

- 6 (a) Explain one internal cause and one external cause of a balance of trade deficit of a country. [10]
- (b) Discuss whether protectionism is the most appropriate policy to improve balance of trade. [15]

Suggested answer for (a)

Introduction:

A balance of trade deficit could be a result of a fall in the export revenue of domestically produced goods and/or an increase in import expenditure on foreign goods. This could occur because of internal and/or external reasons.

Explain an internal cause of BOT deficit:

Higher domestic inflation relative to the rest of the world will reduce export competitiveness of a country and can cause a balance of trade deficit.

For example, India has been experiencing rising rates of inflation since the start of 2022. Assuming prices of other countries' goods and services rise at a slower rate than India, a higher increase in domestic prices in India relative to the foreign prices will cause domestic households in India to increase demand for imported goods and services instead of domestically produced ones, thereby causing import expenditure to increase. At the same time, more expensive exports will cause foreigners to lower quantity demanded for the exports. Since the demand for India's exports is likely to be price elastic due to availability of substitutes from other countries, the increase in price will lead to a more than proportionate fall in quantity demanded, causing export revenue to fall, ceteris paribus. The falling export revenue and rising import expenditure worsen India's trade balance and cause its balance of trade deficit to widen in 2022.

Explain an external cause of BOT deficit:

With globalisation and freer trade flows, competition from emerging economies may lead to the loss of comparative advantage of the more developed countries which can cause a balance of trade deficit.

If the country's domestically produced goods are seen to be of a relatively lower quality or relatively higher priced compared to foreign goods, local consumers will switch to buying the relatively better quality of cheaper imported goods. This will result in a rise in demand for imports and import expenditure. On the other hand, foreigners will also buy

less of the domestically produced goods resulting in a fall in demand for the country's exports and export revenue. The fall in export revenue and rise in import expenditure will lead to a worsening of a country's trade balance. For example, the abundance of labour, land and other raw materials in China has resulted in a lower opportunity cost in the production of low-end manufactured goods than the developed countries like the US. This would mean that the Chinese low-end manufactured goods are more price competitive than the US goods. US will experience a fall in export demand and a rise in import demand. A loss in comparative advantage will thus lead to falling export revenue and rising import expenditure which worsen US's trade balance and resulted in a balance of trade deficit.

Conclusion:

Thus, both internal and external causes may cause a balance of trade deficit.

L3	A well-developed analytical explanation of both internal and external causes of balance of trade deficit. Answer shows excellent application with real world examples.	8-10
L2	An undeveloped explanation of the causes of balance of trade deficit.  Max 5m for a well-developed answer that only explains either internal or external cause of balance of trade deficit.	5-7
L1	A descriptive answer that shows some knowledge of the causes of balance of trade deficit. Largely listing of causes which are only briefly explained and/or answer contains errors.	1-4

(b) Discuss whether protectionism is the most appropriate policy to improve balance of trade. [15]

Suggested answer for (b)

