Catholic Junior College

THEME 3: THE NATIONAL AND INTERNATIONAL ECONOMY

3.2.2 & 3.2.3 MACROECONOMIC ISSUES & POLICIES BALANCE OF PAYMENTS DISEQUILIBRIUM (FOCUS ON LARGE AND PERSISTENT TRADE DEFICIT)

ENDURING UNDERSTANDING

Using the macroeconomic indicators, governments can determine whether their countries have achieved the aim of favourable balance of payments. The failure to achieve a favourable balance of payments position leads to macroeconomic issues, which will reduce the standard of living of its citizens. This will have different consequences, depending on the perspectives of the different economic agents.

ESSENTIAL QUESTIONS

- Why is favourable balance of payments not achieved? What causes balance of payments disequilibrium?
- What are the consequences to the consumers, producers and government if the economy is facing these problems?
- How are the macroeconomic issues related to one another?

UNIT SUMMARY

You have learnt about the key economic aims and indicators – high, sustainable and inclusive economic growth, price stability, full employment and favourable balance of payments position. You have also learnt about the Keynesian AD/AS framework.

When an economy is unable to achieve these key economic aims, it is an indication that the economy's performance is not well.

This topic will address the issues of an economy as a result of not achieving a favourable balance of payments position and understand how this leads to a reduction in standard of living of its citizens.

We will look at the ***causes*** of the macroeconomic issue with Balance of Payments, making use of the Balance of Payments account.

We will continue to look at how the ***consequences*** of these macroeconomic issues would differ, depending on whether the perspective is taken from the *consumer*, *producer*, or *government*.

Next, you will learn more about the ***cures*** that the government can implement to solve balance of payments disequilibrium that often plague the modern economy.

CONTENT

REFERENCES

1. Sloman: Economics 7th Edition Chapter 15, 21 and 22
2. Roger L Miller 8th Edition: Economics Today Pages 780 to 785
3. Parkin, M., et al (2001), 5th ed, Economics, Ch 34.
4. Beardshaw, J., et al (2001), 5th ed, Economics: A Student's Guide, Ch 40 & 41
5. Maunder, P., et al (2000), 3rd ed (revised), Economics Explained, Ch.29

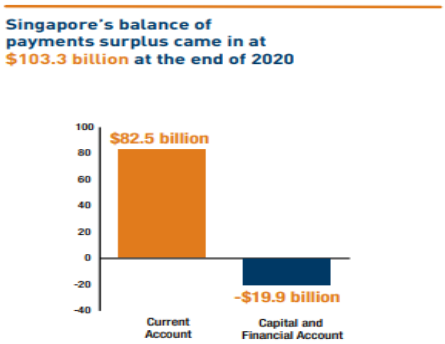
H2 9570 SYLLABUS REQUIREMENTS

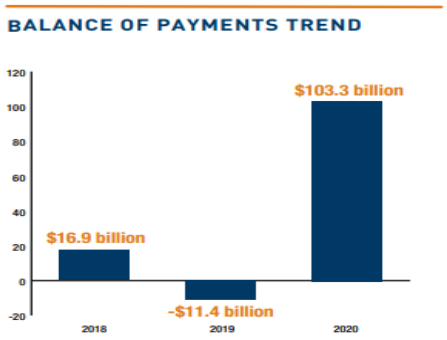
Macroeconomic Issues: **Causes** and **Consequences & Policies (Cures)**

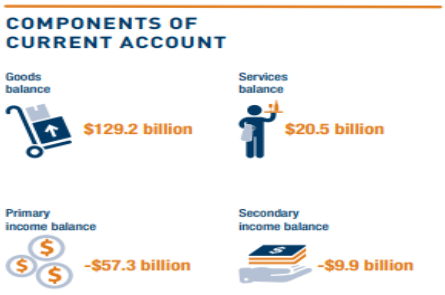
A LARGE AND PERSISTENT TRADE DEFICIT	
Causes	➢ loss in long term economic competitiveness • real factors such as strict labour laws and high minimum wages driving up labour costs, poor infrastructure and inadequate adoption of productivity enhancing technology • monetary factors include high inflation rates and an overvalued exchange rate ➢ external factors such as protectionism, unfair trade practices or deliberate undervaluation of exchange rates by the country's trading partners
Consequences	Consumers ➢ impact on factors such as disposable income and prices of goods and services (material SOL) and other factors such as income distribution, environmental quality (non-material SOL) Firms ➢ impact on their profitability, revenue and costs, and short- and long-term strategies Government ➢ efficiency, equity, budgetary concerns and political considerations
Policies (Cures)	Expenditure reducing: ➢ contractionary fiscal policy (FP) ➢ contractionary monetary policy (MP) Expenditure switching: ➢ supply side policies ➢ exchange rate policy (ERP) including the Marshall-Lerner Condition (MLC) ➢ protectionism

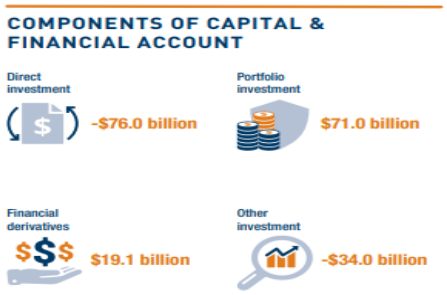
1 Balance of Payments

Shall we begin this topic by exploring what is in Singapore's Balance of Payments?









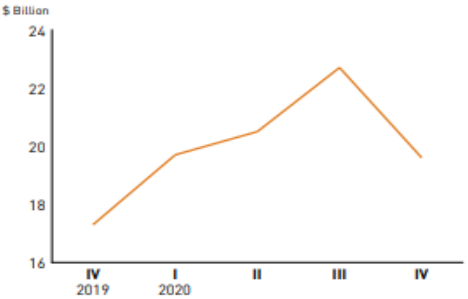
OVERVIEW

Singapore's overall balance of payments rose to $37 billion in the fourth quarter of 2020, from $14 billion in the third quarter. For the year as a whole, the overall balance of payments registered a surplus of $103 billion, reversing the deficit of $11 billion in 2019. This was mainly due to net inflows into the capital and financial account, which was a reversal from the net outflows in 2019. As a result, Singapore's official foreign reserves rose to $479 billion at the end of 2020.

CURRENT ACCOUNT

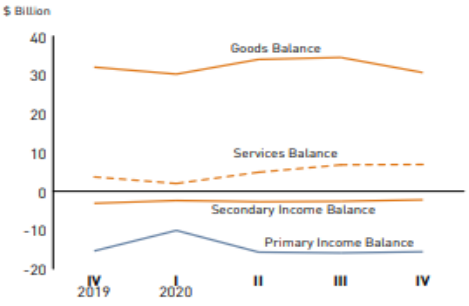
The current account surplus narrowed to $20 billion in the fourth quarter, from $23 billion in the third quarter (Exhibit 5.1). For 2020 as a whole, the surplus rose by $9.6 billion to $82 billion (18 per cent of GDP). This increase was driven by a larger surplus in the services balance and smaller deficits in both the primary and secondary income balances, which more than offset a decline in the goods surplus.

Exhibit 5.1: Current Account Balance



In terms of the sub-components of the current account, the goods balance saw its surplus decline by $3.9 billion from the third quarter to $31 billion in the fourth quarter, as imports rose by more than exports (Exhibit 5.2). For the 2020 as a whole, the goods balance registered a smaller surplus of $129 billion, compared to the $132 billion in 2019, as the exports of goods fell by more than imports.

