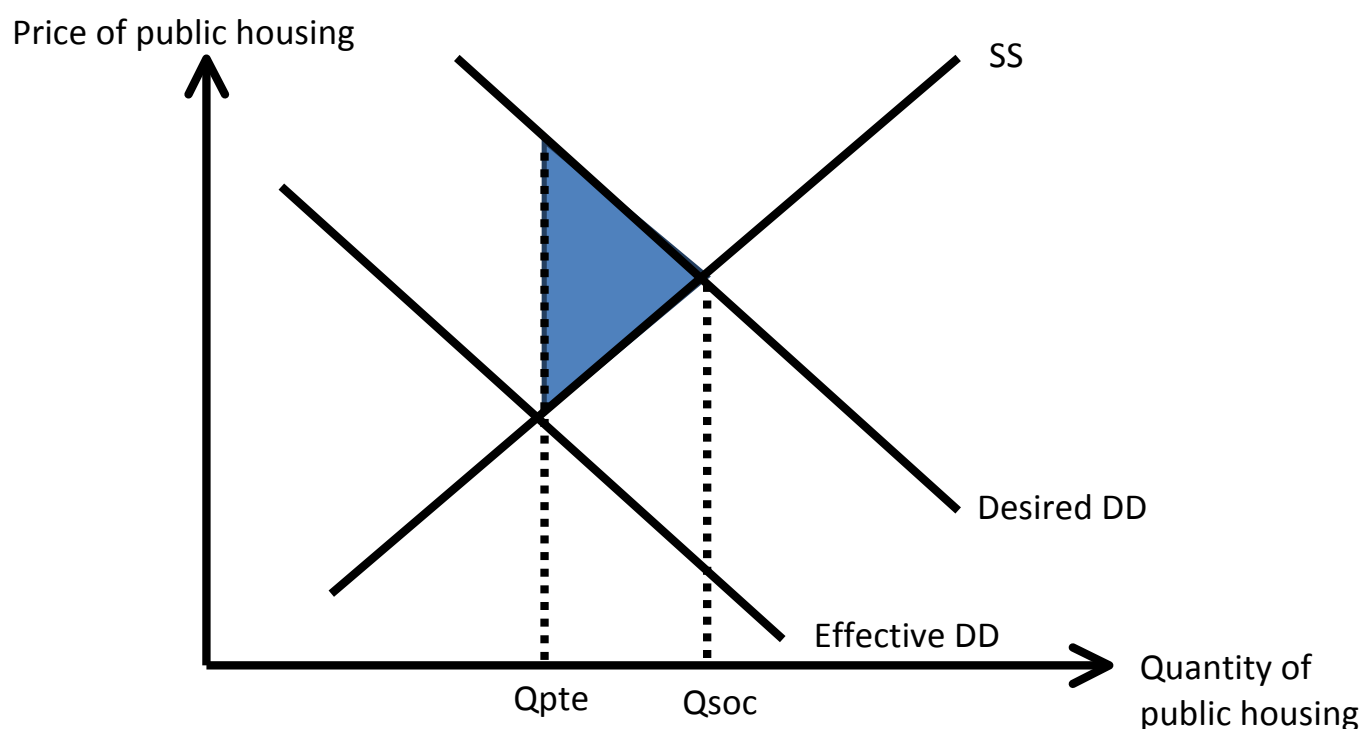
Figure 1: PPC Diagram for Singapore, between Capital goods and Public housing



