**SERANGOON JUNIOR COLLEGE**
**JC2 Preliminary Examination 2015**
**H1 Economics 8819**
**Suggested Answers**

## Question 1

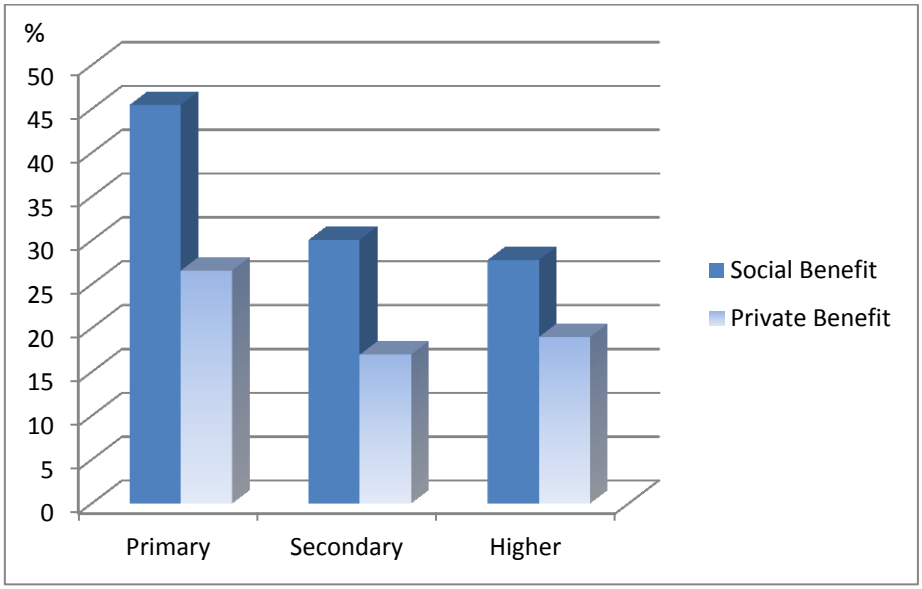
### Higher Education

**Table 1: Enrolment vs Tuition Fees**

| Year | University Enrolment | Average Tuition Fees (S$) (Excluding Dentistry, Medicine, Music) |
|---|---|---|
| **2008** | 11,472 | 29,693 |
| **2009** | 11,947 | 30,948 |
| **2010** | 12,451 | 31,028 |
| **2011** | 13,325 | 31,678 |
| **2012** | 13,456 | 32,945 |

Source: http://www.moe.gov.sg, accessed July 2015

**Figure 1: Returns to Education (%)**




Source: *Economics Education*, Vol. 12, No. 2, August 2004

**Extract 1: Is degree all that important?**

Even as the Government opens up more university places, it has been urging young Singaporeans, including diploma holders, to consider other pathways. PM Lee, who addressed polytechnic students recently, told them that getting a degree was not the only option. He encouraged them to work for a few years or start their own business.

Although sound, such advice is not going to sway polytechnic students very easily. About 17% of a polytechnic cohort will land a place in university, compared to more than 70% of those coming out of the junior colleges. The remaining diploma holders are unlikely to give up on their degree ambitions. A few thousand will head overseas, mostly to British and

Australian universities. These institutions give students generous credit exemptions, allowing them to complete their degrees in one to two years. Those who cannot afford the cost will look to private schools such as the Singapore Institute of Management and EASB Institute of Management. Those whose financial circumstances require them to go out to work will turn to UniSIM to study part-time to fulfil their degree aspirations.

Five years ago, the estimate was that 60% of all polytechnic graduates go on to secure a university degree within five years. These days, polytechnic officials estimate that the figure is probably close to 80%. But why the hankering for a degree? Ask any diploma holder and the answer is likely to be "better jobs and higher salaries".

Source: *The Straits Times*, 18 May 2013

**Extract 2: University brings massive boost to earnings and economy**

University study delivers huge benefits to both graduates' earnings and the wider UK economy. Supporters of student aid subsidies argue that higher education is a "public good" that would be underprovided in a free market.

University study has shown to contribute significantly to the economy, with around 20% of the UK's economic growth between 1982 and 2005 attributable to an increase in the number of graduates, as well as at least one third of the increase in labour productivity from 1994 to 2005. A degree remains one of the best pathways to achieving a good job and a rewarding career – as well as a hugely enjoyable experience for most students.

What is more, there is a real incentive for working hard, because the research finds that gaining a higher degree classification boosts earnings even further. The earnings of a first-degree holder were found to be about six times that of a worker with primary education. And the benefits of university go beyond individual graduates, with the economy greatly enhanced by having a highly-skilled university-educated workforce.

Source*:* https://www.gov.uk*,* 15 Aug 2013

**Extract 3: Engineering the shortage**

What's going on? For engineers, the problem is too much learning. Graduates are plentiful; it is technicians that are in short supply. UK needs 10,000 apprentices a year, but it is only getting 6,000.

There are too many graduates with degrees in subjects that are popular with students but not with employers. Forensic science is one example. Police dramas have made it a popular undergraduate degree, meaning that universities increasingly offer it at the expense of more rigorous courses like chemistry. There were no forensic science courses offered in Britain in 1990; now there are more than 50. The result is a glut. There are about 2,000 forensic science students graduating every year, but only 100 jobs for them to fill—and these usually require a post-graduate qualification, not just a first degree.

Government policy plays a part here, too: chemistry and physics are expensive to teach compared with watered-down degrees like forensic science, and the universities get the same amount of money either way. But universities will make money only if they offer courses that are popular with students, who seem content to ignore what the market is telling them. That may be the result of state-funded higher education. If students had to pay the full cost of their courses, then employment prospects might loom larger in their minds when deciding what to study.

Source: *The Economist*, 6 January 2005

**Extract 4: A forward-looking, integrated planning system**

In modern Singapore, education has consistently been the building block for economic and national development. Former Prime Minister Goh Chok Tong famously stated, “The wealth of a nation lies in its people.” Since the founding of the republic, the high value placed on education as the key to economic growth and national cohesion in a country with no natural resources is evident in the statements of Singapore’s senior leaders. But the statements about “nurturing every child” are not just political rhetoric. They have been accompanied by willingness at each stage to invest considerable financial resources in education. Education spending rose to 3.6% of GDP in 2010, approximately 20% of total government expenditure and second only to defence.

The linkage to economic development is tight and is driven from the top of the government. As Singapore evolved from an economy based on port and warehousing activities, through a low-wage, labour-intensive manufacturing economy, and then to a more capital and skill-intensive industry and finally to its current focus on knowledge intensive industrial clusters, the education system was expected to ramp up the quality of its education and the supply of specific skills needed to make Singapore globally competitive.

Source: http://www.oecd.org, 2010

**Questions**

**(a)** Using demand and supply analysis, explain why there was a rise in university enrolment despite the increase in tuition fees as seen in Table 1. [4]

**(b)** Supporters of student aid subsidies argue that higher education is a "public good" that would be underprovided in a free market.

Do you agree that higher education is an example of a public good? [4]

**(c)** **(i)** Explain why there is a difference between social and private benefit of education. [2]

**(ii)** Explain why the difference between the social and private benefit of education is larger for primary education as compared to higher education. [2]

**(iii)** Discuss the case for subsidising education to solve the problem of market failure. [8]

**(d)** Suggest one possible concern to an economy of a large increase in university graduates. [2]

**(e)** Discuss the extent to which you agree with the view that education is key to economic growth in Singapore. [8]

**[Total: 30]**

**Suggested Answers**

**(a) Using demand and supply analysis, explain why there was a rise in university enrolment despite the increase in tuition fees as seen in Table 1. [4]**

When there is an increase in tuition fees [Table 1], based on law of demand, there should be a fall in university enrolment, ceteris paribus. However, the rise in university enrolment means that the assumption of ceteris paribus does not hold true.

There could be other non-price determinant reasons such as taste and preference. [Extract 1: better jobs and higher salaries or Extract 2: research finds that gaining a higher degree classification boosts earnings even further.] As more and more people believe that with higher education, it would be able to provide them with better jobs and higher salaries, hence demand curve would shift to the right.

At the original price level, there will be a shortage. This will exerts an upwards pressure on the price. As a result, the equilibrium price rises from $0P_0$ to $0P_1$ until equilibrium is attained. In this case, there will be a rise in equilibrium quantity from $0Q_0$ to$0Q_1$. This explains why there is a rise in university enrolment despite the increase in tuition fees as seen in Table 1.