Exhibit 5.2: Components of Current Account Balance



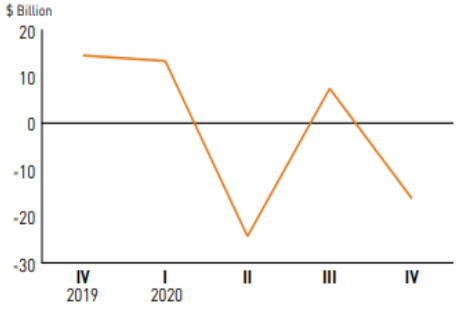
The surplus in the services balance came in at $6.9 billion in the fourth quarter, broadly unchanged from the preceding quarter. However, for the whole of 2020, the surplus in the services balance widened to $21 billion, from $12 billion in 2019. This was driven mainly by lower net payments for travel services and a shift from net payments to net receipts for transport services.

For the primary income balance, the deficit narrowed slightly by $0.3 billion from the previous quarter to $16 billion in the fourth quarter. For the year as a whole, the deficit declined to $57 billion, from $61 billion in 2019, as primary income payments fell by more than receipts.

CAPITAL AND FINANCIAL ACCOUNT

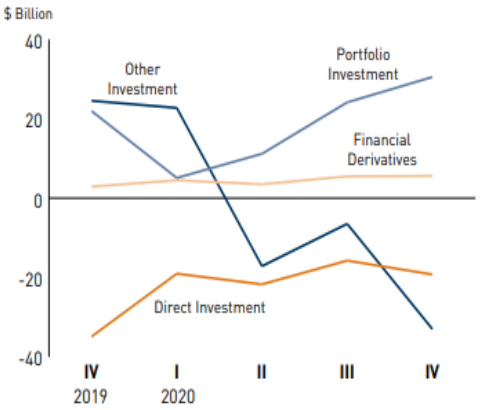
The capital and financial account[1] registered a net inflow of $16 billion in the fourth quarter, in contrast to the net outflow of $7.4 billion in the preceding quarter (Exhibit 5.3). For 2020 as a whole, net inflows came in at $20 billion (4.2 per cent of GDP), a reversal from the net outflows of $84 billion in 2019. The reversal primarily reflected lower net outflows of portfolio investment and a shift in "other investment" from a net outflow to a net inflow position. These factors outweighed a decline in the net inflows of direct investment and an increase in the net outflows of financial derivatives.

Exhibit 5.3: Capital and Financial Account Balance



In terms of the sub-components of the capital and financial account, net outflows of portfolio investment rose by $6.4 billion in the fourth quarter to $31 billion (Exhibit 5.4). For the full year, net outflows of portfolio investment amounted to $71 billion, less than half the $145 billion of net outflows recorded in 2019. This was partly due to a shift from a net outflow position in resident deposit-taking corporations in 2019 to a net inflow position in 2020, as resident banks switched to selling overseas securities from net purchases in the previous year.

Exhibit 5.4: Components of Financial Account (Net)



Net inflows of "other investment" increased to $33 billion in the fourth quarter, from $6.5 billion in the preceding quarter. For the full year, net inflows were $34 billion, a turnaround from the net outflows of $21 billion in 2019. This was partly attributable to an increase in net inflows to the domestic non-bank private sector, as liabilities to non-residents grew and assets abroad fell.

Direct investment saw net inflows amounting to $19 billion in the fourth quarter, higher than the $16 billion in previous quarter. For 2020 as a whole, net inflows of direct investment fell by $19 billion to $76 billion, as the decline in foreign direct investment into Singapore exceeded the fall in residents' direct investment abroad.

Net outflows of financial derivatives came in at $5.6 billion in the fourth quarter, largely unchanged from the previous quarter. For the full year of 2020, net outflows of financial derivatives rose to $19 billion, from $13 billion in 2019.

Source: Economic Survey of Singapore, 2020

Inquiry Questions

Components of Balance of Payments
What are the accounts in the Balance of Payments mentioned in the extract above?

Interpreting Balance of Payments Data
How does the characteristics of Singapore's economy – being small and open affect her Balance of Payments?

Understanding the role of FDI on the Performance of the Singapore economy
What is the role of FDI in shaping the performance of the Singapore economy?

1.1 Balance of Payments

Definition:
The ***Balance of Payments (BOP)*** of a country is a statement of all the international transactions of a country with the rest of the world over a period of time, usually a year. In other words, the balance of payments records the international inflows and outflows of a country's currency.

A favourable balance position of payments *indicates* ***an avoidance of large and persistent balance of payments deficit or surplus.***

A favourable BOP position also implies that the country will have a ***stable exchange rate***, which in turn will affect the competitiveness of the country's exports and ability to import.

Importance: It may serve as a measure of the relative performance of an economy in the global economy in terms of how successful its exports are in other countries or how attractive the country is to foreign investment. Hence, the BOP is important as it affects *exchange rate*, *economic growth*, *employment, inflation* and *standard of living*.

Structure: Since the BOP is an official record collected by the government, the presentation of the currency flows depend on how the government decides to group and classify the different items of payments. The actual presentation of a BOP statement varies from country to country but the major components are

i) Current Account
ii) Capital & Financial Account

These are the components of Singapore's BOP account.

1.2 Meaning of Balance of Payment Equilibrium and Disequilibrium

1.2.1 Balance of Payment Equilibrium

A BOP equilibrium is usually taken to mean that the trade and capital flows into and out of the country *balances* over a number of years. This means the combined receipts from selling goods and services abroad and from the returns from investments abroad equal the combined expenditure on imports of goods and services and investment income going abroad, consequently, there is no change in the official reserves account. When the BOP is in equilibrium, the "Overall Balance" will be zero, and there will no increase or decrease in the official reserves.

A country is in a *stable* and *self-sustaining* position if either

- The balance of payment account remains in balance over reasonable periods of time, or
- Any imbalance in the current account is matched by long term capital flows. (e.g. a current account deficit is offset by sustained capital inflows)

Thus if there are short term surpluses or deficits (i.e. disequilibrium), it will not be a major issue or problem.

1.2.2 Balance of Payment Disequilibrium

A BOP disequilibrium will exist if there is a persistent tendency for the trade and capital outflows to be more or less than the corresponding inflows. There can be a disequilibrium in the *current account* and/or the *capital* and *financial account*.

For example, if an economy imports more than exports, a disequilibrium in the balance of trade under the current account will arise, leading to a BOP disequilibrium as well, ceteris paribus.
It may assume the following forms:

a) A **Persistent Deficit in the BOP** account may be caused by:

   i) **A deficit** on the ***current account*** not matched by inflows in the capital and financial account.
   ii) **A net inflow** on the ***capital and financial account*** not matched by a surplus in the current account. *(Note: The country's debits are more than its credits due to an increase in liabilities to other economies or a reduction of claims in other countries)*

   A persistent deficit must then be accommodated by **a reduction in gold and foreign reserves** or by **borrowing in the official reserves account of the BOP**.

b) A **Persistent Surplus in the BOP** account which may be caused by:

   i) **A surplus** on the ***current account*** not matched by outflows from the capital and financial account.
   ii) **A net outflow** on the ***capital and financial account*** not matched by a deficit from the current account. *(Note: The country's credits are more than its debits due to a decrease in liabilities to other economies or an increase of claims in other countries)*

   It is noteworthy that a persistent surplus would result in **an accumulation of gold and foreign reserves**, hence it does not pose payment difficulties to the country as a BOP deficit would.

1.3 Causes of Balance of Payments Disequilibrium

NOTE: As the H2 Economics syllabus 9570 focuses on causes and consequences of a large and persistent trade deficit, we will look at how governments seek to promote favourable balance of trade, i.e. avoidance of persistent balance of trade (BOT) deficit.

There are many causes of a balance of payments disequilibrium for a country. As mentioned previously, BOP disequilibrium may be caused by current account disequilibrium or capital and financial account disequilibrium.

An improving or worsening current account will result in an improving or worsening BOP respectively, ceteris paribus.

An improving or worsening capital and financial account will result in an improving or worsening BOP respectively, ceteris paribus.