2) Public housing is considered to be a *merit good* by Singapore government

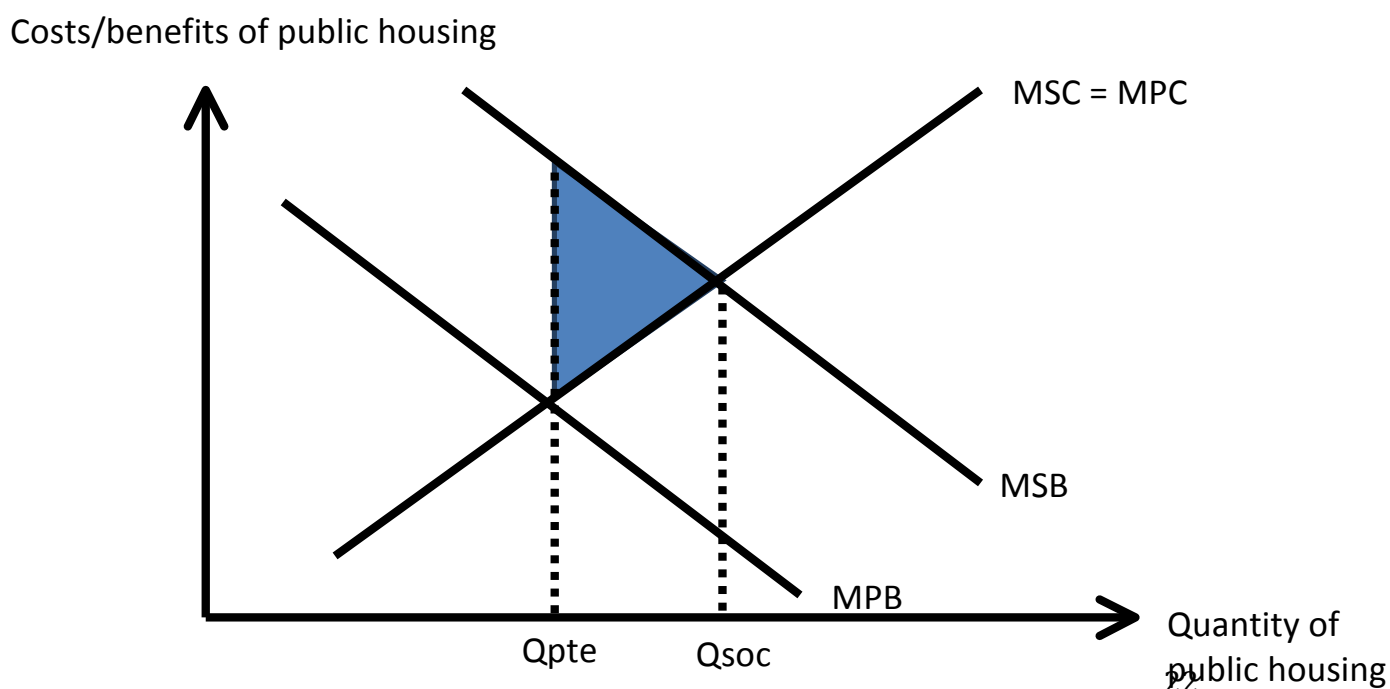
- Public housings are a form of asset investment for Singaporeans, which can be utilized as **retirement collaterals** → **retirement funds in future**.
- This leads to **underestimation of true benefits** in the consumption of public housing from the government's POV.
- The consumption is currently set at Q_{pte} where effective demand for public housing intersects supply of public housing.
- The government sets desired demand higher and therefore Q_{soc} is derived from the intersection of desired demand and supply.
- Since Q_{soc} is greater than Q_{pte} , there is **underconsumption of public housing in the eyes of govt.** → **insufficient housing produced** → **housing is in scarce amount**
- This leads to **development of welfare loss** as indicated by shaded region in Figure 2, thus the market fails.
- To address this market failure, the **allocation of land to public housing is justified as government do indeed provide merit goods**. In Singapore, government has provided for other merit goods such as education and healthcare.
- Since **land is scarce in Singapore**, there is a need for government to intervene to ensure the best allocation of resources → maximize the welfare/benefits the economy can enjoy from the use of land
- The allocation of land to public housing would lend to increase in consumption of public housing and therefore correct the market failure.

Figure 2: Underconsumption of Public housing in Singapore



- Ownership of public housing would instil a sense of rootedness for new residents
- Reinforce national identity → **reduce brain drain OR retain the foreign talents SG has attracted to stay on.**
- Racial quota for HDB flats would reinforce racial harmony amongst residents → **Ethnic integration policy**
- Promotes social cohesion → contributes to social security and diversity.
- This gives rise to external benefits of public housing consumption in Singapore → **positive externality in consumption of public housing.**

Figure 3: Positive externality in the consumption of public housing



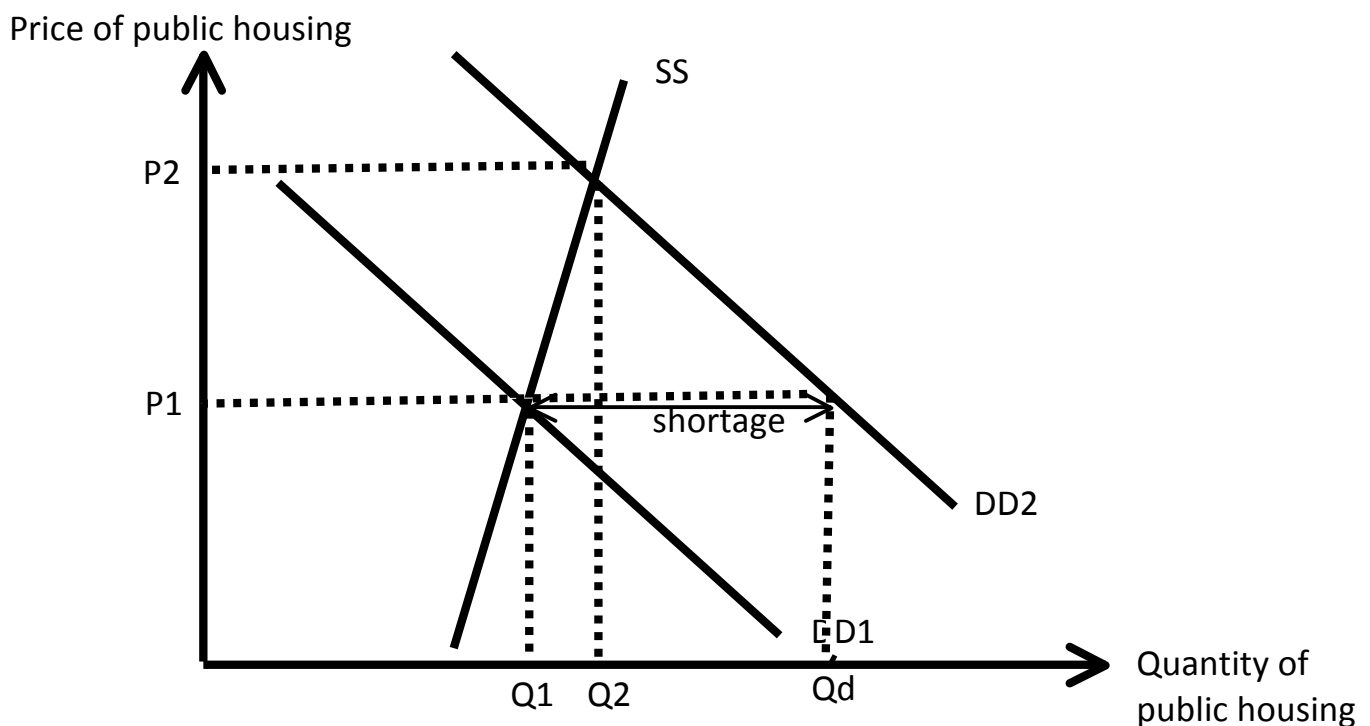
- In the consumption of public housing, the consumers would only consider their private costs and benefits.
- Private costs include the price of the property and the associated opportunity costs of options forgone in the consuming public housings, such as cars, holidays. Private benefits would include possible revenue from renting of the rooms and having personal space.
- Many consumers tend to disregard the possible external benefits generated like racial unity/national identity. Thus, the consumption would be set at Q_{pte} , where $MPB = MPC$.
- As such, there will be social and private benefits curves, such that $MSB = MPB + MEB$
- The social optimal level of consumption is set at Q_{soc} , where $MSC = MSB$. There is underconsumption public housing in the market. At Q_{pte} , $MSC > MSB$, additional units of public housing produced would add more to society's benefits than costs.
- **Welfare loss to society develops** from the underallocation of resources to public housing → **public housing is in scarcity**.

