National Junior College
Economics Department

Preliminary Examination 2013
Answer Booklet

Senior High 2
H1 Economics
(Syllabus 8819)

Examiners' Report for 2013 H1 Economics Prelims

Section A:
Case Study Question 1

(a) With reference to Table 1 and Extract 1:

(i) Compare the change in prices of HDB Resale Residential property and Commercial Shop Space from 2006 to 2011. **[2]**

Similarity: Property prices of both HDB Resale Residential property and Commercial Shop Space show a general increasing trend. [1]

Difference: HDB Resale Residential property prices increased at a faster rate as compared to Commercial Shop Space property prices. [1]

(ii) Explain how the supply of new flats might help to 'keep a lid on prices' of resale flats. **[2]**

The resale and new flats are substitutes in consumption as both serve the same purpose of providing a shelter/home to the people. [1]

When there is an increase in supply of new flats, the quantity demanded of new flats will increase, leading to a fall in the demand for resale flats, thus preventing the price of resale flats from increasing. [1]

(b) (i) Describe the trend in Private Residential property prices over the period 2006 to 2011. **[2]**

From 2006 to 2011, private residential property prices experienced an overall increase. [1]

The private residential property prices dipped from 2007 to 2008 and increased steadily thereafter. [1]

(ii) Using economic analysis, account for the trend in Private Residential property prices over the period 2006 to 2011. **[4]**

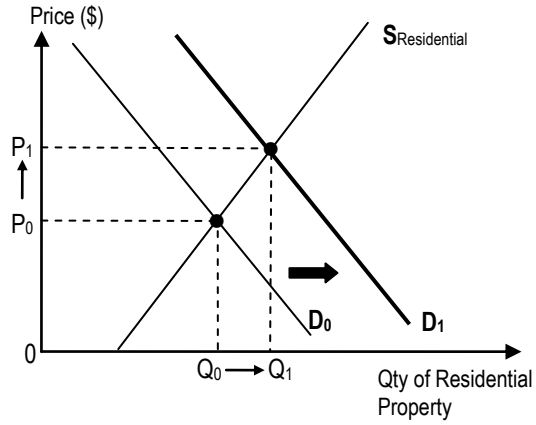
Residential property prices show an increasing rate of increase.

- This is due to the increase in Residential property which could be attributed to the following factors:
  - Increasing household income with a "buoyant economy"
  - Availability of housing loans with "low interest rates"
  - Lifestyle changes
  - Speculators fuelling increase in investment demand
- State and explain clearly a reason for an increase in demand. [2]

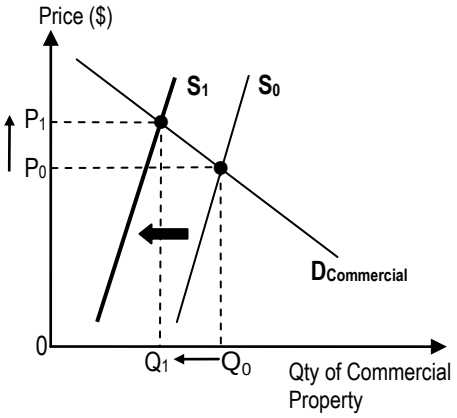
- Interpret that the phrase "it takes time for supply to catch up with demand because of the period required for construction" meant that supply of housing is likely to be price-inelastic (make reference to Extract 2). [1] Thus any increase in demand would like to a sharper increase in prices. [1]

(c) With the aid of diagrams, explain how the change in the prices of Residential property could cause changes in the prices of Commercial property. **[4]**

- There is a positive correlation between the prices of Residential property and Commercial property.
- They are substitutes in production (or in competitive supply) as URA land parcels are "earmarked for competing uses such as for commercial, hotel and private residential developments" (Extract 2). Land resource is a common factor of production that can be used for development of commercial or private properties. [1]
- Illustrate diagrams showing both markets of Residential and Commercial property. [1]



(a): Market for Residential Property



(b): Market for Commercial Property

- Explain briefly the diagrams. As demand for residential property increases, the price of residential property increases. The quantity supplied of residential property increases from Q0 to Q1 in Figure (a), in accordance with law of supply. [1]
- Thus, at each possible price, there is less land available for construction of commercial property. Thus causes a fall in supply from S0 to S1 of commercial property, leading to an increase in its prices, as seen in the increase in price from P0 to P1 in Figure (b). [1]

(d) With reference to the data, evaluate the measures to address the increasing property prices in Singapore. [8]

Introduction

- A number of measures had been implemented to curb increasing property prices, which include both demand-side and supply-side measures.

Body

Elaborate on at least 2 of the following measures with clear links to the impact on the housing market.

- Additional Stamp Duty → curbs speculator demand as it deters potential investors → fall in DD of housing → downward pressure on property prices
  Evaluation:
  - This may be effective as speculative demand may be significant in a buoyant housing market. This measure allows the government to curb housing demand without hurting the genuine home buyers.
  - This may deter FDI from S'pore which would result in negative impact on our macroeconomy. A fall in FDI would result in a fall in injections to AD, thus via the multiplier effect, result in a more than proportionate fall in nominal National Income, compromising on actual economic growth and cyclical unemployment. Fall in FDI may also compromise on potential economic growth.

- Housing Loan Limits → difficulty in obtaining housing loans → limits households ability to purchase housing → fall in DD of housing → downward pressure on property prices
  Evaluation: However it is stated in Extract 3 that there are "low interest rates" and that "(m)any households have amassed cash reserves which can be put down as a deposit for a property" which limits the effectiveness of the above measure in reducing housing demand.

  Evaluation for DD-side measures:
  - The mentioned measures do not necessarily target the other core reasons that drive up demand for housing. As mentioned in Extract 3, "healthy economy", "shallow capital markets" and "lifestyle changes" are some factors causing an increase in demand for housing.
  - Largely effective though as Supply of housing is relatively price-inelastic. Thus any small changes in demand would lead to significant fall in prices (explain clearly with aid of diagram).

- Increase supply of HDB flats/ Increase supply of land parcels for Private Residential projects → downward pressure on property prices

  Evaluation for SS-side measures:
  - It takes time for housing projects to be completed and thus this is more of a LT measure and should be complemented with cooling demand-side measures.
  - Effectiveness is also dependent on PED for housing, which could differ depending on the type of housing.

Conclusion/ Evaluate
- Candidates are to evaluate on the effectiveness of the above measures.
- Both demand-side and supply-side measures are required to address the rising prices as the causes are multi-faceted.
- Measures are not likely to be effective as data shows that housing prices are still rising (ref. to Table 1).
- Whilst stamp duty and loan limits are effective ST measures, the government needs to consider LT measures to address the fundamental changes in the housing market.

L2	4-6 marks	• Balanced consideration of both Demand-side and Supply-side measures. • Good scope of discussion with at least 2 measures explained. • Good rigour of elaboration (e.g. inclusion of market equilibrium diagram, application of elasticity concepts etc.) • Reference to case material in explanation (including the consideration of table of trend of housing prices).
L1	1-3 marks	• Lack of balance in consideration of policies. • Limited scope of discussion with only 1 measure explained. Or mere listing of measures without clear explanation. • Weak rigour of elaboration • No or minimal reference to case material in explanation.

