

2014 SRJC Preliminary Examinations – H1 Economics (8819/01)
Suggested Answers

Question 1 Middle Class and Education in Asia

Extract 1: The rise of Asia's middle class

Companies rub their hands with glee when they think of Asian consumers. The key is the rising middle class. In a DBS Bank's report, *Imagining Asia 2020*, Asia today has a middle class of 525 million people. They make up 28% of the world's middle class. This is projected to expand significantly to an incredible 1.74 billion people over the next 10 years. It's not just a China and India story but one of South-east Asia too. "Over the next nine years, Malaysia and Thailand will see a significant increase in the number of people who will spend more than US\$10 a day," DBS said.

As Asia's middle class grows, so will its demand for goods and services. "The rising middle class will be a significant factor in reshaping national economies. They will be an influential and profitable market segment thanks to their size and emerging buying power," noted DBS.

Durable goods

For a start, there will be much more demand for durable goods such as refrigerators, cars, television sets and mobile phones.

While the middle class is growing, the more impressive expansion will come from the income groups of those earning between US\$4 and US\$10 a day, especially in Indonesia, Vietnam, India and China, said DBS. They will also demand goods and services but at a cheaper price, which will in turn drive the search for innovative solutions to achieve this. Godrej, an Indian manufacturer, is one such company, selling refrigerators for just US\$70.

Education and health care

It is not just demand for goods that will rise. The middle class will also be willing to spend more on important services such as education and health care. This will in turn drive demand for infrastructure – more schools and hospitals.

Source: *The Straits Times*, 23 October 2011

Table 1: Household final consumption expenditure per capita (annual % change)

	2009	2010	2011	2012
China	8.9	7.7	10.6	7.3
India	6.0	7.3	7.9	3.7
Japan	-0.6	2.9	0.2	2.5
Malaysia	-1.2	5.0	5.0	5.9
Singapore	-3.4	4.3	2.4	-0.3

Source: data.worldbank.org, 2014

Extract 2: Emerging economies – rich and confident

In his 1926 short story, *The Rich Boy*, American novelist F. Scott Fitzgerald wrote: “Let me tell you about the very rich. They are different from you and me.” And so they are. Although, today's very rich are not necessarily Americans or Europeans.

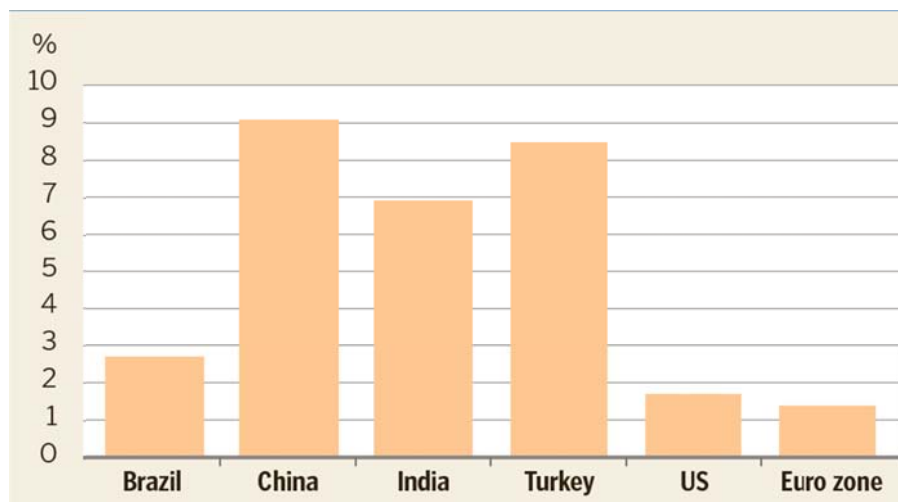
They are quite often the citizens of emerging markets. There are today in Brazil, China, India, Mexico, Russia and Turkey some 320 billionaires, according to the 2012 *Forbes* magazine list of the world's richest people – many more than the 203 billionaires who carry European passports, and just trailing behind the 425 billionaires who reside in the United States.

As a recent Pew Research Centre survey shows, the citizens of emerging markets are more optimistic than those from most developed countries in views about their future and that of their children. And this difference is likely to shape the world economy in the years ahead.

If F. Scott Fitzgerald were writing today, he would amend his comment. It is the emerging rich who are different. Their mood reflects their recent economic good fortune. But it also presages better days to come. Optimistic, upbeat people invest in the future in a self-reinforcing dynamic that bodes well for their economies. The gloom and despair so pervasive in much of Europe threatens the opposite effect. And the world may never be the same again.

Source: Yaleglobal online, 12 July 2012

Chart 1: Annual GDP growth rate (2011)



Source: Yaleglobal online, 12 July 2012

Extract 3: A college building boom in India

On the outskirts of this sprawling city in one of India's poorest states, the whitewashed columns and domes of Chanakya National Law University rise next to a deep and murky swamp. The four-year-old university is part of an ambitious plan to expand higher education to India's most destitute corners, where the country's vast population of young people is concentrated.

Realising that the youth bulge could be an asset in India's drive to become a world power, the government has responded with an ambitious university building spree. The increase in number of institutes can provide access to millions of poor students in a country where many

children drop out of school as early as age 10 and where university education remains largely out of reach. India estimates that there were 13.6 million post-secondary students in 2009, about six million fewer than in the United States. If the government reaches its goals, India could have nearly twice as many college students as does the US by the end of the decade.

But Indian officials acknowledge that the rapid expansion of public colleges and universities will not come close to meeting the demand. Privately run schools fill the gap through distance education, but often their offerings are of low quality, Mr Devesh Kapur, a political scientist at the University of Pennsylvania, told *The Washington Post*.

Mr Pawan Agarwal, an adviser to the federal government's planning commission on higher education, said the Indian government will start to shift its attention "from rapid expansion to quality expansion" this year. The new institutions are fulfilling one mission already, however: They are raising the expectations of a new generation of Indians.

Source: Sarah Garland, *Washington Post*, 1 January 2012

Extract 4: Education woes in Malaysia

Malaysia needs scientists and a professional workforce in science-related fields to move the economy up the value chain. Currently, it is heavily dependent on resources and labour-intensive manufacturing industries.

"It is already a systemic problem – Malaysia is unable to meet demand for engineers and professionals in science-related fields because there are not enough students in this stream," said political analyst Khoo Kay Peng. "It will be challenging for Malaysia to reinvent its economy as the technology curve moves upwards."

Source: Yong Yen Nie, *The Straits Times*, 26 November 2012

Extract 5: India's coffers get boost from remittances

India sells everything from software to textiles abroad, making it the world's ninth-largest exporter country. But at times of economic hardship, a very different kind of commodity helps replenish its foreign exchange reserves – people. Last year, for example, official figures show that Indians sent home about US\$66 billion (S\$80 billion), up from US\$55 billion a year before. These international remittances help moderate India's precarious current account deficit, which widened to about US\$78 billion in 2011/12 due to slowing global demand.

Source: Krittivas Mukherjee, *The Straits Times*, 12 December 2012

Suggested answers

- (a) (i) Compare the change in household expenditure per capita between India and Singapore from 2009 to 2012. [2]

1. Household expenditure per capita always rose in India but fell in 2009 and 2012 in Singapore.
2. Household expenditure per capita rose in India and Singapore in 2010 and 2011.