1.3.1 Causes of Current Account Disequilibrium [Focus: Balance of Trade]

Within the current account, the trade account, i.e. export revenue and import expenditure, is typically the largest account. Hence, a current account deterioration is usually a result of worsening trade balance, while a current account improvement tends to be a result of improving trade balance.

There are multiple factors that may create trade imbalances, hence affecting the current account.

These factors are categorised in terms of price and non-price factors.

i) Price Factors

a) Rate of domestic inflation relative to other countries

Should **the prices of domestic goods and services be relatively more expensive** due to a higher rate of inflation in the domestic country as compared to the rest of the world, this will make exports relatively more expensive. The outcome on export revenue and thus, trade balance will depend on the PED of exports.

Assuming that demand for the country's exports is ***price elastic***, a higher price of exports will result in a ***more than proportionate fall*** in quantity demanded for exports and thus **a fall in export revenue (X).**

As demand for domestic goods is ***positively cross elastic*** (substitutes) with respect to imports, the higher price of domestic goods will cause people to switch from consuming domestically produced goods to the consumption of imports. This will cause an **increase in total import expenditure (M*)*** in the domestic country.

Taken together, ***the fall in export revenue and rise in import expenditure will cause a deterioration in the trade balance***, and possibly increase an existing trade deficit.

Conversely, if ***the inflation rate of the foreign economy is higher than that of domestic economy***, the goods sold by the domestic economy (exports) would be relatively cheaper whereas the imports would be relatively more expensive.

Assuming that demand for the country's exports is ***price elastic***, a relatively lower price of exports will result in a ***more than proportionate rise*** in quantity demanded for exports and hence a ***rise in export revenue***.

Also, given that domestic goods and imports are substitutes, the relatively lower price of domestic goods will cause people to switch consumption from imports to domestically produced goods leading to a fall in demand for imports, causing a ***fall in total import expenditure*** in the domestic country.

This will ***increase the country's net export revenue*** since there is a rise in the value of exports and fall in the value of imports.

b) Changes in Exchange Rate

A depreciation of the Singapore dollar (SGD) against the US dollar (USD) would mean a weaker Singapore dollar. With a weaker currency, the price of exports in foreign currency will be cheaper and this leads to a rise in quantity demanded for exports (note that Px in local currency terms remains the same). At the same time, the depreciation or weakening of the Singapore dollar would lead to the price of imports to rise in local or domestic currency terms leading to a decrease in quantity demanded for imports. **Assuming the Marshall-Lerner condition holds (PEDx +PEDm >1)**, a depreciation of the SGD against the USD will lead to a rise in net exports (X-M).

An increase in the net export revenue that could reduce an existing trade deficit and bring about an improvement to the BOT.

Conversely, if SGD appreciates against the USD, this means it takes less SGD to purchase US$1, and more USD to purchase SG$1. With a stronger currency the price of exports in foreign currency will be higher and this leads to a fall in quantity demanded for exports (note that Px in local currency terms remains the

same). At the same time, the appreciation or strengthening of the SGD would lead to the price of imports to fall in local or domestic currency terms leading to an increase in quantity demanded for imports. **Assuming the Marshall-Lerner condition holds (PEDx +PEDm >1**), an appreciation of the SGD against the USD will lead to a fall in net exports (X-M).

A fall in the net export revenue could in fact worsen an existing trade deficit and bring about a deterioration to the BOT.

c) Changes in Domestic Supply Conditions

When supply of a country's exports fall, its export prices rise. This could increase a trade deficit and worsen the trade balance assuming PEDx>1 (export revenue falls as quantity demanded for exports fall more than proportionately to the rise in export prices).

The fall in supply of a country's exports could be due to:

Reasons	Examples
Loss in comparative advantage	A loss in comparative advantage due to higher costs may reduce supply of exports. This may be due to rising input prices like wage increases, which increases the cost of production in the country. *(Refer to later topic 3.3 Globalisation and the International Economy*). Note: Changes in comparative advantage due to higher domestic cost would be a price factor. However, if loss of comparative advantage due to other countries gaining comparative advantage due to use of better technology, it may be a non-price factor.
Relative rise in cost of production	During an oil crisis, energy prices would have soared and lead to an increase in cost of production. This will reduce the supply of exports. Increase in wages in Singapore due to government policy to reduce inflow of low-cost foreign labour, and levies imposed on the employment of low-cost foreign labour.
Falling domestic productivity	Falling health conditions have caused a fall in productivity of workers in many African countries. As a result, the supply for many of these countries' export falls.

In conclusion, the above factors will affect the trade balance via export revenue (inflow of currency). Assuming no change in import expenditure, a fall in export revenue due to higher prices of domestic exports/goods, assuming PED> 1, would worsen the trade balance and BOT position, ceteris paribus.

ii) <u>Non-Price Factors</u>

d) Changes in Interest Rates

As part of expansionary monetary policy, the Central Bank increases money supply and reduces interest rates. The falling interest rate is likely to increase investment and consumption, causing national income in the economy to increase via the multiplier effect, GPL may also rise as a result, this can mean an increase in the prices of exports from the country. Assuming demand for exports is price elastic, there will be a fall in export revenue. Furthermore, as income increase, it may lead to an increase in demand for imported goods and services.

A rise in import expenditure and a fall in export revenue could increase a trade deficit and worsen the trade balance.

The trade balance and BOP will improve if supply of export rises (price of export fall), assuming PEDx>1.

e) Changes in the Global Demand Conditions

This can be due to **changes in tastes and preferences** of foreign consumers for a country's exports because they are of better quality. This may cause the demand for its exports to decrease, causing trade balance to worsen. Hence, the BOP deteriorates.

For example, as China progressed in her economic growth, GDP per capita rose with an expanding middle class. This fostered a culture of consumption and popular amusement as the taste and preferences of her people changed in favour of imported luxury goods that are of better quality. This will worsen the trade balance of countries that export inferior goods; while improve the trade balance of countries that export luxury goods.

Secondly, **changes in the relative income** and will also affect demand for exports and imports. The demand for exports depends on the national income of an economy's trading partners. If the income of the trading partners falls (e.g. During the 2007-2009 Global Financial Crisis, most of Singapore's major trading partners, e.g. US, European countries, and Japan, recorded negative economic growth rates, whereas Singapore's growth rate in 2009 was 0.1%.) relative to domestic income, demand for the country's exports fall (assuming $YED_x > 0$), then export revenue of the domestic economy will decrease, ceteris paribus. There will be a decrease in the net export revenue of the country leading to a worsening of the trade balance. Ceteris paribus, this may cause a deterioration of the country's BOP position.

Conversely, a change in global demand conditions in favour of the country's exports would cause the trade balance and BOP to improve, ceteris paribus.

f) Establishing Institutional Changes

The establishment of new institutions may change the economic, social and political framework of a country. An example is the formation of the European Union (EU). Members of the EU will benefit but non-member face trade barriers. This may result in disequilibrium on their BOPs.

Therefore, exports of non-members countries could be reduced and this may result in an increase in their trade deficit and worsening of their current account. Similarly if a member of the EU, such as the UK decides to leave the institution, then it would lose its benefits as a member. It could face tariffs on its exports to EU-member countries and hence experience a fall in export revenue that could adversely affect the trade balance.

g) Imbalances in a country's capital and financial account

Trade imbalances could also be caused by imbalances in a country's capital and financial account.

If a country has insufficient savings and government revenue to finance its domestic investments and government expenditure, it will need to borrow from abroad or sell its assets to foreigners to finance such spending.

This will inflate the demand and value of the country's currency, leading to the country's exchange rate being overvalued which will in turn reduce its trade competitiveness.

Questions for Inquiry

EU's Single Market
In the EU's single market (sometimes also called the 'internal market') people, goods, services and money can move around the EU as freely as they do within a single country – instead of being constructed by national borders and barriers as they were in the past.

