

**2017 H2 Prelims EQ6 Suggested Answer**

“The Trans-Pacific Partnership (TPP) embodies what Singapore sees as the future of the Asia-Pacific. It will transform the region by reducing tariff and non-tariff barriers substantially for both goods and services, encouraging greater investment, and addressing new trade challenges in the modern economy.”

Minister Lim Hng Kiang, Minister for Trade

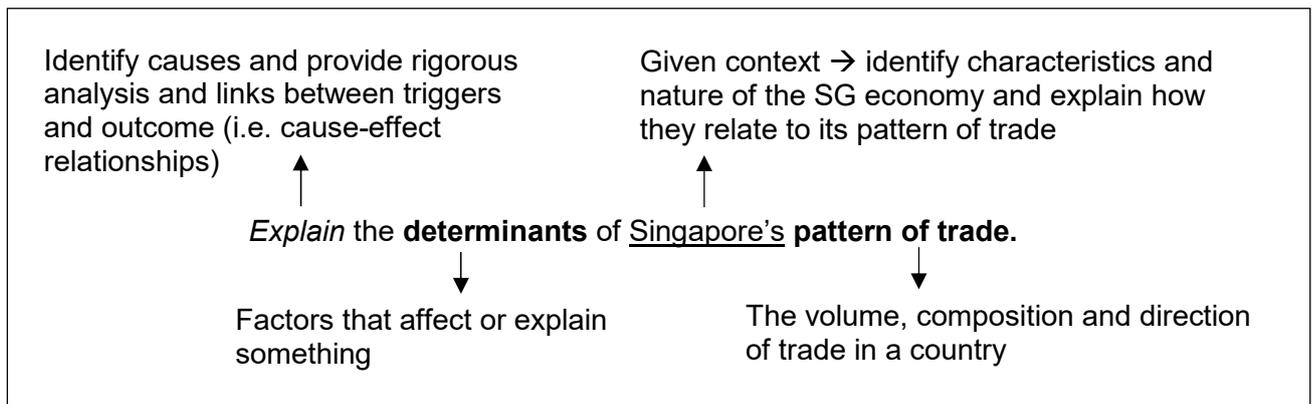
Source: Ministry of Trade and Industry, 06 Oct 2015

(a) Explain the determinants of Singapore’s pattern of trade. [10]

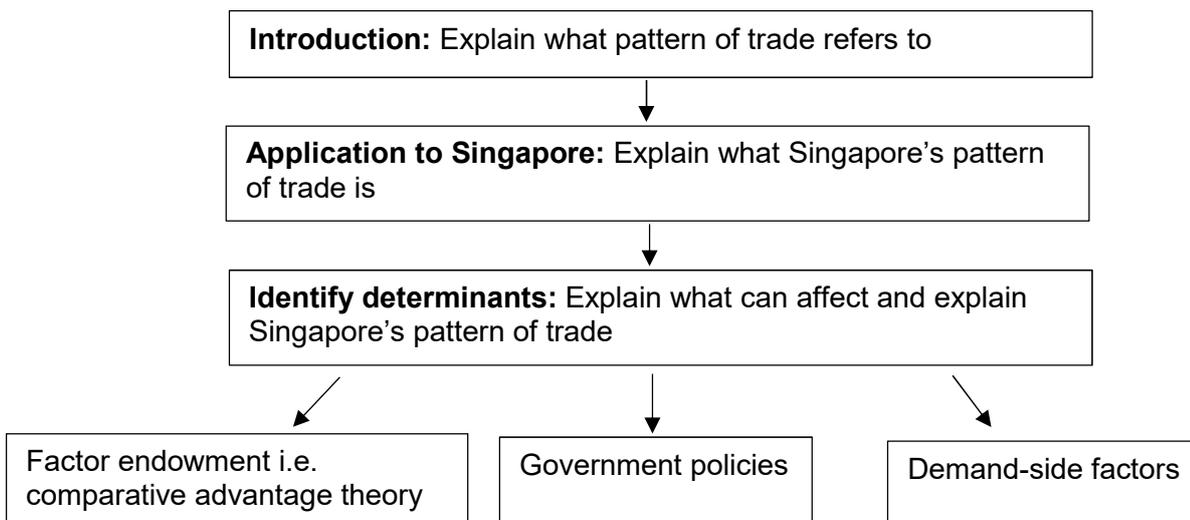
(b) Assess the extent to which smaller economies like Singapore would benefit more from the TPP than larger ones like the USA. [15]

