

International Trade Tutorial – Optional Essay Question  
TJC 2022 Prelims

6. Recently, many countries implemented export bans on food products such as grains and meat. When countries ban exports, this can cause soaring prices, presenting potential risks to Singapore's economy.

Source: *International Food Policy Research Institute*

- (a) Explain the likely consequences of export bans on both the exporting **and** importing countries. [10]
- (b) Assess the extent to which the Singapore government can manage the harms of export bans by other countries on her economic performance. [15]

Part (a) Question Interpretation

<b>Command word/phrase</b>	<i>Explain</i>	Make clear the process of cause (export bans)-effect (macroeconomic performance) relationships using economic theory and examples.
<b>Content</b>	<i>Export bans</i>	Restrictions on the quantity of goods exported to a specific country or countries by a Government.
	<i>Consequences</i>	Impact on macroeconomic performance.
<b>Context</b>	<i>Exporting and Importing countries</i>	May apply to any country, including Singapore that conduct and/or are affected by export bans.

*This response requires students to explain how export bans that have been implemented by countries around the world have impacted these countries as well as the countries they export to.*

**Introduction**

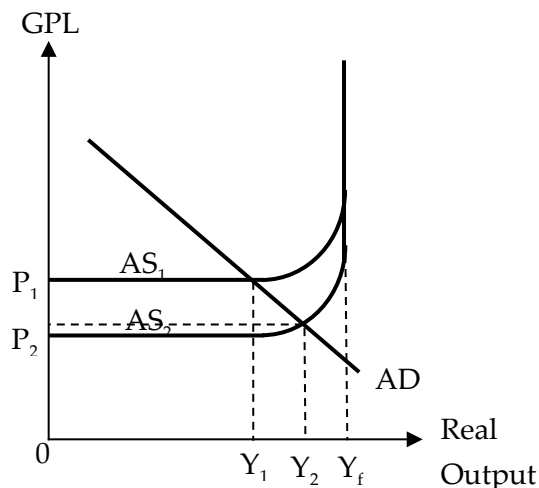
- Export bans are restrictions on the quantity of goods exported by a country.
- Countries around the world have been enacting export bans amid shortage in their own country. Examples of these include face masks, vaccines at the start of Covid-19 and chicken and grain following global supply chain disruptions caused by the Russian-Ukraine crisis.

**Body 1: Explain the likely consequence of export bans on exporting countries**

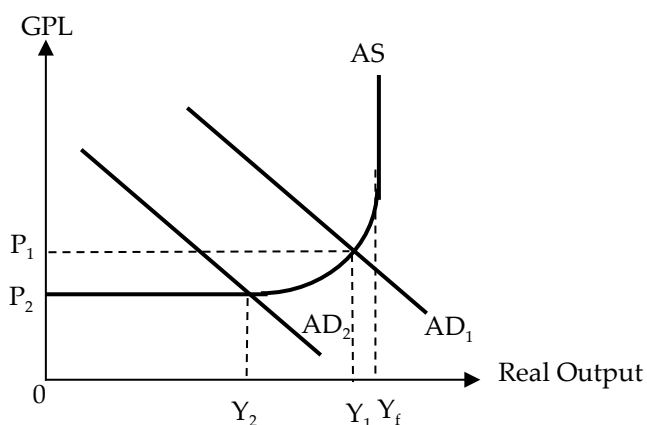
- The **intended consequence** of export bans is to manage shortage and the resulting high prices in the exporting country. For example, Malaysia recently banned the exports of chicken to prevent escalation of chicken prices domestically thus maintaining equity since chicken is a basic food item for Malaysians. By imposing an export ban, domestic firms are prevented from exporting their goods, leading to an increase in domestic supply. As domestic supply increases, price of these goods fall, resulting in cost of production decreasing and AS increasing from AS1 to AS2 in Figure 1. This leads to lower general price levels from P1 to P2 and thus lower inflation.

- However, the **unintended consequence** is that export bans result in lower exports for the exporting country. Since firms can no longer export their products, export revenue decreases, and since  $X$  is a component of  $AD$ ,  $AD$  falls. Assuming there is spare capacity, the reverse multiplier effect sets in resulting in a multiplied fall in  $AD$  from  $AD_1$  to  $AD_2$  in Figure 2. With lower economic growth, derived demand for labour falls and demand-deficient unemployment increases from  $Y_f - Y_1$  to  $Y_f - Y_2$ .