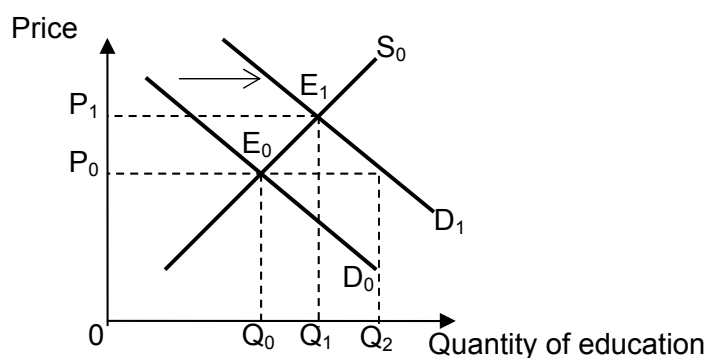
- (ii) How could this change in household expenditure per capita in India explain the 'precarious current account deficit' evident in Extract 5? [2]

1. Rising household expenditure could indicate rising spending on both locally produced goods and imports.
2. Rising import expenditure can lead to a worsening current account, especially since "slow global demand" (Extract 5) can suggest slow rise or even fall in export revenue for India.
3. If import expenditure is much greater than export revenue, India would experience a large and hence precarious current account deficit.

- (b) Extract 1 mentions the rise of the middle class in Asia. With the aid of demand and supply diagrams, explain:

- (i) how the above phenomenon can impact the market for education. [3]

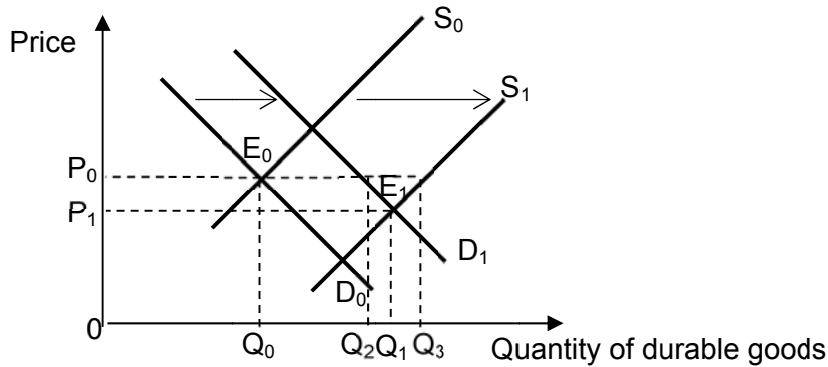
1. Rise in income of the middle class will lead to a rise in their purchasing power.
2. Hence, there will be a rise in the demand for education since it is a normal service.



The increase in demand will shift the demand curve to the right from D_0 to D_1 , causing an initial shortage of Q_0Q_2 at the original price of $0P_0$. Hence the equilibrium price will increase from $0P_0$ to $0P_1$ and equilibrium quantity will increase from $0Q_0$ to $0Q_1$.

- (ii) the possible impact on the market for durable goods given that 'they will also demand goods and services but at a cheaper price, which will in turn drive the search for innovative solutions to achieve this'. [4]

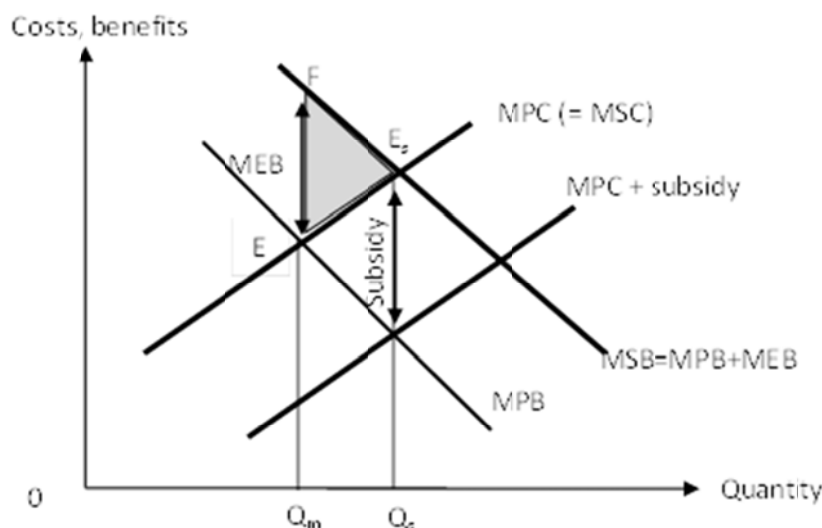
1. There is a rise in demand due to a rise in income.
2. There could also be a rise in the supply of consumer goods.
3. This is due to 'search for innovative solutions', which can translate into more cost efficient methods of production. Hence, assuming no change in revenue, profits of producers will rise. As a result, the supply of durable goods will rise.
4. Assume that the rise in supply exceeds the rise in demand.



5. At the original price of OP_0 , there is a surplus of Q_2Q_3 . This exerts a downward pressure on the price. Consequently, the equilibrium price falls from OP_0 to OP_1 . In this case, there is a rise in the equilibrium quantity from OQ_0 to OQ_1 .

(c) 'The youth bulge could be an asset in India's drive to become a world power' (Extract 3). Discuss whether the 'ambitious university building spree' is the only way to address the microeconomic concern of the Indian government. [8]

1. The consumption of higher education generates positive externalities, i.e. a highly educated pool of young people can help India become a world power. With a larger pool of educated young people, there will be a rise in productivity in the labour force in India when these young people become part of the labour pool. Hence, there will be a rise in productive capacity, leading to a rise in India's AS in the long run, and generating potential economic growth for the country.
2. Currently, there is underconsumption of higher education. The private equilibrium level of consumption of higher education occurs at Q_m where $MPB = MPC$ while the socially optimal level occurs at Q_s where $MSB = MSC$. Hence, there is an underconsumption of higher education and it gives rise to the deadweight loss of area EFE_s .



3. By building more universities, the Indian government hopes to increase the number of university places to the socially optimal level, thereby correcting the problem of underconsumption and thus, India is a step closer to becoming a world power.
4. Evaluation:
 - a. But, the government may suffer from imperfect information on the socially optimal number of university places to provide. If the number of university places is still

less than the socially optimal level, underconsumption of higher education will still exist.

5. Thus building spree is not the only way to increase the consumption of higher education in India.
6. If the government gives the producer of higher education a subsidy equal in value to the MEB generated, the supply curve (MPC curve) will shift to the right or vertically downwards by the full amount of the subsidy to $MPC + \text{subsidy}$. Since firms have increased the supply of the good, the market price of higher education will fall, *ceteris paribus*. The lower price of higher education will induce consumers to increase the quantity demanded.
7. Evaluation:
 - a. The success of the subsidy depends on the price elasticity of demand for higher education in India. The more price elastic is the demand, possibly because the proportion of income spent on higher education is huge for many families in India (Extract 3: millions of poor students in a country where many children drop out of school as early as age 10), the larger is the rise in the quantity demanded for higher education, *ceteris paribus*, when price falls.
8. The ambitious university building spree is not the only way for the Indian government to tap on the youth bulge to maximise the potential of the economy. A combination of policies is a more effective way to raise consumption of university education to the socially optimal level as compared to just using one policy.

