

Q1. In Singapore, generous government funds are allocated both for the training of low-skilled workers and for university education, but university students are expected to bear a fair share of the cost of their education.

- Explain how the market economy allocates resources in the area of education. [10]
- Discuss the view that unlike low-skilled workers who are highly subsidised for training, university students should pay the full cost of their education. [15]

Answer requirements:

(a)

- Key features about how resources are allocated in market economy: no/minimal government intervention, pursuit of self-interest, price signals as basis of signalling and rationing.
- How forces of demand and supply work in resource allocation (what, how & for whom).

(b)

- Using the concept of positive externality to justify why both the training of low-skilled workers and university education deserve government subsidy (case of Merit Good).
- Explaining the case for university students to pay full fee (significant private benefits, income inequality).
- Considering the immediate and long-term external benefits of university education to that of training for low-skilled workers as support why partial subsidy is justifiable for the former.

a) Explain how the market economy allocates resources in the area of education.

Introduction

- Explain market economy:
 - ⇒ Pursuit of self-interest in economic decisions: profit maximisation by firms and utility/satisfaction by households.
 - ⇒ Markets operate with little or no government intervention.
 - ⇒ Resources are allocated through the price mechanism/ forces of demand and supply.

In a market economy, all schools are privately owned and operated and hence production decisions are primarily profit-driven. In consumption decisions, families send their children to schools or studies of choice based on private benefits.

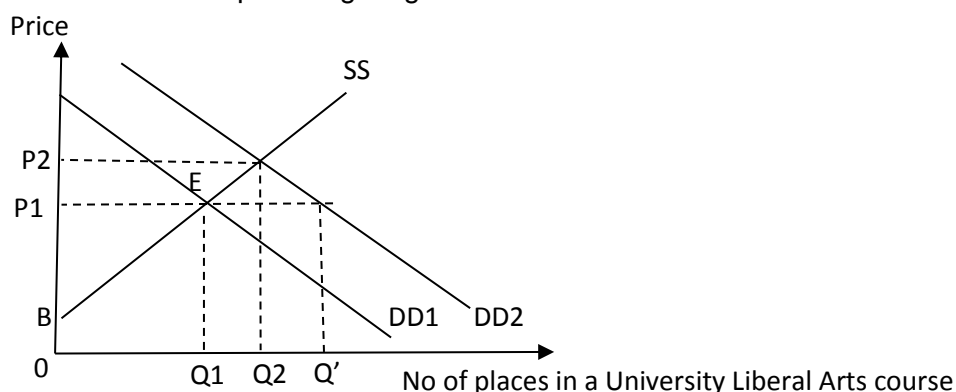
Body

Main part of answer to explain how without government intervention in the market, the allocation of resources for education, be it university education, elementary or pre-school education, will be through the forces of demand and supply.

Prices as a signalling device

Consumers indicate to the producers what goods they want to be produced through their strength of demand, indicated by the prices they are willingness and ability to pay at respective prices.

Supposing that is a greater demand for university education. Consumers indicate this increase in demand through their willingness and ability to pay a higher price for such courses. Explain the effect on level of output using diagram below.



- ### Price as a rationing device

- ## Price influence on how to produce

Note: Students may use any examples of education institutions in answer, e.g. pre-schools, culinary-training courses, etc.

Knowledge, Understanding, Application and Analysis		
L3	<p>Higher L3</p> <ul style="list-style-type: none"> Conceptually accurate explanation of how market economy and price mechanism address the fundamental economic questions (what, how & for whom). Education industry used as context in explanation. <p>Lower L3</p> <ul style="list-style-type: none"> Offers both breadth and conceptual clarity in explaining role of price signal as a signal and rationing device – capturing motives and role of price signals Examples in education mainly stated. 	<p>9-10</p> <p>7-8</p>
L2	<ul style="list-style-type: none"> Undeveloped explanation of the working of price mechanism. Some reference to the movements of resources. 	5-6
L1	<p>Higher L1</p> <p>Explains demand-supply concepts but with conceptual inaccuracies and failing to recognize their role in resource allocation.</p> <p>Lower L1</p> <p>Many irrelevant parts/ major conceptual errors.</p>	<p>3-4</p> <p>1-2</p>

- b) Discuss the view that unlike low-skilled workers who are highly subsidised for training, university students should pay the full cost of their education.