(a) Explain the determinants of Singapore’s pattern of trade. [10]

Question Dissection



Schematic Plan



Suggested Answer	Comments
<p><u>Introduction</u></p> <p>Pattern of trade refers to the composition, volume and direction of a country's trade. Composition of trade refers to what is being exported or imported, while volume of trade refers to the real value of goods and services that is being exchanged. Lastly, direction of trade refers to the direction of exports and import flows. This essay will look at three key determinants of Singapore's trade patterns, namely, its factor endowments, demand-side factors, and finally, the role of government policies.</p>	<p>Define pattern of trade</p> <p>Overview of essay</p>
<p><u>Determinants of Singapore's pattern of trade</u></p> <p>Singapore's factor endowments is a key determinant of its pattern of trade. This can be explained by the theory of comparative advantage, which forms the underlying basis of Singapore's direction and composition of trade. A country has a comparative advantage in producing a good if it is able to produce it at a lower opportunity cost than other countries. Being a small economy with a lack of natural resources and a small population size, Singapore does not have a comparative advantage in land-intensive and labour-intensive production. The opportunity costs of producing land-intensive goods such as crops are too high, given the high costs of land in Singapore. Likewise, the shrinking labour force due to an ageing population and declining birth rates further increases the opportunity cost of producing labour-intensive goods like apparel and footwear. Hence, Singapore is a net importer of both land and labour-intensive goods.</p> <p>On the other hand, Singapore is a net exporter of chemical products, machinery and transport equipment as it has a comparative advantage in the production of such capital and technology intensive products. Singapore has a highly-educated population that provides it with a ready pool of high-skilled labour. In addition, being an economy that is open to capital flows, the inflow of FDI has also facilitated technological progress and the improvement in the quality of domestic capital goods. The availability of highly productive capital and labour thus allows Singapore to enjoy a comparative advantage in skill and technology-intensive goods and services such as medical devices and financial services.</p> <p>Besides supply-side factors, demand-side factors also account for Singapore's pattern of trade. Changes in demand levels can affect Singapore's pattern of trade. The rise and opening up of emerging economies like China and Vietnam has led to an increase in the demand for goods and services that Singapore produces, such as financial and logistical services, leading to an increase in the volume of Singapore's exports. Similarly, with the rise in production levels due to a larger number of foreign and local firms, the demand for imported raw materials and factor inputs has also risen. This has therefore led to an increase in the volume of imports by Singapore.</p>	<p>State first determinant – factor endowments</p> <p>Define key concept – comparative advantage</p> <p>Explain why Singapore does not have comparative advantage in land-intensive and labour intensive production</p> <p>Explain why Singapore has comparative advantage in high-tech, high value-added production</p> <p>State second determinant – demand-side factors</p> <p>Explain why Singapore's trade volume with the rest of the world has increased</p>