Marking scheme:

L3	1. Good application of merit goods is evident 2. Explain and evaluate direct provision by government 3. One other way is well-discussed 4. Informed conclusion that addresses the question requirement is evident
L2	1. Application of merit goods is evident 2. Either failure of information or positive externalities is applied 3. Explain and evaluate direct provision by government 4. "only way" is either not addressed or cursorily addressed
L1	Largely descriptive answer with little economic analysis

- (d) Extract 4 states that 'Malaysia needs scientists and a professional workforce in science-related fields to move the economy up the value chain'. Explain how the concept of opportunity cost can be applied to this statement. [3]

1. Apply central problem of economics

- a. Scarcity: limited resources which in this case can refer to labour force; unlimited wants can refer to the different areas that the Malaysian economy wants to specialise in
- b. Choice: The Malaysian economy wants to move from labour-intensive manufacturing to higher value-added production. In order to make the change in comparative advantage (CA), the government needs to encourage more students to take up science courses.
- c. Opportunity cost: With more students taking up science courses, Malaysia will have a bigger pool of scientists, i.e. more favourable factor endowments that can promote the growth of the higher value-added industries. Hence, it will be able to produce these goods at a lower opportunity cost than trading partners, i.e. less of the alternative good such as a labour-intensive manufactured good is forgone, and be able to export these goods. By developing CA in these industries, the economy would forgo production in the labour-intensive manufacturing industry.

- (e) In the light of the data provided and your own relevant knowledge, do you think that the economic growth of emerging economies such as China, India and Turkey evident in Chart 1 can be sustained? [8]

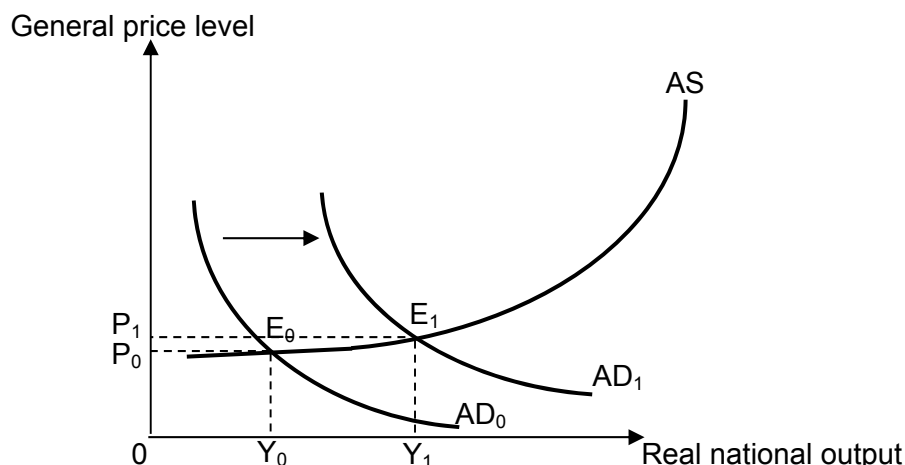
Introduction:

1. A sustained rate of economic growth implies positive and stable economic growth. This happens when there is actual and potential economic growth with low inflation.
2. Whether the economic growth of emerging economies such as China, India and Turkey can be sustained depends on the following factors: prevailing economic conditions in the emerging economies and the state of the global economy.

Body:

Thesis: The economic growth emerging economies such as China, India and Turkey can be sustained.

3. Extract 1: growing middle class in Asian countries such as China and India
 - a. The number of people who spend more than US\$10 a day (Extract 1) increases. This means that there will be a rise in consumption expenditure (C) in the emerging economies. Investment expenditure (I) will also rise in the emerging economies as firms expect to earn a high rate of return when they invest in the emerging economies due to a rise in demand for normal goods and services.
4. There is also evidence of a rise in government expenditure in India due to the increased spending on education (Extract 3).
5. With a rise in C, I and G, there will be a rise in AD in the emerging economies.



Currently at Y_0 , the emerging economy is operating at less than full-employment. When there is a rise in I and G , the multiplier process is activated (explain). The multiplier process continues until the economy reaches a new equilibrium national income at a higher level, i.e. Y_1 , which is nearer to the full-employment level of national income in this case. As a result, the emerging economies can experience actual economic growth with low inflation.

6. Evaluation:

- a. If the emerging economy is operating near full employment, the multiplier effect on national output will be dampened by the rise in the general price level. As a result, slow actual economic growth with high inflation will occur. In this case, the economic growth of the emerging economies may not be sustained.

Anti-thesis: On the other hand, the economic growth of the emerging economies may not be sustained.

7. There is slow economic growth in major economies such as the US and the Euro zone (Chart 1).

- a. If the slow economic growth in these economies persists or even becomes negative, it can have an adverse impact on the export revenue for the emerging economies. For example, the slow economic growth in the US would instil pessimism in the households, which would lead to a fall in consumption as households save more. This reduction in spending also includes expenditure on imports, which are the emerging economies' exports. With a fall in export revenue, $(X-M)$ of the emerging economies will fall, *ceteris paribus*.
- b. As a result, there may be a smaller rise in AD as the fall in $(X-M)$ reduces the rise in AD caused by the aforementioned rise in C , I or G . Hence, real national output will rise by a smaller extent in the emerging economies.

Conclusion:

1. In my opinion, the ability of the emerging economies such as China, India and Turkey to sustain their economic growth depends how successful they are in shifting their economic growth model from an export-led one to one that depends more on domestic consumption and investment.

Marking scheme:

L3	1. Thorough discussion of whether the economic growth in the emerging economies is evident that is well-grounded in AD-AS analysis
	2. Good use of case information and background knowledge is evident

	3. Informed conclusion that addresses the question requirement is evident
L2	1. Some attempts are made to discuss whether the economic growth in the emerging economies can be sustained are evident 2. Use of AD-AS analysis is evident 3. For a good one-sided discussion
L1	Largely descriptive answer with little economic analysis