**Figure 1: Impact of Export Ban on AS**



**Figure 2: Impact of Export Ban on AD**



**Body 2: Explain the likely consequence of export bans on importing countries**

- Export bans result in shortage of these products in the importing countries, driving up prices.** Even if these countries try to diversify their import sources, prices of these imports are still likely to be higher than from the original source. Importing countries thus face higher cost of production.  $AS$  falls in the short run and the  $AS$  curve shifts upwards from  $AS_2$  to  $AS_1$  in

Figure 1, and the country faces cost-push inflation as GPL increases from P2 to P1 and potentially lower economic growth from Y2 to Y1.

#### Mark Scheme

Level	Knowledge, Application / Understanding and Analysis	Marks
L3	<p>For a well-developed answer that has:</p> <ul style="list-style-type: none"> <li>• <b>good scope</b> – explains at least two different consequences of export bans on both exporting and importing countries;</li> <li>• <b>good rigour</b> - thoroughly analyses the consequences of export bans using relevant tool of analysis, ie AD/AS; and</li> <li>• <b>good application to context</b> - supports explanations with real-world and relevant context.</li> </ul>	8 - 10
L2	<p>For an underdeveloped answer that:</p> <ul style="list-style-type: none"> <li>• <b>lacks scope</b> – explains only one consequence of export bans on exporting <u>and</u> importing countries; and/or explains two consequences of export bans on either exporting <u>or</u> importing countries.</li> <li>• <b>lacks rigour</b> – provides some degree of economic analysis of consequences of export bans on exporting or importing countries; and/or</li> <li>• <b>lacks application to context</b> – limited or no reference to real-world context.</li> </ul>	5 - 7
L1	For an answer that shows some knowledge of export bans and its consequences but is largely irrelevant or contains conceptual errors.	1 – 4

- (b) Assess the extent to which the Singapore government can manage the harms of export bans by other countries on her economic performance. [15]

Part (b) Question Interpretation

<b>Command word/phrase</b>	<i>Assess the extent...</i>	To examine and present the different aspects of a problem or subject, usually in support of a position or argument and give a judgement. Present the arguments to support your judgment of how far the Singapore government is likely to be successful in managing the harms of export bans.
<b>Content</b>	<i>Harms of export bans</i>	Follow through from part (a), cost-push inflation and/or weaker economic growth.
<b>Context</b>	<i>Singapore government</i>	Bring in relevant examples applied to different contexts of the export bans faced by Singapore.

*This response requires students to first explain the different policies the Singapore government could adopt to manage the harms of export bans. The answer should go on to explain the limitations and/or negative unintended consequences of these policies. Finally, the evaluation requires students to give a sound judgement on how likely the Singapore government is in managing the harms of export bans.*

**Introduction**

- As mentioned in the preamble, when countries ban exports, this can cause soaring prices, presenting potential risks to Singapore's economy. Part (a) shows that importing countries such as Singapore face higher cost-push inflation which could lead to lower economic growth. This essay assesses the extent to which the Singapore government can manage the harms of these export bans on her economic performance.

**Policy 1: Encourage investments/promote R&D**

Singapore can manage the harms of export bans by other countries through the use of supply-side policies to increase domestic supply. For example, Singapore has its 30 by 30 plan to meet 30% of Singapore's nutritional needs by 2030. Such measures decrease Singapore's reliance on imports, making it more resilient to external shocks. This allows Singapore to mitigate effects of shortages and ensure sufficient supply for the population.

After facing vaccine and mask shortage at the onset of Covid, Singapore has now attracted German biotechnology company BioNTech, which developed the COVID-19 vaccine, to establish its Asia-Pacific regional headquarters in Singapore, where it will also set up an mRNA manufacturing facility which will produce several hundreds of millions of mRNA vaccine doses per year starting from 2023. Other firms such as Thermo Fisher and Sanofi will also manufacture a range of vaccines. Singapore has also been ramping up its masks production capabilities, with

government agency A\*STAR working with local enterprises, including local textile and apparel manufacturer Ramatex, to help design effective masks for Singaporeans' use.

**(Limitation)** However, given that Singapore does not have comparative advantage in producing these goods, this may lead to productive inefficiency and higher cost of production, decreasing AS. As such, Singapore is likely to incur higher opportunity costs in producing these goods. Moreover, promoting R&D to increase supply entails time lag and uncertainties in outcomes. Government funds could have been used for important competing uses such as education and healthcare. As a whole, this could lead to lower Standard of Living for the citizens.

