Question 1: 2015 A Levels

"While Singapore's economic restructuring efforts have borne fruit, it is a marathon with no finish line. We are not done. I don't think we'll ever be done. Ten years from now, I'm sure we'll still be talking about productivity growth and upgrading." - Prime Minister Lee Hsien Loong

Todayonline, 11 June 2019

(a) Using examples, explain why an economy's comparative advantage might change over time. [10]

(b) Assess the measures adopted by the Singapore government to improve the economy's global competitiveness. [15]

(a) Explain why an economy's comparative advantage might change over time. [10]

Command	Explain why • Provide at least 2 reasons of why comparative advantage in an economy might develop or lost over time.
Concepts	Theory of comparative advantage Dynamic comparative advantage
Context	Not given, use own examples to substantiate argument

Introduction: A country's comparative advantage is determined by its opportunity cost in production.

- Define comparative advantage: A country has a comparative advantage in the production of a good/service if it incurs a lower opportunity cost compared to another country.
- Differences in opportunity cost are mainly due to differences in the quantity and quality of resources for the production of a specific good.
- A country will have comparative advantage in the production of good/service which uses more the resources/efficiency the country has more. A country with advanced technology will have comparative advantage in production with high technology content.
- Comparative advantage is not static, it changes over time with countries having different rates of improvements in their production processes. Singapore for example has acquired its current advantage in pharmaceutical industries technology and R&D investment.

Requirement 1: (Factor 1) Changing factor endowment

- In the early days of industrialisation in Singapore, the country used to have comparative advantage in labour intensive industries such as food and textile production. However, with the emergence of China and other Southeast Asian countries which have abundant labour, Singapore's comparative advantage is lost to these countries. In response to this, Siungapore has focused on developing its labour force through its education and upskilling efforts to increase the skillsets of workers. This has allowed Singapore to develop a comparative advantage in industries such as higher-end manufacturing, financial services and innovative technology.
- Similarly, China can be said to have lost some comparative advantage in labour intensive production as Vietnam has developed in the abundance of low skilled labour with low wages needed for such production.

Requirement 2: (Factor 2) Differing rates of technological advancement between countries

- Technological advancements can be used to overcome constraints faced by a country in terms of quantity of resources. Technology can make up for the lack of skilled labour in a country. This allows the country to enjoy a lower opportunity cost than that of its trading partners.
- A country that initially has the comparative advantage via technology may lose it if it is does not invest enough in R&D to sustain this advantage compared to its competitors. The global rise of Samsung (South Korea) and the fall of Nokia (Finland) is one example of the shift in comparative advantage due to technological gaps.
- Related to technology is the rate of investment in plant and machinery. Greater use of automation, even at the same technology, can improve efficiency.
- Singapore is an example of a country that uses both investment and innovation to move up the value chain in the pattern of comparative advantage.

Comparative advantage is **dynamic** and changes over time with shifts in quantity and quality of resources between countries. Comparative advantage can be acquired through various methods involving improving the quality of resources. It should be noted that the shifts in comparative advantage are very much influenced by government policies. Singapore is an example of how various government policies have been focused on sustaining and acquiring new comparative advantage.

	Level Descriptors	**Marks**
L3	• Two factors (requirements) clearly explained on how comparative advantage shifts. • Comparative advantage principle sufficiently explained as reference in the explanation of the two factors.	8-10
L2	• Superficial explanation of comparative advantage and two factors, OR one factor well explained.	5-7
L1	• With major conceptual errors e.g. mistaking opportunity cost with cost of production, competitive advantage with comparative advantage.	1-4

Cambridge report (FOR TEACHER'S REFERENCE ONLY)
This question was, in the main, chosen by relatively weak candidates. In consequence, many of the answers were descriptive rather than analytic in approach. Part (b) was marginally better answered than part (a).

(a) Most candidates defined comparative advantage and described factors that might cause it to change. They described factors such as declines in mineral resources such as oil, changes in the work force, changes in technology, changes brought on by globalisation and changes due to government policy. The better responses linked this to opportunity cost but very few used production possibility curves or other tools of analysis to help explain their responses.

(b) Assess the measures adopted by the Singapore government to improve its global competitiveness. [15]

Command	Assess the measures • Explain at least 2 measures adopted • Elaborate on limitations or unintended consequences of these measures
Concepts	Government policies mainly Supply side policies and/or trade policies
Context	Singapore

Approach:
Requirement 1: Policy A

Evaluation of policy A (strengths and limitations)

Requirement 2: Policy B

Evaluation of policy B (strengths and limitations)

Introduction: A country's global competitiveness is affected by its supply conditions

- Global competitiveness refers to the capacity of an economy to compete with other economies for export demand, foreign investment and even foreign talents. This capacity is influenced by the quality of the country's resources and infrastructure, the efficiency of the government and its economic policies in place.
- A country can be globally competitive in terms of both price and non-price factors of its resources and production.
- Singapore's exposure to imported inflation due to the country's import reliance is dependence on imports poses constant threat to the country's global competitiveness and the set of policies includes the management of this risk through exchange rate policy.
- The Singapore government uses both direct government intervention and pro-market supply-side measures in driving productivity and efficiency gains for improvement in global competitiveness.