**(b) Supporters of student aid subsidies argue that higher education is a "public good" that would be underprovided in a free market.**

**Do you agree that higher education is an example of a public good? [4]**

No, I disagree that higher education is an example of public good.

Higher education is rivalry in consumption. One person's consumption of higher education does reduce the places available to another person.
Higher education is excludable in consumption. It is easy to exclude non-payers from enjoying the good. In the case of higher education, if the students do not pay school fees, they will be excluded in the consumption of education

Given the characteristics of rivalry and excludability in consumption, higher education is not a public good but a private good

**(c)(i) Explain why there is a difference between social and private benefit of education. [2]**

The difference between private and social benefit to education is the external benefits. The social benefits are the total benefit to a society from the consumption of education. Social benefits include all the private benefits that accrue to individuals who spend on education plus any external benefits of consumption of education.

**(ii) Explain why the difference between the social and private benefit of education is larger for primary education as compared to higher education. [2]**

Assuming that social benefits are the same for both education levels, the difference between social and private benefits of education is the differing levels of private benefits. Private benefits for higher education is larger compared to primary education as the premium on higher education provides a strong incentive for

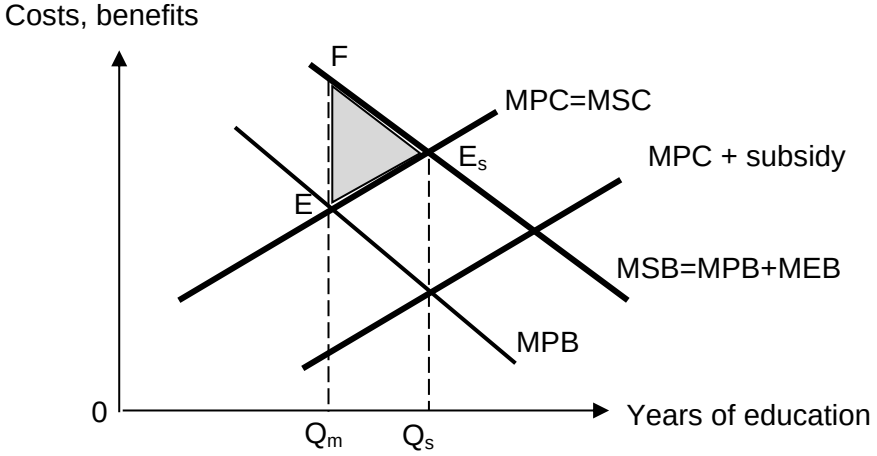
individuals to pursue university qualifications (Extract 2: earnings of a first-degree holder were found to be about six times that of a worker with primary education.) Hence, the differing private benefits explain why there is a difference between the social and private benefit of education.

**(iii) Discuss the case for using subsidy to solve the market failure in education. [8]**

Higher education is a merit good. Merit goods are goods that the government deems to be socially desirable and intrinsically good. Thus, their consumption should be encouraged. The essence of merit goods is to do with a **failure of information** to the consumer. The individuals who make decision about how much education to receive do not perceive its full benefits at the time of making the decision about how much education to consume. As such, consumers under-value the product and this give rise to underconsumption of higher education.

**Simple elaboration of 5 steps**

The external benefit of education is that of economic growth to a country. This is because with education the quality of our labour force would improve and thus bring about an increase productivity and economic growth. The external benefit thus results in a divergence between the marginal social benefit and the marginal private benefit.




Therefore there is an under consumption of education is the market equilibrium will be at Qm whereas the socially optimum output level is at Qs. If additional $Q_mQ_s$ units were consumsed, these units of output would add more to total benefits than to costs. Hence, society's welfare would be higher if firms produce these additional units, but they do not. The **deadweight loss of area $EFE_s$** is thus incurred.

**Subsidy**

To correct the problem of market failure due to positive externalities, the government could give a subsidy equal to the amount of marginal external benefit.

A subsidy could be offered on the production of education as it has external benefits.

As MSB is greater than MPB, a subsidy equivalent to MEB at the socially optimal level, $Q_s$ would shift the MPC curve vertically down by that amount of subsidy to MPC + subsidy. The imposition of the per unit subsidy results in an output that corresponds to socially efficient level of output $Q_s$.

The advantages of using subsidies are that it can be adjusted according to the estimated external benefits arising from the consumption of higher education.

**Case against subsidy:**

Government may fail to measure external benefits accurately as there are many factors that could have attribute to the country's economic growth. This may results in giving too much subsidies and can lead to unnecessary wastage of nation's reserves. The reserves could have been better used in other areas such as the maintenance of our transport infrastructure.

Furthermore, substantial funding from the government distort free market allocation system. [Ext 3: But universities will make money only if they offer courses that are popular with students, who seem content to ignore what the market is telling them …. If students had to pay the full cost of their courses, then employment prospects might loom larger in their minds when deciding what to study.] If the amount of subsidy given is fixed regardless of the course of study, popular courses with limited benefits in terms of job prospect will be overconsumed as the cost of study has been artificially lowered. In addition the courses that are less popular but with greater benefits in terms of job prospect will be under consumed.

**Conclusion:**
Despite the costs of subsidy, government is still willing to invest 'Ext 4] considerable financial resources in education. Education spending rose to 3.6% of GDP in 2010, approximately 20% of total government expenditure and second only to defence.' The aim is to '[Ext 4] ramp up the quality of its education and the supply of specific skills needed to make Singapore globally competitive.'

| **Marks** | |
|---|---|
| **L3** | Detailed explanation of the case for subsidy by explaining the market failure involved and how the subsidy works to help solved the market failure.<br>Explained clearly the case against subsidy.<br>Made a personal judgement on the case for subsidy |
| **L2** | Some explanation of the case for subsidy.<br>Some attempt to explain the case against subsidy.<br>Limited attempted to make a personal judgement on the case for subsidy |
| **L1** | Smattering of knowledge with some relevant points.<br>Answer lacks precision and there are a lot of inaccuracies.<br>One sided analysis. Only considered either the case for or the case against subsidy.<br>No personal judgement on the case for subsidy made |

**(d) Suggest one possible concern to an economy of a large increase in university graduates. [2]**

Large increase in university graduates may result in structural unemployment. . As seen in Ext 3, 'Graduates are plentiful; it is technicians that are in short supply.' Structural unemployment is a *mismatch* between the *skills* of the *unemployed* workers which are the graduates and the *skills* needed for the technician jobs that are available.

**OR**

A large increase in university graduates will lead to a fall in the wages and this may discourage upgrading of skills. With the lack of relevant skills in the economy, this could result in a leftward shift of AS curve as there is a fall in productive capacity due

to a fall in the quality of labour. With a fall in productive capacity, this will result in a fall in potential economic growth.

**(e) Discuss the extent to which you agree with the view that education is key to economic growth in Singapore. [8]**

Economic growth can refer to actual growth or potential growth. Actual growth is the increase in national output actually produced and it can be achieved through an increase in aggregate demand. Potential growth refers to an increase in the full-employment level of national output and it can be achieved through an increase in aggregate supply. Therefore the key to achieve growth in Singapore will be to develop our resources (e.g. land, labour, capital and entreprenuership) and improve our technology.

**Thesis: High value placed on education is key to an economy like Singapore as it helps improve the quality of our labour force.**

Singapore being highly dependent on trade will need to produce based on its comparative advantage. Hence it will need to produce goods that which it has the lowest opportunity cost in. In light of increasing globalisation, Singapore comparative advantage has changed from one which is heavily reliant on capital and skill-intensive industries (e.g. electronics) to one which is more focus on knowledge intensive (e.g. pharmaceutical). Hence in order to prepare Singapore for the changing structure of its economy, Singapore will need to ensure that it has the workers with the right skills for the job through education. With the right workers for the jobs it will ensure that Singapore can produce these goods at the lowest cost and ensure its export competitiveness. This will then bring about economic growth for the country Singapore only form of resources lies with its people. This coupled with our dwindling birth rates, will mean that we will need to invest heavily in the education of our people to ensure growth. With higher education, the quality of labour in Singapore will have improved. This would mean a more productive and efficient workforce. Hence this brings about an increase in productive capacity of the country and an increase in the aggregate supply. With that that the full employment output level of the country increase and thus potential growth is achieved.