3) More public housing is required due to increase in population

→ response to population white paper to increase to 6.9 million in 2030

- Benefits: Influx of foreign talent boost labourforce → increase in factor [labour] quantity → **expansionary effect on LRAS** → contributes to sustained growth
- Reduce reliance on labour force due to aging population. High opportunity costs of increase in taxes for working population → reduce incentive to work → affects labour productivity, which is a key factor for consideration of FDI.
- Increase influx of foreign talents → more housing are needed since **accommodation is a necessity**
- Housing requires time to construct → need to develop infrastructure to cater to increase in population → deter build-up of housing bubble
- **Supply and demand for public housing tend to be price inelastic** → any shift in demand/supply will lead to **sharp price movements**.
- As illustrated below, the supply of public housing tends to be price inelastic, since producers cannot easily manipulate quantity supplied in response to price movement as time is required to construct the flats.
- Thus, any increase in demand for public housing, for instance, expectations of higher public housing prices in the future, would result in an increase in prices of public housing to a larger extent compared to increase in quantity of public housing. → MAP
- This sharp increase in prices of public housing leads to a **secondary problem of inequity**. Low income consumers may be priced out of consuming this merit good.

Figure 4: Market for public housing



Anti-thesis → allocation of land to public housing is not justified

1) High opportunity costs → Land scarcity

- Refer to figure 1 → **due to land scarcity, allocation of land to public housing would incur high opportunity costs**, since land could be used for commercial purposes, which could stimulate actual growth
- Since **land is scarce** and a primary factor input, there has to be efficient allocation of this resource.
- Consider allocation of land for commercial purposes → One Marina
- Opportunity costs of rental of offices, creation of jobs, attracting FDIs
- Allocation of land to public housing would not generate as much tangible returns to the country.
- HDB makes hundreds of millions of losses with each year → factoring land costs and construction and govt subsidy → construction of public housing worsens fiscal position of government in contrast to revenue generating projects like commercial offices → **high opportunity costs incurred for provision of public housing**

2) Provision of other merit goods

- Other merit goods could benefit society → R&D → develop new sectors of growth → lend to export competitiveness → improves resilience to external shock which is crucial in current economic conditions where recessions are occurring with higher frequencies.
- Consider land allocated for One North → Research facility for development of biomedical hub → new area identified as key sector of growth → **opportunity costs** → chance to develop key sector of growth and improve resilience of economy
- Education → another form of merit goods which can contribute to improvement in productive capacity of economy. Furthermore, established education facility could attract better FDI and foreign talents

- Consider land allocation for SUTD → 4th public university in Singapore → to increase proportion of graduates in Singapore → improve factor quality of labour → attract foreign investment → **opportunity costs** → **expansionary effect on economy**
- Healthcare → merit goods and key sector of growth → medical tourism → FDI to start up medical services in SG → good reputation of high quality medical services in South East Asian region.
- Consider land allocation for Khoo Teck Puat hospital → infrastructure required to cater to increase in population and aging population → establishing more healthcare providers in housing estates. **Opportunity costs of revenue from medical tourism and attracting FDIs**

