

## **H2 Economics 9757 Paper 1 Question 1: Suggested Responses**

### **Question 1: The Market for Higher Education**

- (a) With reference to Table 1, compare the government expenditure per student for primary and university education from 2012 to 2015. [2]

- Both government expenditure per student for primary level and university have generally increased from 2012 to 2015. [1]
- Government expenditure per primary school student is always lower than university expenditure per student. [1]

OR

- Both government expenditure per student for primary level and university have generally increased from 2012 to 2014 but for 2015, university expenditure per student has fallen while expenditure per primary school student continued to increase. [1]

- (b) Using demand and supply analysis, explain two reasons for the expected increase in UK's university tuition fees. [3]

*With references to Extract 2,*

- The increase in birth rates in UK → leads to the rise in demand for university education → increase in DD [1]
- Cut in government subsidies for universities leading to higher COP for universities. → Decrease in SS [1]
- A shortage will occur in the market [1] → lead to an increase in price of university education

*1m: DD factor*

*1m: SS factor*

*1m: price mechanism linking to shortage*

*(Diagram is not expected, and no additional marks assigned)*

- (c) (i) Explain how recruitment in the labour market may not lead to an efficient outcome. [3]

- Recruitment in labour market may fail due to imperfect information where asymmetric information occur as one party (potential employer/ candidate) has more information than the other party (potential employer/ recruiter), causing the outcome of adverse selection. [1]
  - It is a situation in which higher-ability candidates are being squeezed out of recruitment because they are unable to effectively demonstrate and contrast themselves from lower-quality candidate. This could be in the form of inability to demonstrate: [1]
    - Candidate's personal traits or characters to potential employers.
    - Candidate's not divulging sufficient and accurate information about their level of competency to take on challenging tasks etc.
- Leading to inefficient outcome in recruitment of labour, such as:
  - Misalignment of the candidate's personal values to companies' values. For instance, the information of a potential candidate who was involved in embezzlement in the previous company may not be accessible to potential employer. The potential employer may thus be unable to accurately assess the integrity and financial management ability of the candidate.
- Thus, resulting in an inefficient outcome where there is over-employing of

unsuitable/ under-qualified candidate (lower-ability) and under-employing of the right 'fit' candidate (higher-ability) for the job by the employers. [1]

2m: Identify and explain the source of mkt failure (imperfect info/ asymmetric info; adverse selection) in relation to recruitment in labour mkt

1m: how recruitment leads to inefficiency in labour mkt

**(ii) Explain how governments and firms can reduce the inefficiencies identified in (c)(i). [4]**

- The use of big data treatment, where firms tap on technology [1] to gather and analyse data/information of candidates so as to gain a more accurate understanding of the candidates (such as having matching values between the potential employee and the firm) → improving the recruitment selection process → reducing the inefficient outcome by ensuring the right 'fit' candidate (higher-ability) are recruited for the job by the firms and reducing the employing of unsuitable/ under-qualified candidate (lower-ability). [1]
- Government could introduce the need for more stringent screening process such as the need for information on applicant's employment history, criminal records and loan records to be taken into account during recruitment process. [1]. This is to enable firms to have a better signal of the candidate's character and commitment → reducing the inefficient outcome by ensuring the right 'fit' candidate (higher-ability) are recruited for the job by the firms and reducing the over-employing of unsuitable/ under-qualified candidate (lower-ability).  
For instance, candidate with good loan records would provide a clearer signal to firms about the candidate's ability to manage funds responsibly in ensuring timely repayment of loans. Information such as loan records can serve as a good signal for firms as they are difficult to fake and candidates of better loan records are thus more likely to be better candidates. [1]

1m for government and 1m for firms - Identify of measure from extracts

1m for government and 1m for firms - explain how the measure can address the inefficiencies; reducing adverse selection.

**(d) Discuss the view that the Singapore government monopolising the market for higher education is undesirable for consumers. [8]**

**Approach:** When the government assumes the sole provider of higher education in Singapore, we could view it as 'monopolization' of the industry. Students are expected to evaluate the desirability of govt monopoly of higher education market based on evidences from extracts (practical and real issues raised).

**Intro:** The Singapore government has always invested heavily in education, and the move to restructure the private UniSIM as an autonomous university owned by the govt (Extract 4) means that the govt now owns six public universities. There is little room left for private universities to thrive, and this can bring undesirable effects for consumers.