**Anti-thesis: Other factors like infrastructural development is also key to an economy like Singapore as improve the quality of capital available**

With our economy moving to one that is more focus on knowledge based economy, it is important to we ensure that we focus on education to ensure that we have the people with the skills for these industries. However this would not have been possible without the rapid infrastructural development of the country. The development of Biopolis, Fusionpolis and Mediapolis at One-North has helped to support the growth of the knowledge based industries. The state-of-the-art facilities, scientific infrastructure and specialised services have allowed companies to cut research and development costs significantly and accelerates the development timeline.
These infrastructural developments thus help to increase the productive capacity of the country and bring about potential growth. Furthermore the first class infrastructure will also help to ensure that Singapore remains an attractive destination for foreign investors thereby ensuring actual economic growth.

**Conclusion**
Given that Singapore is an economy with no natural resources other than its people, it will have to constantly invest in the education to ensure high quality of labour that is

needed for growth in Singapore. However having said that it does not mean that Singapore should only focus on its labour as there is also a need to invest in research and development and other resource available to it such as capital, entrepreneurs and even land.

**Mark Scheme**

| Marks | |
|---|---|
| L3 | Shows understanding that economic growth are determined by AD and AS factor (e.g land, labour, capital, entreprenuership and techonological advancement.)<br>Detailed and thorough explanation of how education is key economic growth in Singapore. Clear analysis to show how education can bring about both actual and potential economic growth.<br>Considered carefully other factors that could be key to economic growth in Singapore or examine carefully why education might not be key to economic growth in Singapore.<br>Personal judgement made on whether or not education is key to economic growth in Singapore. |
| L2 | Some attempt to explain how education can bring about actual and/or potential economic growth.<br>Consider other factors that could be key to economic growth or explain why education might not bring about economic growth.<br>Limited attempt in making a personal judgment.<br>CAP 4m: 1 sided analysis |
| L1 | Smattering of knowledge with some relevant points.<br>Answer lacks precision and there are a lot of inaccuracies.<br>No attempt to make personal judgement |

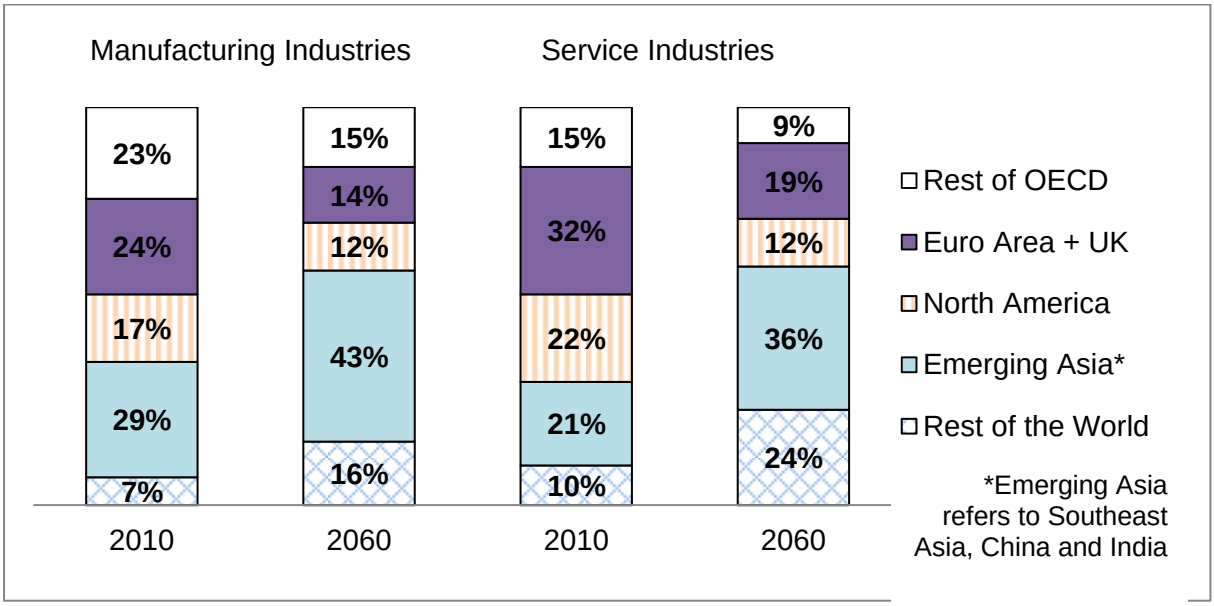
**Question 2**

**Internal and External Imbalances**

**Extract 5: Changing trade patterns**

The relative importance of different countries and regions in specific markets is set to change markedly over the coming decades, driven by diverging growth performance, changes in relative productivity and production prices. Notably, China, India, other Asian economies and Africa are projected to become the dominant players in manufacturing, while most OECD countries are expected to lose ground.

**Figure 2: Countries' share in world exports by industry, 2010 and 2060 (%)**




Source: *Trade patterns in the 2060 World Economy*, OECD, December 2014

**Extract 6: Fragile economies under pressure**

The "fragile five" – Turkey, Brazil, India, Indonesia and South Africa – are considered particularly vulnerable to an exodus of foreign capital as the prospect of higher interest rates diverts funds back to the US in search of higher returns. The fate of the fragile five is important, not least because they account for more than 12% of global GDP, and have contributed almost one-fifth of world economic growth since 2009.

Ben Bernanke, the Fed chairman, has argued that emerging markets will ultimately benefit from policies that are designed to create a stronger US economy. He, along with the world's policymakers, will be hoping that the waves in emerging markets created by the winding down of the US Federal Reserve's quantitative easing programme will prove to be a bump on the road to global recovery, and not the beginning of a fresh crisis. Here we look at the problems that some emerging markets are facing.

**Brazil**

According to the IMF, the government budget deficit of Latin America's largest economy will reach 3.3% of its GDP this year, while the current account deficit is estimated at 3.6%. Brazil's trade balance in 2013 is the worst for 13 years.

Meanwhile, consumers are now laden down with record levels of debt. The country's decade-long consumption binge has helped drive annual inflation close to the 6.5% ceiling of the central bank's tolerance band, forcing the government to enforce costly fuel subsidies to help cap prices.

Brazil has also been steadily increasing interest rates in the battle against inflation and a weakening real – the currency which has fallen by about 15% against the dollar over the past year. Rates have risen by 3.25% points over the past nine months, and the central bank's latest move was to push them up a further half-point, to 10.5%, in January. Economists are expecting another rise this month.

But growth prospects are deteriorating. Some analysts had expected the tightening of monetary policy to stop after the economy shrank in the third quarter of 2013, for the first time since 2009. But the increases have continued, underlining some of the unenviable choices faced by the country's policymakers.

**India**

In 2013, India's current account deficit reached a record of 4.8% of GDP, in part due to high gold imports. The yellow metal is one of the biggest contributors to the country's trade imbalance, second only to oil.

The government budget deficit of India is expected to reach 7.2% of its GDP and the current account deficit 2.4% in 2014. Like several of its emerging market peers, India raised interest rates last week, in its case by a quarter-point, to 8%, in an attempt to rein in consumer price rises and prop up the currency.

It was a surprise move by Asia's third-largest economy, with analysts predicting no change before the decision was made. Inflation has been slowing, but consumer price inflation remains high: it was close to 10% in December. The Reserve Bank of India has proposed a target of 4% inflation by 2016.

Despite these figures, the country is currently lifted by optimistic sentiments as reform-minded Narendra Modi won the election, while the current account deficit has narrowed rapidly as exports improved, remittance inflows remained solid and higher import duties and quantitative restrictions discouraged gold imports. In addition, non-oil, non-gold imports have declined in line with weak domestic demand, and capital inflows have strengthened.

**Indonesia**

Indonesia resisted increasing interest rates for a second month in January, against a backdrop of stable inflation, at 8.4% in December. The central bank said it was closely monitoring the impact of the Fed's tapering programme, after growth in south-east Asia's largest economy slowed to its weakest rate in four years last year, with a poor trade position and the outflow of foreign capital taking their toll. The current account deficit is expected to be around 3% of its GDP. The rupiah was the worst-performing emerging market currency in 2013, down around a fifth against the dollar.