Question 2 Taking the Pulse of Eurozone

Extract 6: What Germany offers the world

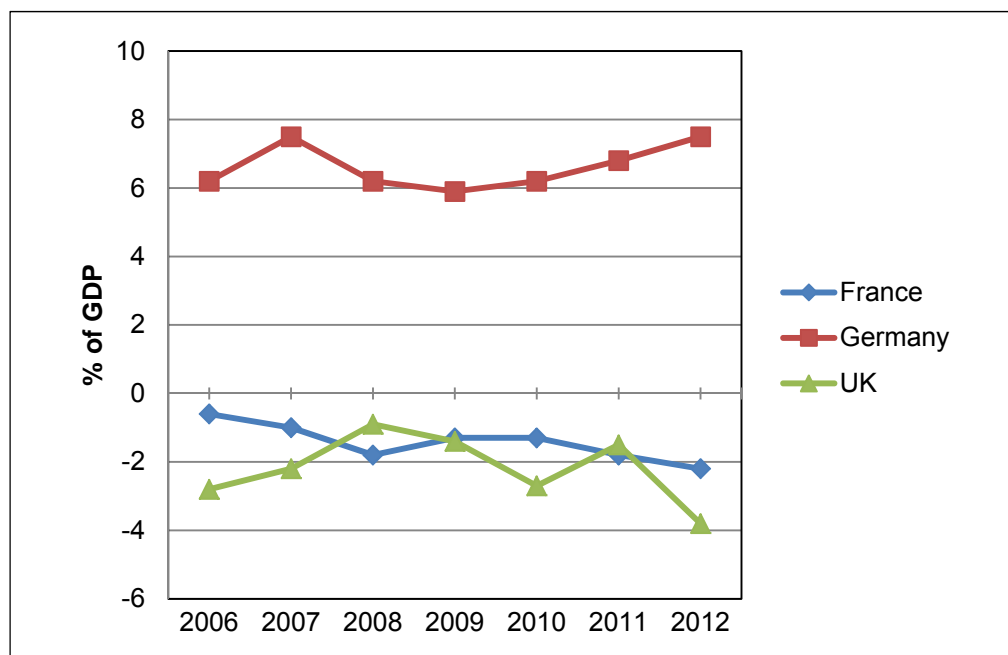
Beckhoff Automation, one of Germany's family owned businesses, is among thousands of "hidden champions" that account for much of Germany's prowess as a manufacturer and exporter. Its sales leapt 34% to €465m last year. It is aiming for €2 billion by 2020. Largely thanks to its Beckhoffs, Germany looks like a bright exception to the dispiriting rule among developed economies. True, its economy contracted more than those of most rich countries during the 2008-09 world recession, but the jobless rate rose by less than in all the others, peaking at 7.9%. And nobody talks about downgrading Germany's AAA credit rating; it can borrow money for practically nothing.

Not all the news is good. The economy shrank in the final quarter of 2011; and even if first quarter figures do not reveal Germany itself to be in recession, its economy will continue to suffer the drag of recession elsewhere in the euro area and a slowdown in developing countries. But just 1% growth is enough to create jobs, according to Bert Rürup, a former chairman of the government's council of economic "wise men". In a book written with a journalist, Dirk Heilmann, "Fat Years: Why Germany has a Brilliant Future", he giddily predicts that by 2030 Germany will become the world's richest large country in terms of income per head.

Such success brings a great deal of admiration. Spain's education minister is looking into Germany's "dual system" of vocational training, which combines classroom instruction with work experience. John Cridland, director of the Confederation of British Industry, wants Britain to have its own version of firms like Beckhoff. Nicolas Sarkozy began his campaign for re-election as France's president sounding as if he would gladly swallow the model whole. Germany prioritised "jobs, jobs, jobs," he said. "If it worked for them, why wouldn't it work for us?"

Source: *The Economist*. 14 April 2012

Figure 1: Current account



Source: OECD

Table 2: Selected economic indicators of Germany

	2009	2010	2011	2012
Annual % growth rate (at constant prices)	-5.1	4	3.3	0.7
Consumer prices inflation (annual %)	0.3	1.1	2.1	2.0
Unemployment (% labour force)	7.7	7.1	5.9	5.4
Government debt (% GDP)	47.6	55.5	55.1	56.9
Gross capital formation (% GDP)	16	17	18	17

Source: World Bank

Extract 7: The eurozone crisis: growth problem

Europe's politicians are often berated for an excessive focus on austerity. And it seems likely that there is a huge problem with several countries pursuing austerity simultaneously. One cannot switch the economy from domestic consumption to exports, if all your neighbours are trying to do the same. Canada's success in the 1990s occurred during the great boom of its biggest trading partner, the US.

This is what makes the debt crisis so difficult. The best way to eliminate a debt problem is to grow the economy rapidly but Europe seems to have lost the knack. And the demography is not encouraging because the workforce is likely to stagnate or shrink. Indeed, there was something perverse about taking on so much debt in the first place; debt requires confidence, on the part of the lender or the borrower and ideally both, that the borrower's income is going to grow. But Europeans piled up the debt even as the growth rate slowed, rather like a 64-year old going on a spending spree before retirement.

It may well be that European economies would perform better collectively if austerity programmes were relaxed. But it is a stretch to believe that Europe can return to the growth rates seen in the 1960s or even the 1970s. And those rates might be needed to make the debt problem go painlessly away.

Source: *The Economist*, 17 December 2012**Extract 8: Eurozone needs a growth strategy, not more austerity**

The recession on the eurozone's periphery is deepening and moving to the core, namely France and Germany. Indeed, the recession will worsen throughout this year, for many reasons. First, fiscal austerity is accelerating the contraction, as higher taxes and lower government spending and transfer payments reduce disposable income and aggregate demand. Moreover, as the recession deepens, resulting in even wider fiscal deficits, another round of austerity will be needed. And now, thanks to the fiscal compact, even the eurozone's core will be forced into recessionary austerity.

Moreover, while über-competitive Germany can withstand a strong euro, for the rest of the eurozone's periphery, where unit labour costs rose 30-40% during the last decade, the value of the exchange rate would have to fall to parity with the US dollar to restore competitiveness and external balance. After all, spending less and saving more to reduce debts depress domestic private and public demand and the only hope of restoring growth is an improvement in the trade balance, which requires a much weaker euro. Meanwhile, the

credit crunch in the eurozone periphery is intensifying: thanks to the European Central Bank (ECB) long-term cheap loans, banks there don't have a liquidity problem now, but they do have a massive capital shortage.

There are also signs of austerity and reform fatigue both in Spain and Italy, where demonstrations, strikes, and popular resentment against painful austerity are mounting with the rise in unemployment rates and a severe lack of jobs. The trouble is that the eurozone has an austerity strategy but no growth strategy. And, without that, all it has is a recession strategy that makes austerity and reform self-defeating, because, if output continues to contract, deficit and debt ratios will continue to rise to unsustainable levels. Moreover, the social and political backlash eventually will become overwhelming.

Structural reforms in areas such as education, innovation, competition and green growth is also essential but that which will eventually increase productivity growth can be recessionary in the short run. Increasing labour market flexibility by reducing the costs of shedding workers will lead to more layoffs in the public and private sector in the short run, exacerbating the fall in incomes and demand.

Without a much easier monetary policy and a less front-loaded mode of fiscal austerity, the euro will not weaken, external competitiveness will not be restored, and the recession will deepen. And, without resumption of growth – not years down the line, but in 2012 – the stock and flow imbalances will become even more unsustainable. More eurozone countries will be forced to restructure their debts, and eventually some will decide to exit the monetary union.

Source: *The Guardian*, 13 April 2012

Suggested Answers

- (a) (i) Compare Germany's balance on current account with that of France's and Britain's over the period 2006 to 2012. [2]
- While Germany enjoyed a current account surplus over the period, France and Britain's current account was in deficit.
 - Germany's current account surplus (as a % of GDP) was rising while France and Britain's current account deficit (as a % of GDP) was also increasing.
- (ii) From Extract 6, explain one reason for the difference observed. [2]
- Structural factor – Extract 6, para 3 states that Germany's has a "dual system" of vocational training, which combines classroom instruction with work experience (Extract 6, Para 3).
 - This suggests that Germany will has a comparative advantage in the production of high-tech value added goods due to their unique education system in Europe which leads to higher productivity, lower unit cost of production and causes exports to be more competitive. Net exports increases, which accounts for Germany's rising current account surplus.
 - On the other hand, without such an infrastructure in France and Britain as stated in Extract 6, Para 3 "... wants Britain to have its own version of firms like Beckoff", their exports might have loss competitiveness, which accounts for the rise in current account deficit.