Introduction

- Both training and university education are merit goods
 - Goods deemed by society to be socially desirable and considered by the government to be under-consumed without its intervention.
 - Both have high positive externality and therefore need government intervention, mainly in the form of subsidies, not only to make them affordable but also to increase the number of university graduates and trained workers to reach social efficiency level.
- However, some people are of the view that for various reasons, university education should not be highly subsidised like that of that of training for low-skilled workers. This essay looks at this discussion.

Why need for subsidy on merit goods

- The concept of positive externality
 - Both university education and training have high external benefit (benefits on others and the economy). Training improves productivity and skills thereby improving rate of growth and international competitiveness. Education is found to yield additional indirect benefits to growth for example by stimulating physical capital investments and technological development and adoption across many different industries (creating the potential for gains in dynamic efficiency).
 - With the existence of positive externality, the social benefit of education is larger than its private benefit. Since the workers and students and their parents only consider own private benefits, training and university education will be under-consumed without government intervention, leading to welfare loss.
 - Hence need for government intervention in education and training to achieve social efficiency. Ideally, government subsidy should be equal to the value of the positive externality.
- Imperfect knowledge
 - Insufficient information to recognise the future returns from undertaking a training. The low-skilled workers are generally less educated and lacks information on what they can gain from acquiring more skills.
 - Many young people are myopic when making university and degree course decisions. Or they may be averse to taking on debts even though it might be in their long-term financial interest to do so. Hence there's a need for the government to adopt a "paternalistic" view on what is best for the lower-skilled workers and younger people.

Thesis 1: University students should pay full cost of their education as unlike low-skilled workers' training as the extent of private benefit is much larger compared to that for training.

- Larger extent of private benefit from university education compared to training of low skilled workers

Both training and university education have private benefit in terms of higher earnings, more employable and less susceptible to being unemployed. But the private benefit of university education is much higher than the private benefit of low-skilled workers' training. Because the future earnings and standard of living to be enjoyed would be much higher compared to the private benefits from training of low-skilled workers.

If we consider the full social cost of each, the external benefit of university education can be smaller in proportion compared to that of training of low-skilled workers or arguably, the case for primary school education because people who are literate and numerate are able to learn new skills a lot quicker and be more productive for the economy. Likewise, training for lower lower skilled worker increases labour productivity → reduces firm's labour cost hence production cost.

Unlike low-skilled workers who go for training for very practical reasons, many university students take up courses such as Liberal Arts and Humanities subjects for personal satisfaction and fulfilment. Such courses do not add as much to the social benefit to the society as training courses for lower skilled workers.

Anti-thesis: University education's external benefit is much higher in the long-run

- In gaining university education, the training received from university education makes the graduates to be more productive, flexible, creative, enterprising and efficient and provide significant benefits to society as a whole (e.g. in engineering, architectural, business and financial management). University education train students to acquire skills that enable them to be evaluative and able to have foresight and work much longer hours than the lower-educated trained workers. University education contributes towards efficient democratic institutions, human rights, political stability and towards the generation of new ideas that can benefit the whole country both in the short run and in the long run.
- Such non-market external benefit of university education is possibly much higher than the external benefit of training lower-skilled workers and primary education put together → hence providing much higher social benefit to the society in the long run. Therefore, it is only fair therefore that they should be subsidised at an early stage in their lives as they will pay it all back in kind throughout their productive lives
- Higher income of graduates → higher income bracket → higher income tax rates → higher government tax revenues in the long run → can be used to fund other socially beneficial government spending programmes
- Hence, the argument that university students should pay full fee without government subsidy is valid only if the social benefit of university education is entirely private in nature, i.e. if external benefit is absent. However, one cannot deny that university education has vast external benefit.