The Indonesian government and central bank (Bank Indonesia) are making efforts to curb the current account deficit and combat high inflation. Therefore, it kept the benchmark interest rate at the relatively high level of 7.50%.

Adapted from *The Guardian* & www.indonesia-investments.com, February 2014

**Extract 7: Only structural reforms can reduce current account deficit: ADB**

"The Asian Development Bank (ADB) forecasts that Indonesia's economic growth will soften slightly to 5.7% in 2014, before picking up to 6.0% in 2015," ADB's country director for Indonesia, Adrian Ruthenberg, said in a release made available to The Jakarta Post on Tuesday. The current account is also projected to post a deficit for 2015.

The ADB said reducing Indonesia's current account deficit, which is mainly caused by trade deficit in the oil and gas sector, would remain a challenge in 2014 and beyond. Domestic oil output has been in a state of decline for almost two decades due to a lack of investments and exploration in combination with maturing oil fields and, secondly, domestic fuel consumption has risen sharply in recent years amid solid economic growth and generous government fuel subsidies. Structural factors have also contributed to the problem. The deterioration that started in 2003 suggests that Indonesia's export competitiveness, particularly in manufacturing, has eroded. The rupiah has appreciated in real effective terms, and labour productivity in manufacturing has fallen below rates achieved in neighbouring countries.

"To address this challenge, Indonesia's government has taken steps to slow domestic demand, spur exports, and dampen imports," said Edimon Ginting, ADB's deputy country director for Indonesia.

Source: *The Jakarta Post*, April 2014 & Asian Development Bank, 2014

**Questions**

**(a)** **(i)** Using Figure 2, describe the changes in the relative shares of world exports of manufacturing and services for North America and Emerging Asia between 2010 and 2060. [2]

**(ii)** Explain how the concept of opportunity cost can be used to explain the changes you observed in (a) (i). [4]

**(b)** Using AD/AS analysis, explain how emerging economies can benefit from a stronger US economy. [4]

**(c)** Explain a possible link between the level of interest rates in a country and its exchange rate. [2]

**(d)** Explain why there is a need for government to rein in consumer prices. [2]

**(e)** Discuss whether Indonesia or India should be concerned with its current account deficit. [8]

**(f)** Discuss what policies you would recommend to a government when faced with the twin problems of current account deficit and inflation as described in the case study. [8]

**[Total: 30]**

**(a) (i) Using Figure 1, describe the changes in the relative shares of world exports of manufacturing and services for North America and Emerging Asia between 2010 and 2060. [2]**

North America's relative share of world exports of both manufacturing and services industries have fallen, while Emerging Asia's relative shares of world exports of both manufacturing and services industries have increased.

**(a) (ii) Explain how the concept of opportunity cost can be used to explain the changes you observed in (a) (i)? [4]**

The change in the relative shares of world exports of the 2 regions could be due to the changes in technology that affect productivity and opportunity costs of producing these goods.

The decline in North America's share of world's exports of manufacturing and services might be attributed to the rise in its opportunity costs of producing these goods or its loss of comparative advantage in these industries to Emerging Asia. Due to rapid gains in technology in Emerging Asia and the increase in the level of education and skills in its labour force, Emerging Asia is increasingly able to produce lower-end manufactured goods and certain types of services (low-end) at a lower opportunity costs compared to North America.

For example, in 2010, North America might incur a lower opportunity cost of producing machines in terms of its next best alternative good forgone such as food crops, compared to Emerging Asia. The reason could be that the factor endowments in North America such as its highly skilled labour force and advanced technology are more suited to the production of machines than food crops. Thus its comparative advantage lies in machines (manufactured goods).

However, by 2060, Emerging Asia could have made great gains in technology advancements and also increased the skills and education levels of its labour force such that its opportunity cost of producing machines is lowered to a level that is lower than that incurred by North America. As such, by 2060, Emerging Asia has gained comparative advantage in machine production at the expense of North America. The same explanation could be advanced for the rising share of world exports of services too. In this case, North America might have lost comparative advantage in low-end services.

**(b) Using AD/AS analysis, explain how emerging economies can benefit from a stronger US economy. [4]**

With a stronger US economy, emerging economies such as India, China and Indonesia will experience a faster economic growth and an improvement in their balance of payments. As the US experience economic growth, there is a rise in purchasing power of the US consumers that raises their demand for imports. US firms would also increase demand for imported inputs from emerging economies. These will lead to a rise in import expenditure of US. As US is a key trading partner of many emerging economies, the rise in import expenditure in US will lead to a rise in export revenue of emerging economies.

At the same time, the stronger US economy improves the financial ability and confidence of the US firms to invest in other countries such as the emerging economies.

Both the rise in export revenue and inward investment of US firms into emerging economies increase the level of AD in emerging economies. This is because export revenue and investment are components of AD. Due to the rise in AD, there will be a shortage of goods and services in the economy.

Assuming that the emerging economies are not operating at full employment, as the price rises, the firms will respond by increasing the production of the goods and services. This will lead to a rise in real national output and hence economic growth.

*Alternatively, students can include the multiplier process as follows:*
*Assuming economy is not near full employment (AS curve horizontal), when AD rises, shortage results that induces firms to hire more factor inputs to increase production. Thus incomes rise and this will lead rise in induced consumption which further increases production and incomes. The multiplier process continues until a new equilibrium level of national income where AD=AS is attained. Eventually total rise in national income is more than the initial rise in export revenue and investments.*

**(c) Explain a possible link between the level of interest rates in a country and its exchange rate. [2]**

The rise in interest rates in a country will lead to an appreciation of the domestic currency relative to a foreign currency. This is because the rise in interest rates will attract hot money from abroad (short term capital inflow) as the returns are higher. Hence, this will lead to a rise in demand for the domestic currency, resulting in a shortage. Therefore, the price of domestic currency, which is the exchange rate, will appreciate.

**(d) Explain why there is a need for the government to rein in consumer prices. [2]**

When there is a persistent increase in consumer prices, this means that there is inflation in the country. High inflation is usually harmful to an economy. High inflation discourages savings and investments. This is because of the increased uncertainty and greater risk because firms are not able to accurately project future prices and costs of production. They will postpone investments. Fall in investments lead to fall in aggregate demand as well as fall in aggregate supply. The fall in AD leads to surplus of goods and services and in the short run, firms reduce production, leading to fall in national income and economic growth. In the long run, the fall in AS lowers the potential economic growth of the country. Thus there is a need for government to rein in consumer prices.

**(e) Discuss whether Indonesia or India, should be concerned with its current account deficit. [8]**

Introduction
A current account deficit means that the country's total expenditure on imports of goods and services, factor incomes from abroad and net unilateral transfers exceed its total earnings from export of goods and services and factor incomes paid to abroad. A current account deficit implies that a country is living beyond its means.

Whether this deficit should be of concern to the government depends on a few factors such as the size and nature of the deficit and its causes.

Body

The size of current account deficit as % of GDP for both Indonesia and India are comparable, 3% and 2.4% respectively (Extract 7). This size in itself may be considered small and thus not a cause for concern for both economies.

However, if we study the trends, Indonesia's deficit seems to be more persistent than that of India's. In fact, Indonesia's current account deficit has started in 2003 (Extract 8). On the contrary, India's deficit has declined somewhat. Also, upon closer examination into the causes of the deficit, Indonesia's deficit is a result of fundamental structural issues. For example in Extract 8, it was mentioned that part of the deficit was due to the country's "lack of investments" in the oil and gas sector and "maturing oil fields." The lack of investments resulted in fall in productivity and efficiency in the sector and this coupled with the maturing oil fields means that it is increasingly difficult to increase the domestic supply of oil. Hence, the country is forced to increase its oil imports and this explains the rise in import expenditure.

In addition, labour productivity in Indonesia is falling relative to its neighbours. Ceteris paribus, this means that its unit labour costs in particular in manufacturing, rises and so this may force its firms to increase its export prices. Hence, it is not surprising that Indonesia is also losing its export competitiveness in manufacturing as mentioned in Extract 8.

The situation for India is different. India's deficit was attributed to the rise in gold imports (Extract 7) as the people buy gold as a store of value. Government attempts to reduce gold imports by imposing tariffs have been successful in reducing gold imports. This coupled with the rise in India's exports have narrowed the current account deficit.