(b) How far can Figure 1 be used to infer about Germany's current account contribution to its economic growth between 2009 and 2012? [4]

- Germany's economic growth rose rapidly from 2009 to 2010 before slowing down till 2012 → real GDP was rising but at a slower rate.
- As Germany's current account surplus (as a % of GDP) continued to increase over the period. It contributed to the rise in real GDP as $(X-M)$ rise → AD rise → national output rises, leading to the rise in real GDP. Hence current account contributed largely to the economic growth.
- However, there are other factors contributing to economic growth besides $(X-M)$ such as C , I and G which are not shown in Fig 1. Hence while $(X-M)$ continued to rise at a constant rate, if C , I and G fell, it might result in a smaller increase in GDP → as explained by the fall in rate of economic growth shown in Table 2.

(c) Explain why one way 'to eliminate a debt problem is to grow the economy rapidly.' [3]

- Debt occurs when the total government expenditure is more than total government revenue collected and the government has to finance its spending through borrowing from private banks and a debt is incurred.
- When there is strong economic growth, residents earn higher income and businesses earn greater profits. Hence more tax revenue, both personal and corporate, can be collected.
- More jobs can also be created when there is economic growth and less transfer payments need to be provided for the unemployed causing a fall in government expenditure.
- The rise in tax revenue and the fall in government expenditure can be used to repay the principal sum and interest of the loans, eliminating the debt problem.

(d) In view of rising labour cost, explain whether allowing the exchange rate 'to fall to parity with the US dollar will restore competitiveness and external balance'. [5]

- Allowing the Euro 'to fall to parity with the US dollar' suggest a depreciation of the exchange rate.
- This is necessary because Extract 8, para 2 suggests that "unit labour costs rose 30-40%". This raises cost of production due to wage cost push inflation → AS ↓ in the short run → firms will pass on the rising cost to consumers in the form of higher domestic and export prices → ↑ P_x .
- As export prices increases, Euro's exports might lose competitiveness → Assume $PED_x > 1$ → more than proportionate fall in quantity demanded for exports → ↓ TR_x . Assume imports are relatively cheaper → DD for imports rises → TE_m ↑ → $(X-M)$ ↓ → Worsening current account upsets the external current account balance the Eurozone.
- However, allowing the Euro "to fall to parity with the US dollar will restore competitiveness and external balance" if the fall in value of the Euro is greater than the rise in COP → help to offset the rise in COP leading to an overall ↓ P_x in foreign currency. On the other hand, P_m ↑ in domestic currency. Assume ML condition holds, where sum of PED_x and PED_m is more than 1, $(X-M)$ ↑ and this restores the external balance in the Eurozone.

Evaluation

- However, if there was only a weak depreciation which is insufficient to offset the rise in the COP given that “unit labour cost rose 30-40%” → overall the price of exports will still rise and there will not be an improvement on the current account.

- (e) The data elaborates on the effects of fiscal austerity (Extract 8) on the eurozone. Discuss how such a measure will affect its standard of living. [6]

Introduction

- Material SOL is measured by the quantity of goods and services consumed by an individual while non-material SOL is measured by factors such as happiness, crime rates, socio-economic factors ie. life expectancy, infant mortality rates, quantity of leisure, etc
- Fiscal austerity refers to a fall in government expenditure and a rise in tax revenue in order to reverse the budget deficit situation in the country.
- While fiscal austerity can reduce material and non-material SOL in the short run, when the budget deficit is corrected, it can lead to an improvement in the SOL in the long run.

Fiscal austerity measures have negative effects on the country's material SOL in the SR.

- Extract 8, Para 1 states that ‘fiscal austerity is accelerating the contraction, as higher taxes and lower government spending and transfer payments reduce disposable income and aggregate demand.’
- When a country adopts fiscal austerity measures, there will be a fall in G and higher personal and corporate income tax. The rise in personal income tax will cause a fall in disposable income and consumption (C). In addition, a rise in corporate tax will also decrease post-tax profits, so the level of investments will fall. When C and I fall, AD and NY fall. This triggers the reverse multiplier effect which causes a multiple fall in national income and employment. As the amount of goods and services produced in the economy falls, there is also less for consumption, hence material SOL falls in the short run.

Fiscal austerity measures can improve the country's material SOL in the LR.

- The objective of the fiscal austerity measure is to reduce the government spending and increase the government tax revenue with the intention of reversing the government budget deficit and debt in the EU.
- In the LR, this reduction of debt will boost investors' confidence in the EU and investors will start to increase their FDI into the region again. With an increase in FDI, AD and AS can rise again in the Eurozone, leading to an improvement in future SOL.

However, fiscal austerity can also cause non-material SOL to suffer in the short run.

- The austerity measures especially the rise in income taxes and the reduction in transfer payments (ie. Unemployment benefits) would have caused a high level of unhappiness in the economy especially. In addition, a fall in government expenditure on public projects could also cause a rise in unemployment rates, stress levels, unhappiness and crime rates can increase leading to a fall in non-material SOL.

Conclusion

The fiscal austerity measures will likely cause material and non-material SOL to fall in the short run. However, if the measures work to achieve its objective which is to reduce debt in the LR, material and non-material SOL can then increase.

Levels	Levels Descriptor
L3	<ul style="list-style-type: none"> • Thorough explanation of the effects of the austerity measures in both the SR and LR. • Good reference to how austerity affects both material and non-material SOL. • Effective application of case material. • Insightful conclusion that rounds up the discussion.
L2	<ul style="list-style-type: none"> • Good explanation of austerity measures but lacking in reference to both the SR and LR. • Some discussion on material AND non-material SOL but with some gaps in analysis. • Inconsistent application of case material.
L1	<ul style="list-style-type: none"> • Weak understanding of austerity measures with limited explanation and many gaps in analysis and/or evaluation • Answers may contain conceptual errors. • Weak application of case material.

- (f) Nicholas Sarkozy claimed that Germany prioritised 'jobs, jobs, jobs'. To what extent do you agree that 'jobs, jobs, jobs' should continue to be Germany's top priority in 2012? [8]

Introduction

- Prioritising 'jobs, jobs, jobs' refers to placing low unemployment as the top economic goal and where the government implements policies in order to achieve the goal.

Body

Thesis: Unemployment should continue to be Germany's top priority goal in 2012

Even though unemployment has been falling, Germany should continue to place emphasis on low unemployment as a high degree of unemployment brings about serious consequences

- In 2012, unemployment stands at 5.4% of the labour force. As the unemployment rate has been falling since 2009, which is a positive sign, it also suggests that Germany should continue to press on in terms of lowering unemployment to avoid the consequences of high unemployment.
- The problem of high unemployment → wastage of scarce resources and a loss of potential output → represented by a point inside the PPC → unemployed could have produced something of value for society but they cannot → Society is thus deprived of a higher output and standard of living.

