5 (a) **Explain how a country's circular flow of income could be affected by its trading partners' pro-trade policy.** **[10]**

(b) **Discuss whether an increasing balance of payments surplus is necessarily desirable for a country.** **[15]**

Part (a): Explain how a country's circular flow of income could be affected by its trading partners' pro-trade policy. [10

Question Dissection

Command Word	Explain
Question Type	Explanation
Concept(s)	• Circular flow of Income • Workings of the Multiplier Process
End Point	To explain how increase in injection via an increase in export expenditure (due to pro-trade policy adopted by a country's trading partner) into the circular flow of Income can lead to a multiplied increase in the country's national income OR Students can alternatively interpret as a rise in X and M but M rising more than X and hence a rise in W ➔ reverse k process.
Context	Any country

Suggested Answers

(I) Introduction

When a country's trading partner adopts a pro-trade policy, this suggests that free trade is promoted where buyers and sellers from different economies may voluntarily trade without a government applying tariffs, quotas, subsidies or prohibitions on goods and services. This may facilitate the increase in the demand for the country's exports, hence increasing its export revenue. Assuming that import expenditure remains unchanged, the increase in the country's export revenue will lead to an injection into a country's circular flow of income, which will then lead to a multiplied increase in the country's national income.

[Note: students can also explain that pro-trade policy of trading partners can encourage an increase in import expenditure of the country. Assuming that increase in export revenue is greater than import expenditure, this will lead to an increase in injection into the country's circular flow of income)

(II) Body

(1) Describe the circular flow of income model

The circular flow of Income shows the flow of goods & services and their payment around the economy. It illustrates the relationship between various economic units and how the economy arrives at an equilibrium level of output, income and expenditure

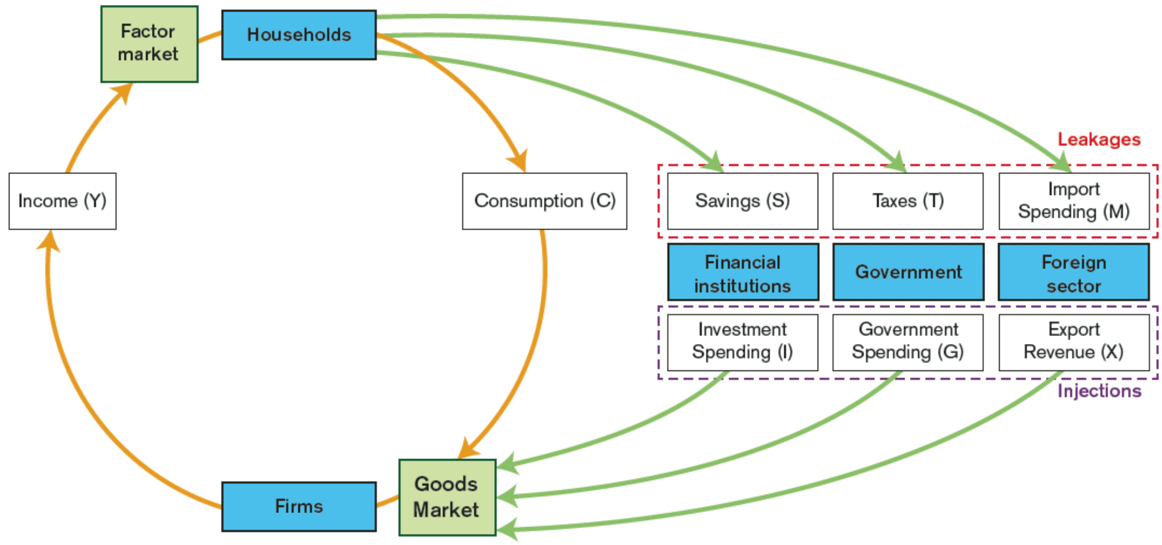

Figure 1: The Circular Flow of Income Model

To produce a country's final goods and services, firms pay income to households for the use of factors services i.e. labour services, land, capital and entrepreneurship-ability owned by households. Households will then use their factor income to buy domestically produced consumer goods and services from firms.

However, in a 4-sector economy, not all income earned by households is spent on domestically produced goods and services and passed back to firms. Some of the income may leak out of the circular flow of income in the form of savings, taxes paid to the government and expenditure on imported goods. These make up the withdrawal from the circular follow of income. Withdrawals (W) or leakages from the circular flow refer to household income that is not spent on domestically produced goods and services. Additionally, only part of the demand for firms' output arises from household expenditure. Expenditure on domestically produced goods and services is also made up by firms, government and the foreign sector in the form of injections. Injections (J) or additions into the circular flow of income refer to the income received by domestic firms that do not arise from domestic household consumption. These include the investment expenditure (I), government expenditure (G) and export expenditure (X).