Synthesis & Conclusion

From the data provided, I think that Indonesia should be more concerned with its current account deficit than India because the problem has persisted for a long time which suggests that there are serious fundamental structural weaknesses in the economy that the government has not addressed successfully. Reducing the deficit would require painful structural adjustments which can be costly yet necessary. However, it seems that the Indian government has less to worry about its current account deficit because the current policies seem to work.

Even so, my conclusions above are based on a set of data that is really inadequate and incomplete. Thus, understandably, more information such as the ability of the country to finance the current account deficit and the other reasons for the deficit are required to be able to make more accurate conclusion as to which country should be concerned with its current account deficit.

**Mark scheme**

| | |
|---|---|
| L3 | Adequate to rigorous economic analysis is consistent throughout the answer.<br>Good use of relevant data to support key ideas.<br>***Clear and logical reasoning to determine choice of country with reference to setting criteria for decision-making.***<br>***Awareness of the limitation of data.*** |
| L2 | Adequate to rigorous economic analysis is evident. |

| | |
|---|---|
| | Some use of relevant data to support key ideas.<br>Some attempt to apply and explain criteria for decision making.<br>Coherent and logical response.<br>If response is largely theoretical, with very limited reference to case material, then award max 4m. |
| L1 | Some understanding of the problem of current account deficit and its causes.<br>Limited attempt to address the question.<br>Lack of clarity in explaining choice of country. |

**(f) Discuss what policies you would recommend to a government when faced with the twin problems of current account deficit and inflation described in the case study. [8]**

*Introduction*

The choice of government policies most often depends on the relative effectiveness of the policies in solving the problem and consideration of their trade-offs. Most often, the government that faces twin problems of current account deficit and inflation, certainly would need more than one policy.

*Body*

The government can consider expenditure-reducing policies such as contractionary monetary and fiscal policies to reduce both the current account deficit and inflation. As mentioned in Extract 7, in all economies, Brazil, India and Indonesia, interest rates have been raised or kept high to rein in consumer prices. Rise in interest rates makes it more costly for firms and households to borrow money. Thus there will be a fall in both investment and consumption. The fall in AD creates a surplus of goods and services, thereby bringing down the general price levels. (AD/AS diagram is optional).

This policy may be more effective in reducing inflation in countries like Brazil and Indonesia than in India. The reason is that consumption and investment demand may be more sensitive to higher interest rates because the economic outlook for both Indonesia and Brazil is not good as stated “growth prospects are deteriorating” and its people are heavily indebted. In contrast, India is “currently lifted by optimistic sentiments” which suggests that the positive economic outlook may instil confidence in the economy such that the higher interest rates may not be very effective in curbing investment and consumption.

The higher interest rates will also help the country to reduce its current account deficit through its contractionary effect on national incomes. The resultant fall in national income reduces the people’s purchasing power and hence reduces their ability to buy imports. As a result import expenditure falls. The more income elastic is the demand for imports, the larger will be the fall in demand for imports. However, this policy is most effective if the cause of deficit is high economic growth. In the case of countries like Indonesia, part of the deficit is due to structural problems. As such, a more appropriate policy to consider would be supply-side policies.

Supply-side policies like interventionist or market-oriented policies can be used to increase efficiency and productivity thereby solving the stated twin problems. For example, in Singapore, the government introduce SkillsFuture, a scheme that subsidises training to encourage more workers to upgrade their skills. This move aims to increase the quality of the labour force and with greater efficiency, unit costs of production can be lowered. This in turn will translate to lower prices of the country’s exports which will lead to rise in quantity demanded and hence rise in export revenue. The government e.g. the Indonesian

government can also subsidise investment in its oil and gas sector to improve efficiency and hence increase AS. When the oil sector is able to increase production to meet the rise in domestic demand, that will help to reduce the country's demand for oil imports and so improve its current balance. Supply-side policies is a long-term policy. However it has positive impact not only on the current balance but also on inflation although there are limitations to its successful implementation such as lack of willingness of the people to take up training due to financial constraints or lack of willingness of firms to send their workers for training due to loss of man-hours currently.

Conclusion

Solving the twin problems of current account deficit and inflation can be challenging to any government. Contractionary demand management policies such as monetary policy can help to solve both problems simultaneously and thus could be recommended although there is a trade-off in terms of slower economic growth. Still the government may be forced to adopt that solution especially when inflation is quite severe. The government should also actively use supply-side policies because in this age of globalisation, competition is keen and thus, to maintain its competitiveness and maintain a healthy current balance, innovation and increasing efficiency are key. In this respect, supply-side policies are necessary.

**Mark scheme**

| | |
|---|---|
| L3 | Rigorous explanation of at least 2 appropriate policies.<br>Makes a recommendation after considered evaluation.<br>Coherent response.<br>Use case material to support ideas. |
| L2 | Adequate explanation of at least 2 appropriate policies.<br>Some attempt at evaluation.<br>May use case materials to support ideas. |
| L1 | Limited explanation of appropriate policies.<br>May explain the solution to only one problem.<br>Very limited evaluation of the solutions. |

## Section B

Answer **one** question from this section.

**3** **(a)** Explain, with the help of examples, how scarce resources are allocated in the free market. [10]

**(b)** Discuss the usefulness of price elasticity of demand to a government. [15]

**PART A**

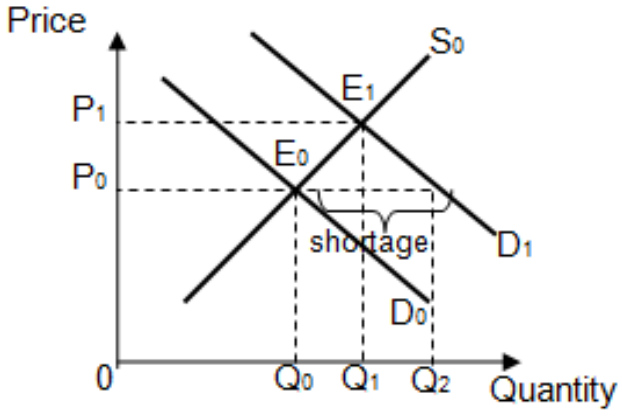
**Introduction**

Define key term: Scarcity arises because there are limited resources but unlimited human wants. Thus, resources are scarce or insufficient to satisfy all wants. A free market economy is one in which the decisions of individual households and firms determine the allocation of resources.
Direction of essay: In the allocation of scarce resources, the producer faces the problems of what and how much to produce, how to produce and for whom to produce. In a market economy, the price mechanism is able to solve these problems.

**P1: The price mechanism solves the problem of what and how much to produce.**
EE: In a free market economy, resources are allocated through the price mechanism**.** The free play of market forces of demand and supply determines price which then acts as a signal to firms to allocate scarce resources.

The consumers signal their demand for the goods by offering a price that they are willing and able to pay for the good. The producers will then respond by producing the quantity of the goods that they are willing and able to produce for the price that is offered to them.

For example, in Figure 1, the initial equilibrium price is $P_0$ and the equilibrium quantity of waffles is at $Q_0$. If demand for waffles rises from $D_0$ to $D_1$ and supply remains unchanged, this will cause a shortage of $Q_0Q_2$ at the original price of $0P_0$ which will exert an upward pressure on price as unsuccessful buyers are willing to pay a higher price. As price rises, quantity demanded falls and profit maximising sellers increase the quantity supplied.




A new market equilibrium is reached at point $E_1$ where quantity demanded will once again be equal to the quantity supplied. Both the new equilibrium price and quantity exchanged are

higher following an increase in demand. Hence the equilibrium price will increase from $0P_0$ to $0P_1$ and equilibrium quantity will increase from $0Q_0$ to $0Q_1$.

L: Thus the price mechanism solves the problem of what and how much to produce.

**P2: The price mechanism solves the problem of how to produce.**

EE: Due to the competitive environment that exists in markets, firms are motivated to produce goods as cheaply as possible and keep their prices as low as possible. Often the prices of inputs used by firms are dependent on the demand and supply of inputs in the market as well.

To produce goods at the lowest possible cost, firms compare the prices of labour, land and capital and use the least cost combination of inputs by using more of cheaper resources and less of more expensive resources. For example, SBS Transit buses hire less conductors. The company tries, whenever possible, to rely more on machines (ticketing machines) than labour (conductors). The reason is that labour is more expensive.