E2	2 marks	Well-reasoned overall assessment of the measures supported by analysis.
E1	1 mark	Some attempt at assessing the individual measures in addressing the rising housing prices.

(e) Discuss the view that government provision of public housing is necessary. [8]

Introduction
- Identify the various sources of market failure in the housing market:
  - Income inequity

– Merit good (for genuine home-buyers/ owner occupied housing)

Body
Thesis: Government provision is necessary as it helps to solve the market failure present in the housing market.

- Explain that there are positive externalities of public housing where the creation of "cohesive communities" help to "support national objectives such as maintaining racial harmony and stronger family ties" (Extract 4). As such public housing is deemed to be socially desirable and is a merit good. Public housing is likely to be under-consumed due to the presence of imperfect information whereby households are unaware of the full benefits of public housing.
- Also, this allows the government to develop projects such as the "Green Neighbourhood" (Extract 4). As such, there are other external benefits of consumption of such public housing projects as compared to other private housing projects.
- Explain clearly with the aid of the benefit-cost framework, how there would be an under-consumption of housing if to the private markets, and thus there is a need for the government to intervene to increase the consumption of housing.
- In addition, public housing also help to address the income inequality in an economy as the government strives to provide public housing at affordable prices.

Anti-thesis (i): Government provision is not necessary as it may result in government failure.

- There could be government failure where the government estimates incorrectly the housing demand and supply. Asymmetric information is present, and this has resulted in insufficient supply of HDB flats to cope with the increasing demand.
- As the sole provider of HDB flats, and thus as one of the major players in the housing market, the government has significant market power. This may result in both productive inefficiency and X-inefficiency due to the lack of competition.
  Evaluation: With a large scale of production, with the provision of public housing, the government is able to reap internal economies of scale and pass on these cost savings to potential home-owners in terms of lower prices for public housing.

Anti-thesis (i): Government provision is not necessary as there are other methods of intervention or private producers are able to adequately provide for the markets.

- Instead of direct provision, government can consider subsidising private housing market projects instead. This would effectively lower the MPC so as to increase the consumption of housing (explain with the aid of benefit-cost diagram). Such private projects are likely to be of greater variety, for example, condominiums with various amenities such as pool, bbq pit etc.
  Evaluation: Subsidies would likely result in a strain on the government budget.

- Changes to government regulation to encourage consumption of housing by genuine home-buyers/ owner occupied housing. Government perhaps could reduce restrictions on genuine home-buyers so as to encourage consumption of housing. For example, banking regulation can help ease the availability of housing loans to such genuine home-buyers i.e. first-time home-buyers. Otherwise, direct subsidies can be given to genuine home-buyers.
  Evaluation: It may be difficult to distinguish between demand from genuine home-buyers and speculative demand. Thus, the encouragement of demand of genuine home-buyers may fuel further increases in property prices, worsening the problem identified in part (e).

Conclusion
- It depends on the characteristics of the economy. For a land-scarce economy such as Singapore, it is important to ensure that efficiency of land use is achieved. Given that Singapore economy is small, estimation errors are unlikely to be significant and thus government should provide for public housing to address market failure problems such as concerns of under-consumption as well as income inequality concerns.

- Whilst government should step in to provide public housing, it should also regulate and allow the development of private housing developers so as to complement its efforts. This would keep the housing market contestable and ensure a variety of housing options for potential home-buyers.

L2	4-6 marks	• Balanced essay in elaboration of thesis and anti-thesis. • Good rigour of elaboration (e.g. inclusion of +ve externalities diagram) • Good scope of discussion e.g. elaboration of at least 2 reasons for anti-thesis. • Show some recognition of other methods of government intervention • Reference to case material in explanation.
L1	1-3 marks	• Lack of balance in elaboration of thesis and anti-thesis. • Limited scope of discussion in both thesis and anti-thesis. • Weak rigour of elaboration • No or minimal reference to case material in explanation.

E2	2 marks	Well-reasoned overall assessment of whether government provision in necessary.
E1	1 mark	Some attempt at assessing the individual reasons for or against government provision.

Case Study Question 2

(a) (i) With reference to Figure 1, describe the trend in GDP growth of emerging and developing economies over the period 2007 to 2011. **[2]**

General trend: The GDP growth of emerging and developing economies generally declined over the period from 2007 to 2011. [1 mark]

Refinement: The emerging and developing economies went into recession with negative GDP growth in Q4 2008, but recovered to show positive GDP growth again by Q1 2009. [1 mark]

OR The GDP growth of emerging and developing economies showed the sharpest decline in 2008 but recovered sharply in 2009. [1 mark]

(ii) Suggest two possible reasons why the recovery of advanced economies and of emerging economies after the global economic slump of 2008 and 2009 'took divergent paths'. **[4]**

Possible reasons:

- Advanced countries faced high government debt which caused greater financial instability and loss of confidence, resulting in a smaller increase in investment and consumption spending. The outlook for emerging economies was more positive as they did not suffer from high government debt, resulting in larger increases in C and I. The AD and hence NY rose faster for emerging economies.
- Advanced countries were constrained from pursuing expansionary fiscal policy by their high government debt, whereas emerging economies were not. As such, emerging economies could rely on large fiscal stimulus to boost domestic demand and stimulate economic growth, thus recovering faster.
- The negative outlook in advanced countries caused capital to flow out to emerging economies. The capital inflow leads to an increase in I and hence increase in AD in emerging economies which stimulates economic growth via the multiplier effect. This allows emerging economies to recover faster.
- Advanced countries may be more integrated among themselves in terms of trade and financial flows, so their economic downturn affected one another more adversely. Since the fall in AD was larger, it took a longer time for them to recover. Emerging economies, on the other hand, were able to continue growing through trading among themselves, and were less affected by the recession in the advanced economies. Their AD did not fall as much and could increase more quickly due to the increase in (X-M) after the recession.