In an 4-sector economy, equilibrium national income is achieved when total withdrawals equals total injections i.e. W (i.e. S+T+M) = J (i.e. I+G+X). At the equilibrium level of national income, current spending also equals current national output. Hence, there is no depletion of inventories or accumulation of inventories and firms have no incentive to increase or reduce production.

(2) Explain how rise in export expenditure (X) as an injection leads to a multiplied increase in national income through the workings of the multiplier process.

With the pro-trade policy adopted by a country's trading partner, this can lead to an increase in the country's export expenditure. This in turn represents an increase in injection such that total injections now exceed total withdrawals and the economy is now in disequilibrium. **As J > W**, there will be a depletion of the inventories. Hence firm will step up production in the next period which translate into hiring more labour which is a derived demand for producing the goods and services. Firms will pay out more factor income which increases the national income and induce more consumption.

Assuming a 4-sector economy with excess capacity, an injection or autonomous increase in exports expenditure of $100 million will generate an initial increase in income of $100 million for households employed by firms. These households will spend a proportion of the additional income on consumption of $50 million, depending on the size of their marginal propensity to consume (assume MPC 0.5), while the rest (i.e. $50 million) is leaked away as additional savings, taxes or particularly imports spending given that there is free-trade promoted between the trading countries and hence the country will be more incentivized to increase its expenditure in imports.

Since one person's spending creates another person's income and income stimulates further spending, this rise in consumption on domestically produced goods of $50m creates income for another group of people who supply the consumer goods. They will in turn increase induced consumption based on their MPC (which equals $25 million in this example) while the rest constitutes further leakages (of another $25 million here).

This cycle of spending and re-spending will continue until the total increase in leakages (i.e. 100 million here) equals to the initial injection (i.e. $100 million here) into the circular flow of income. The multiplier process eventually stops because of the presence of leakages. The increase in induced consumption is smaller with each successive round as part of increase in income is leaked out in the form of S+ T + M.

The eventual increase in national income is several times the initial increase in injections. In this numerical example, it will rise by $200 million. The multiplier, k, represents how many times the national income increase with respect to the initial injection. In this numerical example, multiplier = 1/MPW or (1-MPC) = 2.

(III) Conclusion

Hence, with a pro-trade policy adopted by a country's trading partner, it can enable the country to enjoy a multiplied increase in its national income. The extent of the increase in its national income is dependent on the size of the multiplier which is in turn dependent on the proportion of leakages (MPW) or the proportion of induced consumption (MPC). Therefore, the smaller the value of MPW or higher the value of MPC, the greater the size of the multiplier, and that would mean a greater multiple increase in a country's real national income.

In this case, since the marginal propensity to import may increase due to the pro-trade policy advocated by the country's trading partners, the size of the multiplier is expected to be smaller and hence the leading to a smaller increase in real national income.

Note: Candidates could alternatively provide the explanation for which the rise in M exceeds the rise in X for the domestic country due to the partner's pro-trade position.

Level	Knowledge, Application / Understanding and Analysis	Marks
L 3	For a well-analysed and reasoned answer on how an increase in export expenditure due to trading partner's pro-trade policy can lead to a multiplied increase in national income through the multiplier process taking effect within the circular flow of income. The circular flow of income diagram is required, with clear reference made to the diagram.	8 – 10
L 2	For an answer that gives a descriptive explanation to explain how an increase in export expenditure can lead to a multiplied increase in national income. Insufficient depth in analysis, missing out certain components or processes within the circular flow of income. .	5 – 7

L 1	For an answer that shows some basic but largely inaccurate knowledge of the circular flow of income.	1 – 4

Part (b): Discuss whether an increasing balance of payments surplus is necessarily desirable for a country. [15]

Question Dissection

Command Word	Discuss –
Question Type	Explain, elaborate and give a reasoned opinion, of which an evaluative conclusion is expected
Concept(s)	• Meaning of BOP surplus • Impact on macroeconomic goals
End Point	To arrive at a conclusion on whether an increasing BOP surplus is necessarily desirable for a country in terms of its impact on the macroeconomic objectives, and taking into consideration the nature and state of the economy.
Context	Any country

(I) Introduction

Define BOP and BOP surplus

The Balance of payments (BOP) of a country is a statement of receipts for all economic transactions between residents of a country with the rest of the world over a period of time, usually a year. A balance of payments surplus may occur as a result of net inflow from either the current account (CA) or capital and financial account (CFA) or both. The desirability of an increasing BOP surplus hinges on its impact on achieving the country's other macroeconomic goals; namely that of attaining economic growth, full employment and price stability.