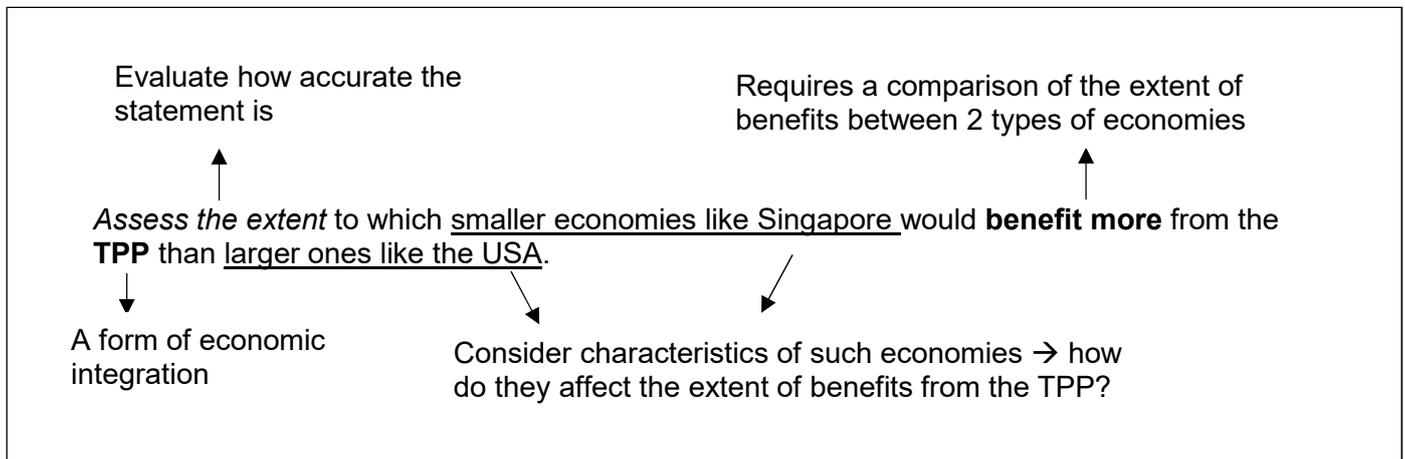
<p>Lastly, Singapore's pattern of trade is also heavily influenced by government policies. The Singapore government has put in place policies to move Singapore up the value chain by developing high-technology knowledge-intensive industries such as the aerospace and biomedical sectors. For instance, the Singapore government devoted large amounts of funds to develop its biomedical sciences industry by providing key research infrastructure and facilities in the form of Biopolis, an international research and development centre. Doing so has enabled Singapore to grow its pharmaceutical, healthcare and medical technology industries by fostering exchange of ideas and collaborations among the research community located there. Hence, deliberate government policies to develop strategic sectors has enabled Singapore to export increasingly high-value added and knowledge-intensive goods and services to the rest of the world, thus changing its composition of exports and pattern of trade.</p>	<p>State third determinant – government policies</p> <p>Explain how government policies can affect the composition of Singapore's exports</p>
<p><u>Conclusion</u></p> <p>In summary, Singapore's trade patterns can be explained by a variety of factors, including comparative advantage theory, demand-side reasons, as well as government policies. The active signing of FTAs such as that of the TPP can also influence Singapore's trade with other countries, which will be analysed in (b).</p>	<p>Summarise the key determinants of Singapore's trade patterns and provide a link to (b).</p>