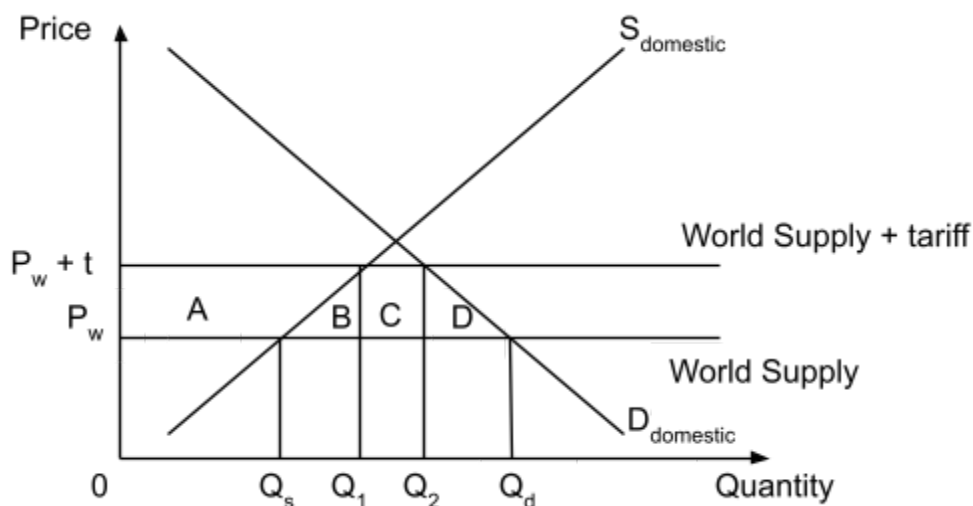
### Introduction

To improve balance of trade, a government can adopt either expenditure-reducing or expenditure-switching policies to increase the export revenue of goods and services and/or decrease the import expenditure on goods and services. This essay will discuss how protectionism, contractionary fiscal policy, and supply-side policy can improve balance of trade. The appropriateness of these measures depends on the root causes of the balance of trade deficit, economic conditions, nature of the economy and the unintended consequences/ trade-offs in macroeconomic goals.

### Policy 1: Explain how protectionism can improve balance of trade.

Protectionism is a form of expenditure-switching policy which aims to switch the expenditure of domestic households from foreign to domestic goods to reduce imports and/or switch the expenditure of foreign households to goods produced by the country to increase its exports.

For example, the US government imposed 200% import tariffs on solar panels imported from China. With the imposition of import tariff,  $t$ , the price of imported good increases from  $P_w$  to  $P_w + t$ , as shown in diagram below. As import prices increase, consumers will switch to cheaper domestically produced substitutes, and this will reduce the quantity demanded of imports from  $Q_d - Q_s$  to  $Q_2 - Q_1$ . Assuming the demand for imports are price elastic (there are close substitutes produced by domestic firms), the increase in the price of imports will reduce the quantity demanded by more than proportionately leading to a fall in import expenditure. Ceteris paribus, balance of trade improves.



### Limitations

- However, import tariffs may reduce export revenue if the export industry is reliant on imported raw materials. So, the overall impact on the trade balance is dependent on whether producers in the export industry can switch to cheaper domestic supplies. If the firms in the export industry use the imported raw materials that experience an increase in the price, the cost of production will increase and thus lead to an increase in the price of exports. If the demand for exports is price elastic, the quantity demanded for exports would decrease more than proportionately and thereby reducing export revenue. The overall impact on the net export would most probably be an improvement of the trade balance as the impact on the import expenditure is direct while the impact on the export revenue is more indirect where the imported raw materials may only take up a small portion of the total cost of producing the exports.
- The imposition of tariffs leads to the loss of consumer welfare. Consumers are worse off as domestic consumption of the good falls from  $OQ_d$  to  $OQ_2$  and they have to pay a higher price of  $P_w + t$ . The loss in consumer surplus is more than the gains to both producer and the government, leading to a welfare loss to the society shown by area (B+D).
- Rise in price of imported raw materials will also lead to a rise in the cost of production. SRAS falls. RNY falls and imported cost-push inflation occurs (unintended consequences).

### Policy 2: Explain how contractionary fiscal policy can improve balance of trade.

A government may adopt contractionary fiscal policy (an expenditure reducing policy) to improve the balance of trade by reducing its import expenditure. For example, the US government can reduce government expenditure on education, healthcare, etc. and/or raise taxes to reduce aggregate demand. A rise in income tax will reduce the personal disposable income and ability to purchase goods and services. A rise in corporate tax will reduce the expected after-tax profits, hence reduces the incentive for firms to invest. Fall in G, C and I → fall in AD → firms will face an unplanned rise in inventories and therefore reduce production and require lesser factors of production and this will result in a fall in national income. With lower national income, there will be lower induced consumption from households and this will result in a downward multiplier process with a multiplied fall in the national income. As purchase of imports is dependent on the national income, the fall in national income will result in a fall in import expenditure which will help to improve BOT, ceteris paribus.

### Limitations

- However, there may be conflict in macroeconomic goals depending on the state of the economy. If the economy is operating below full employment, this policy

may result in a rise in unemployment. Moreover, the fall in AD may fuel business pessimism and may induce firms to further cut down on investment. Therefore, besides reducing current RNY and employment, such policies also run the risk of reducing potential growth.