(b) Using the information in Table 2, compare the patterns of budget balance in the UK and India, between 2008 and 2011. **[2]**

Similarity: The budget balances for UK and India are in deficit. [1]
Difference: UK's budget deficit as a percentage of its GDP has increased while that of India has decreased. [1]

(c) (i) State the theoretical relationship between the government budget balance and the government debt. **[1]**

A deficit in the government budget balance would lead to an increase in the government debt. [1 mark]

(ii) Explain one reason why the above relationship might not be observed from the data in Table 2. **[2]**

From Table 2, all the countries showed a budget deficit throughout the period 2008 to 2011. We would expect their government debt to increase throughout the

period. However, the Central Government Debt as a percentage of GDP for countries such as Greece, India and Italy declined in 2010 and 2011.
[1 mark for stating the discrepancy between the data and the expected relationship]

Possible reasons: [1 mark]

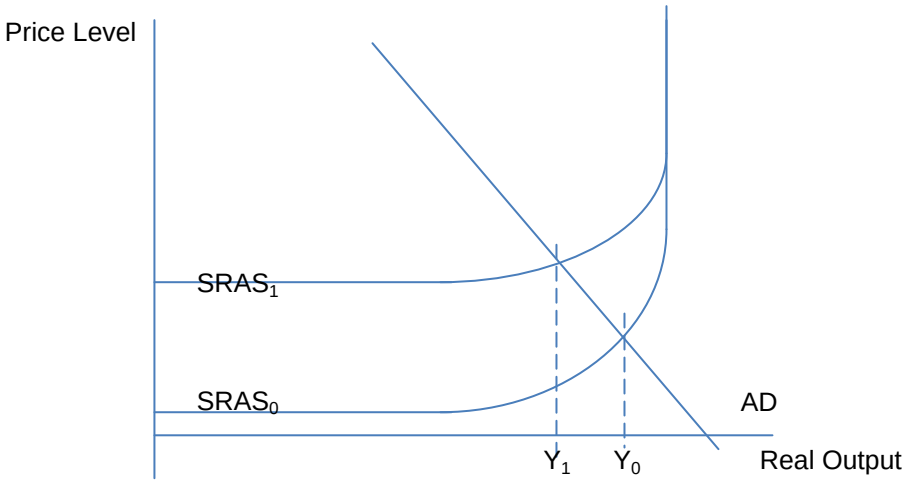
- The economic recovery in 2010 and 2011 may cause the GDP to increase more than the rise in government debt.
- There could be bailouts given by the EU or IMF which help to reduce the government debt
- The creditors of the government debt may have decided to "forgive" or write-off some of the debts, thereby helping to reduce the government debt of these countries.
- Falling interest rate may help to reduce the debt burden (which includes the interest payments). Hence the proportion of government debt is reduced.

(d) Using a relevant diagram, analyse the effect of rising oil prices on economic growth of the US. **[3]**

Oil is used as a fuel for power generation and transportation such as in cars, trains and airplanes. A rise in price of oil will therefore result in an increase in cost of production for firms, causing a fall in the SRAS. [1 mark] The increase in cost of production means that firms will reduce their output at each given price level, resulting in a fall in the equilibrium level of national income. Hence it causes economic growth to decline and even become negative. [1 mark].

As shown in Fig 1, the fall in SRAS causes a fall in real output from Y_0 to Y_1, showing negative economic growth.

Fig 1



(e) With reference to the data, assess the appropriate policy options for the US government to keep the economy growing amidst the threats it is facing. **[8]**

From Extract 1, the advanced countries, which include the US, are experiencing a slowdown in economic growth from 2010 to 2011, "with growth and interest rates remaining unusually low". In addition, as mentioned in Extract 2, US is faced with rising oil prices which threaten its economic growth further with increasing costs of production. This coincides with an impending eurozone debt crisis which could threaten the financial stability of the world. The negative outlook causes a loss of confidence which results in an outflow of capital and fall in consumer spending. All these threats suggest the need for the US government to adopt appropriate policies to stimulate economic growth.

As the US government is itself suffering from high government debt (over 80% of GDP in 2011), expansionary fiscal policy would not be an appropriate option. In fact, the US government may be forced to cut its spending as mentioned in Extract 2 – "struggling state and local governments may dismiss more workers this year as many face their deepest shortfalls since the economic downturn began, and a Congressional stalemate over the country's budget could even lead to a federal government shutdown".

One appropriate policy option is monetary policy. The Fed can reduce interest rate to stimulate investment. The cut in interest rate reduces the cost of borrowing for firms, and hence increases the profitability of investments. This leads to an increase in investment.

As the interest rate is already "unusually low" as mentioned in Extract 1, it may not be possible to reduce interest rate much further, making Monetary Policy less appropriate. Instead, the US government can adopt exchange rate depreciation. According to the Marshall-Lerner condition, as long as the sum of elasticity of demand for exports and imports is greater than one, a depreciation of the exchange rate will lead to an improvement in the balance of trade. This means an increase in (X-M), which means an increase in AD, resulting in a multiplied increase in national income through the multiplier process.

Another option is to implement Supply-side policies to increase SRAS. As the economic slowdown is a current problem, the focus is on achieving actual growth rather than potential growth. Hence the appropriate policy is to increase SRAS rather than LRAS. Possible SS-side policies:

- Subsidies to reduce cost of production (as above)
- Reducing structural rigidities eg. wage guidelines to recommend flexible wages or wage cuts
- Increasing labour force (eg. foreign labour or encouraging women to work) to reduce labour costs.

Conclusion (Overall assessment):
Given the uncertainties of the external environment and the economic slowdown US is experiencing, the government will need to adopt expansionary demand management policies to boost its domestic demand. However, the high US government debt makes fiscal policy inappropriate, leaving the government with the choice of monetary policy or exchange rate policy. According to the Mundell-Fleming policy trilemma, US being a country with free capital mobility, will have to choose between adopting monetary policy and exchange rate policy. However, given that US interest rate is already very low, any increase in money supply will not reduce interest rate very much. Instead, it could cause capital outflow due to the surplus liquidity in the financial markets, leading to a fall in the US dollar exchange rate. However, as there are also supply side factors such as the rising oil prices, the government should complement the demand management policies with supply-side policies to reduce the costs of production and shift the SRAS. Such a combination of policies will help the US government to sustain economic growth in the face of the various threats mentioned in the case study.

L1	1-2	Largely irrelevant with some relevant points that are not clearly explained. Major conceptual errors may be found.
L2	3-4	Policies are appropriate but may not be well developed or explained. Only 1 policy that is well developed.
L3	5-6	At least 2 appropriate policies well explained with relevant diagrams. Assessment of the appropriateness of fiscal policy is included

E1	1	Some attempt at assessing the policies for achieving sustained economic growth
E2	2	Well-reasoned overall assessment of the policies supported by analysis.

(f) It is said that 'Italy, the eurozone's third largest economy, is not just "too big to fail", but it may also be too big to bail'. Discuss the possible impact of an unsustainable Italian government debt on the economies of the UK and China. **[8]**

Introduction:
With a high government debt amounting to over 110% of GDP and an economy in contraction, Italy finds it increasingly difficult to service or repay its government debt. As the Italian government debt becomes unsustainable, the financial and economic stability of the entire eurozone is threatened. Other countries that have economic or financial linkages with Italy or the eurozone will also not escape the adverse effects of the debt crisis.

Effects of the unsustainable government debt:
As its debt becomes unsustainable, the Italian government will have to cut its spending and raise taxes in order to reduce its debt. This will have a contractionary effect on the economy, causing AD and hence national income to fall. Moreover, business and consumer confidence will also be affected, causing consumption and investment to fall, thus leading to further decline in AD and real output.
The loss of confidence is likely to cause capital to flow out of Italy, as investors decide to withdraw their investments or shift their businesses to other countries.

As the third largest economy in the eurozone, Italy is "too big to fail". In the event that the government defaults on its debt payment, it could cause a major financial crisis as the banks and other governments who own the debt (ie the creditors) will see much of their assets wiped off their balance sheets, and may even become insolvent as a result. This could lead to a collapse of the banking system and a credit crunch as liquidity dries up (ie loanable funds become in shortage).