To create this unified market, hundreds of technical, legal and bureaucratic barriers that used to stifle free trade and free movement between the EU's member countries have been abolished, generating 2.77 million extra jobs and growth of 2.1% between 1992 and 2008.

Free to do business across the entire economic bloc, companies have expanded their operations, with the resultant competition both bringing down prices and increasing consumer choice.

Adapted from http://europa.eu/pol/singl/index_en.htm

Question:
How will Brexit affect the UK's current account, and hence her BOP?

1.3.2 Causes of Capital and Financial Account Disequilibrium

a) Changes in Interest Rates

During an expansionary monetary policy, Central Bank increases money supply, and interest rates fall affecting the financial account. This will lead to an outflow of short-term funds in search of better interest rates elsewhere, thus the BOP deteriorates.

b) Expected changes in exchange rates

Changes in exchange rate that creates expectations of future movements of exchange rate will have an effect on the financial account.

If there was an expectation of a depreciation in future, a prospective foreign investor might defer his investment for some time (long-term capital flow), and there could also be high outflow of short-term investment (short-term capital flow), thus worsening the BOP.

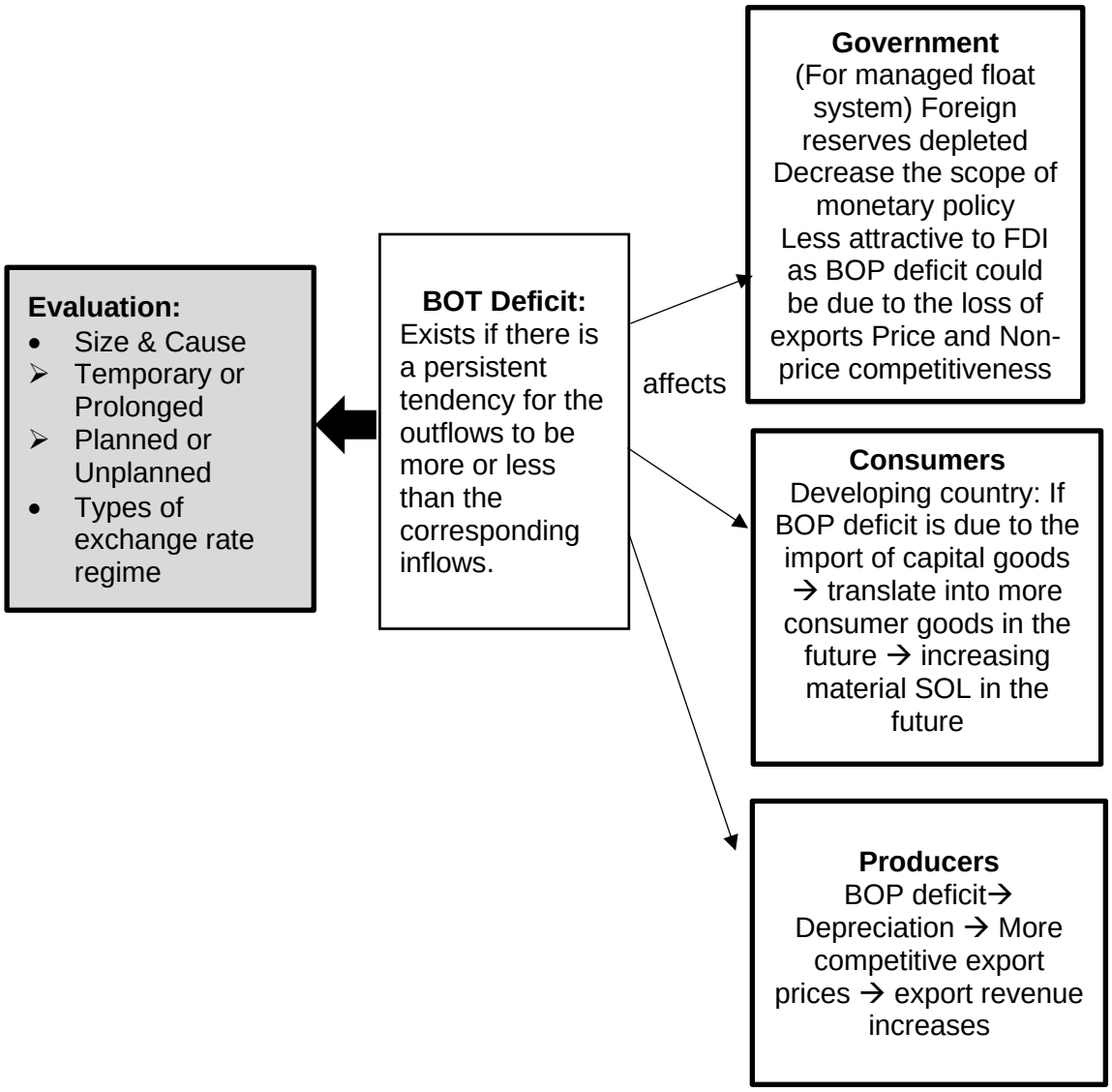
On the other hand, if investors expect the exchange rate of a country to appreciate continuously and into the future, they will tend to invest more in this country, improving the BOP position.

c) Changes in political and social factors

Changes in capital and financial movement can also be caused by political instability. Increasingly, the movement in short-term funds (hot money) has been an important factor causing disequilibrium in the BOP. This occurred in the Asian Financial Crisis in which the large outflow of short-term foreign funds caused a worsening of the BOP of most Asian economies and led to the sharp depreciation of most Asian currencies in the latter half of 1997.

1.4 Effects of Balance of Trade (BOT) Disequilibrium

The severity of any resulting problem of a BOT disequilibrium depends upon the *size and cause* of the disequilibrium, whether it is *temporary or prolonged*, *planned or unplanned* and the *type of exchange rate regime* the disequilibrium occurs in. Both a BOP deficit and a BOP surplus may be a concern. We will first turn our attention to the problems due to a ***BOT deficit*** because in general, a BOP deficit poses a greater problem to a country than a BOP surplus.



1.4.1 Effects of a Balance of Trade Deficit on the Consumers, Producers and Government

As mentioned previously, a BOT deficit may arise due to an increase in import expenditure and/or fall in export revenue. This section will focus on the impacts of ***long-term***, ***large*** adverse balance of trade deficits that is ***unplanned.***

Consumers

To correct the persistent BOT deficit, the government might implement protectionist policies such as tariffs on imported goods. This would raise the prices of imported good, reducing consumer ability to purchase them. This may adversely affect their material standard of living.

For a developing country, a current account deficit in the initial years of development may be more due to its purchases of imported capital goods rather than consumption goods. The higher capital accumulation should enable its productive capacity to increase faster and this should allow the country to export more in the future (which will then correct the initial current account deficit). The wealth created will increase the material standard of living of the people.

Producers

For such developing countries, the demand for imported capital should fall overtime as the country becomes less capital scarce and also because producers will become increasing able to produce its own capital goods. Thus the country's current account should improve overtime. This also applies for countries with a **planned balance of payments deficit** for infrastructural developments.

If the deficit is due to long-term capital outflow which will yield returns or profits in the future: this will then benefit the country's current account when investment income is sent back in the future, yielding higher future income of **consumers** and **producers** in the longer run.

BOP deficit may arise due to a deficit in either the current, capital and financial accounts or all of them. A ***long-term***, ***large*** adverse balance of payments deficits that is ***unplanned,*** is a serious problem since it is caused by a country living beyond its means.

Government

BOT deficits will have to be corrected because there is a limit on the ability of the government to sustain such chronic deficits. Its finite official reserves will run out as a deficit must be accommodated by a reduction in gold and foreign reserves or by borrowing in the official reserves account of the BOP.