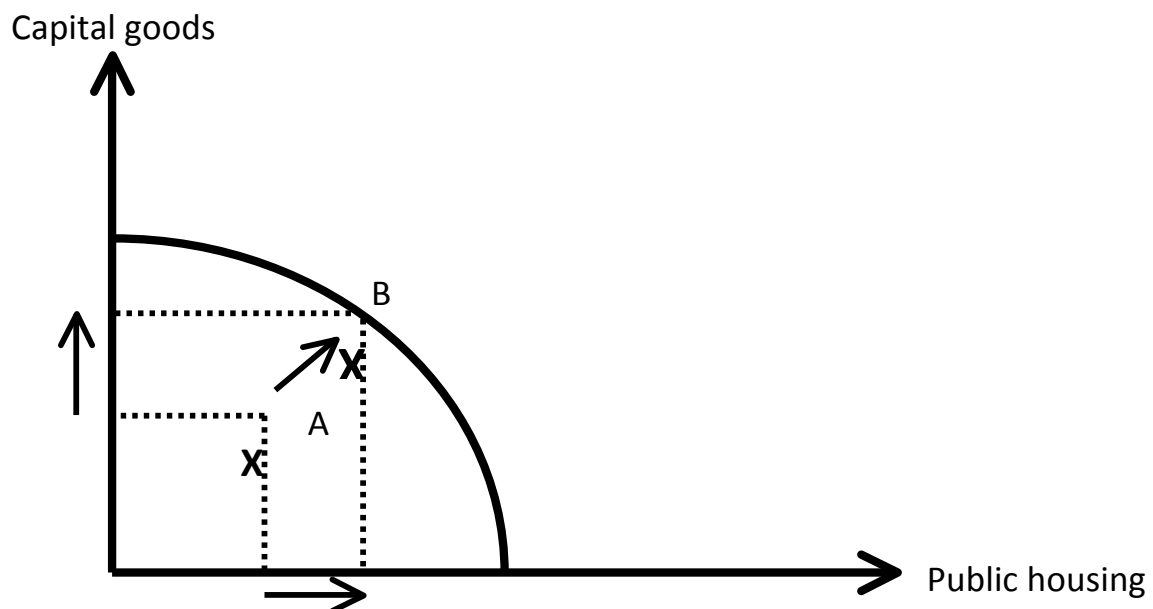
3) Possibility of overcorrection

- Information lag → As government does not possess all information → likelihood that there are error in the derivation of Q_{soc} → may have led to **overallocation of scarce resources** to the market of public housing → resulting in further welfare losses and therefore greater inefficiency in the allocation of resources → government failure results → **incurs greater opportunity costs**
- Time lag → the construction of many public housing in current time period may be remedy the shortage experienced. → market of public housing would likely experience greater increase in demand for public housing and therefore higher increase in prices before the supply of public of housing could increase → possibility of surplus of public housing in the future → reinforce bursting of bubble in the future → **incurs greater opportunity costs**
- Implementation lag → HDB is a large government body → bureaucratic red tape which could hinder the administrative process → leads to higher costs of production, more time required for vetting processes etc. → leads to slower response to current shortage in the market → problem of housing bubble would worsen before intervention is applied. → **worsens the opportunity costs incurred**

4) Assuming resources are not fully used

- Assuming Singapore has land which are unused currently → Economy is producing within PPC instead of on the curve → it is possible to allocate land to public housing, **without incurring opportunity costs** → economy is able to achieve **pareto optimality**, which refers to making consumers better off without any compromise on their existing welfare.
- This would be illustrated by an outward movement towards to **PPC curve**, from point A to point B, as shown in the figure 5.

Figure 5: PPC diagram for movement towards curve



Synthesis

Government has to employ cost-benefit analysis in order to allocate land use most efficiently. Furthermore, government has to consider the short and long run implications of the allocation of land. While Singapore has been active in land reclamation, this is neither a feasible nor sustainable option.

Evaluative conclusion

Public housing are sold with a lease of 99 years → govt would be able to re-possess the land and can re-allocate the land for other uses in future → poor planning could lead to wastage of resources in construction and tearing down of buildings.

In lieu of housing bubble → concern could be centred on ensuring prices of public housing remain equitable → primary objective of public housing → consumption of HDB flats even for the low-income → foster Singaporean sense of rootedness.

More importantly → this is an opportunity for the government to demonstrate its resourcefulness in reducing the bubble before it threatens the economy with likelihood of recession and poor investment outlook.

Complementing policies → Regulations in housing market to ensure equity and reduce speculation on housing has been imposed. However, as there are no perfect policies, there remains a need for govt to implement a basket of policies.

Level	Descriptors	Marks
L3	Elaborated and rigorous explanation detailing the pros and cons of allocating land for public housing with constant references made to the concepts of scarcity, opportunity costs and production possibility curves.	9-11
L2	Clear explanation as to why the allocation of land use to public housing is justifiable , with consideration to alternative land use and other goals of governance. References to opportunity costs and production possibility curves are required.	6-8
L1	Attempt to explain why provision of public housing is desirable, with some economic analysis on merit goods/positive externality . References to opportunity costs incurred must be addressed.	1-5
Evaluation	Descriptors	Marks
E2	Reasoned judgement with insights on current economic development and how decisions made by government could be affected by long run and short run objectives.	3-4
E1	Conclusion with stance made, which lacks economic analysis.	1-2

4. **‘With increasing globalisation, Singapore has to invest ahead in the fundamentals that will drive Singapore’s economic success and ensure that growth remains inclusive, benefiting all members of society, while encouraging a spirit of self-reliance. The government also has to ensure that resources are allocated efficiently in order to ensure environmental sustainability.’**

Adapted from Ministry of Finance, 1 February 2010

- (a) Explain how globalisation may hinder a government in achieving its economic objectives. [10]
- (b) With reference to the above statement, discuss the usefulness of the policies adopted by the government to achieve its economic objectives. [15]

a)