### ***Policy 2: Diversify sources of imports/build buffer stock***

To counter the harms of export bans, Singapore could ensure supply resilience by diversifying its import sources and signing more FTAs. Singapore has signed more than 22 regional and bilateral FTAs to ensure it is not vulnerable to export bans from other countries. When Malaysia banned its chicken, Singapore was able to turn to Brazil and Thailand for frozen and chilled chicken thanks to its FTAs with the countries allowing the country to have alternative sources of chicken. Hence, by maintaining good relations with regional and western markets, Singapore will be able to mitigate effects of export bans though cost may increase due to greater transportation costs. Overall, diversification and FTA can alleviate soaring prices, curbing cost-push inflation arising from export bans.

**(Limitation)** Diversifying import sources necessarily entails sourcing from more expensive suppliers. This could be due to higher transportation costs, for example chicken from Brazil vs Malaysia. The quality of goods may also be compromised, for example the import from Malaysia is fresh chicken while those from other countries are frozen chicken and at best chilled chicken. The higher cost of production results in AS falling in the SR and the AS curve shifting upwards from AS<sub>2</sub> to AS<sub>1</sub> in Figure 1, resulting in higher General Price Levels (P<sub>2</sub> to P<sub>1</sub>) and weaker economic growth (Y<sub>2</sub> to Y<sub>1</sub>).

### ***Policy 3: Appreciate SGD to deal with food price inflation***

Singapore can mitigate cost-push inflation by using contractionary exchange rate monetary policy. This involves appreciating the SGD by buying the SGD on the forex market. The appreciation of SGD results in foreign imports being cheaper in terms of domestic currency and hence a fall in cost-push inflation as Singapore can import cheaper factors of production from other countries.

**(Limitation)** A limitation of the exchange rate monetary policy is that Singapore may risk a weaker economic growth as they become less price competitive. An appreciation makes exports more expensive in foreign currency terms and imports cheaper in domestic currency terms. Assuming Marshall-Lerner condition holds, ie, the absolute sum of price elasticities for demand and supply is greater than one, (X-M), a component of AD, will fall, and with the reverse multiplier effect results in a large fall from AD from AD<sub>1</sub> to AD<sub>2</sub> and real output falling from Y<sub>1</sub> to Y<sub>2</sub> in Figure 2.

### ***Evaluative conclusion***

**[Stand]** All three measures have been adopted by the Singapore government to deal with export protectionism and are useful and necessary stop-gap measures. As Singapore has strong ties with many countries and also a good reputation, she is likely able to diversify its trade composition to protect the economy against export bans.

**[Situation]** Unlike many countries, Singapore has the financial as well as political ability to implement difficult and costly measures such as manufacturing products deemed to be of national

security importance. Even though economy theory suggests that these policies go against the theory of CA, there appears to be little choice given that Singapore is unable to control the policies of export-banning countries.

**[Alternative]** Even as Singapore adopts policies which appear to go against the principles of free trade, it continues to negotiate more FTAs to diversity its existing trade links. It should also push for WTO to impose punitive measures on countries which implement export bans.

#### Mark Scheme

Level	Knowledge, Application / Understanding and Analysis	Marks
L3	For a well-developed answer that has: <ul style="list-style-type: none"> <li>• <b>good scope</b> – explains how Singapore government is able to manage the harms of export bans, using at least 3 policies; and</li> <li>• <b>good balance</b> – explains how the use of such policies may not be effective or successful; and</li> <li>• <b>good rigour</b> – utilises appropriate AD/AS analysis, to explain how the impact of these policies on undoing the harms of export bans.</li> </ul>	8 – 10
L2	For an underdeveloped answer that: <ul style="list-style-type: none"> <li>• <b>lacks scope</b> – explains fewer than three policies; and/or</li> <li>• <b>lacks balance</b> – does not explain how they may not be effective or successful and/or</li> <li>• <b>lacks rigour</b> – gives a descriptive explanation of how the policies work to manage the harms of export bans.</li> </ul>	5 – 7
L1	For an answer that shows some knowledge of policies to manage export bans. Answer may contain multiple conceptual errors.	1 – 4
Level	Evaluation/Synthesis	Marks
E3	For a well-substantiated evaluation of the extent that the Singapore government is able to manage the harms of export bans. Synthesises economic arguments to arrive at a well-reasoned conclusion.	4 – 5
E2	For an answer that makes some attempt at an evaluation of the extent that the Singapore government is able to manage the harms of export bans	2 - 3
E1	For an answer that gives an unsupported evaluative statement(s).	1