Impact on UK:
As mentioned in Extract 4, Britain is "on the frontline" of the eurozone debt crisis, due to its close connection with the eurozone countries. UK will likely be more adversely affected through its trade and capital flows with the eurozone. The economic contraction in Italy arising from the government budget tightening and loss of confidence will mean a fall in Italy's demand for imports. Other countries in the eurozone may also experience an economic recession due to their close trade relations with Italy. This may cause the eurozone countries to reduce their demand for imports or even adopt protectionistic measures to restrict imports. This would mean a fall in UK's exports, leading to a fall in AD and hence real output via the reverse multiplier effect.

Moreover, as mentioned in Extract 2, British banks may also own part of Italy's government debt. If the Italian government defaults on its debt, the British banks "would not be spared". This means that the British banks will also experience a loss of their assets in terms of loans to the Italian government. If the banks do not have sufficient reserves, they may face a shortage of liquidity and become insolvent. Any collapse of a bank will result in loss of wealth as the savings deposits of the people will be gone. This would cause a fall in consumption spending as well as fall in investment due to the negative outlook. In addition, the credit crunch, as loanable funds become in shortage, will also cause investment to fall. The effect is a further contraction of the economy, resulting in severe recession.

The loss of confidence in the UK arising from the economic downturn and banking crisis may cause capital to flow out to other countries. This not only results in a fall in investments, further aggravating the economic contraction, but also a worsening of the

Capital and Financial Account of the balance of payments. To the extent that it causes an overall balance of payments deficit, it could lead to a depletion of the country's official foreign exchange reserves or an increase in the foreign debt, which will add to the debt burden of future generations in UK.

However, as UK is not part of the eurozone and retains its own currency (the sterling pound), it is able to implement its own macroeconomic policies such as monetary policy or exchange rate policy independently of the eurozone. It is therefore able to counteract the economic contraction by introducing expansionary monetary policy. Moreover, the British pound may be perceived as a stronger currency, thus attracting short-term capital inflow as investors decide to put their funds into pound sterling deposits. This will help to improve the balance of payments, as well as provide much needed liquidity to the banking system.

Impact on China:
Likewise, China could be adversely affected through its trade relations with Italy and the eurozone. A debt default by the Italian government can be likened to a major bankruptcy which can cause a severe recession in the eurozone, and the "consequences would be felt everywhere, including in the US and China". As mentioned in Extract 4, "trade would go into freefall", which means that China will also experience a decline in its exports, leading to a fall in AD, and hence decline in real output. Extract 3 also mentioned that "economists are expecting demand for Chinese exports to weaken in coming months, as the U.S. and European economies struggle to grow at even a modest pace". This can lead to a recession in China, similar to what is seen in UK.

However, China could be less adversely affect compared to the UK, as it could benefit from capital inflow due to the more positive outlook of its economy. As mentioned in Extract 3, "China's red hot economic growth… remains the envy of many western countries still struggling to recover from the global economic meltdown." Extract 1 also mentioned that "China, Brazil and other fast-growing nations have struggled to contain inflation and control heavy inflows of investment money". Such capital inflows result in an increase in investment in China, which leads to an increase in AD as well as productive capacity and LRAS, resulting in both actual and potential growth. Moreover, the inflow of capital also helps to improve the Capital and Financial Account of the balance of payments, which can contribute to further accumulation of foreign exchange reserves in China.

In addition, China is focusing on "promoting more domestic demand", as mentioned in Extract 3. This may be done through the government's expansionary fiscal policy. Hence, despite the potential fall in net exports, the AD may still increase due to other factors such as increased government spending on infrastructure or increased consumption due to transfer payments given by the government. Moreover, as the Chinese government is not constrained by high government debt, it is able to pursue expansionary fiscal policy to stimulate AD and increase economic growth.

Moreover, China may be less dependent on trade with the EU compared to UK, as it may have more trade relations with other Asian countries such as India, Singapore and Japan. Hence, the Chinese economy could still continue to grow as it expands its trade in the Asian region.

Conclusion and evaluation
As the world becomes increasingly integrated, it is likely that a debt crisis in eurozone caused by the unsustainable Italian government debt would have adverse consequences on countries all over the world, including UK and China. Being in close proximity and hence closely linked to the EU, UK would likely bear the brunt of the eurozone debt crisis and could well fall into a deeper recession. While China could also be adversely affected via a decline in its exports, the negative impact may be mitigated by an increase in domestic demand as well as capital inflow from the advanced countries. Hence, the overall impact of the Italian government debt crisis on China is

likely to be more muted.

L1	1-2	Largely irrelevant with some relevant points that are not clearly explained. Major conceptual errors may be found.
L2	3-4	Impact on only ONE country is fairly well developed (ie only impact on UK OR China) OR no differentiation between UK and China ie treating the impact as identical for both countries. Or there is discussion of impact on BOTH UK AND China, but may lack rigour in analysis. Discussion of the impact is one-sided (only positive or only negative effects) Lack of reference to case materials
L3	5-6	Excellent discussion of impact on BOTH UK AND China that is well developed with good rigour of analysis, supported by references to the case materials, including comparison or discussion of different extent of impact between UK and China. There should be some reference to the significance of the government debt. Discussion is 2-sided, covering both positive and negative effects on at least one of the countries.

E1	1	Some evaluation of the impact on UK and/or China that may not be well developed nor supported by analysis
E2	2	Excellent evaluation of the impact on UK AND China that is well developed and supported by analysis.

Section B:

3. In 2010, Singapore emitted around 43 million tonnes of greenhouse gases that cause global warming. If nothing is done, its output in 2020 would reach 77.2 million tonnes. The government has pledged to cut emissions.

- *Adapted from The Straits Times, 3 June 2013*

(a) With the use of examples, explain how the presence of positive and negative externalities may lead to market failure. [10]

(b) Discuss the view that the use of tradable permits is the best solution to correct the problem caused by carbon emissions in Singapore. [15]

(a) Suggested Answer:-

Introduction:

Define Market Failure

Firms and households make decisions based on their private costs and benefits. External costs/benefits are not factored in.

Body:

Presence of positive externality

- Use an example such as the market for primary healthcare.
- Define positive externalities: occur when private consumption/production creates an external benefit to society that affects third parties as a 'spill-over effect' that is not internalised by the private households and firms
  - Private benefits (MPB): eg. tuberculosis vaccination – vaccinated individual stays healthy , does not spread the disease, unlikely to fall ill and therefore can enjoy leisure activities.
  - External Benefits (MEB): unlikely to spread tuberculosis to others, employers benefit too as their vaccinated employee stays healthy and take less time off work → increase in work productivity, translating the external benefits to the whole economy in terms of higher productivity due to a healthier population; benefits that accrues to third parties such as friends, family, neighbours, colleagues and society
  - Presence of positive externality leads to a divergence between private and social benefits. The welfare loss to society resulting from positive externalities can be represented graphically, as shown in Figure 1.