### Mark Scheme

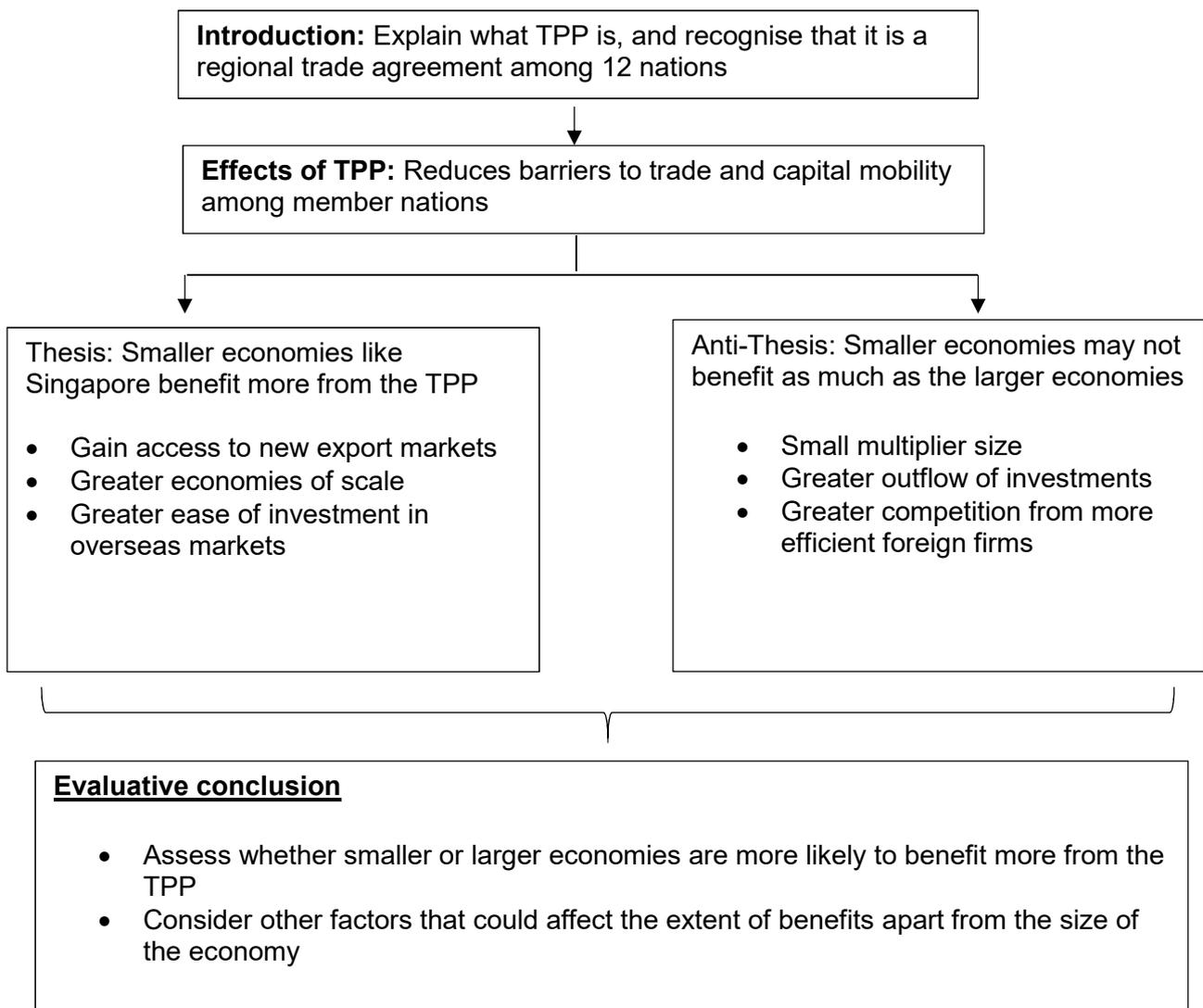
	<b>Knowledge, Application / Understanding and Analysis</b>	
<b>L3</b>	<p>For an answer that <b>thoroughly analyses</b> the determinants of Singapore's pattern of trade, with <b>scope and rigour</b>. Answer analyses how Singapore's pattern of trade is determined largely by comparative advantage theory <u>and</u> 2 other determinants.</p> <p>Answer shows good application to the Singapore's context with the use of appropriate examples.</p>	8 – 10 (9)
<b>L2</b>	<p>For an answer that shows an understanding of the determinants but <b>inadequately analyses</b> how they affect Singapore's pattern of trade.</p> <p>Answer has <b>limited scope</b>, and did not analyse how Singapore's pattern of trade is determined by comparative advantage theory <u>or</u> only analyses 2 or fewer determinants.</p>	5 – 7 (6)
<b>L1</b>	<p>For an answer that is <b>descriptive and superficial, lacking in development</b>. <b>Major conceptual errors</b> that affect the accuracy of the essay may also be present.</p> <p>Answer only analyses 1 determinant of Singapore's pattern of trade, where the determinant is <u>not</u> comparative advantage theory.</p>	1 – 4 (3)