Having to persistently lose gold or foreign reserves or to borrow short term show that the country is unable to finance desired imported goods and services with exports or long term capital flows. It may need to **incur large external debt** (borrow from abroad) to cover its deficits. Borrowing from abroad is constrained by foreign perceptions of its credit-worthiness, which will **lower a country's competitiveness in attracting FDI**, thus affecting its long term growth prospect. Besides, if it borrows too much, it will find that agencies which lend it money such as IMF will impose conditions for future borrowing. This means that the government loses its ability to run its economy in the way it sees fit.

Furthermore, a persistent trade deficit reflects poor economic management, which results in a loss of confidence in the economy. A **capital flight may ensue**,

which will worsen the country's balance of payments and may lead to a deterioration in the exchange rate.

In addition, a persistent trade deficit could be an indication to the government that the country's exports are too low; suggesting that the economy is not competitive in terms of:

- Export price competitiveness; and/ or
- Export non-price competitiveness (quality).

This can create some structural issues that leads to **dependence on imports,** which cannot be substituted through domestic production. This will then have implications on the government as to how they should intervene to correct the BOT deficit.

Exchange rate regimes and different effects of BOT deficit

The effects of a BOT deficit in a *Free Float exchange rate* regime differs from that of *Fixed/Managed float*. It is considered more of a problem in the Fixed/Managed float regime. There will be a significant impact on components of the economy that the governments are concerned with.

(i) Effects of BOP Deficit in a Free Float Exchange Rate Regime

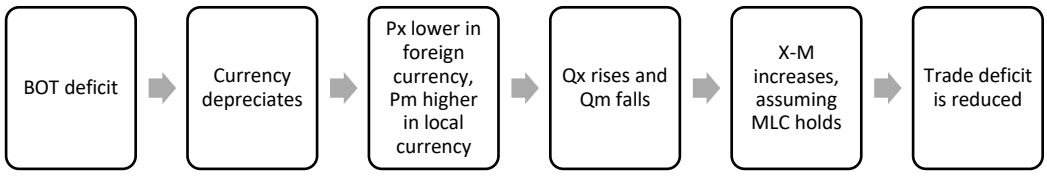


Figure 1: Effects of Trade Deficit in a Free Float Regime

In a free float exchange rate regime, when the country has a BOT deficit, this means that the demand for the country's currency fall (due to a decrease in currency inflows) and/or the supply of the country's currency in the foreign exchange market increase (due to an increase in currency outflows). Thus, the external price of the currency – **the exchange rate – responding to market forces and would fall (depreciates).**

As the exchange rate of the country depreciates, foreign price of exports falls and domestic price of imports increases. This leads to an increase in quantity demanded in exports leading to an increase in export revenue and a decrease in quantity demanded of imports. This leads to a decrease in import expenditure. Assuming the MLC holds (PEDx + PEDm >1), then X-M will rise, mitigating the BOT deficit. Therefore, **balance of trade disequilibrium (deficit) is cured through automatic correction of the exchange rate depreciation.**

However, when the exchange rate of the country depreciates, the country may suffer from imported inflation since imported raw materials will be more expensive in local currency terms. This is especially true in countries dependent on imports, Consumers may end up paying more for basic necessities like rice while cost of imported raw materials increase, leading to a rise in costs of production (unintended consequences)

(ii) **Effects of BOP Deficit in a Fixed/Managed Float Exchange Rate Regime**

Figure 2: Effects of BOP Deficit in a Fixed/Managed Float Exchange Rate Regime

In contrast, in a fixed/managed float regime where governments peg their exchange rates at a targeted rate, overvaluation of the exchange rate may occur (the fixed exchange rate or the 'pegged' value is greater than its supposed free market value).

In the event of BOT deficit, when the demand for the domestic country's currency falls, the exchange rate depreciates below the pegged rate. In order to maintain the pegged exchange rate, the government **may have to use its official reserves** to purchase more of its domestic currency (increases demand for the domestic country's currency in the forex market) to prevent depreciation.

Official reserves are limited, so a country cannot go on financing a BOT deficit forever. Furthermore, there could be a loss of investor confidence as seen in Thailand and South Korean during the 1997 Asian Financial Crisis and could lead to capital flight.

Eventually therefore, in a fixed/managed float[1] exchange rate system, a country must take action to try to reduce or eliminate a persistent BOT deficit to prevent drawing down of their official reserves.

1.4.2 Effects of a Balance of Payment Surplus on Consumers, Producers, Government

Like a balance of payments deficit, a ***temporary*** balance of payments surplus is *not* a problem.

A ***large and persistent BOT surplus*** may however be *undesirable* for a number of reasons.

These include:

a) A Balance of Trade Surplus is Inflationary

A BOT surplus is an injection into the circular flow of income, which via a multiplier effect will increase the national income. However, if the economy is at, or near, full employment, this will lead to demand-pull inflation instead.

For example, a rising balance of trade (current account) surplus will lead to rising net exports, a component of AD. This will cause AD to shift right. If the economy is at or near full employment, general price levels will start to rise (affects **consumers** through its effects on inflation).

[1] Managed float system will be explained in the next section on *Macroeconomic Policies*. It is sufficient to note for now that a managed float system lies in between a fixed and free float system in terms of degree of government intervention. Read up more on Singapore monetary policy (exchange rate) - it is a managed float system!

b) See-Saw: One Country's Surplus is Another Country's Deficit

It is impossible for all countries to run BOT surpluses simultaneously as the trade balances across countries depict much like a see-saw: when one country enjoys a significant trade surplus, another country will be suffering from a large trade deficit. Unless countries with persistently large surpluses agree to take action to reduce their surpluses, deficit countries will not be able to reduce their deficits. As a consequence and in desperation, deficit countries may be forced to resort to import controls from all countries, including the surplus countries. This is detrimental to world trade.

For example, the Japanese huge BOT surplus during the 1980s was matched by an American BOT deficit and the US authorities had made threats of a trade war if Japan did nothing about this imbalance of trade between the 2 countries. More recently, China's trade surplus with the USA also led to issues, as well as the on-going disputes

c) The 'Dutch Disease' Effect

The growth of the United Kingdom's oil trade surplus in the 1970s and 1980s illustrates another problem that a BOT surplus can cause. The oil surplus led to a huge 'hot money' inflow via its effects on confidence and speculation.

This caused the sterling pound's exchange rate to rise to a level greatly overvalued in terms of the trading competitiveness of Britain's non-oil manufacturing industries. As a result, the UK's manufacturing industries lost world markets due to its exports being less price competitive – export revenue from non-oil industries decrease assuming $PED_x > 1$. This accelerated the slowdown in the growth of the manufacturing industries of the British economy.

d) BOT Surplus and Appreciation of Currency

As the above explanation shows, a BOT surplus will likely lead to an appreciation of the country's currency (assuming free exchange regime or within the band of a managed float). This will in turn have an impact on consumers, producers and the government.

Consumers

Consumers will find that imports to be relatively cheaper and increase their expenditure on imports. Assuming PED_M is elastic, import expenditure will rise.

If the surplus is due to *long-term capital inflow*, the investment in plant and equipment will stimulate output and employment, thus increasing standard of living of consumers.

Producers

Producers who export their goods and services will now experience a relatively more expensive price. Assuming PED_X is elastic, export revenue will fall.

Government

With a temporary BOP surplus, the country just adds to its reserves, uses the surplus to lend abroad or to repay past loans. It also has an expansionary effect on the economy if the surplus is due to a high level of net export revenue and/or a high level of inward foreign direct investment.

In sum**,** the balance of trade records international transactions in terms of export revenue and import expenditure of a country. Overall trends, such as a BOT deficit or surplus in the balance of payment is not sufficient to understand a country's economic health. It is more important to look at the root causes behind the BOT deficit or surplus in the BOP, and thus implement the appropriate policies to address the root cause of the issue.