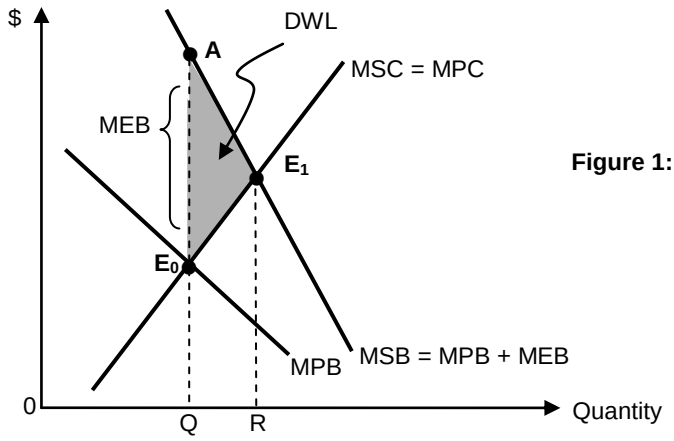


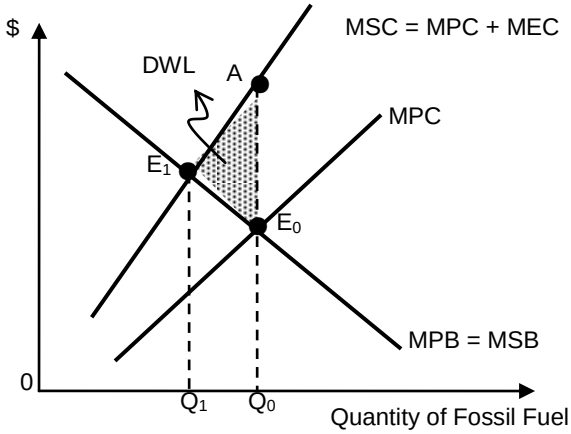
Figure 1: Positive Externality leading to allocative inefficiency

- From Figure 1, the free market equilibrium is at E_0 (where MPB = MPC) with output at 0Q units. The cost of a vaccination is given by MPC=MSC (assuming MEC = 0).
- As MSB = MPB + MEB, the presence of positive externalities means that MSB exceeds MPB by the amount of MEB.
- The social optimum level of output is 0R units (where MSB = MSC).

- There is under-consumption of the good by QR units.
- Individuals fail to internalise the external benefits, hence leading to under-consumption causing a dead-weight loss to society (area AE_0E_1) due to an allocatively inefficient level of consumption.

Presence of negative externality

- Use an example of a negative externality such as carbon emissions.
- Define negative externality and distinguish between private cost and external cost in a context (burning of fossil fuel for electricity).
  - Private cost: cost incurred to purchase raw materials, payment for labour and rental etc.
  - Private benefit: to produce electricity for firms and households, to earn revenue, maximise profits.
  - Establish that carbon emissions results in an external cost (MEC) to society that is not internalised (e.g. green house effect, climatic change resulting in loss of production) during the transaction between private households and firms; and hence this is a case of negative externality which causes market failure.
- With the aid of a diagram, explain how these factories in maximizing their profits (MPC=MPB) would result in external cost (carbon emissions)
- Define (marginal) social cost and benefit, and explain the condition for a socially efficient level of output (MSC=MSB)
- A case where there is a divergence between private costs and social costs.
- Diagram that is well explained to show how the market failed in optimal resource allocation with clear identification of MPB = MPC and MSB = MSC.



- Price system does not always register all the costs associated with production and consumption.
- At the free market equilibrium, producers and consumers will only equate private costs and benefits and produce at MPB = MPC.
- With the existence of negative externality, it resulted in MSC>MPC. Assuming that MSB=MPB (no positive externality), producing at MPB = MPC will result in MSC>MSB which is not socially optimal.
- Dead-weight loss to society (Area AE_0E_1) is analysed. (The total cost of burning Q_1Q_0 quantity of fossil fuel is $Q_1E_1AQ_0$ is more than its total benefit, $Q_1E_1E_0Q_0$.)

Conclusion: The two markets failed to allocate resources efficiently which calls for government to intervene via different measures.

Level	Descriptors
Level 3 **9-10**	• Thorough and detailed explanation of how market fails when externalities are present and its impact on resource allocation. (indicate and explain the presence of deadweight loss) • Analysis includes definition of allocative efficiency • Excellent application of concepts by integrating the examples into the explanation. • Diagrams are accurately drawn and well labelled with excellent explanation • No errors evident in elaboration.

7-8	• Good explanation of how market fails when externalities are present and its impact on resource allocation (indicate the deadweight loss on the diagram without explanation) • Good application of concepts by explaining the examples. • Diagrams are accurately drawn and well labelled with good explanation • Minimal errors evident in elaboration.
Level 2 **5-6**	• Adequate explanation of how market fails when externalities are present • Elaboration lacks adequate rigour (e.g. did not explain how the market generated level/socially optimal level is determined.). • Some attempt at using diagram for analysis. Explanation of the diagram is not well-developed. • Some application of concepts by mentioning the examples in the explanation. • For answer that explains only the positive or negative externality - capped at 5.
Level 1 **1-4**	• Answer is mostly irrelevant • Unclear explanation of externalities with limited explanation of how the presence of the externalities result in market failure • There may be basic errors in theory and/or listing of points. • Minimal or no diagrams included to aid explanation

(b) Suggested Answer:-
Introduction:

- Identify the main sources of carbon emission in Singapore.
  - (Electricity Generation): Singapore is a city-state with limited natural resources. Due to the geographical constraints, the country has very little alternative energy sources beyond oil and gas and thus heavily reliant on fossil fuels to meet their energy needs at present. [48% of total emission]
  - (Industry sector) Despite so, as an export-oriented economy, much of the energy used by the industries is not to make products for local consumption but rather products for export. For instance, Singapore is one of the largest refining centres in the world and the three oil refineries account for about 20% of Singapore's total energy use.
  - (Transport): emitted by the vehicles on the road [19% of total emission]
  - Air transport: the growth of air travel also contributes to the rising level of carbon emission in the country.

- The use of tradable permits is one of the marked-based policy instruments to force the firms to internalize the external cost. The other policy is taxation.
- Other non-market based, e.g. legislation, nationalisation, education and campaigns can be implemented as well.

Body:
Thesis: The use of tradable permits is a solution to correct the problem caused by carbon emissions

- Explain how the tradable permits system will result in a socially optimal level of production.
- Explain how this system to impose a price on carbon is market-based.
  Government decides on the amount of carbon emissions allowed, issues permits and distributes them to firms. Firms who want to pollute must have a permit, and hence the emissions produced will equal to the level which is socially optimal. Firms which pollute less than the amount of permits they have been allocated can sell these to other firms which require them at a price which is determined by the market for tradable permits (determined by the demand and supply of these permits). The purchase of permits raises the costs of polluting firms →MPC is higher and these polluting firms are forced to internalize the external costs.
  While the overall level of emissions is determined by a command-and-control method, their distribution is determined by the market, making it a market-based approach to tackling the problem of carbon emissions.
- Benefits of using tradable permits:
  - Identification of the overall emissions that is socially optimal – the government can simply settle total amount of permitted discharge according to the ability of the environment to absorb the pollutants.
    As the price of carbon emission is determined by the price mechanism in the tradable

permits market, this will avoid the problem of taxation where the government does not know the specific costs and benefits of the private households and firms.