**Argument for: Government monopolizing the higher education market is undesirable for consumers**

**1. Criteria of free market entry:**

New private universities may not be able to enter the market. As the govt is

pushing for more places for students in public universities, it would be hard for private universities to enrol more students and be profitable.

- The lack of competition may cause x-inefficiency to develop in the higher education sector where there is a lack of variety and consumers' choice of courses of study are limited to the ones offered by the autonomous universities.
- As a large entity, the government could easily restrict further entry of private universities through restrictions based on size (requirement of security deposits, for example), branding and the range of products (courses) offered.
- While the autonomous universities are free to set their own direction and differentiate their educational offerings, there could be duplication in the market, and result in competition for labour (professors, administrators, etc.) and push the cost of university education up. There is a high possibility that fees for consumers will be raised beyond allocative efficiency level ( $P > MC$ ).

## 2. Opportunity cost criteria:

With the government also subsidizing primary education as well as other levels, it may find itself stretched having to incur high trade-offs and opportunity costs in their use of funds and resources for the various needs in other education levels (Table 1 – the average govt expenditure per primary school student have risen by 27.7% between 2012 & 2015). The rising costs may be passed on to consumers in the form of rising fees or other forms of taxation.

**Counter-Argument: Government monopolizing the higher education market is desirable for consumers**

**Students would need to highlight some of the objectives of the govt (as a monopoly) in the provision of higher education.**

### 1. Efficiency criteria: (Outcome of natural monopoly)

- Pricing education closer to  $P=MC$  (allocative efficiency)

[Students to insert diagram to show MC-pricing]

As a natural monopoly, the cost of offering higher education is lowered due to economies of scale and re-structuring of processes (e.g. joint admissions). → Fees can be kept more affordable for consumers, achieving the govt's goal of having more quality workforce, and offering greater opportunities for the low-income group to participate in higher education. Any cost increases could also be absorbed by the govt without having to charge consumers.

- Producing at an output level closer to allocative efficiency

Opening of new autonomous university allows government to extend economies of scale to the new university, and be able to accommodate the demand for higher education from low income groups. If left to market forces, it is likely that universities will limit the number of places at profit-maximization output level, where  $MC=MR$  [ref diagram], and charge higher fees which erode consumer surplus.

### 2. Narrowing the income gap in the long run (Equity criteria)

Enabling the lower income to participate in higher education means that lower income families would have the opportunity to improve their standard of living in the long run

- As mentioned in the Extract 3, this group values higher education lower than what it benefits them, and thus information and encouragement is needed to push them to participate in the market.

**3. Government is able to ensure quality of university education by ensuring standards and evenness of quality**

The wide variety of private university institutions and offerings may result in market saturation and little supervision over the quality of education.

- This could result in several universities duplicating their courses without adding value to the industry.
- Govt monopoly of universities could minimize duplicity of courses across universities. Eg. Extract 4: UniSIM focusing strongly on social services courses while NUS offers dentistry and music.
- Government monopolizing these universities could result in common educational standards across the degrees offered.

**Evaluative Judgement:**

While monopolies often result in deadweight loss to society with their higher prices and lower output, monopolising higher education by the government is desirable based on the evidences in the extracts:

- Education is a merit good, and if left to the market, will be under-produced. Thus, some level of govt intervention, including nationalization of the market may have to be undertaken.
- The lower-income consumers will benefit from the subsidies given to them, achieving a more equitable outcome in society as mentioned in Extract 3 paragraph 2.

Level	Descriptors	Marks
L2	<ul style="list-style-type: none"> <li>• Answer provides a well-developed and balanced view on the desirability of Singapore government monopolizing the higher education market for the consumers.</li> <li>• Answers draw from the data as well as from their knowledge of the Singapore economy.</li> </ul>	4-6
L1	<ul style="list-style-type: none"> <li>• There is a lack of depth of analysis regarding the desirability of Singapore government monopolizing the higher education market for the consumers.</li> <li>• Use of data is sporadic and inconsistent.</li> <li>• Inaccurate use of concepts.</li> </ul>	1-3
E	<ul style="list-style-type: none"> <li>• Judgement is based on analysis that reaches a conclusion based upon consideration of the analysis.</li> </ul>	1-2

**(e) Discuss whether the Singapore government should follow the UK in cutting subsidies for university education. [10]**

**Approach:** Students should consider the reasons for the subsidies made by the Singapore govt. Based on extract 3, subsidies on higher education sector require a careful balancing between strategic considerations, equity, and efficiency. These considerations could differ from what the UK govt based their decision to cut their subsidies on, however. Thus, on evaluation, cutting the subsidies would also entail a review of these considerations in the Singapore context.