(II) Body

Thesis: BOP surplus is desirable

(1) **Increase in economic growth and employment level**

A balance of payments surplus can have an expansionary effect on the economy if it is due to an increase in current account surplus and a capital and financial account surplus

A rise in current account surplus could be due to a rise in a country's exports price competitiveness which would lead to a rise in its export earnings. If import expenditure is assumed to remain unchanged, this can lead to an increase in a country's net exports, thus causing an increase in the level of aggregate demand. Assuming that the economy has spare capacity, the excess AD at the original general price level creates a shortage of goods and services produced, causing an unplanned fall in inventories. This will create an upward pressure on prices, and prompt firms to increase production which increases income. The rise in income further induces an increase in consumption resulting in further expansion of output and hence a multiplied increase in national income via the multiplier process. Hence the economy reaches a new equilibrium with higher real national income (from Yo to Yf). A rise in households' purchasing power suggests that the material standard of living in the country has improved. Furthermore, since labour is a derived demand, firms hire more workers since more output is produced. Hence, this can help boost the employment level in the country. For a small and open economy like Singapore, while the multiplier value is small due to the high leakages from the circular flow of income via the high MPS and MPM, the impact of an increasing BOP surplus on the increase in real national income is more significant because net export constitutes a large percentage of the aggregate demand, as opposed to countries with large domestic markets to drive their economic growth instead

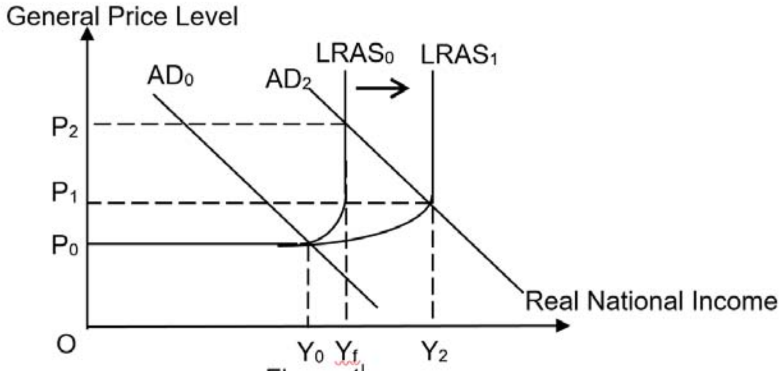

Figure 2: Effects of a rise in current account and capital and financial account surplus

Additionally, a rising capital and financial account surplus can be due to a rising net inflow from foreign direct investment. This could arise from the increased business confidence and expectations which can translate into higher expected returns to investment, hence encouraging long term investment into the country. With a rise in FDI, it can lead to both an increase in AD to AD2 and AS to AS2 in the economy. This can lead to an increase in both actual and potential growth of the surplus country, resulting in greater actual and potential economic growth. Hence sustained growth can be achieved, as represented by an increase in real GDP from Y0 to Y2. Hence an increasing BOP surplus is especially desirable for countries that are highly dependent on FDI as a significant driver of growth.

(2) Reduce imported inflation

A persistent balance of payments surplus will lead to a rise in demand for the country's currency hence resulting in an appreciation of the of the country's currency. This can help to lower the prices of imports which may then rein in import price-push inflation and is especially desirable for countries such as Singapore that is heavily dependent on imports of foodstuffs for consumption and raw materials for production. Firms experiencing lower costs of production due lower imported prices will be faced with higher profits, ceteris paribus. If they pass on the lower cost of production to the consumers in terms of lower prices, this can lead to a fall in cost of living and a rise in the standard of living in the country.