Introduction

- **Define globalisation:** Globalisation is defined as the process through which an **increasingly freer flow of ideas, people, goods, services, and capital** leads to the integration of economies and societies.
 - a. free flow of **ideas**
 - b. free flow of **people**
 - international movement of labour or migration (**Link to freer flow of labour**)
 - c. free flow of **goods and services**
 - free trade or trade liberalisation (**Link to freer flow of trade**)

- d. free flow of **capital & investment**
 - emergence of worldwide financial markets and better access to external financing for corporate, national and subnational borrowers result in rapid movements of capital and integration of financial markets (**Link to freer flow of capital**)
 - rise and expansion of multi-national corporations (MNCs) within and across countries e.g. Microsoft, Citigroup, IBM etc.
- State government micro-economic goals – economic efficiency and equity
- State government macro-economic goals – low inflation, low unemployment, sustained economic growth and healthy balance of payments.

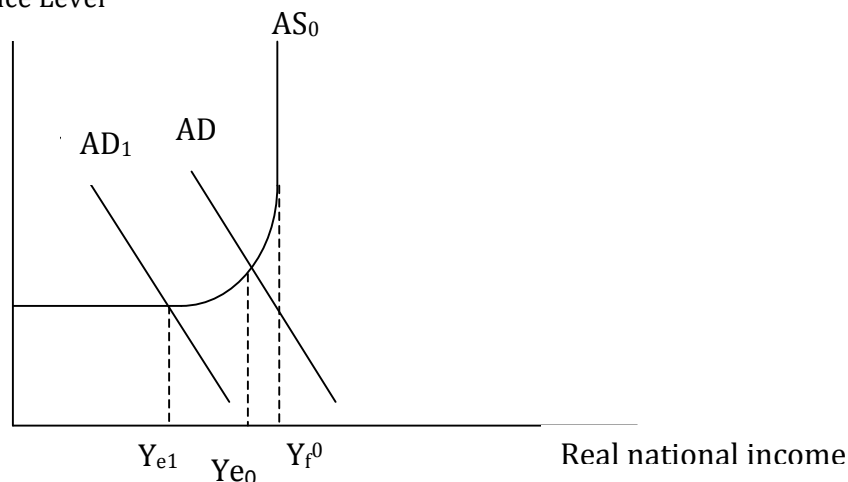
Main Development

1. Explain how globalisation hinders a government from achieving its macro-economic objectives.

Globalisation could result in the risk of falling trade owing to rising competition in the international arena.

- For example, Singapore is squeezed between low cost emerging countries like China and India and high-tech export countries like Japan. With China and India catching up fast, Singapore loses its comparative advantages in low-cost manufactured exports, ceteris paribus → Falling X competitiveness in low-cost manufactured goods
- Globalisation could results in the risk of falling investment owing to rising competition in the international arena. Rising competition for investment world-wide. Countries like Singapore face falling Investment (I) as foreign and local firms (especially labour-intensive industries) as such firms relocate to countries with lower cost of production.
- Increased vulnerability to external shocks → Globalisation increases integration of economies with the world and hence increases its vulnerability to external shocks like oil shocks and financial meltdown in US. Countries will be more prone to contagion effects of other countries' economic crisis. These shocks can be transmitted from one country to another through various channels---trade, financial and mechanical spillovers. External shocks could affect an economy through the trade channel → decreases net X.

General Price Level

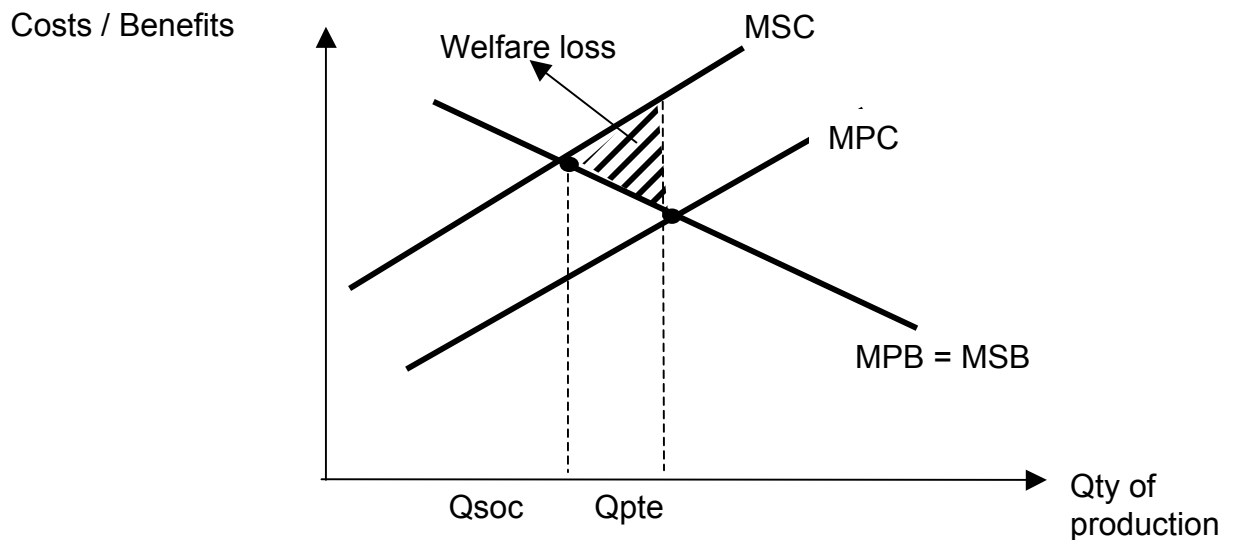


- Adverse effect on net X and I → fall in AD from AD_0 to AD_1 → leading to multiple fall in **actual growth and national income and employment. (internal effects)**