**Argument for: Singapore should cut subsidies**

**1 Extent of private returns to higher education, as compared to external benefits:**

Considering that there are private returns of higher employability and wages (Extract 3) to higher education, it may be **possible that current subsidy levels are too high**. If students are to gain from higher education, then they should be

willing to pay a larger proportion of the fees. → **The govt may have overestimated the size of external benefits of higher education.** A cut in subsidies would lower the quantity of places available in universities, and possibly lead to a better allocation of resources.

[Students to insert diagram to illustrate possible over-subsidy of higher education]

- 2 **High subsidies may lead to an overconsumption of higher education places,** which would then lead to an over-supply of graduates. This could mean that the Singapore economy would have to be able to absorb the increase in graduate workers with sufficient capacity and opportunities for graduate-level jobs. If not, it could result in under-employment or, in an economic crisis, high unemployment. Thus to prevent this, a cut in subsidies would reduce the number of university places and reduce the rate of increase in graduates.
- 3 **Improved range of courses by universities:** Reducing subsidies would mean that universities would have to increase their fees for some consumers, or be more strategic in their offering of courses.
  - a. Higher fees are viable as higher income consumers now have better ability to pay and thus do not need to be subsidised at the same level as those with lower income
  - b. Consumers are more knowledgeable about higher education courses, and are more discerning about their choice of university courses to attain their dream career.
 Thus, universities can be allocatively more efficient with the reduced subsidies if they offer courses that consumers are willing and able to pay for.
- 4 Similar to the UK economy, the **opportunity cost of subsidizing higher education could be high**, considering that there are other priorities in the economy, for example caring for the aging population, improving public infrastructure on healthcare and transportation, and budgeting for industry transformation programmes.

### **Counter-Argument: Singapore should not cut subsidies**

- 1 **Consideration of efficiency and equity: Extent of market failure caused by positive externalities and the income gap**  
 As expressed in extract 3, market failure exists in the market for higher education. Thus, there is a case for government to subsidize.
  - The extent of subsidies so far has generated a large pool of skilled and educated workforce, which has contributed immensely towards the economic progress of the country. This shows that the external benefit are large and continues to be enjoyed by the economy
  - The govt has to also consider the need to support the aspirations of the lower income group through subsidizing their participation in higher education.
- 2 **Strategic consideration of economic progress and competitiveness:**  
 Expenditure figures in Table 1 show that the amount spent by the govt per university student is more than double that of expenditure on primary school students.
  - Considering that universities have to deliver high quality education to prepare the people for the future economy, a cut in subsidies could place them in danger of having to cut corners, employ low quality teaching staff and reduce intake of students.
  - There could also be a reduction in the range of courses that students can

choose from. As an education hub, this would make the sector less attractive to investors and potential private institutions.

- Considering the need for labor to continue to be highly skilled for the future economy, subsidizing higher education should continue

### 3 Strategic consideration of fiscal capacity:

From Extract 1, UK govt decided to cut subsidies in order to ease their debt. This might not be the case for the Singapore govt. Unlike the UK govt, the govt of Singapore does not have a large debt and historically have a healthy budget balance through the govt prudent spending. This provides them with a strong ability to continue subsidizing higher education, even at its present level to achieve its social and macroeconomic goals.

### Evaluative judgement

Overall, the level of subsidies that the government gives to universities should be high enough to sustain their quality of education. While it can be argued that the private benefits gained by consumers are high and thus should be privately financed, the economic benefits to the economy of a highly educated and skilled workforce far outweigh the economic costs of the subsidies given. The Singapore government does have that fiscal ability to continue subsidizing higher education.

Level	Descriptors	Marks
L2	<ul style="list-style-type: none"> <li>• Reasons for the subsidies are well analyzed, and placed within the context of the Singapore economy.</li> <li>• Answers draw from the data as well as from their knowledge of the Singapore economy.</li> <li>• Answers have a balanced view regarding whether the Singapore govt should reduce subsidies or continue with the current level.</li> </ul>	5-7
L1	<ul style="list-style-type: none"> <li>• There is a lack of depth of analysis regarding the reasons to implement subsidies in education.</li> <li>• Use of data is sporadic and inconsistent.</li> <li>• Inaccurate use of concepts.</li> </ul>	1-4
E	<ul style="list-style-type: none"> <li>• Judgement is based on analysis that reaches a conclusion based upon the analysis offered.</li> </ul>	1-3