Anti-Thesis: The use of tradable permits is not the best solution to correct the problem caused by carbon emissions in Singapore

- Limitations of using tradable permits:
  - No incentive for firms to reduce emissions beyond the level stipulated by the government
  - Issues of equity in the allocation of the permits – there are many sources of carbon emissions in Singapore. It is very difficult to decide on a fair distribution of the permits given the firms are of various sizes and pollute at different levels. It is also unfair to allocate the permits equally to every firm.
  - Market for the purchase/sale of permits must be present – The market for tradable permits in Singapore is too small, hence price mechanism may not be effective in ensuring the polluting firms are paying the right price to pollute.
  - Enforcement can be difficult and costly.

Other measures can be used.

Taxation

- Impose a tax, on the producers, equivalent to the MEC caused by the carbon emissions at the socially optimal level of output.
- Explain, using a diagram, how the imposition of the tax will result in a socially optimal level of production, where MSB = MSC.
- Establish evaluative statements on the limitations of a policy of taxation.
  - Difficulty of measuring the monetary value of MEC; leading to a possibility of over/under taxation resulting in allocative inefficiency.
  - Administrative costs, time lags incurred in the implementation of the tax policy
  - Shifts in government policies creating uncertainties in the market. For eg: the political pressure arising from prices due to imposition of a carbon tax could lead to the reduction or removal of that tax.

Other policies (Non-market based):

- Laws and Regulations: A maximum permitted level of emission is determined. The government then imposes fines on these firms who exceed the imposed limit to pollution. Inspectors have to be engaged to monitor the amount of pollution. For vehicle carbon emissions, this can be easily done through a legislated installation of catalytic convertor.
- Technology based standards: based on the advancement in technology, the government can insist that polluters use the best existing level of technology to ensure that emission is minimized to the best of their ability. [Improve energy efficiency in all sectors of the economy]
  - Singapore's government released the 'National Climate Change Strategy' (NCCS) in 2008 with the aim to increasing the cost-competitiveness of the Singapore economy, as most initiatives relate to tweaking the price-based incentives of firms and households to be more energy efficient.
  - (Example: in the industry sector) Improving energy efficiency in the industry sector which accounts for about 54% of Singapore's carbon dioxide emissions: Improving the energy efficiency of the industries is a win-win strategy as this not only lowers their carbon emissions but renders them more cost-competitive in a high oil price environment. While the processes in our various industries are differentiated, there are common approaches to improving their energy efficiency.
- Support the use of less carbon-intensive fuels (e.g. natural gas, renewables);
  - (Example: Electricity generation in Singapore) Increased Use of Natural Gas:
    As the government does not subsidise energy prices, generation companies have an inherent incentive to choose the most efficient technology. Within just a few years, the proportion of electricity generated by gas using highly efficient combined cycle turbines in Singapore grew from 19% in 2000 to 79% in 2007. This led to significantly lower CO2 emissions from the power sector, as natural gas emits 40% less CO2 than fuel oil per unit of electricity generated.
- Moral Suasion/Education Programmes: Government can run campaigns and education programmes to inform firms of the consequences of carbon emissions.

- (Other example: Transport sector) The transport sector in Singapore accounts for about 19% of greenhouse gas emissions. Improving the energy efficiency of the transport sector is achieved through the following key strategies:
  a) Managing vehicle usage and traffic congestion;
  b) Improving and promoting the use of public transport;
  c) Improving fuel economy; and Singapore's National Climate Change Strategy
  d) Promoting green vehicles.
- Establish evaluative statements on the limitations of non-market based policies:
  - Easy for firms to understand and easily implemented. Straightforward.
  - Constant monitoring leads to administrative costs, borne by taxpayers.
  - Often, economic aims can be mixed with political aims, reducing the government's will to tightly control pollution.
  - For education programmes, it may take time to change production/consumption behaviour.

Conclusion/Evaluation:

- With the possibility of government failure, the cost-benefit analysis is used to determine whether government policies resolve the problem of allocative inefficiency and welfare loss to society.
- The use of tradable permits would put a limit on the amount of carbon emissions and hence is effective in reducing the emissions to the desired level set by the government. This measure has the advantage of encouraging 'cleaner' firms as firms that emit lesser carbon would profit from the trading of the permits. By allowing a smaller emission each period of time, the government is able to progressively reduce emissions effectively. However, given the size of Singapore economy, the market for tradable permits is unlikely to be effective to meet the aim.
- Effective policies should preferably be a combination of solutions as there are many different sources of carbon emissions in Singapore.
- Alternative policies like supporting R&D in cleaner technologies, providing incentives for consumers and producers to switch to cleaner fuel sources should be in place as alternative and viable substitutes to fossil fuel. This could be more cost-saving in long run, and acceptable by the public.

Level	Descriptors
Level 3 **9-11**	• *Explanation of the nature of market failure caused by carbon emission (if this was explained clearly in (a), it is not required in (b))* • Detailed explanation of how tradable permits can be used to correct this market failure • Answer shows excellent explanation of at least 2 other policies to correct this market failure • The measures are thoroughly evaluated. • Diagrams may be included with excellent explanation. • Minimal errors in analysis. • Excellent reference to the Singapore context.
Level 2 **8**	• *Explanation of the nature of market failure caused by carbon emission (if this was explained clearly in (a), it is not required in (b))* • Good explanation of how tradable permits can be used to correct this market failure • Answer shows some explanation of at least 1 other policy to correct this market failure • The measures are adequately evaluated. • Diagrams may be included with good explanation. • Some errors and inconsistencies are apparent in analysis. • Minimal or no reference to the Singapore context.
  6-7	• *Explanation of the nature of market failure caused by carbon emission (if this was explained clearly in (a), it is not required in (b))* • Adequate analysis of how tradable permits can be used to correct this market failure • Answer may recognise other policies to correct this market failure but not well explained • The measures are not evaluated or superficial evaluative statements are provided. • Minimal or no diagrams included to aid explanation or diagram included but not

	explained. • Some errors and inconsistencies are apparent in analysis. • Minimal or no reference to the Singapore context. For one-sided answer that shows an excellent analysis of how tradable permits can be used to correct this market failure For an answer largely based on the regurgitation of policy solutions from lecture notes with no reference made to the case of carbon emission as a cause of market failure.
Level 1 **1-5**	For an answer that is mostly irrelevant in answering the question • There may be basic errors in theory and/or listing of points. • No diagrams included to aid explanation. •
E2 (3-4)	Well explained judgement as to whether the policy of tradable permits is the best solution to correct the problem caused by carbon emission in Singapore. Consider a few factors such as public acceptance, opportunity cost incurred, duration of implementation of the policies etc.
E1 (1-2)	Mainly unexplained judgement as to whether the policy of tradable permits is the best solution to correct the problem caused by carbon emission in Singapore.