- Falling X competitiveness in low-cost manufactured goods → weakening of the trade a/c → weakening current a/c → **weakening BOP assuming capital & financial a/c remains unchanged (external effects)**

1. Explain how globalisation hinders a government from achieving economic efficiency.

- Globalisation gives rise to a freer movement of labor across countries. Such emigration can lead to welfare loss. Emigration has reduced the labour force in many countries including Singapore. Emigration of high-skilled workers leads to a decline in the productivity of those who stay behind. For example, qualified doctors, researchers, and engineers confer positive externalities on the rest of the population, and these are lost when they emigrate resulting in welfare loss to society and economic inefficiency.
- Globalisation facilitates the increase trade among countries. Trade could encourage MNCs to move to countries that have weak pollution controls and export from there. There is often overconsumption of non-renewable energy by firms for their production processes. This overconsumption of non-renewable energy due to overproduction of goods and services generates negative externalities on third parties for which no compensation is made.
- The effective working of the market mechanism is thus hindered (market has failed) as social efficiency is not achieved. With the presence of negative externalities, the marginal social cost is greater than the marginal private cost, as $MSC = MPC + \text{Marginal External Cost (MEC)}$.



- In a free enterprise economy, private producers and consumers ignore external costs and produce at output level where $MPC = MPB$, achieving private efficiency. However, the socially optimal level of output is at Q_{soc} where $MSC = \text{Marginal Social Benefit (MSB)}$.
- At Q_{pte} , MSC is greater than MSB. An additional unit of production of goods adds more to social cost than to social benefit. As a result, price mechanism overallocates resources to the production activity. Hence, there will be a welfare loss as shown by the shaded area and the market mechanism is hindered in efficiently allocating resources → economic inefficiency.

3. Explain how globalisation hinders a government from achieving equity.

- Increased technology progress due to globalisation rewards the premium on skills and depresses the share of income going to unskilled labour. On the other

hand, the lowly-skilled worker faces the risk of losing his job to technology or a low-cost worker in or from another country → widening income gap between skilled and unskilled workers and greater income inequality of workers in booming and declining industries.

Marking Scheme

Knowledge, Application, Understanding and Analysis		
L3	A well-developed answer that consists of good application of relevant examples to explain how globalisation prevents a government from achieving its economic objectives.	7 – 10
L2	For an answer that uses economic analysis to explain how globalisation prevents a government from achieving its economic objectives. However, there is some lack in economic depth and rigor or a lack of examples to support the answer.	5 - 6
L1	For an answer that shows a descriptive knowledge of how globalisation hinders a government from achieving its economic objectives.	1 – 4

‘With increasing globalisation, Singapore has to invest ahead in the fundamentals that will drive Singapore’s economic success and ensure that growth remains inclusive, benefiting all members of society, while encouraging a spirit of self-reliance. The government also has to ensure that resources are allocated efficiently in order to ensure environmental sustainability.’

b) With reference to the above statement, discuss the usefulness of the policies adopted by the government to achieve its economic objectives. [15]

Introduction

The Singapore government has implemented the following policies in order to achieve its economic objectives:

1. Fiscal policy with a supply-side intent → to achieve macro-economic objectives
2. Supply side policy → to reduce income inequality.
3. Micro-economic policies → to enhance the efficient allocation of resources

Main Development

1. Usefulness of Fiscal Policy with a supply-side intent to achieve macro-economic objectives

In order to remain competitive in an increasing globalised world and to prevent globalisation from hindering the economic progress of Singapore, the government must invest ahead, in the fundamentals that will drive Singapore's success: research capabilities, infrastructure and connectivity of a global city and a highly skilled workforce. This calls for the introduction of fiscal policy with a supply-side intent to

- a) Increase research and development (R&D)
- b) Providing the infrastructure and connectivity of a global city state
- c) Increase access to education and training

- **Increase R&D capacity in Singapore**

- As Singapore moves towards a knowledge-based innovation-driven economy to promote productivity and competitiveness in the global arena, there is a need for Singapore to identify potential strategic research areas in which Singapore can invest to develop new industries for the future.

- The key drivers of these efforts are:

- a. World-class research-intensive universities – Universities play a prominent role in a knowledge-based, innovation-driven economy by developing the talent for the economy. The presence of world-class research intensive universities will be crucial to achieve and sustain this outcome. In addition, universities will play an increasingly important role in training talent needed for Singapore's areas of comparative advantage.

- b. Mission-oriented public sector research institutions – Public sector R&D activities can help to attract and anchor high value-added knowledge-intensive manufacturing activities of MNCs and Globally Competitive Companies (GCCs), as well as to grow the latter's R&D activities in Singapore. Through various innovation platforms that are facilitated by the public sector, the government also create opportunities for the local SMEs to collaborate and engage the large enterprises to build business partnerships and network.

- The increase in R&D efforts in Singapore helps to develop the nation's productive capacity, develop niche areas and increase its competitiveness in the global arena.