(3) Boost foreign reserves

With an increasing BOP surplus, the country can experience a rise in its foreign exchange reserves. This is because foreigners would have to buy the country's currency to pay for the country's exports or to invest on the country. Such accumulation of foreign reserves would give the surplus country the ability to intervene in foreign exchange market in times of a BOP deficit. This is desirable, particularly for countries that operate on a managed float system because the accumulated foreign reserves would allow the country to intervene and manage its exchange rate where the need arises to ensure stability not only in the external sector but also create confidence in the strength of the country's currency which may then discourage speculative attacks on its currency. Hence an increasing BOP surplus which leads to accumulation of foreign exchange reserves and the eventual stability of currency is especially crucial for countries like small and open economy like Singapore that is highly dependent on trade and FDI to drive its economic growth.

<u>Anti-thesis: BOP surplus is not desirable</u>

While a BOP surplus is often considered as a symbol of national economic success, a persistent and excessive BOP surplus can cause problems to an economy.

(1) Demand-pull inflation

An increasing BOP surplus contributed by a large rise in export revenue or FDI would increase AD. If the economy is operating near full employment, this has the potential of overheating the economy and cause demand-pull inflation. For countries that have been experiencing low unemployment rates for instance Singapore where the rate of unemployment has been hovering around 2% since 2010, this suggests that the economy is operating at or near full employment, hence increasing BOP surplus might hence not be desirable due to the inflationary pressure that could result from net inflows in the CA or CFA, hence negatively affecting its internal stability.

(2) Fall in SOL

Fall in Current SOL. If the increasing BOP surplus is a result of positive net X which can be due to less imports consumed, this can compromise on the country's material SOL in the current period as households are forgoing current consumption of imported goods and services.

Fall in Future SOL due to a future deficit in the current account. If the BOP surplus is due to excessive foreign investment in the country, then this may result in a deficit in the current account in the future when payments in the form of investment income are paid abroad to foreigners. Such a leakage of investment income in the future will lower the standard of living of future generations.

(3) Retaliation which slows down surplus country's growth

Given that one country's surplus is another country's deficit, this may lead to countries with a BOP deficit retaliating by imposing import controls or other forms of protectionist measures, especially if the other countries feel the surplus is a result of an undervalued exchange rate that has directly caused less output and jobs in deficit countries. Such measures reduce the exports of the country facing an increasing BOP surplus, which can lead to a contractionary effect on its economy. Additionally, it could lead to a strain in international trading relationships. A case in point is the recent trade war between USA and China. China had a record US$375.2 billion (S$494 billion) goods surplus with the US in 2017 and this has led to retaliatory actions by the US government with a slew of tariffs imposed on China's exports which could slow down China's economic growth as a fall in China's export revenue could result in a fall in AD and hence a contractionary impact on China's economy, in terms of fall in its production, national income, economic growth and extensive job losses.

(III) Conclusion

Whether an increasing BOP surplus is desirable for an economy is dependent on the nature of the economy. For a small and open economy like Singapore that is highly export-oriented and import-dependent, having a healthy and increasing BOP surplus is essential to drive the economic performance of the country due to the relative importance of her large external sector where her external demand is 75% of total demand. Additionally, an increasing BOP surplus is a good position to be in as it reflects confidence in the economy. This can further attract FDI into the country which can further fuel sustained economic growth in the country.

Additionally, the state of the economy matters too. If the productive capacity of a country is unable to keep up with the increasing AD that can result from an increasing BOP surplus, as in the case of Singapore given that the economy is near full employment, the rising inflation may eventually discourage FDIs to our shore, hence compromising on the country's actual and potential growth. Hence, to mitigate the rising inflation that could result from an increasing BOP surplus, the government could adopt relevant policies to expand its productive capacity so as to reap the benefits of an increasing BOP surplus on its economy.

Level	Knowledge, Application / Understanding and Analysis	Marks
L3	For an answer using detailed analysis and clear explanation of both positive and negative consequences of an increasing BOP surplus, and taking into consideration both the current and capital and financial account position In considering the extent of the impact of the desirability of an increasing BOP surplus, references were made to the context of different economies	8-10
L2	For an answer giving largely descriptive explanation of the positive and negative consequences of an increasing BOP surplus, with some considerations of the current and capital and financial account position	5-7
L1	For an answer that shows knowledge of the consequences of an increasing BOP surplus on an economy; or limited scope of coverage i.e. considered only either current or capital and financial account position.	1-4

E3	For an answer that arrives at an analytically well-reasoned judgment based on some criteria to determine whether an increasing BOP surplus is desirable for an economy.	4-5
E2	For an answer that makes some attempt at a judgement that is elaborated with relevance to the question.	2-3
E1	For an answer that gives an unsupported evaluative stance which attempts to respond to the question	1