4. **(a)** Explain the factors that may result in sustained economic growth in Singapore. [10]

(b) Discuss the view that globalisation is largely beneficial to the Singapore economy. [15]

(a) Suggested Answer:-

Introduction:

- Definition – Economic growth may be defined as the increase in real national income or output of final goods and services in an economy over a period of time.
- Different aspects: Economic growth may be the result of greater and better utilisation of existing resources (i.e. a rise in employment) or an increase in the capacity of the economy to produce goods and services (i.e. an increase in full-employment GDP). We call this "actual growth" and "potential growth".
- For sustained economic growth, in addition to actual growth, there needs to be an increase in the productive capacity of the economy (potential growth). This can be achieved when the quantity of factors of production, quality of factors of production or technology improve (i.e. through supply side factors).

Body:

Factors affecting potential growth:

- Potential growth is the rate of growth of potential output (or full-employment output), i.e. the speed at which the economy could grow in the long run (when resources are fully utilised). It is measured by the percentage annual increase in the capacity of the economy to produce.
- The productive capacity of an economy is determined by the quantity and productivity of its resources or factors of production. Hence potential growth is determined by supply factors such as the increase in the country's factors or production or improvement in productivity.
- Explain possible factors that can cause potential growth eg. increase in labour force due to immigration, increase in capital stock due to foreign investments, increase in productivity due to technology advancement, etc.
    - Increase the quantity of labour - The Singapore government embarked on a policy of attracting more foreign talent into the country as well as promoting population growth via schemes such as baby bonus, and child tax relief.
    - Increase in the quality of labour - The Singapore government established the Workforce Skills Qualifications (WSQ) system and provided subsidies to promote skills training. For example, the Skills Training for Excellence Programme (STEP) provides subsidized training courses to upgrade the skills of Professionals, Managers, Executives and Technicians (PMETs) in Singapore. These aim at improving the skills and productivity of the workforce, making workers more employable and enhancing their occupational mobility, so that they can take up jobs in the expanding sectors of the economy. Another scheme, the Workfare Training Support (WTS) scheme provides incentives and subsidies for low wage workers to upgrade their skills. The incentives include absentee payroll for companies who send their low skill workers for training and training allowance for low wage workers who sign up for the relevant training on their own.
    - More effective use of land area and increase the quantity of land area via reclamation - Marina Bay Sands and Gardens by the Bay are built on reclaimed land. Urban Redevelopment Authority (URA), Singapore's national land use planning authority prepares long term strategic plans, as well as detailed local area plans, for physical development co-ordinates and guides efforts to bring these plans to reality.
    - The government also encourages R&D and innovation through tax incentives to help increase the future productive capacity of the economy.

For economic growth to be sustainable in the long run, the actual growth should be kept in pace with the potential growth of the economy.

Factors affecting actual growth:

- Actual growth is the percentage increase in value of national output actually produced over a period (eg. quarter or year): it is the rate of growth in actual or real output.

- Explain that actual growth is the result of greater and better utilisation of resources (ie increase in employment). This may be caused by an increase in AD when the economy is operating below the full employment level. (*accepts if students explain an increase in SRAS*)
    - Explain possible factors that could result in actual growth (shift in AD) with relevant examples: Increase in investments due to positive economic outlook; increase in foreign direct investment into the country; increase in net exports due to globalisation, reduction in business costs due to government subsidies, etc.
    - Positive business confidence in the economy – this could be due to the political stability and good communication and transportation infrastructure. As such, this could possibly lead to an increase in foreign direct investments in Singapore, resulting in actual growth.
    - Changes in government policies – in times of worldwide recession, the Singapore government may adopt expansionary fiscal policy (via an increase in G or a decrease in taxes) to boost the AD.

Illustrate actual growth and potential growth using AD/AS diagram, and explain the diagram.

Conclusion:
For economic growth to be sustainable in the long run, the actual growth should be kept in pace with the potential growth of the economy. If the actual growth exceeds potential growth, there will be increased inflationary pressure causing prices to rise. If actual growth is slower than potential growth, there will be increased spare capacity, resulting in higher unemployment.

Level	Descriptors
Level 3 **9-10**	• For answers that shows detailed explanation of the factors may result in sustainable economic growth • Diagrams may be included with excellent explanation. • Minimal errors in analysis. • Excellent reference to the Singapore context.
7-8	• For answers that shows good explanation of the factors may result in sustainable economic growth • Diagrams may be included with good explanation. • Minimal errors in analysis. • Some reference to the Singapore context.
Level 2 **5-6**	• For answers that shows some explanation of the factors may result in sustainable economic growth • Minimal or no diagrams included to aid explanation or diagram included but not explained. • Some errors and inconsistencies are apparent in analysis. • Minimal or no reference to the Singapore context. • One-sided answer (either AD or AS factors are mentioned) – capped at 5.
Level 1 **1-4**	For an answer that is mostly irrelevant in answering the question • There may be basic errors in theory and/or listing of points. • No diagrams included to aid explanation.

(b) Suggested Answer:-
Introduction:
Define globalisation - refers to the growing economic integration of national economies, in terms of financial flows, trade, movement of factors of production, ideas and changes in information technology.

Globalisation is generally beneficial to Singapore since it is dependent on trade for its economic growth. With globalisation, we have gained higher productivity, wider consumer choice at lower prices, and better living standards.

However, globalisation is not without risk. Shocks and disturbances are transmitted across borders with greater speed and virulence, and can destabilise economies. Wage disparities between skilled and unskilled workers have widened in both industrialised and developing countries. There are company closure, job losses, and a sense of insecurity too. Some of these adverse effects are also experienced in Singapore which may outweigh the benefits of globalisation.

Thesis: Globalisation is beneficial to the Singapore economy

Positive impact of freer flow of trade in goods and services:
With rapid expansion of international trade in goods and services between countries, it enables Singapore to increase its exports, resulting in higher aggregate demand and hence economic growth.

- This is especially beneficial for a small economy like Singapore as domestic consumption is not sufficient to push up the aggregate demand for higher economic growth.
- Singapore's export markets will be enlarged as free trade is promoted. As such, exports will become more competitive. As Singapore has CA in the capital-intensive and knowledge based industries, this will lead to an increase in Qty DD for Singapore's exports in these sectors as she has lower opportunity costs in the production of these goods and services → assuming PEDx > 1 → this will lead to an increase in export revenue and rise in net exports.
- Increase export markets will lead to greater efficiency in production due to IEOS. Greater competition for domestic industries will lead force domestic firms to be productively efficient and dynamically efficient.
- If net exports increases overall, will lead to economic growth, lower unemployment rate, improvement in BOT and BOP. Cheaper imports and greater competition will lead to fall in GPL and dampens inflation.

Positive impact of freer capital flow:
Freer capital flow will lead to FDI inflows.