L: Thus the price mechanism solves the problem of how to produce. This is in this case the use of more machines than labour.

**P3: The price mechanism solves the problem of for whom to produce.**

EE: Different people are willing and able to pay different prices for a good. This is partly due to differences in incomes and tastes and preferences. In a market economy, consumers' dollar votes or the willingness and ability of consumers to pay for a good determine the pattern of resource allocation. Those who are able and willing to pay more will exert a greater influence on resource allocation resulting in producers allocating scarce resources to produce goods and services for them. For example, premium durians in Malaysia are exported to other countries where consumers are willing and able to pay the premium price.

L: This illustrates that demand largely determines resource allocation decisions where the consumer is king in the free market.

**Conclusion**
Summary: The price mechanism will determine how scarce resources are being allocated by addressing the basic problems of what and how much to produce, how to produce and for whom to produce.
Link to part b: However in some circumstances, it may not result in efficient allocation of resources and thus the government might need to intervene in certain markets.

| Levels | Descriptors |
|---|---|
| **L3** | • Good explanation how the price mechanism can address the basic problems of what and how much to produce, how to produce and for whom to produce with a well explained price adjustment process.<br>• Real-life examples used to illustrate the workings of the price mechanism. |
| **L2** | • Good explanation of how the price mechanism can be used to allocate scarce resources efficiently.<br>• Some understanding of how the price mechanism can address the basic problems of what and how much to produce, how to produce and for whom to produce. Or a well explained price adjustment process.<br>• Some examples given but lacking in elaboration. |
| **L1** | • Smattering of points with little understanding of the price mechanism can result in efficient allocation of scarce resources. |

| | |
|---|---|
| | • Many conceptual errors. |

**PART B**

**Introduction**

- Define key term: Price elasticity of demand (PED) refers to the degree of responsiveness of quantity demanded of a good to a change in the price of the good itself, ceteris paribus.
- Direction of essay: The concept of PED is useful to the Government to a certain extent as it can help assess the impact and effectiveness of:

  1) Tax policies implemented with the purpose of raising government tax revenue

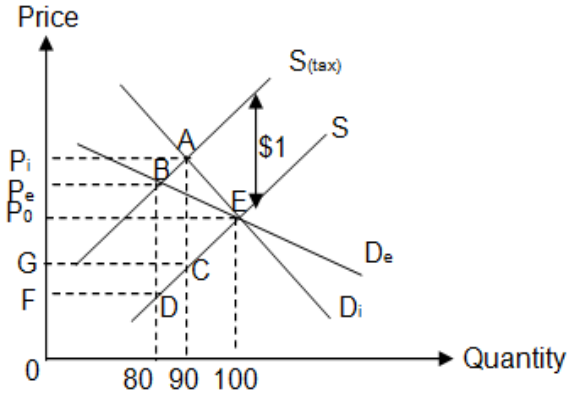
  2) Implementation of taxation to reduce undesirable consumption of a demerit good OR subsidies to increase consumption of merit good and

  3) Depreciation policy in reducing a trade deficit.

**P1: Knowledge of PED is useful to determine the amount of tax revenue that can be collected when a tax is imposed on various goods**

EE:

- In order to raise tax revenue to finance its government policies or correct a budget deficit problem, a government may seek to impose an indirect tax, such as an ad valorem tax (ie. GST) on various goods and services sold in the economy.
- However, the effectiveness of such a policy is determined by the amount of tax revenue that the policy can raise, which in turn is affected by the PED of the good.
- The more price inelastic the demand of the good is (ie. habit forming goods such as cigarettes, alcohol and addictive drugs), the less responsive quantity demand is to the price increase when tax is imposed. Hence, when quantity demand falls less than proportionately than when PED >1, so the tax revenue which is determined by the amount of tax multiplied by the amount of tax will be larger.




- As shown in Figure 2, the initial equilibrium quantity traded of a particular good is 100 units. When a specific tax of $1 is imposed on production, this raises the cost of production. Hence, the producer is willing and able to produce this same level of output only if he can charge a price higher by the amount of the tax. This shifts the supply curve vertically upwards by the amount of the tax from S to $S_{(tax)}$. The resulting shortage at price OP results in a new market equilibrium.
- If demand for the good is relatively more price elastic, as represented by demand curve $D_e$, quantity falls more than proportionately with the price increase and the new market

equilibrium is pt B. The new equilibrium quantity is 80 units, hence the total tax revenue collected is \$80 (80 units x \$1) or the area $P_eBDF$.

- However, if the demand for the good is relatively more price inelastic, as represented by a steeper demand curve $D_i$, quantity is less responsive to the price change, hence the new equilibrium quantity is 90 units and the total tax revenue collected is \$90 (90 units x \$1) or the area $P_iACG$.
- Therefore in reality, when a tax such as a GST or road tax is imposed, the government will be able to collect more tax revenue when it is imposed on goods whose demand is price inelastic such as cigarettes or sections of roads which are heavily utilised. The same goes for the imposition of casino entrance levy when it is imposed on habit forming goods such as gambling.

**L1**: Therefore, if the same amount of tax was to be imposed on each unit of a good, the total tax revenue collected will be larger when the tax is placed on a good whose demand is more price inelastic and the government can increase government tax revenue more substantially.

**P2: Knowledge of price elasticity of demand enables the government to analyse the effectiveness of a tax policy in reducing undesirable levels of consumption of a demerit good.**

EE:

- The use of tax to reduce consumption of socially undesirable goods will be more successful the greater the price elasticity of demand.
- Tax increases the price of a good. If demand for the good is price elastic, a small amount of tax per unit would be sufficient to reduce consumption significantly. However, if the demand for the good is price inelastic, as in the case of cigarettes and alcohol, even a large amount of tax may not reduce the quantity demanded very much.
- For example, in 2013, exercise duties on non-cigarette alcohol products such as beedies, ang hoon and smokeless tobacco was raised by 25 per cent. Such unfiltered tobacco products are seen to be more dangerous to health than cigarettes and tend to be the choice for poorer smokers. Since demand is price inelastic due to its habit forming nature, there has to be a substantial rise in the amount of tax in order to reduce consumption of it significantly to the socially optimal level of output.
- In Figure 2, the original equilibrium quantity is 100 units. When the demand for the good is price elastic, as represented by the demand curve $D_e$, the imposition of a tax will reduce the quantity demanded from 100 to 80 units. However, when the demand for the good is price inelastic as represented by the demand curve $D_i$, the quantity demanded is reduced from 100 to 90 units only.

**L2**: Thus if demand for a good is price inelastic, it might be necessary to impose a very high tax in order to reduce consumption to the socially desirable level. Other supplementary measures like legislation and education are also necessary.

**P3: Knowledge of PED can also determine the effectiveness of the implementation of a depreciation policy when a country is faced with a trade deficit**

EE:

- To correct a trade deficit, the government can depreciate its currency to boost export competitiveness and it can do so by selling its domestic currency in the foreign exchange market.
- When domestic currency depreciates, the price of the country's exports in foreign currency will fall. Assuming the demand for its exports is price elastic, this will lead to a more than proportionate increase in quantity demanded for exports, ceteris paribus, and hence a rise in its export earnings.

- Currency depreciation will also increase price of imports in domestic currency. If the demand for imports is price elastic, a rise in price will result in a more than proportionate fall in quantity demanded for imports, ceteris paribus, leading to a fall in import expenditure.
- With a rise in the country's export earnings and a fall in its import expenditure, there will be a rise in net exports (X-M). The trade balance will improve.
- For this policy to be effective in targeting the trade deficit problem, it must fulfil the PED conditions, which is the Marshall-Lerner condition where the sum of price elasticity of demand for exports and price elasticity of demand for imports is more than one, so that the currency depreciation will lead to a rise in net exports.

L: Thus, the concept of price elasticity of demand is useful as the value of price elasticity of demand for the country's exports and imports will determine the outcome of this policy.

**P4: However, in reality, there are limitations to the usefulness of the PED concepts to a government.**

**(i) Ceteris Paribus assumption:**

- Knowledge of the concepts of elasticity of demand is certainly useful in the government in decision-making but to a limited extent. This is because the concepts operate under "ceteris paribus" assumption. In the real world, more than one factor affecting demand can change simultaneously, for example, price, income and tastes and preferences can all change at the same time.
- For example, the government might impose a tax on a good whose demand is price inelastic in order to earn larger tax revenue. However, other factors such as a fall in income might result in a fall in demand resulting in a smaller amount of tax revenue earned.