2 Macroeconomic Policies to correct Balance of Trade (BOT) Imbalances

An unhealthy balance of trade (deficit or surplus) would have repercussions on various macroeconomic aims of countries. A BOT imbalance should be corrected when it is **large and persistent.**

Governments can choose to implement policies to address a **large and persistent BOT deficit.** They can be classified as:

i. **Expenditure Reducing** *(income effect)*:
These are measures which aim to rectify the deficit by cutting expenditure, including expenditure on imports for e.g., **Contractionary Fiscal and Monetary Policies**

ii. **Expenditure Switching** *(substitution effect)*:
These are measures which are designed to switch expenditure from imports to domestically produced goods for e.g., **Supply-Side Policies, Exchange Rate Policy and Trade Policies**

We will take a look at how the various demand management policies can be used to correct a BOT deficit in the following section.

Note: If a government wishes to correct a BOT surplus, it can engage in the exact opposite of the above, i.e., expansionary demand management policies and/or revaluation.

2.1 Use of Contractionary Fiscal Policy in Correcting BOT Deficit

Balance of Trade deficit can be caused an increase in import expenditure and/or decrease in export revenue.

1. ***Mechanism***

Governments can use contractionary fiscal policy which is to decrease G and increase T to achieve its objective of a healthy BOT in the following way:

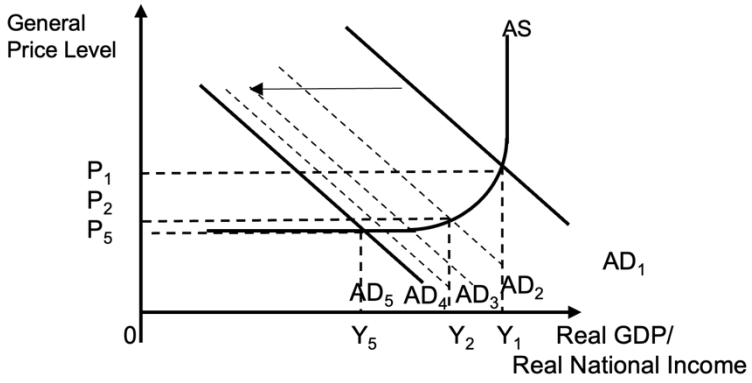


Figure 3: Fiscal Policy as an Expenditure Reducing Policy

Acronym	Steps	Description
A	**1. AD/AS Factor and Component**	When the government implements contractionary fiscal policy, it may: - Reduce G - Increase T (corporate tax and income tax)→ Fall in post-tax profits and disposable income→ Fall in I and C
S	**2. SHIFT of AD/AS**	The fall in autonomous C, I and G will then result in AD falling from AD_1 to AD_2.
A	**3. ADJUSTMENT process**	A fall in AD will result in a fall in Real National Income from Y_1 to Y_2. This will then lead to a fall in income induced consumption and thereafter, a further fall in AD. This triggers many successive rounds of decrease in national income and income induced consumption. At each round, the decrease in both gets smaller. The multiplier process will end when the decrease in national income is too small to generate further decreases in induced consumption. The autonomous fall in AD from AD_1 to AD_2 results in a multiplied decrease in RNY from Y1 to Y5
P	**4. END POINT**	This results in negative actual economic growth. This then reduces real national income and expenditure, including expenditure on imports, resulting in M falling and X-M increasing, addressing the BOT deficit. The bigger the marginal propensity to import, the larger will be the fall in expenditure on imports.

2. ***Evaluation of Policy***

State of Economy	Contractionary fiscal policy can involve severe domestic costs; output and employment levels tend to fall. For a country that is faced with both trade deficit and demand deficient unemployment (when the economy is **below full employment),** such policies will worsen the unemployment problem and economic growth. Hence, contracting the economy may not be a viable option when the economy is slowing down or in a recession. Contractionary fiscal policy works best if it leads to ***expenditure switching*** behaviour instead of expenditure reducing. This is because it will solve the trade deficit without exacerbating employment and income problems.
Unintended Consequences	**Expenditure Switching Effect** Contractionary fiscal policy can also have an ***expenditure switching*** effect. The fall in aggregate demand may cause the

	domestic inflation rate to fall relative to its trading partners, thereby increasing the price competitiveness of exports and reducing that of imports. Residents of other countries may then switch their demand toward the country's exports, while its own residents switch away from imports, preferring instead to buy cheaper domestically produced substitutes. If the country's domestic goods are close substitutes of the foreign imports, residents will switch more readily their expenditure pattern as compared to a country without close domestic substitutes to foreign imports. **Political Acceptability** Contractionary fiscal policies are more acceptable in some countries as unlike protectionist measures, it does not conflict with obligations with World Trade Organisation and does not invite retaliation from trading partners who may impose tariffs. However, the international multiplier effect will set in as a fall in imports by one country following deflationary policy would represent a loss of export revenue by other countries. Other countries may in turn decrease demand for exports from the aforementioned country, leading to a fall in export revenue and national income subsequently, beyond its initial target.
Nature of Economy	Contractionary fiscal policy may also be of limited effectiveness if the demand for imports in the country are income inelastic. For small and open economies like Singapore which are highly dependent on imported food and consumer durables (i.e. necessities with 0<YED<1), the fall in income would lead to a less than proportionate fall in demand and may not have a significant effect in reducing import expenditure. The small size of the Singapore's multiplier may also diminish the impact of a contractionary fiscal policy as income would fall by a smaller extent compared to an economy with a large multiplier. The induced fall in import expenditure would hence be also less.
Root cause	If the root cause of the current account deficit is due to a loss in export competitiveness, then a contractionary fiscal policy targeting import expenditure would not address the lack of export revenue.

2.2 Use of Contractionary Monetary Policy in correcting BOT Deficit

***1*. Mechanism**

Governments can use contractionary monetary policy which is to increase interest rate to achieve its objective of a healthy BOT in the following way:

Acronym	Steps	Description
A	**1. AD/AS Factor and Component**	When the government implements contractionary monetary policy, it may: - Decrease Money Supply - Increase Interest Rates→ Increase Cost of Borrowing→ Reduction in

		profitability of investments→ I decreases + consumption of durables decrease thus, C decreases
S	**2. SHIFT of AD/AS**	The fall in autonomous C, I and G will then result in AD falling from AD_1 to AD_2. (Refer to Figure 3 for diagrammatic explanation)
A	**3. ADJUSTMENT process**	A fall in AD will result in a fall in Real National Income from Y_1 to Y_2. This will then lead to a fall in income induced consumption and thereafter, a further fall in AD. This triggers many successive rounds of decrease in national income and income induced consumption. At each round, the decrease in both gets smaller. The multiplier process will end when the decrease in national income is too small to generate further decreases in induced consumption. The autonomous fall in AD from AD_1 to AD_2 results in a multiplied decrease in RNY from Y1 to Y5
P	**4. END POINT**	This results in negative actual economic growth. This then reduces real national income and expenditure, including expenditure on imports, resulting in M falling and X-M increasing, addressing the BOT deficit. The bigger the marginal propensity to import, the larger will be the fall in expenditure on imports.