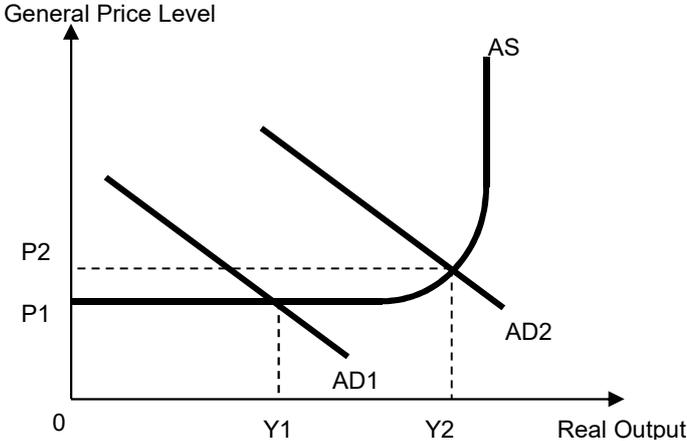
**(b) Assess the extent to which smaller economies like Singapore would benefit more from the TPP than larger ones like the USA. [15]**

Question Dissection



Schematic plan



Suggested Answer	Comments
<p><u>Introduction</u></p> <p>The Trans-Pacific Partnership (TPP) is a regional trade agreement between 12 nations, including Singapore, Vietnam and the United States. It aims to create a common market where trade barriers are removed to allow free trade among member countries, as well as free movement of capital. With increased trade and capital mobility with other countries, there are various benefits and costs to smaller and larger economies like Singapore and the US. This essay will analyse the difference in the extent of benefits to smaller and larger economies, and assess who stands to benefit more from joining the TPP.</p>	<p>Explain what the TPP is</p> <p>Provide an overview of the essay</p>
<p><u>Thesis: Smaller economies like Singapore benefit more from the TPP</u></p> <p>Joining the TPP allows smaller economies like Singapore to overcome any weaknesses in external demand to enjoy greater actual growth arising from a rise in exports. With the removal of tariff and non-tariff barriers to trade, the TPP allows Singapore to gain access to new export markets in particular that of Canada and Mexico which it does not currently have FTAs with. As Singapore has a limited domestic market and is therefore extremely dependent on external demand for its growth, greater access to the markets of the member countries, would bring about an increase in its export demand and hence aggregate demand (AD), thus stimulating its growth.</p> <p>As shown in Figure 1, an increase in export demand raises Singapore's AD and causes it to shift rightwards from AD1 to AD2. This increase in demand for goods and services results in an increase in firms' derived demand for labour as they increase output in the next production cycle. The resultant increase in income levels leads to a rise in income-induced consumption, which causes a further rise in AD. The subsequent rounds of increases in income-induced consumption and AD results in a multiplied increase in national income and real output, as represented by the increase in real output from Y1 to Y2.</p>  <p><b>Fig 1: Actual growth from increase in exports</b></p>	<p>Thesis (1) – TPP allows smaller economies to export to a larger market</p> <p>Explain how exporting to a larger market increases actual growth</p>

On the other hand, for larger economies like the US that have a large domestic market, consumption and investment are likely to make up a larger proportion of their AD as compared to external demand. The rise in net exports arising from the TPP would thus have a relatively less significant impact on their growth.

Hence, being part of the TPP benefits smaller economies like Singapore more than larger economies like the US, as freer trade in the region allows these economies to overcome a slowdown in external demand to achieve further growth.

Another key benefit of the TPP to smaller economies would be the greater economies of scale that could be enjoyed by domestic firms. Being able to produce and export to a larger market enables Singapore firms to reap substantial economies of scale. This could take the form of technical economies of scale such as the use of large machines that allow output to be produced at a lower unit cost. The purchase of such large machines may not have been economically viable previously with a smaller export market and hence lower output level. The presence of such economies of scale therefore leads to lower costs and also lower prices should firms pass on the cost savings to households, thus benefiting consumers. Domestic firms in larger economies like the US would probably have been able to enjoy substantial economies of scale even before the opening of new markets under the TPP, due to their large domestic markets.

In addition, the removal of restrictions to foreign direct investment (FDI) in the member countries means Singapore firms would be able to invest more easily in businesses in the member nations. For instance, there is likely to be an increase in Singapore's direct investment in private healthcare and telecommunications services in emerging markets such as Brunei and Vietnam. Such increased direct investment abroad would bring about greater inflow of income payments in the form of profits to Singapore in the long run, when such businesses become profitable, thus increasing its gross national product (GNP) and material standard of living, ceteris paribus. Expanding overseas is especially important for Singapore firms as a way to boost their profits given the relatively small size of the domestic market. Also, moving their operations overseas may help these firms to lower their labour costs, as they can tap on the larger pool of labour in the overseas markets, thus mitigating the effects of high labour costs due to a small local workforce. In contrast, the extent of such benefits brought about by increased outward FDI is likely to be smaller for larger economies such as the US and Japan as local firms already benefit from the large domestic markets and a ready pool of labour.

Explain how benefit of exporting to a larger market is less important to a larger economy

Summarise the first argument

Thesis (2) – TPP allows firms in smaller economies to enjoy EOS

Thesis (3) – TPP allows greater investment overseas which allows smaller economies to overcome their small domestic market

Anti-Thesis: Smaller economies may not benefit as much as the larger economies

With fewer restrictions to the flow of capital among member nations, they are likely to enjoy a rise in FDI from other member countries. This increases AD, and results in a rise in real output and national income via the multiplier process. With a larger multiplier size, a given increase in FDI will result in a much larger increase in national income and real output in larger economies as compared to smaller ones like Singapore due to a large marginal propensity to import. In addition, in response to the relaxation of barriers to capital flows, it is likely that firms in member countries like Japan may choose to invest in countries with larger markets such as the US, as the potential profits may be much higher. Hence, countries with a larger consumer base may see a much larger increase in FDI from member nations as compared to smaller economies like Singapore.

Moreover, with the possible increased outward FDI from smaller economies like Singapore, there is a likelihood that jobs may be lost to workers in the member countries such as Malaysia and Vietnam, resulting in a rise in unemployment. This is likely to be less of a concern to larger economies like US and Japan, where it is argued that outward FDI may be less prevalent than smaller economies like Singapore.