Thesis 2: University education widens income inequality

- University education is likely to benefit the higher income households more as they are more aware of the long-term private benefit of university education → one of the reasons why there are more students from higher and middle income groups in the university. Large subsidy on university will make the fiscal system regressive (benefiting the higher income more).
- Also, university graduates earn more than those who do not go to university → widens income gap.

Anti-thesis: University education is also a very important way to improve the economic and social mobility of low income population.

- The lack of subsidies in education can worsen inequality. Without government subsidy, children of low income families can be deprived of university education, and they remain less qualified than the richer children who can afford university education.
- University education is an important way to provide economic and social mobility, hence a generous subsidy is needed for them, at least with means testing criterion.
- Higher subsidies may be provided for lower-income students, to be determined through means testing. This will ensure that all students will have a fair opportunity to university education and allows for social mobility → hence narrow income gap.

Thesis: Paying full cost of university education can lead to Improvements in allocation of resources in higher education

- Students paying for their university education will encourage them to be more selective in the courses they choose and will stimulate an improvement in teaching quality of universities in order to attract students to study their preferred courses in their universities. Tuition fees make parents and students to be more mindful about economic value of the choice of university courses.

- With students paying full fees, government funds can instead be used to expand university facilities, teaching as well as to maintain and expand high level scientific research → research findings contribute to international competitiveness of economy through development of high-knowledge sectors.

Antithesis: Impact on supply of university graduates with degrees that are essential but considered less rewarding in job prospects or earnings.

- It is feared science and engineering - among the most expensive courses to run because of equipment costs and specialist staff – will see a fall in demand → threatening long term damage to the country's manufacturing competitiveness.

Synthesis

- Given that the extent of private benefit of university education is much higher in significance compared to that of training courses for low-skilled workers, it seems fair that undergraduates are made to bear the cost of their university education.
- Government subsidy on the high cost of university education that benefits the handful of students with academic qualification for further studies could cause a strain of their resources, particularly in debt-ridden countries such as the UK. The funds could be used to finance other education sectors such as primary and pre-school education whose benefits are much more broad-based.
- However, one must realise the external benefit of university education in developing the country's future - socially, politically and economically. Hence, subsidising university education is justifiable, just like training for low-skilled workers.
- Moreover, for equality of access, there is a need for the government to support undergraduates either through subsidies or subsidised student loans, particularly for students from the lower income families.

Knowledge, Understanding, Application and Analysis		
L3	<ul style="list-style-type: none"> • Conceptually accurate and well elaborated explanation in considering the extent of private benefit and external benefit of university education compared to training for low-skilled workers. • Making comparative note of the reason why the training of low-skilled workers receives large subsidy. • Good use of examples. 	9-11
L2	<ul style="list-style-type: none"> • Comparative explanation of the private benefit and external benefit of university education and training for low-skilled workers but undeveloped. <p>OR</p> <ul style="list-style-type: none"> • Developed explanation of the social benefits (private benefit and external benefit) of university education to argue why government subsidy is justifiable, without comparing to training for low-skilled workers. 	6-8
L1	<p>Higher L1</p> <ul style="list-style-type: none"> • Uses relevant economic concepts but with major conceptual errors. • Mainly descriptive attempt (without using economic concepts) in comparing the benefits of university education and training for low-skilled workers. 	3-5
	<p>Lower L1</p> <ul style="list-style-type: none"> • Smattering of points but not answering the question 	1-2
L2	Evaluation based on a sound criterion and ending with a considered judgement. E.g. Considering the relative private and external benefits of university education in relation to training for low-skilled workers.	3-4
L1	Evaluation and judgement without-criterion/ substantiation E.g. Considering the pros and cons of undergraduates paying full university fees without connecting to the extent of external benefits.	1-2