2. ***Evaluation of Policy***

State of Economy	Contractionary monetary policy can involve severe domestic costs; output and employment levels tend to fall. For a country that is faced with both trade deficit and demand deficient unemployment (when the economy is **below full employment),** such policies will worsen the unemployment problem and economic growth. Hence, contracting the economy may not be a viable option when the economy is slowing down or in a recession. Contractionary monetary policies will work best if it leads to ***expenditure switching*** behaviour instead of expenditure reducing. This is because it will solve the trade deficit without exacerbating employment and income problems.
Unintended Consequences	**<u>Expenditure Switching Effect</u>** Contractionary monetary policy can also have an ***expenditure switching*** effect. The fall in aggregate demand may cause the domestic inflation rate to fall relative to its trading partners, thereby increasing the price competitiveness of exports and reducing that of imports. For example, residents of other countries may then switch their demand toward the country's

	exports, while its own residents switch away from imports, preferring instead to buy cheaper domestically produced substitutes. If the country's domestic goods are close substitutes of the foreign imports, residents will switch more readily their expenditure pattern as compared to a country without close domestic substitutes to foreign imports. **<u>Political Acceptability</u>** Contractionary monetary policies are more acceptable in some countries as unlike protectionist measures, it does not conflict with obligations with World Trade Organisation and does not invite retaliation from trading partners who may impose tariffs. However, the international multiplier effect will set in as a fall in imports by one country following deflationary policy would represent a loss of export revenue by other countries. Other countries may in turn decrease demand for exports from the aforementioned country, leading to a fall in export revenue and national income subsequently, beyond its initial target.
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Root cause	If the root cause of the current account deficit is due to a loss in export competitiveness, then a contractionary monetary policy targeting import expenditure would not address the lack of export revenue.

Overall Effectiveness of Fiscal Policy/Monetary Policy to correct a large and persistent BOT deficit

The use of contractionary fiscal or monetary policy to correct a trade deficit is more appropriate if it is caused mainly by an increase in import expenditure, and if the economy is also suffering from demand-pull inflation **(i.e. depending on root cause)**. This is because the use of such domestic-oriented demand management policies would not address the trade deficit due to a lack of export competitiveness in terms of quality deterioration, and would unintendedly lead to **adverse unintended consequences**, i.e. negative economic growth and unemployment if there is spare capacity in the economy, i.e. AD cuts AS at the horizontal/ intermediate range.

Fall in government expenditure as part of contractionary fiscal policy tends to be politically unacceptable as it could mean a cut in spending in areas such as education and healthcare that could worsen non-material standard of living.

These policies are more likely to be used to address trade deficit in the **short-term and should be complemented with more long-term measures**, e.g. supply-side policies that improve export competitiveness in the long-term.

Note: For the purpose of discussion in examinations, assess the advantages and disadvantage for each policy specific to the given context of the question. Make an overall evaluation that is a reasoned stand relevant to the question.

2.3 Use of Fiscal/Monetary Policy in Correcting BOT Surplus

The fiscal/monetary policy available to a government for reducing a persistent and large balance of trade surplus is simply the opposite of that appropriate for correcting a balance of trade deficit.

The government can use fiscal/monetary policy in addressing a BOT surplus in the following way:

- Pursue **expansionary** fiscal/monetary policies. Expansionary fiscal/monetary policies will lead to an increase in consumption and investment and thus an increase in aggregate demand and national income via the multiplier effect. An increase in national income will cause the economy to increase the demand for imports. As a result, it would reduce the balance of trade surplus, assuming export revenue remains constant.

- However, countries with BOT surplus often do not want to exacerbate the inflationary pressure already present, hence they would rarely intervene to correct a BOT surplus with expansionary fiscal/ monetary policies.

- Furthermore, a BOT surplus is often tolerated for small and open economies, e.g. Singapore, as it is the main source of actual economic to growth. Hence, small and open economies with BOT surplus often leave the adjustment to the deficit nations, choosing instead to deal with the inflation rather than the BOT surplus.

- On the other hand, larger economies, e.g. Japan and China, which were pressured by trading partners to reduce their trade surpluses have used other policies, e.g. appreciation or trade policies to encourage higher imports.

2.4 Use of Exchange Rate Policy in Correcting a BOT Deficit

1. Mechanism

<u>Devaluation/ Depreciation of Currency</u>

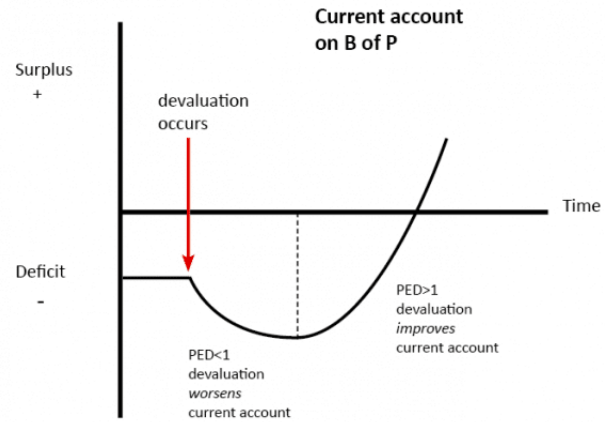
For economies that use a fixed/managed float exchange rate, devaluation or depreciation can help to correct a trade deficit. In a free-floating exchange rate, any balance of payments disequilibrium will be auto corrected

- Both devaluation (fixed exchange rate system) and depreciation (managed floating exchange rate system) have the same effects on balance of payment deficits, that is:
- Exports will now appear cheaper in **foreign currency** and the quantity demanded for the country's exports rises. Imports will appear more expensive in **domestic currency** and quantity demanded of imports falls. **Assuming the Marshall-Lerner condition holds (PEDx +PEDm >1)**, a devaluation will lead to a rise in net exports (X-M) and bring about an improvement to the BOT.

- This measure is thus **expenditure switching** i.e. switching expenditure from imports to domestically produced goods.

2. ***Evaluation of Policy***

State of Economy	**Spare Capacity & Demand-Pull Inflation** When implementing a devaluation/ bringing about a depreciation of exchange rate to reduce a trade deficit, the government needs to consider the **level of spare capacity in the economy**, ie at which range of AS is the economy operating in. Otherwise, if the economy is at nearing Yf, the rise in (X-M) will lead to **demand-pull inflation**. The rise in GPL will then offset the effects of lowered export prices in foreign dollars, the aim of the initial fall in exchange rate. If spare capacity does not exist, or in the case of full employment in the economy, then it is necessary to increase productivity (and LRAS) or to deflate the domestic economy (i.e. reduce AD) so as to create spare capacity.
Unintended Consequences	Devaluation or depreciation raises the prices of imports. If the country is heavily dependent on imported raw materials, e.g. Singapore, it will increase the cost of production which may lead to the unintended consequence of an **imported cost-push inflation**. The firm will then charge higher prices which may set off an inflationary wage-price spiral. This could yet again reduce the price competitiveness of exports which was the original intent of devaluation/depreciation in the first place. There are also direct inflationary effects of higher foreign prices of imported consumer goods which increases the consumer price index **<u>Retaliation from Trading Partners</u>** Devaluation tends to result in retaliatory actions. Other countries may also devalue their currencies resulting in competitive devaluation. To avoid the threat of retaliation by foreign firms (that could result in competitive devaluation) and the possibility of a damaging price war, exporters may want to maintain price stability through administered price changes. In the export market instead of lowering foreign prices following depreciation, firm can raise export prices and in so doing retain *foreign* prices at the pre-depreciation level. *Note that by increasing domestic prices (and keeping foreign prices constant), firms are able to increase profits as the same volume of goods and services are sold but at a higher price, thus overall export revenue increases.* **<u>Loss in confidence in the country</u>** Devaluation may trigger off a chain reaction: it reduces the value of investments denominated in domestic currency held by foreigners and destroy their confidence in the country's currency. Thus they may attempt to move their capital out of the country. If they expect a further devaluation to take place, they will sell their investments, leading to massive short-term and long-term capital outflow, known as 'capital flight'. This not

	only puts tremendous pressure on the currency but also worsens the balance of payments position further.
Root cause	**<u>Loss of export competitiveness due to fall in quality</u>** If the root cause of the BOT deficit is due to a loss in export competitiveness in terms of quality, the depreciation of the currency addresses only export price competitiveness. Other policies, e.g. supply-side policies to promote R&D and innovation, are needed to improve non-price export competitiveness.
Time Period	**<u>J-curve effect- Policy may only be effective in LR when MLC holds</u>**  **Figure 4: J-curve Effect** A depreciation would only lead to an increase in net export revenue, (X-M) if the **Marshall-Lerner condition holds**. If this assumption does not hold due to contractual agreements in the short run, for an example, export revenue would fall due to a decrease in price of exports resulting in a less than proportionately rise in quantity demanded of exports. Likewise, import expenditure would increase as a rise in the price of imports would lead to a less than proportionate fall in quantity demanded of imports. This would worsen the trade deficit initially instead. This is commonly known as the **J Curve effect** which states that a depreciation in the exchange rate can cause a deterioration of the current account in the short-term (because demand is inelastic). However, in the long-term, demand becomes more price elastic and therefore, the current account begins to improve.