- **Providing the infrastructure and connectivity of a global city state**

- To attract MNCs into Singapore, there is a need to enhance physical infrastructure to increase industry collaboration and design innovation. Furthermore, Singapore pride itself as a global city state that provides all the necessary infrastructure provided to attract businesses, innovation and talents.

- With this “Host to Home” strategy, the Economic Development Board aims to move Singapore from being a host to companies to become a home where business, innovation and talent are nurtured.
- This strategy adopted by the government has effectively attracted significant amount of FDIs and talents into Singapore, thereby increasing its productive capacity.
- **Continuing Education and Training Masterplan (CET)**
 - The Continuing Education and Training (CET) Masterplan is a comprehensive plan to prepare the Singapore workforce for the future and maintain a competitive advantage for Singapore.
 - For employers – The plan aims to enhance quality and productivity by helping their workers acquire industry-relevant skills and stay ahead of industry developments.
 - For all Singaporeans – The plan will form the fundamentals of a lifelong learning system to help workers find their niches, seize opportunities in new growth areas and remain relevant and employable. CET will enable our workers, including rank-and-file workers and professionals, managers, executives and technicians (PMETs) to remain employable with new and better skills.
 - Emerging and growth industries– to equip Singaporeans with the skills for job opportunities in new growth industries, whether they are preparing for new jobs, switching careers or acquiring new skills.
 - As part of the CET Masterplan, the Government will ramp up the capacity of the CET training infrastructure, establish stronger linkage between CET and pre-employment education institutions, and set up a specialised Institute of Adult Learning to develop the capability of adult educators. The aim is to quadruple the annual training capacity by 2010, from 22,000 to 80,000 workers. The Government will partner leading education and training providers, from both the public and private sectors, to set up quality CET centres for growth industries as well as expand existing CET centres to offer high quality and industry-relevant training courses.
 - CET also looks into providing upgrading opportunities and structured assistance for low income workers so that they will also be able to achieve real and sustainable income growth through:
 - Introduce a broad-based incentive scheme to encourage employers to send their low-wage workers for training and for these workers to commit to training.
 - Develop a structured programme to train and place low-wage workers in better jobs. The programme could be customised to meet the needs of low-wage workers. It should cover basic literacy skills, placement into better jobs (be it with same or different employer), financial assistance to cover opportunity and other costs (e.g. training allowance, completion awards for key milestones), modular classes (to cater to their schedule as many are on rotating shifts with limited leave entitlement), peer support and counselling to provide positive reinforcement and support.
 - To ensure sustainability of our productivity efforts, there should also be a closer linkage between productivity and wage growth to motivate workers, through performance-based.

- This will increase the quality of our workforce thereby increasing Singapore's productive capacity.
- As a whole, with the increase in government expenditure in the area of R&D, infrastructure and in the education and training of workers, this will lead to an increase in the AD in the short run from AD1 to AD2, ceteris paribus (Illustrate with diagram) → increase in actual growth, and a reduction in demand deficient unemployment.
- On the other hand, the increase in Singapore productive capacity through R&D, education and training of workers and FDIs → increase in LRAS from LRAS1 to LRAS2 (illustrate with diagram) → sustained EG, reduction in structural unemployment and a low rate of inflation.
- There will also be an improvement in Singapore's balance of payments.
 - With increasing export competitiveness, this will lead to an increase in the net exports, ceteris paribus → improvement in the current account.
 - The increase in FDIs will lead to an increase in the capital account.
- To provide at least 1 well-explained limitation of supply side policies / fiscal policy with supply side intent.
 - Cost of financing G expenditure → could worsen government fiscal position.
 - Long gestation period required

2. Usefulness of Supply Side Policy to achieve lower income inequality

At the same time, the Government must also ensure that growth remains inclusive, benefiting all members of society, while encouraging a spirit of self-reliance. There is a need for the government to reduce income inequality in an environment of intense global competition. The best way to do this is for the Government to provide strong support for low-wage workers through the Workfare Income Supplement (WIS) Scheme.

Workfare Income Supplement Scheme

Globalisation, increased competition and the change in Singapore's comparative advantage have resulted in the lack of relevant skills and hence slower wage growth for low-wage workers → increasing income inequality between the skilled and unskilled workers.

- The objective of WIS is to supplement the wages and retirement savings of older low-wage workers as well as to encourage them to stay employed.
- In 2010, the WIS Scheme was enhanced by increasing the maximum WIS payment from \$2,400 to \$2,800, and increasing the qualifying average monthly income ceiling from \$1,500 to \$1,700 to encourage older low-wage workers to seek and to remain in employment.
- In 2012, the payment frequency of WIS was increased from twice a year to four times a year for employees to help them better meet their short-term needs. WIS was also extended to younger persons with disabilities (PWDs).
- As announced recently at Budget 2013, there will be further enhancements to WIS. Some of the key revisions include the extension of the income cap to \$1,900 to benefit more Singaporean workers, higher WIS payouts of up to \$3,500, higher proportion of WIS to be paid out in cash and increase in WIS payments to the CPF Medisave and Special Accounts.