- Contractionary fiscal policy will be more appropriate if the economy is initially experiencing inflationary pressure, as a fall in AD will be able to cool down the economy and lower GPL. This will improve the price competitiveness of exports and will also encourage consumers to switch towards domestically produced goods which are now relatively cheaper than imports.
- If the consumer confidence and business outlook are very strong, the policy may not be able to reduce the consumption and investment expenditure significantly fall in RNY and hence import expenditure may not be significant limited improvement in BOT
- The extent of fall in import expenditure will also depend on the marginal propensity to import (MPM). For countries who have large MPM values i.e.  $MPM > 1$ , there will be more than proportionate fall in the demand for imports more significant improvement in BOT, *ceteris paribus*.

[Alternative policy: students can also explain how depreciation of currency can improve net exports and hence improve BOT.]

### Policy 3: Explain how supply-side policy can improve balance of trade.

A government can adopt supply-side policies to increase its export revenue and hence improve balance of trade. For example, the Singapore government can provide grants, subsidies or tax incentives to encourage innovation and investment in research and development (e.g. the Productivity Solutions Grant which provides funding for firms that adopt technologies to improve productivity). These policies lower the cost of conducting R&D, incentivizing firms to conduct more R&D, enabling firms to improve the quality of its products and increase the demand for its exports. Moreover, with better production methods or processes, the firms will be able to improve productivity and generate more output with the given inputs, thus lowering unit costs of production. This will improve the price competitiveness of the exports and result in a rise in quantity demanded of exports. Assuming demand for the exports is price elastic (i.e. many close substitutes in the global market), there will be a rise in export revenue as the higher revenue gained from the more than proportionate rise in quantity demanded will outweigh the loss in revenue from the fall in price of exports. This will improve the balance of trade, *ceteris paribus*.

### Limitations

- However, the time taken for supply side policies to take effect tend to be long and the outcome is uncertain.

- In addition, investments in R&D may worsen the balance of trade position in the short-run as it may involve high import expenditures on capital goods from foreign countries, leading to a worsening of the BOT in the short-run.
- This policy is costly and can drain the government's resources, diverting resources away from other areas of competing needs.

### Conclusion/ Evaluation

- The appropriateness of these measures depends on the root causes of the balance of trade deficit, economic conditions, nature of the economy and the unintended consequences/ trade-offs in macroeconomic goals. To minimize the limitations that each policy possesses, the government can adopt a combination of expenditure reducing policy, expenditure switching policy and supply-side policies.
- Protectionism such as import tariffs is a quick-fix measure that can improve the balance of trade in the short run when economy is experiencing a large and persistent BOT deficit. But, the improvement in trade deficit brought about by the protectionist policy is likely to be short-lived if the root-cause for the BOT deficit is not addressed.
- If BOT deficit arises due to demand-pull inflation, then expenditure reducing policies like contractionary fiscal policy would be more appropriate than protectionism via import tariffs which can further increase the level of inflation in the country. If the root cause of the BOT deficit is lack of export competitiveness, then supply-side policies to improve the competitiveness of the exports will be more appropriate. However, as the effects of supply-side policies take time, and there may be other causes of the BOT deficit, other short-run policies may be required to complement the supply-side policies.

Level	Descriptor	Marks
L3	For a well-developed explanation of at least 2 policies (including protectionism) to improve balance of trade. Answer shows excellent application to real world examples.	8–10
L2	For an under-developed explanation of policies to improve balance of trade, with some attempt to show application.  For a one-sided answer with a well-developed explanation of only one policy – max 6.	5–7
L1	Smattering of valid points. Descriptive ideas of how policies work which are not linked to improvement of balance of trade.	1–4
<b>Evaluation</b>		

<b>E3</b>	For an answer that arrives at an analytically well-reasoned judgement.	<b>4–5</b>
<b>E2</b>	For an answer that makes some attempt at evaluation but does not explain adequately their judgement.	<b>2–3</b>
<b>E1</b>	For an answer that gives an unexplained, unsupported evaluative statement.	<b>1</b>