**(ii) Accuracy and Reliability of the Data:**

- The value of price elasticity of demand of a good may also not be accurate for the following reasons:
    - Sample size and characteristics are too small to be representative.
    - Time period selected is far from the current period, hence data is outdated.
    - Data collected is inaccurate for various reasons such as households do not reveal their preferences accurately due to personal reasons.

L: Under such circumstances, the use of PED by a government is limited due to the inaccuracy of the data

**Conclusion**

Summary and personal opinion:

- The concept of price elasticity of demand ~~is~~ may be useful to a government in formulating policies to achieve its goals. However, there are also limitations to the use of these concepts and government should be aware of the limitations in order to make accurate judgement of the effectiveness of the policy.
- In view of such limitations, the government must make an effort to constantly update the elasticity concept data through yearly consumer household expenditure surveys and also be aware of factors that might affect the demand or supply of the good or service in question.

| Levels | Descriptors |
|---|---|
| **L3** | • Rigorous and clear two-sided explanation of how the PED concepts can be |

| | |
|---|---|
| | used to assess the effectiveness of various government policies. (Max 7m if only candidate only explain Micro policies)<br>• Clear and relevant examples given in answer. |
| **L2** | • Good explanation of the usefulness of PED concepts to the government.<br>• Some understanding of how the PED concept can be used to help assess the effectiveness of various government policies (Micro or Macro).<br>• Some examples given but lacking in elaboration. |
| **L1** | • Smattering of points, showing little or superficial understanding of Price elasticity of demand concept with many conceptual errors. |
| **E2** | • For an evaluative discussion, or one that is supported by rigorous economic analysis.<br>• Eg: ability to explain the limitations of using the PED concept with clear examples.<br>• Able to provide a personal view. |
| **E1** | • For an unexplained judgment, or one that is not supported by analysis. |

**4** **(a)** Explain the key components of the circular flow of income of Singapore. [10]

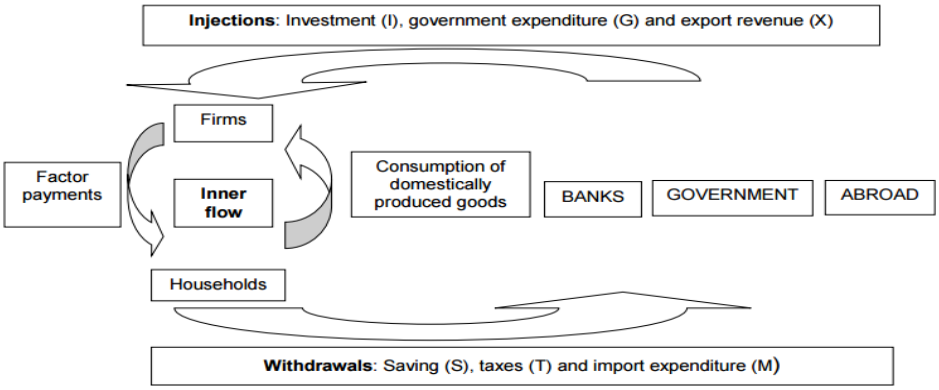
**(b)** Globalisation has resulted in improvements in standard of living in all countries. Discuss. [15]

**Part A**

**Introduction**

Define key term: The circular flow of income describes both the flow of money and goods and services between firms, households, government and the external sector in an economy.
Direction of Essay: Singapore is an open and small country which relies heavily on trade and foreign direct investments. This results in imports, exports, investments and savings being the key components of its circular flow of income.

**P1: Explain the circular flow of income**




The interaction between firms and households takes place in two different markets – goods and factor markets. The goods market is where trade in goods and services takes place whereas in the factor market, services of factors of production are traded. These interactions involve the flow of income between firms and households.

Firms hire factors of production from households or individuals to produce goods and services. In return for the use of factors of production such as labour services, land, capital and entrepreneurship skills owned by households, the firm pays income to the households or individuals. These incomes can be in the form of wages, rent, interest and profits. The sum of all these factor payments makes up the national income of the country.

With the income received, households spend all their incomes on goods and services produced by the firms. This flow measures income in real or output terms. The total expenditure by households equals the total income received.

Besides consumption expenditure that arises from household's current income, there are also other forms of expenditure that do not arise from household's current income. These are investment expenditure on capital goods by firms, government expenditure on goods and services and expenditure by foreigners on the country's domestically produced goods and services or exports. These expenditures are called injections.

On the other hand, there are also leakages or withdrawals from the circular flow of income. They are called so because they are part of income that is not spent on currently produced goods and services. Examples of withdrawals are savings, taxes and import expenditure.

**P2: The key injections into the circular flow of income of Singapore are investment expenditure and export revenue.**

EE: Being an open economy and our status as a financial hub, there is less restriction in the inflow and outflow of foreign direct investments. Thus more investments will flow in and out of the country resulting in a change in injections in the economy. A country like Singapore is

most likely to experience a high inflow of FDI due to its characteristics of having the 2nd lowest corporate tax rate in the region, a stable and non-corrupted government.

Being a country with a small population, Singapore has a small domestic market for the sale of its goods and services. Thus, there is a need to export its goods and services to other countries. Being endowed with skilled labour with a high productivity level will enable Singapore to produce high quality exports at a lower price resulting in high export earnings. Singapore also signed a number of Free Trade Agreements (FTAs). A FTA is a legally binding agreement between 2 or more countries to reduce or eliminate barriers to trade and investment making it easier to trade with her FTA partners and to invest in their markets.

L: Therefore investment expenditure and export revenue are the key injections.

**P3: The key withdrawals from the circular flow of income of Singapore are savings and import expenditure.**

EE: The level of savings is high in Singapore. This arises from compulsory savings through CPF contribution where 20% of gross income is saved. In addition, households save another proportion for precautionary and other purposes. Overall, Singapore's savings as a percentage of GDP is about 50% which is one of the highest in the world.

Being a small country lacking natural resources, Singapore is also heavily dependent on imported final goods and services for consumption and raw materials for production of goods and services.

L: All these resulted in high levels of savings and import expenditure.

**Conclusion**
Summary: In conclusion, due to Singapore's characteristics of being a small, open country which relies on trade, the key components of its circular flow of income are savings, import expenditure, investment expenditure and export revenue.

Link to part b: The changes to injections and withdrawals caused by factors such as globalisation will have an impact on the level of national income in the country both in the short run and in the long run. This will also impact a country's standard of living.

| Levels | Descriptors |
|---|---|
| **L3** | • Thorough explanation of the circular income flow with all key components described with relevant examples.<br>• Clear explanation of these why these components are the key injections and withdrawal from the circular income of flow with reference to the Singapore economy. |
| **L2** | • Adequate explanation of the circular income flow<br>• Some explanation of any 2 components with some reference to the Singapore economy |
| **L1** | • Broad overview of the circular income flow<br>• Limited explanation of the key components of the circular flow of income of Singapore. |

**Part B**

**Introduction**

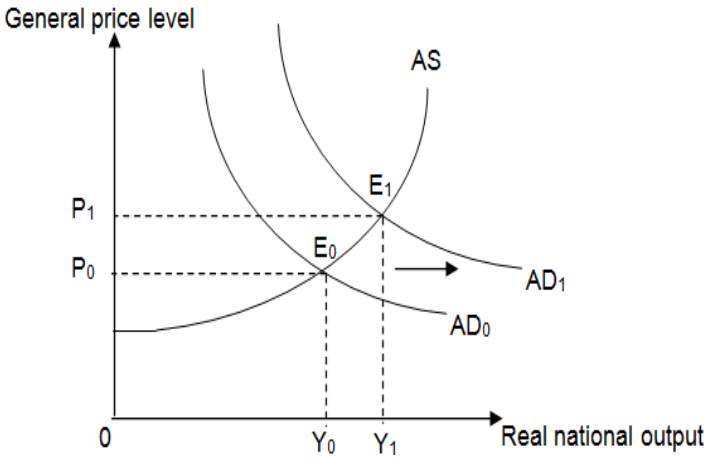
Define key terms: Globalisation is the process of continuing integration of countries in the world where national markets become increasingly interlinked. Globalisation leads to a lowering of trade barriers and greater mobility of goods and services, labour, capital and technological know-how.