Anti-Thesis: Germany should prioritize other economic goals besides unemployment in 2012

Considering the severity of the other economic problems and the economic conditions within the Germany economy, Germany should consider prioritizing reducing government debt and boosting economic growth as its top priority

- In 2012, the most severe economic problem in Germany is its government debt which stands at 56.9% of the GDP as per Table 2. In order to finance the deficit,

Germany will have to dig into their reserves or borrow from international authorities such as IMF which will cause them to incur interest.

- In addition, with such a high government debt, there will be opportunity cost in terms of being unable to utilise government funds to develop the economy further. The existence of a significant debt may also generate fears about the future stability of economy, which discourages potential investments.

In addition, the root cause of unemployment in Germany seems to be cyclical in nature rather than structural, hence Germany will have to wait until the recession is over for the unemployment to recover fully.

- Extract 7 states that ‘... it seems likely that there is a huge problem with several countries pursuing austerity simultaneously. One cannot switch the economy from domestic consumption to exports, if all your neighbours are trying to do the same.’ As Germany’s trading partners suffer a fall in economic growth due to the Eurozone crisis, this causes a fall in purchasing power and demand for Germany’s exports to fall → When (X-M) falls → AD falls → NY falls → since labour is a derived demand, employment also falls.
- Since the root cause of unemployment is largely due to cyclical fall in the demand for its exports, besides depreciating the Euro to increase the export competitiveness, it might have to wait for the crisis to be over before it can make a full recovery from the recession.
- Therefore, besides waiting for the economy to recover from the recession to witness a further fall in AD or to boost economic growth, there is little the German can do to reduce unemployment further, so it should not be a priority.

Conclusion

- High unemployment brings about consequences for a developed economy such as Germany and thus should be a cause for concern. However with more pressing issues, there might be a need to place other economic problems such as the high debt and slow growth as the top priority.

Levels	Levels Descriptor
L3	<ul style="list-style-type: none"> • Explanation of both thesis and anti-thesis on why unemployment should and should not be the main priority goal in Germany. • Effective application of case material which shows understanding of economic issues such as high unemployment, debt and slow growth. • Insightful conclusion that rounds up the discussion.
L2	<ul style="list-style-type: none"> • Some discussion on the thesis and anti-thesis but with gaps in analysis. • Answers show weak understanding of economic issues such as high unemployment, debt and slow growth. • Weak application of case material.
L1	<ul style="list-style-type: none"> • One sided discussion on thesis OR anti-thesis. • Answers contain many gaps in analysis and/or conceptual errors. • Limited explanation which reflects weak understanding of economic issues. • Weak/no application of case material.

- 3 (a) Using a production possibility curve diagram, explain the central problem that all economies face. [10]
- (b) Evaluate the view that a government should use indirect taxation to respond to the existence of a negative externality in its country. [15]

PART A

INTRODN

The central problem faced by all economies is the problem of scarcity. From this one central problem stems all the other economic problems.

BODY

The central problem faced by all economies is the same regardless of their level of development. It refers to the problem of scarcity which will always exist because there are more wants relative to the amount of resources available.

Scarcity arises because human wants are unlimited, but resources are limited and inadequate to meet all of society's wants.

Due to the problem of scarcity, factors of production must be utilised efficiently to produce the goods and services most desired by the society. Some wants might have to be given up to fulfil more urgent needs. Hence, because of scarcity, choices have to be made.

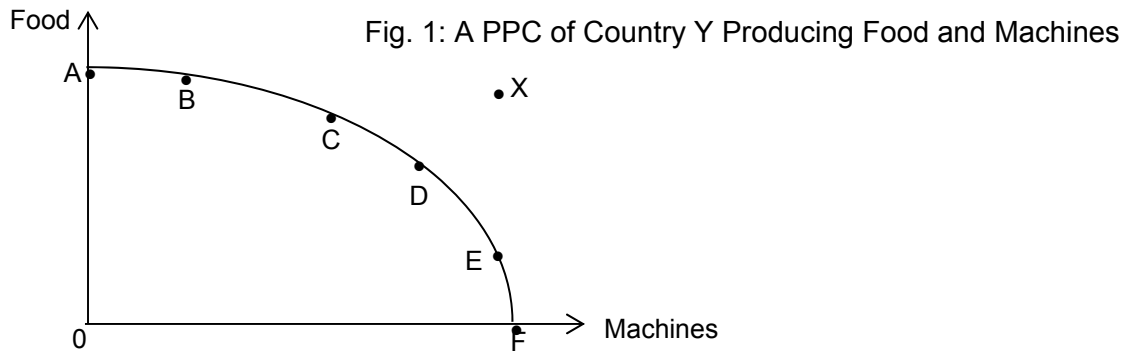
Choice is the act of selecting among alternatives and it involves sacrifices. For example, the more food a nation produces, the less resources there will be for producing other goods. People must be rational and weigh the benefits and costs carefully when making a choice. The three fundamental questions that an economy must resolve when making choices are:

- i. What and how much to produce: Since it is not possible to produce everything, there is a need to decide what and how much to produce.
- ii. How to produce: There is a need to get the maximum use out of the limited resources available. Therefore the need to consider what kind of machines to use, how much labour to deploy and how the factors of production should be combined to generate the maximum output.
- iii. For whom to produce: Differences in purchasing power will determine for whom the goods are produced.

In resolving the above questions, a choice is made which involves sacrifice. This sacrifice of alternatives in the production/ consumption of a good is known as its opportunity cost i.e. the next best alternative foregone which represents the real cost of the activity.

The concepts of scarcity, choice and opportunity cost can be illustrated graphically by using a production possibility curve (PPC). It shows all the possible combinations of two goods that a country can produce within a specified period of time with all its resources fully and efficiently employed and at a given state of technology.

Assume that Country Y can produce only 2 goods: machines and food, with its existing resources and employment and keeping the state of technology unchanged.



The central economic problem of scarcity is represented on the PPC by the unattainable combinations which lie outside of the PPC (Point X). X cannot be attained as there are not enough resources to produce the combination of goods. There is scarcity of resources.

The concept of choice is represented by movement along PPC. As many combinations of machines and food in the country can be produced, it is necessary to choose one of these combinations. For e.g. it can choose combination A which consists of all machines and no food or combination B which has both machines and food or other combinations on PPC.

The concept of opportunity cost is shown by the negative slope of PPC which is concave to the origin. If the country wishes to produce more machines, it must produce less food.

CONCLUSION

Thus, scarcity is the central problem faced by all economies and it leads to choice-making in resource allocation. For any choice made, an opportunity cost is incurred.