- This will lead to increase in investments in Singapore. If there is net inflow of FDI → AD and AS increases → NY increases via multiplier effect → EG (actual and potential growth), lower unemployment rate. This will lead to an improvement in the capital account and BOP in the short run. Attracting FDIs in specific industries will help Singapore to develop CA in new niche areas.
- Singapore firms have greater access to foreign markets. → Outsourcing → more efficient and lower cost production and hence, improves competitiveness of Singapore's exports.

Positive impact of freer labour movement:
Freer movement of labour will lead to increase in the supply of labour in Singapore – both highly skilled and low skilled.

- Lower wages: reduces wage-push inflation and Singapore remains competitive as costs of production are maintained. Besides, low or semi-skilled foreign workers are mostly required in industries such as construction and building that are shunned by most indigenous workers in Singapore. With foreign workers, important infrastructure such as roads and public transportation system can be built and this contributes to greater productivity. Aggregate supply rises.
- In addition, with the inflow of foreign talents from developing countries, they help improve quantity and quality of labour → helps achieve potential growth and increase LRAS of Singapore. Singapore will be able to achieve non-inflationary sustainable EG.
- Influx of foreign talent allows Singapore to develop new niche areas in the knowledge based industries.

Anti-thesis: Globalisation is not beneficial to the Singapore economy

Negative impact of freer flow of trade in goods and services:
Removal of barriers on imports increases in the quantity demand for imports. This will lead to competition for import substitution industries due to loss in CA in these industries e.g. labour-intensive production → fall in DD for domestically produced goods. This will lead to rise in import expenditure and fall in NX.

- Local firms will find themselves competing with bigger and more established foreign companies, and may not be able to survive the competition, resulting in decline of the domestic industries. This could lead to loss of jobs and possible economic decline.
- Another adverse effect is the loss of jobs. In particular, labour-intensive and low-value added industries in Singapore are relocated to lower production cost locations in emerging countries like

China, India and Vietnam given their abundant and hence cheaper labour. This relocation has resulted in job losses in Singapore and increased unemployment fall in income and material standards of living. (Eg. closure of Seagate Ang Mo Kio plant in 2009). Although it is argued that based on the principle of comparative advantage, Singapore should restructure its economy and specialise in more knowledge-intensive or technology-intensive (which also means higher value-added) industries. In reality, the displaced labour are not able to find employment in these new industries due to the lack of skills and qualifications, i.e. there is occupational immobility of labour.

- If NX increases overall, may lead to demand-pull inflation in the SR if economy is near full employment.

Evaluation: Whether Singapore benefits more than costs depends on the overall net effect on net exports. If net exports increases, benefits > costs → Benefits from economic growth, lower unemployment rate, improvement in BOT and BOP will outweigh the costs of higher inflation and structural unemployment.
In recent years, Singapore has restructured its economy to focus on new niche areas of growth. This has ensured that Singapore's exports are competitive in the world economy and to benefit from globalisation.

Negative impact of freer capital flow:
Freer capital flow will lead to outflow of FDI. Singapore may not be as competitive as other developing countries.

- May lead to structural unemployment as domestic firms outsource the production process. (as explained above)
- If net inflow of FDI →over-heating in the SR → DD-pull inflation. (as explained above)
- Crowding out of domestic investments → over-reliance on FDI for economic growth → more susceptible to international shocks. For example, a major recession in US could cause other major economies in the world to experience economic slowdown as well ("when US sneezes, the rest of the world catches a cold"). Globalisation and the free movement of capital, in particular hot money, have led to very destabilizing effects on many countries including Singapore. Financial crises since the 1990s (Asian Financial Crisis in 1997; Dot.com burst in 2001; Credit crisis in 2008) have happened more frequently, spread across countries more rapidly and their effects more devastating. Hot money, and the speculative behaviour of hedge fund managers have been blamed for this, along with human greed and unsound banking practices. The global financial crisis in 2008 is an example of how integration of financial markets in the world could result in a chain reaction of collapse of financial institutions and economic downturn across countries.
- Worsening of current account in the LR due to repatriation of profits.

Evaluation: Whether the benefits > costs depends on net capital flows. It is likely that Singapore will benefit more than the costs because of the ease of setting up businesses, coupled with favourable government policies in Singapore. In recent years, Singapore has positioned itself well to attract net FDI inflows.

Negative impact of freer labour movement:
Freer movement of labour will lead to brain drain, where local talents chose to work overseas. → fall in labour supply → fall in AS → limits potential growth.

Inflow of labour into Singapore

- Dampens wages especially for the lower-skilled workers. As Singapore restructures its economy, more investments are put into higher technology, higher value added industries such as bio-medical, pharmaceuticals and aerospace, which require higher skills. Professionals employed in the financial and business services sector also experience higher income growth. However, the majority of workers which are in lower skill jobs find their wages rising more slowly, resulting in a greater income disparity in the country.→ Rising income inequality.
- Worsens current account due to repatriation of profits.

Evaluation: It is likely that Singapore benefits from the movement of labour (net inflow of labour) because we are able to attract and retain talent through favourable tax policies and high standard of living.
Labour flows are also necessary to boost economic growth given our low birth rate.

However, cost of living in Singapore has increased quite significantly with inflation rates highest in recent years. (Evaluate if it has do with inflow of labour)

Conclusion/Synthesis: Given the size and openness of the Singapore economy, Singapore has no choice but to embrace globalisation. Whether globalisation is largely beneficial to the Singapore economy depends on:
(i) Potential to realize gains from globalization if resource allocation moves in line with principle of CA. But the presence of government policies to maximize the gains would play a catalytic role to realizing these gains.
(ii) The overall net benefit also depends very much on government efforts to minimize the threats such as widening income gap and structural unemployment. Briefly explain the policies that are in place.

Level	Descriptors
Level 3 **9 - 11**	For an answer that shows excellent explanation of both benefits and costs of globalisation on Singapore economy • Excellent explanation of the benefits and costs of freer trade and capital flow • Sufficient scope of coverage (impact on at least three macroeconomic aims and other aims such as efficiency and equity.) • Excellent depth of analysis • Good application to the context of the question • Diagrams included with excellent explanation • Minimal errors in analysis
Level 2 **8**	For an answer that shows good explanation of both benefits and costs of globalisation on Singapore economy • Good explanation of the benefits and costs of freer trade and capital flow • May be limited in scope of coverage • Sufficient depth of analysis • Diagrams included with good explanation. • Some errors and inconsistencies are apparent in analysis.
6 – 7	For an answer that shows some explanation of both benefits and costs of globalisation on Singapore economy **OR** shows a more detailed one-sided answer explaining the benefits of globalisation on Singapore economy • Some errors and inconsistencies are apparent in analysis. • Minimal or no diagrams included to aid explanation or diagram included but not explained.
Level 1 **1 – 5**	For an answer that is mostly irrelevant in answering the question • Some generic and superficial explanation of the benefits of globalisation but with little application to Singapore economy • There may be basic errors in theory and/or listing of points. • Minimal or no diagrams included to aid explanation
E2 (3-4)	Well explained judgement if globalisation is beneficial to Singapore economy
E1 (1-2)	Mainly unexplained judgement if globalisation is beneficial to Singapore economy