- The combined changes to WIS and CPF contribution rates will help to boost the retirement adequacy of lower-income workers as well as raise the take-home pay for the vast majority of WIS recipients.
- The Government will constantly review the WIS to ensure that it is focused, timely and effective in reducing the income inequality in Singapore *thereby ensuring that growth remains inclusive, benefiting all members of society.*

Limitation

- Whilst WIS scheme may enhance the income of the low wage workers, it does not lead them out of their low wage condition.
- Low-wage workers face particularly severe barriers to upgrading themselves. As many low-wage workers depend on casual work to earn a living, their hours tend to be long and irregular, and they face high opportunity costs when they participate in training. Employers are also generally less supportive of training lower-skilled workers.
- Hence, WIS should be complemented with incentives such as the CET to encourage low wage workers to upgrade their skills in order for them to have better jobs that allow them to earn more.

3. Usefulness of micro-economic policies in allocating scarce resources efficiently (correct negative externalities arising from increasing globalisation)

As mentioned in Part (a), the increasing globalisation may lead to the generation of negative externalities on third parties not involved in the production / consumption of the goods and services. Whilst economic competitiveness is important, it should not be at the expense of environmental degradation. Hence, there is a need for government to mitigate or reduce the external cost to society through the use of micro-economic policies to bring about environmental sustainability (which is necessary to sustain Singapore's economic competitiveness).

- Government provision of the infrastructure needed for the development of renewable energy sources
 - The development of renewable energy sources, such as solar and biomass, can help enhance energy resilience and environmental sustainability.
 - Based on the Sustainable Singapore Blueprint, Singapore aim to have 5 percent of peak electricity demand supplied from renewable energy sources by 2020.
 - Singapore, therefore, needs to continue to support innovation and the infrastructure necessary to develop renewable energy sources as a component of our national energy portfolio.
 - This replacement of the use of crude oil and coal for energy needed for production with green energy can help reduce the negative externalities generated due to increasing globalisation taking place.
 - Explain 1 limitation of policy:
 - Cost of financing G expenditure → could worsen government fiscal position.
- Education and Campaigns on the importance of using energy more efficiently
 - At the same time, there is a lack of awareness and information among households, and even some companies, about their energy use and possible ways to use energy more efficiently.

- Government agencies and non-governmental organisations should continue to work together to raise awareness, educate and provide accurate information to help firms and consumers choose equipment that best meet their needs.
- Significant improvements can be achieved in the long run only if a mindset of energy conservation is inculcated in all firms and households.
- Through education and campaigns, firms and consumers will be more aware of the harms of the overconsumption of energy and hence will reduce their demand of energy to the socially optimal level, thereby reducing welfare loss to society.
- Explain limitation(s) of policy:
 - It takes time for education and campaign to take effect; hence it does not offer immediate solutions to the situation.
- Legislation (eg. GreenMark Incentive Schemes)
 - The government has introduced incentives such as GreenMark incentive schemes to encourage energy efficiency in buildings. There are also grants for companies to perform energy audits and build capability for energy conservation and efficiency.
 - Explain limitation(s) of policy:
 - High administrative cost involved introducing and implementing the GreenMark energy scheme.

Overall Evaluation

- ❖ In view of the nature of the Singapore economy, Singapore has gained much from globalisation. The combination of micro and macro economic policy measures adopted by the government is useful in assisting Singapore to ride on the waves of globalisation to attain the various macro and micro economic goals and reduce any possible trade-offs, despite their limitations. These measures are adopted after taking into account the fact that Singapore cannot isolate herself from the rest of the world due to the characteristics of its economy and thus need to embrace globalisation.
- ❖ The Singapore government needs to constantly review the current policies in order to **maximise the potential gains and minimise the potential costs of globalisation** given the global economic outlook.
- ❖ In the coming decade, there will be new challenges and opportunities for Singapore and Singapore will have to update her strategies and develop new capabilities through the policies discussed above. Singapore is well placed to succeed in the emerging post-crisis world. The global crisis has reinforced the shift of markets to Asia. There is therefore no lack of opportunities for Singapore in the decade ahead. Therefore Singapore needs to make use of its policies to build deeper capabilities and expertise to make the most of this window for growth. But to sustain growth, the government has to make better and more productive use of our resources, and especially by growing the skills and talents of its people and ensuring a more equitable society for all the live in.

Marking Scheme:

Knowledge, Application, Understanding and Analysis		
L3	For a well-developed analysis of at least 3 policies that can be undertaken to achieve Singapore's economic objectives, supported with relevant real world knowledge or examples. There is reference made to the preamble and limitations of the policies are clearly explained.	9 - 11
L2	<p>For an underdeveloped analysis of at least 3 policies that can be undertaken to achieve Singapore's economic objectives, with some support of real world knowledge or examples. Little reference to preamble and mention of limitations of policies.</p> <p>OR</p> <p>A well-developed analysis of only 2 policies that that can be undertaken to achieve Singapore's economic objectives, supported with relevant real world knowledge or examples. There is reference made to the preamble and limitations of the policies are clearly explained.</p> <p><u>Max of 8 marks</u> if policies address only the achievement of macroeconomic objectives or only the achievement of microeconomic objectives.</p> <p>Max of 8 marks for answers that has no application to pre-amble.</p>	6 - 8
L1	The answer shows some theoretical knowledge of policies with no application to pre-amble. Some conceptual errors displayed.	1 - 5
Allow up to 4 additional marks for Evaluation		
E2	For an evaluative discussion that is based on economic analysis.	3-4
E1	For an unexplained judgment, or one that is not supported by economic analysis.	1-2