Further, the elimination of import tariffs may lead to greater competition with imports from foreign firms, thus reducing the profits of local firms especially those in smaller economies. The domestic firms in smaller economies tend to be smaller than those in larger economies due to the lack of economies of scale. With higher average costs of production, these firms may not be able to compete with the cheaper imports from larger foreign firms. An example would be the agriculture and livestock industries in Vietnam, which would likely struggle to compete against their more cost efficient counterparts in larger economies like US and Canada. The switch from consuming locally produced goods to foreign imported ones would lead to a fall in domestic consumption and a rise in import volume, causing a fall in the economy's AD and hence economic growth.

Anti-thesis (1) – Smaller economies may benefit less due to smaller multiplier size and less FDI inflow

Anti-thesis (2) – Smaller economies may benefit less due to loss of jobs from increased outward FDI (a direct counterargument to Thesis (3))

Anti-thesis (3) – Smaller economies may benefit less due to greater competition from larger economies

Evaluative conclusion

As an economy with a small domestic market and a lack of natural resources, Singapore has always adopted a pro-globalisation stance. The relaxation of barriers to trade and capital flows within the TPP would certainly bring benefits to smaller member nations like Singapore and Vietnam, particularly in terms of increased exports and overseas investment. Such benefits are arguably less significant for larger economies like the US and Japan, which already benefit from the large size of their domestic markets. Hence, smaller economies tend to benefit more than bigger economies to a large extent.

Assess whether a smaller or larger economy is likely to benefit more and why

<p>However, though it may appear that smaller economies being more reliant on trade and foreign investments may benefit more from being part of the trade pact, the benefits to Singapore in particular, are likely to be marginal. This is because Singapore has always been an economy that is open to trade and capital flows, with limited import tariffs. In addition, it already has FTAs with more than 30 trading partners, including many within the TPP. Hence, any benefits from increased exports and FDI are probably much smaller than a less open economy like Peru.</p> <p>Hence, instead of the size of the economy, other characteristics may be more relevant in determining the extent of benefits from joining the TPP. These characteristics could be the degree of openness or the stage of development of the economy. A less open developing economy like Peru would likely gain much more from joining the TPP, as compared to an already open and developed economy like Singapore.</p> <p>How much an economy may benefit from the TPP also depends on the ability of the government to minimise the costs of increased foreign competition. The Singapore government has adopted measures to enhance the attractiveness of Singapore as an investment destination, such as the provision of infrastructure and tax incentives. Various supply-side measures have also been implemented to raise the productivity of its workforce and attract or retain FDI. Such proactive measures allow Singapore to mitigate the costs from joining the TPP, and provides a sharp contrast to the US, which has decided to leave the TPP in light of the possible adverse impacts on its economy.</p>	<p>Comment on the relevance of size of economy in determining the extent of benefits by considering other aspects of the economy</p> <p>Recognise that how much a country benefits from the TPP also depends on its ability to mitigate the costs arising from it</p>
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### Mark Scheme

<b>Knowledge, Application / Understanding and Analysis</b>		
<b>L3</b>	For an answer that <b>thoroughly analyses</b> how size of the economy affects the benefits of joining the TPP. Answer demonstrates <b>rigour and scope in analysis</b> , and shows <b>clear comparison</b> between the two types of economies.	8 – 10 (9)
<b>L2</b>	For an answer that shows <b>good knowledge</b> of how size of the economy affects the benefits of joining the TPP. Answer may demonstrate rigour and scope in analysis, but <b>do not show clear comparison</b> between the two types of economies.  Answer may have good knowledge of how size of the economy affects the benefits of joining the TPP but analysis is undermined by <b>insufficient rigour and scope</b> .	5 – 7 (6)
<b>L1</b>	Answer may have some knowledge of how size of the economy affects the benefits of joining the TPP. However, the answer has <b>significant conceptual errors or is very descriptive</b> .	1 – 4 (3)
<b>Evaluation/Synthesis</b>		

<b>E3</b>	<b>Insightful conclusion/judgement</b> on the importance of the size of the economy in determining the benefits of joining the TPP, and which type of economy is likely to benefit more. Synthesis makes it clear that due to the differing characteristics of the economies, some benefit more than others from joining the TPP.	4 – 5
<b>E2</b>	Attempted synthesis on the importance of the size of the economy in determining the benefits of joining the TPP, and which type of economy is likely to benefit more. However, there are <b>some logical flaws and/or inaccuracies</b> in the synthesising process.	2 – 3
<b>E1</b>	For an answer that gives an <b>unsupported statement</b> on the importance of the size of the economy in determining the benefits of joining the TPP, and which type of economy is likely to benefit more.	1