Requirement 1: Singapore adopts supply-side measures such as skills training and infrastructure provision such as digital connectivity.

- The government adopts supply side measures such as skills training and infrastructure provision.
- Over the years, the government has improved the quality of education from the primary to tertiary level and pushed for skills training through initiatives such as the Skills Future. The government's investment in education and ongoing skills development has helped to raise the labour force's capabilities and productivity. Other supply side measures also include various investment grants for firms to adopt deeper technology and expand internationally such as the enterprise grants
- These supply-side measures lead to greater efficiency which has the effects of expanding productive capacity and lowering domestic unit production costs. This leads to the price competitiveness of Singapore's exports. Firms' capacity to produce innovative products and

services also raises external demand as they are unique and less substitutable compared to competitors' exports. For example, Singapore has developed an edge in industries such as financial services, refined petroleum and green technology.

Evaluation:

- Interventionist supply side policies such as these have incurred a high financing cost by the government. This is critical as the use of these resources could be used for other priorities in Singapore such as keeping income inequality low or supporting the ageing population. It may also lead to firms and labour becoming over-reliant and lacking self-initiative to improve at their own costs. While it incentivizes labour and firms to improve, governments must ensure they eventually take ownership of their own development eventually.
- Another limitation is that such measures are uncertain and dependent on the receptivity of workers and firms. Moreover, the fast changing landscape may make these upskilling and innovations obsolete very quickly.

Requirement 2: Singapore adopts an exchange rate policy to mitigate imported inflation or to minimize negative growth

- As Singapore has no natural resources, and hence very dependent on imported raw materials. This makes imported inflation a constant threat to the economy's global competitiveness.
- To mitigate imported inflation, the MAS adopts a modest and modest appreciation of the SGD. The SGD is allowed to appreciate at a moderate pace within a band. This minimizes the rise in prices of imported goods and services in SGD. As the SGD appreciates, the price of imports in SGD can become cheaper or remain stable, should there be fluctuations or shortages in other countries.
- In the event when the external economy is weak, Singapore usually adopts a zero appreciation policy to maintain the price competitiveness of its exports. For example, during the Covid-19 pandemic in 2020 and the Global Financial Crisis in 2009, there was a global recession. Singapore set its exchange rate to zero appreciation.

Evaluation: Appreciation hurts price competitiveness of exports, particularly for service industries as they do not have high import content. This is because the services industries benefit less from the low imported costs, as their resources are mainly high skilled labour from Singapore. While keeping the economy buffered against imported inflation to sustain domestic cost and price competitiveness, the appreciation policy also inflates prices of its exports. It is therefore very important for the government to collect accurate and sufficient data to fine tune its policies to suit Singapore's needs in different seasons. To manage the impact on export competitiveness, MAS reviews the slope and band of appreciation twice a year with due consideration to global market conditions.

Synthesis:

- Singapore's global competitiveness has been very much engineered through the government's supply side policies which have a high cost of financing. However, the support for SMEs and the workforce is needed to ensure stability of employment and the inclusivity of economic growth.

- To further support this, the government has also ensured there is a sound working of market forces in industries, for example through the openness of markets which will push firms to be innovative and competitive.
- That said, even if measures have succeeded in bringing about productivity and efficiency gains, the impact on Singapore's global competitiveness is still dependent on how other countries have fared. The challenge is in ensuring that Singapore improves its rate of innovation and price competitiveness more than other countries. This is the greatest challenge to an economy highly reliant on foreign demand for its economic growth.

	Level Descriptors	**Marks**
L3	Conceptually correct, well-developed and balanced analysis on at least two policies (two requirements). To reach this level, answers must provide some evaluative comments on the effectiveness or sustainability of the measures.	8-10
L2	Conceptually correct but analysis lacking in conceptual insights and/or evaluative perspective of the policies.	5-7
L1	Superficial explanation of policies and lacking the connection to global competitiveness.	1-4
E3	Well-explained evaluative judgements about 2 Rs, plus a summative conclusion, e.g. answer points out fiscal challenges and harm on export price competitiveness, followed with an overall judgement that Singapore also emphasises on the need for effective functioning of market forces to support the fiscal and monetary policies.	5
E2	Two evaluative judgements, one of which is explained.	3-4
E1	Unsupported evaluative statements or one explained evaluative judgement, e.g. mentioning that fiscal polices enhancing global competitiveness not sustainable but answer does not point out why or the trade-off in terms of resource allocation or inclusivity.	1-2

Cambridge report (FOR TEACHER'S REFERENCE ONLY)
This question was, in the main, chosen by relatively weak candidates. In consequence, many of the answers were descriptive rather than analytic in approach. Part (b) was marginally better answered than part (a).

(b) The majority of responses to this part of the question were descriptive with only a few candidates using appropriate analysis to explain how the measures adopted by the Singapore government have improved the economy's global competitiveness. Better responses not only referred to measures that improved the quality of exports but also to financial measures aimed at reducing the price of exports. The most commonly discussed measures included membership of Free Trade Areas, supply-side policy, and exchange rate policy. These candidates assessed the limitations and appropriateness of each measure in improving the global competitiveness of Singapore.