Level	Descriptors
L3	<ul style="list-style-type: none"> • Good explanation of the central problem of scarcity using the PPC framework linking to resource allocation • Clear ranking of options in the explanation of opportunity cost
L2	<ul style="list-style-type: none"> • No PPC analysis, but good explanation of the 3 concepts and how they affect resource allocation • No PPC analysis but able to apply economic concepts to explain scarcity, choice & opportunity cost but unable to link these 3 concepts to resource allocation
L1	<ul style="list-style-type: none"> • Shows some knowledge of what scarcity is but lacking economic application • Smattering of ideas, examples about scarcity, choice & opportunity cost

PART B

INTRODN

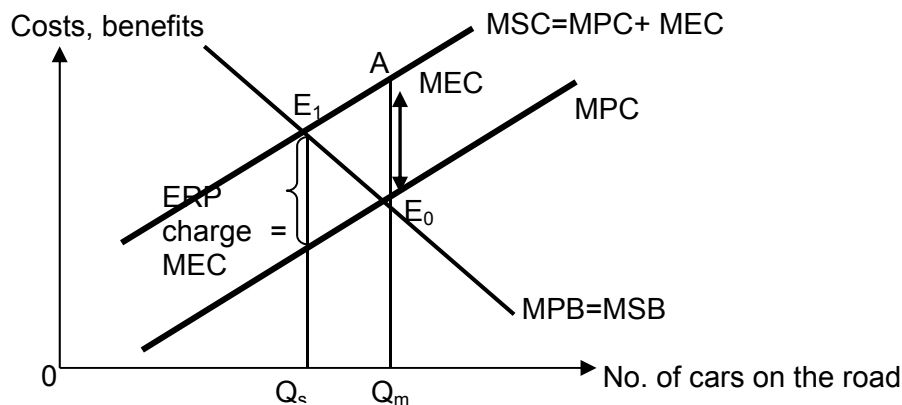
Define negative externality: Refers to the external cost imposed on third parties who are not directly involved in the production/ consumption of a good, and these third parties are not compensated for the harm inflicted on them.

Assume the negative externality arises from traffic congestion which results in market failure. The latter is undesirable because resource allocation concerning what, how much, how and for whom to produce using the price mechanism fails to achieve the socially optimal level of resource allocation. Hence society's welfare is not maximised, thus there is a need for the Singapore government to intervene.

BODY

Traffic congestion is a form of market failure as it signals that road usage has exceeded its socially optimal level.

- Traffic congestion generates noise and air pollution that reduces quality of living for residents (3rd parties) living near congested roads. They may face long term health problems which cause them to incur medical costs, which is an example of external cost.
- Due to presence of negative externalities, there is a divergence between MPC and MSC by the extent of MEC, hence true/ social cost is higher than private cost. In figure 1, MSC curve is derived by adding MEC to MPC.



- Assuming there is no external benefit, MPB therefore equals MSB. When left to the free market, motorists will use their cars to where $MPB = MPC$ at point E_0 making $0Q_m$ the market equilibrium quantity of car usage. But it is at $0Q_s$, the social optimum where $MSC = MSB$ at point E_1 .
- Thus the free market through price mechanism will bring about a level of car usage $0Q_m$ that is higher than $0Q_s$. There is overusage of cars/roads by $Q_s Q_m$ leading to inefficient resource allocation. For each additional trip beyond Q_s till Q_m , the cost to society is more than the benefit as MSC is greater than MSB . By summing up the excess of MSC over MSB for additional road trips $Q_s Q_m$, a welfare loss to society of $\$E_1 A E_0$ results.

To address the problem of traffic congestion, a government can implement an indirect tax such as the Electronic Road Pricing Scheme to control car usage during peak hours. It is effective as it tackles the root cause of traffic congestion where there are too many cars on the roads given limited road space.

All vehicles are fitted with an electronic device which is triggered if it enters a congested area. Different rates will be charged at different times of the day based on the severity of the traffic congestion. Thus ERP rates reflect the external costs to society as a result of traffic congestion and are aimed at closing the gap between MPC and MSC.

Evaluation of ERP

- It is a fair market-based solution as the charges are based on usage so that whoever contributes more to congestion pay more according to the “polluter pays” principle.
- It is hard to estimate the level of external cost and hence, the ERP charges. Over/undercharging result in under/overutilisation of roads below/beyond socially optimal level.

The usefulness of an indirect tax like the ERP in tackling traffic congestion suggests that while it should be used, there is a need to complement it with other policies as there are limitations to its usage.

In Singapore for example, the government attempts to reduce congestion by limiting the number of cars that can be bought. New car owners need a COE to register his car. The number of COEs determines the number of cars on the roads. And this number depends on the annual rate of car growth and the number of vehicles deregistered in the previous period. The prices of COE will vary with demand and supply with the number of COE decided by Land Transport Authority (LTA). Rising demand will lead to a rise in the COE premium, *ceteris paribus*.

Evaluation of COE

- Without the COE scheme, the car population in Singapore would rise substantially. This scheme caps the number of vehicles to produce a socially optimal level of road usage and hence reduces congestion. But this would mean that the public transport system must be able to support the rise in commuters. If not, this would add burden to the public transport, resulting in another different set of problems such as congested buses and trains that might worsen society welfare.

In the long term, a government needs to ensure that its public transport system is efficient and serves as a viable alternative to driving cars. For example, in Singapore, improvements are made to the existing infrastructure by building a more efficient public transport system. Examples include The Circle Line.

Evaluation

- It is difficult to balance between providing quality public transport and keeping costs low and affordable for users. The cost burden of providing public transport (if government has to subsidise) will eventually fall on taxpayers. There could also be a strain on government's budget during lean years, eg. global recession in 2009. However, this could be less of a problem for a government like Singapore as it has been accumulating budget surpluses from previous years.

Conclusion

In dealing with traffic congestion, the Singapore government has implemented a package of policies, which includes indirect tax, to allow people to fulfil their aspirations to own a car and at the same time, increases the usage of public transport.

Level	Descriptors
L4	<ul style="list-style-type: none"> <u>Thorough explanation</u> of at least 3 policies , demonstrating excellent application with relevant <u>economic analysis</u> and evaluation of measures Make a judgement of the <u>relative</u> appropriateness of measures in terms of the more appropriate policies implemented Insightful conclusion
L3	<ul style="list-style-type: none"> Thorough explanation, application & evaluation of at least 2 policies Make a judgement of the relative appropriateness of measures
L2	<ul style="list-style-type: none"> Some explanation of policies with evaluation
L1	<ul style="list-style-type: none"> Smattering of ideas. Describes policies, with limited evaluative comments

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- 4 As a result of free trade agreements, the United States has and still is experiencing record breaking unemployment and a crippled manufacturing industry.

(a) Explain the costs of free trade. [10]

(b) Discuss whether the imposition of trade barriers by an economy is the most effective measure in helping domestic industries overcome external competition. [15]

Part A

Intro

Free trade occurs when governments do not discriminate against imports or interfere with exports by applying tariffs or quotas to imports or subsidies to exports.

There are several costs when countries engage in free trade. These include a fall in economic growth and worsening of the Balance of Payments (BOP) due to increased vulnerability to external shocks, structural unemployment due to loss of comparative advantage and imported inflation.

Body

With free trade, problems in one part of the world can spread like a contagion to other parts. For example, a recession in the US will result in a fall in income of consumers in the US. US consumers will not only consume fewer domestically produced goods, but also reduce their consumption of imported products. This results in a fall in net exports of the affected countries.

The fall in net exports will result in a fall in aggregate demand (AD). As seen in figure 1, the AD shifts to the left from AD_0 to AD_1 resulting in a surplus. Eventually, there will be a multiple fall in national output from Y_0 to Y_1 .