The standard of living refers to the level of material and non-material well-being of an individual or household. The material well-being is measured by the quantities of goods and services consumed while non-material SOL is measured by factors such as the quality of healthcare and education standards, happiness and stress levels.

Direction: Globalisation is one of the main reasons to account for economic growth and higher standard of living in many countries. But globalisation also poses serious challenges to other countries. The extent to which a country's standard of living will improve depends on a few key factors which are both economic and non-economic in nature, which we will discuss in this essay.

**P1: Globalisation will result in greater flows of goods and services and economic growth and hence countries enjoy an improvement in its material standard of living.**

EE: Globalisation leads to a rapid expansion of international trade in goods and services and greater mobility of factors of production. Countries win when they gain market access for their exports due to trade liberalisation. With trade, the demand for the country's exports by the rest of the world increases. This will result in a rise in export earnings. Assuming that the rise in demand for exports is higher than the rise in demand for imports, there will be a rise in net exports causing the aggregate demand to rise.



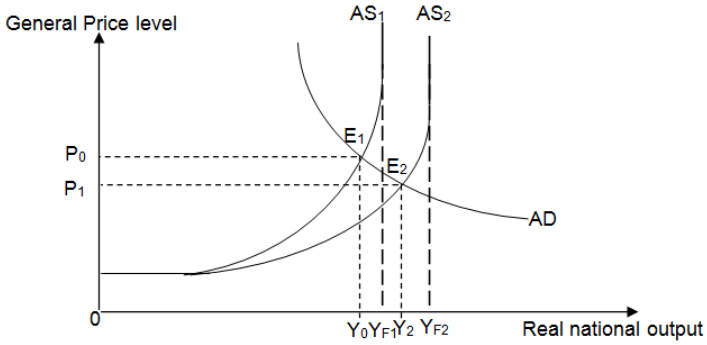

PAP: The original equilibrium is at $E_0$. When there is an increase in aggregate demand, the AD curve will shift to the right from $AD_0$ to $AD_1$. At the original price level of $P_0$, the level of aggregate demand is now greater than that of aggregate supply. The resultant shortage causes prices to be bid up. As price levels rise, firms have incentive to increase production because of the higher profits. At $E_1$, the general price level and real national output are higher at $P_1$ and $Y_1$ respectively. Unemployment will also fall as labour is a derived demand of production. The rise in real national output, assuming that population is constant, implies that people in the country are better off because it could be that more goods and services have been produced and made available for consumption. Hence more wants are satisfied. The rise in national income and fall in unemployment will result in higher purchasing power of the people.

L: Thus, with globalisation and expansion of trade due to trade liberalisation, most exporting countries enjoy a rise in its material standard of living as a result of trade fostering its economic growth and employment.

EV: The extent of the rise in net exports and economic growth depends on the level of competitiveness of the country's exports. Countries like Singapore who adopted supply side policies to encourage innovation and R&D will be able to produce quality goods and services at a lower price. This will enable it to enjoy a higher increase in net exports and thus a higher material SOL.

**P2: Globalisation might also result in inflow of foreign direct investment which will result in a rise in future standard of living.**

Globalisation has led to greater financial flows across national border. Since 1990, there has been a huge upsurge in international capital flows and a growing integration of international capital markets. Total foreign direct investment (FDI) flows in the world have increased over the years.




In the long run, the rise in quantity of capital goods due to the rise in FDI will result in a rise in productive capacity. This will result in a rise in the country's LRAS causing the AS curve to shifts from $AS_1$ to $AS_2$ rise resulting in a rise in full employment level of real national output from $Y_{F1}$ to $Y_{F2}$. This results in potential economic growth.

L: As a result, the country's future living standard can be expected to improve due to the ability to produce more goods and services in the future.

EV: The level of inflow of FDI depends on the country's ability to attract it. Countries whose conditions are not favourable for investments will suffer from an outflow of FDI. Eg. Political instability and poor infrastructure development. Countries facing political turmoil such as Thailand during the recent coup experienced an outflow of investments. This will in turn worsen its standard of living. On the other hand, some developing countries that boast of a skilled low cost labour force, sound infrastructure and lower cost of production will be able to attract more FDIs due to the higher rates of returns they offer on investments.

**P3: Globalisation might result in structural unemployment which will worsen the country's material standard of living.**

EE: With globalisation, large numbers of (mainly low-skilled) workers from China and India enter into the global labour force. This results in the loss of comparative advantage in low-end manufactured goods due to outsourcing of jobs. There will be loss of jobs mainly for low-skilled workers and older workers, thus resulting in structural unemployment due to mismatch of jobs as these workers find it difficult to switch to the sunrise industries due to the lack of skills. Eg. In Singapore, hard-disk maker Seagate Technologies shut its manufacturing plant in Ang Mo Kio and retrenched 2,000 workers in 2010 when it decided to

move its production plant to Thailand to take advantage of cost competitiveness that is present in Thailand. While Seagate Technologies retrenched the workers in their production facilities in Singapore, it expanded the R&D team to work on researching and developing new hard drives in the country. This created jobs for skilled workers. However, without the relevant skills, workers who have lost their manufacturing jobs previously will not be able to take up employment in the new sector.

L: This results in structural unemployment in the country which worsens the SOL.

EV: However, the extent to which a country will suffer from structural unemployment and a fall in material SOL depends on its ability to train workers to take up jobs in the new sunrise industries with the relevant SS- side policies. In Singapore, the government emphasises on continuous upgrading of skills and implemented many training and re-training programmes which increases labour mobility. This enables workers to switch and find new jobs and mitigates the negative impact of structural unemployment that arises from globalisation.

(Candidate might also explain how the change in demand for high skilled and low skilled workers might result in rising income inequity. Thus not everyone's standard of living will improve.)

**P4: Globalisation might also cause a country's non-material standard of living to worsen.**

EE: Despite the rise in income, due to increase in export earnings and investment, non-material quality of life might deteriorate with more globalisation. The resultant rise in production might increase the level of pollution in a country. For example, in 2012, Indonesia and its surrounding countries experienced its worst haze problem when the pollution standard index (PSI) shot to 400. The haze was caused by a Singapore-based company. Due to the lack of enforcement, the slashing and burning of the Indonesian forests was to make way for palm oil plantations for biofuels. Despite the rise in FDI in the country which resulted in a rise in income, the Indonesians suffered from the worsening air quality which in turn worsened their non-material standard of living.

The increase in level of output may also mean that workers in some developing countries are working long hours assuming that labour productivity level remains unchanged. This reduces the amount of leisure time reducing quality of life. For example, the emergence of sweat shops in countries with low labour costs such as China and Bangladesh due to globalisation resulted in workers working long hours under unfavourable conditions despite the rise in output.

L: Thus there will be a fall in non-material standard of living. The government of the country must therefore intervene by implementing regulations to curb the level of pollution and ensure the welfare of workers is well taken care of in order to lessen these negative impacts. The extent of this negative impact on SOL will is therefore dependant on how the governments of different countries react and prevent pollution from going out of control.

**Conclusion**

Globalisation is beneficial because it brings about increased output and income, thereby raising the standard of living of the people. However, in the short run, countries may face some problems like unemployment, pollution and the fall in quality of life. The extent of these

impacts also depends on the characteristics and conditions of these countries. Countries may use regulation and supply side policies to address the impacts. This is so that the full benefits of globalisation can be realised while minimising its negative impact.

| Level | Descriptors |
|---|---|
| **L3** | • Sound analysis of the impact (both positive & negative) of globalisation on current, future material SOL and Non-material SOL.<br>• Examples given are clear and relevant.<br>• Conclusion is reasonably supported. |
| **L2** | • Adequate understanding of the impact of globalisation on standard of living with some recognition of the differing impact on different countries.<br>• Shows impact on only 1 form of SOL |
| **L1** | • Splattering of points.<br>• Very weak response to question, with vague understanding of the impact of globalisation on various aspects of standard of living. |
| **E2** | • For an evaluative discussion, or one that is supported by rigorous analysis.<br>• Able to provide a reasonable personal view. |
| **E1** | • For an unexplained judgment, or one that is not supported by analysis. |