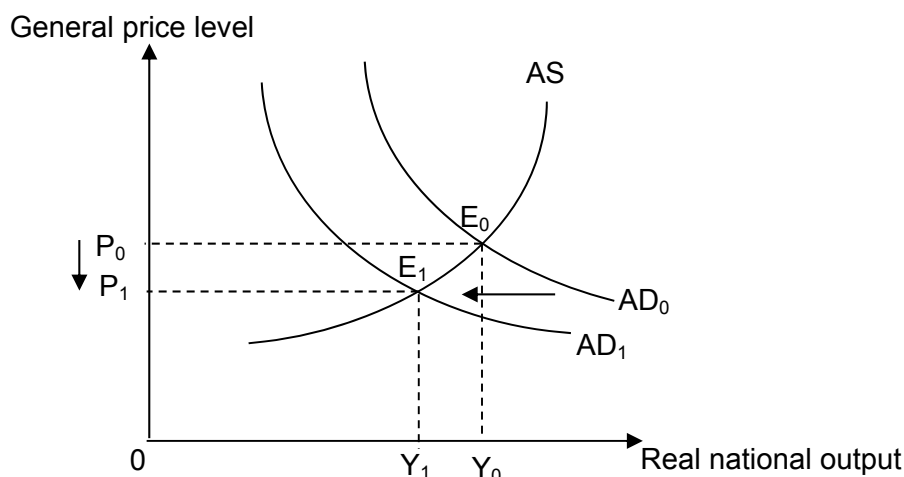


Figure 1

This increased exposure to external shocks due to free trade will therefore result in a fall in economic growth and worsening of the BOP.

Free trade results in countries specialising and producing goods and services which they have a comparative advantage (CA) in. Due to trade, developed countries such as Singapore might lose their CA in labour-intensive manufacturing to emerging economies such as China due to its abundance of labour resulting in a lower labour cost. Due to the presence of better technology and sound infrastructure, Singapore move up to higher value-added manufacturing (e.g. biomedical) which they have a CA in. Workers who lack the

necessary skills to work in such industries will be unemployed due to the mismatch of skills. This loss of CA can therefore result in structural unemployment.

Countries depend on one another for final goods and services as well as raw materials for production. The rise in general price level in a country could directly result in imported inflation in its trading partners as prices of imported final goods and services rise. With free trade, import-price-push inflation might occur due to supply shocks. The Middle Eastern crisis during the 1990s resulted in a fall in supply of crude oil which resulted in prices of imported crude oil to soar in oil importing countries such as Singapore. Being an essential input of production, the soaring oil prices will result in higher cost of production which in turn caused the prices of manufactured goods to rise. Hence, another cost of free trade is that it could bring about a rise in imported inflation.

Conclusion

In conclusion, free trade could have a negative impact on the internal (i.e. economic growth and inflation) and external (i.e. BOP) stability of an economy.

Level	Descriptors
L3	<ul style="list-style-type: none"> • A detailed explanation of costs of free trade. • Appropriate use of real life examples to explain the problems faced by countries due to free trade.
L2	<ul style="list-style-type: none"> • Candidate is able to identify and explain the costs of free trade and how the greater vulnerability to external factors resulted in the costs of free trade. • However, some parts of the answer are underdeveloped.
L1	<ul style="list-style-type: none"> • Brief description of costs of free trade.

- (b) Discuss whether the imposition of trade barriers by an economy is the most effective measure in helping domestic industries overcome external competition. [15]

Intro

The imposition of trade barriers such as tariffs and quotas on foreign goods and services serves to protect domestic industries from external competition brought about by free trade.

However, trade barriers might not be the most effective measure as they do not address the cause of the loss of a country's competitiveness. Hence, a government might want to explore other measures to efficiently and effectively help these domestic firms face such external competition.

Body

Thesis

With trade, domestic industries face competition from foreign industries. This is especially so when firms from the foreign industry are able produce the same goods at a much lower cost due to the comparative advantage (CA) that they enjoy.

The imposition of trade barriers is useful in protecting firms that are newly-established but have potential CA in the short run. Because they are still in infancy stage, these firms are usually small and hence they tend to produce at a higher average cost, due to inability to reap fully economies of large scale production. As a result, these firms are unable to compete with the larger and more established firms abroad and hence are forced to shut down. If such an industry is protected, it can eventually become big and efficient enough to

compete in the world market. In the long run, the protection will be removed when the domestic firms are able to compete internationally.

Import quotas limit the volume or supply of imports by specifying the maximum amount of a foreign-produced good that is permitted into the country over a specified period of time. This reduces the supply of the imported good into the country. As a result, the price of the imported good rises.

The rise in prices of the imported goods will make domestically produced goods, which are substitutes for the imported good, relatively cheaper. The demand for domestically produced goods will increase, leading to a rise in output, incomes and employment as well.

1. Although there are some merits to the infant industry argument explained above, it is actually difficult to identify new industries that have the potential to grow big, be competitive globally and contribute to the economy in the long run. Identifying the 'wrong' industries for protection may prove to be costly for the country as it leads to a long-term loss of consumer welfare and misallocation of resources.

Anti-Thesis (other better measures)

In order to protect domestic firms, the government might choose to depreciate its currency by selling its currency in the foreign exchange market. Depreciation will result in a rise in price of imports in domestic currency, making imports less price competitive than domestically produced goods.

1. Foreign countries may retaliate by depreciating their currencies to discourage the exports of the country that depreciated its currency. If so, the result is competitive depreciation that does not help the country overcome the external competition.

The government may implement supply-side policies by offering domestic firms subsidies so as to encourage them to send their workers for skills-upgrading or improve in their methods of production through research and development.

With high-skilled workers and better technology, there will be an improvement in productivity level resulting in a fall in cost of production which will increase the price competitiveness of the goods produced by the domestic industries. The quality of these domestically produced good might also improve, which would reduce external competition as imports are seen as weaker substitutes for the domestically produced goods.

1. The effectiveness of supply-side policies to reduce external competition is limited in the short run due to the problem of time lag. It takes time to persuade employers and workers of the need for skills upgrading and it takes time for workers to learn new skills. In view of this, the policy of skills training should be on-going to ensure that workers are constantly upgrading their skills to better fit into a rapidly changing economy.

Conclusion

Trade barriers serve as a form of protection for domestic industries when faced with external competition. However, due to its limitations and the possibility of retaliation from trading partners, such measures should be used only in the short run. Thus in order for the domestic industries to overcome external competition, there is a need for firms to constantly upgrade the skills of their workers and technology through supply-side policies.

Level	Descriptors
L4	<ul style="list-style-type: none"> Competent discussion of three measure is evident

	<ul style="list-style-type: none"> • Good use of examples is evident • Overall assessment of the three measures is evident in the conclusion or informed ranking of measures is evident in the essay
L3	<ul style="list-style-type: none"> • Good discussion of at least measures is evident • Analysis is not consistently rigorous – At least one measure must be explained and evaluated in detail to be in this band • Detailed explanation and evaluation for two measures but sketchy for the third
L2	<ul style="list-style-type: none"> • Some explanation of measures to help overcome external competition is evident • Some conceptual errors are evident
L1	<ul style="list-style-type: none"> • Smattering of ideas, e.g. points on how measures work are mainly listed, rather than explained • Descriptive answers