Overall Effectiveness of Exchange Policy to correct a large and persistent BOT deficit

However, one advantage of devaluation is that unlike protectionism, devaluation **does not distort comparative advantages** *(Refer to next topic on International Economy)* ***as the opportunity cost of allocating resources to produce two goods remains unchanged.*** It can however be seen as a sign of weakness in the country's macroeconomic management. Furthermore, speculation may be encouraged if there are signs that the devaluation was not substantial enough in the first place to correct the BOP current account deficit. (I.e. People expect further devaluation and hence, they sell the currency first)

As explained in Section 2.3.5 of Economic Growth (Open Economy Trilemma), the use of exchange rate policy to correct a trade deficit is usually only feasible for small and open economies, e.g. Singapore, that use exchange rates as to manage monetary policies. Most large economies use interest rates to manage their monetary policies (China being an exception).

However, the main challenge for small and open economies concerning the use of depreciation/ devaluation to reduce a trade deficit is their reliance on imported FOPs, and hence a need to maintain a modest and gradual appreciation to lower price of imported FOP in terms of domestic currency. Therefore, using depreciation/ devaluation to reduce a trade deficit could lead to adverse unintended consequence of imported cost-push inflation, which could also hurt export price competitiveness.

Furthermore, the use exchange rate policies to correct trade deficits would likely worsen the deficit in the short run as PEDx and PEDm are less than one. It would likely only start to reduce trade deficits in the long run when PEDx and PEDm are greater than one.

2.5 Use of Exchange Rate Policy in correcting BOT Surplus

Countries often do not intervene in the case of BOT surplus (as it positively adds to a country's official reserves) unless they are pressured by trading partners who suffer significant BOT deficits and threaten to engage in a trade war.

In addition, BOT surplus could bring about unintended consequences, typically demand-pull inflation, and the government might use exchange rate policy to correct the other issues accordingly.

If they wish to adjust, take note that the exchange rate policy (some elaboration is provided below) available to a government for reducing a persistent and large balance of payments surplus is simply the opposite of that appropriate for correcting a balance of payments deficit.

1. Mechanism

Current Account Surplus:

- By revaluing currency or bringing about an appreciation, foreign price of exports rise and domestic price of imports decrease.
- This will result in a fall in quantity demanded for exports and a rise in quantity demanded for imports.
- Assuming the MLC holds, the net exports (X-M) decreases, eliminating or reducing the trade surplus.

2. Evaluation of Policy

State of the economy and Unintended consequences	In practice, countries experiencing BOT surpluses resisted revaluation because such actions would make their domestically produced goods and services more expensive to foreigners and cut into their sales. Domestic industries will be hurt, and unemployment raised. It is therefore unlikely for countries to willingly revalue UNLESS the BOP surplus leads to other major issues (e.g. demand pull inflation) in the country or if the country faces significant pressure from trading partners.

Root Cause	Should the root cause of the surplus originate in other countries (that are recording trade deficits), exchange rate policy would do little to reduce the surplus. For example, when China joined the World Trade Organisation (WTO) in 2001, it fuelled the growth of manufacturing exports to the US and the rest of the world. Deemed the 'factory of the world', China provided lowly priced consumer goods that satisfied consumers' taste and preferences. To address the persistent China trade surplus that is contributed largely by the export of low price consumer goods to the US, it would be essential to target US consumption and saving habits instead.

Overall Effectiveness of Exchange Rate Policy to correct a persistent BOT Surplus

Governments will have to first determine whether a BOT surplus constitutes an urgent problem. As stated earlier, a persistent BOT surplus is less of a problem compared to a deficit, unless it leads to demand pull inflationary pressures. Secondly, governments will need to determine the root cause and whether manipulating the exchange rate would address the root cause. E.g. in the case of China, while an undervalued yuan has been largely addressed as China switched to a managed float and allowed the yuan to appreciate; their trade surplus has persisted, suggesting that the root cause isn't due to an undervalued yuan making Chinese exports artificially price competitive.

2.1 Use of Supply-Side Policies to correct BOT deficit:

1. Mechanism

In addition to the above policies, the government may also make use of supply-side policies to improve price and product competitiveness of domestic product to increase demand for domestic good internationally. **This has an expenditure switching effect.**

Compared to the use of short-term demand management tools, e.g. fiscal, monetary and exchange rate policies, to correct trade deficits, **supply-side policies can improve long-term export competitiveness**. The main focus of supply side policies in correcting a BOP deficit due to current account is to make the country more productive and to increase its exports.

Examples of some possible supply side policies may include:

a) Training & retraining to increase labour productivity

A country with BOP deficit must pursue a long term supply side policies to increase its productivity thus increase its export competitiveness. This can be done by investing in education and encouraging investment which improve the quality of its factors of production which in turn will improve the cost of production and quality of exports.

If export prices are lower relative to other economies and PED_x >1, this would lead to a more than proportionate rise in quantity demanded for exports and a rise in export revenue. Assuming import expenditure remains the same, the trade and BOP deficit would be reduced.

b) Provision of monetary incentives for firms to increase R & D investment.

Firms may carry out **process innovation** to improve efficiency of production to reduce unit cost of production to increase export price competitiveness. If export prices are lower relative to other economies

and PED_x >1, this would lead to a more than proportionate rise in quantity demanded for exports and a rise in export revenue. Assuming import expenditure remains the same, the trade deficit would be reduced.

Firms may carry out **product innovation** to improve quality of product to increase demand and reduce substitutability (reduce PED/XED) of domestic goods. This would lead to an increase in demand for the country's exports and consequently a rise in export revenue. Assuming import expenditure remains the same, the trade deficit would be reduced.

2. Evaluation of Policy

Unintended Consequences	The R&D costs may be borne by either the government or the producers. Should the government have to bear the cost of R&D it may lead to a rise in government debt or the opportunity cost of less expenditure in other areas, e.g. healthcare and transport.
Time period	It will take time for successful research outcomes and commercialisation of research findings. Should this take a long time, other competitors may have developed a higher quality substitute and hence the policy would have little impact on the country's export competitiveness.

Note: Other policies that may reduce the trade deficit include trade policies and protectionist policies. This will be covered under Theme 3.3: Globalisation and the International Economy.

2.2 Use of Supply-Side Policies to correct BOT surplus:

One of the effects of a persistent BOP surplus is demand pull inflation which supply side policies will not directly address, hence the focus of the use of supply side policies is to diversify the economy if the persistent BOP surplus is due to a growth in trade surplus specific to one sector eg commodities like oil, natural gas.

Diversification of exports

If a large proportion of exports is made up of goods and services from one sector, the government can seek to diversify its economy by increasing spending on human capital and infrastructure in order to provide conditions suitable for the development of new industries. This can be supplemented by incentives through tax cuts, grants and subsidies to attract local and foreign firms to invest in the new sectors. Or example Bahrain which is one of the oil exporting Arab economies has diversified its economy by developing banking and financial sectors – particularly Islamic banking and built the first aluminium smelter in the Gulf which now provides the country's biggest non-oil goods exports.

Time lag and uncertainty of effectiveness of policies. In an attempt to diversify its economy, the government may effectively support promising sectors. It remains uncertain if these infant industries may eventually develop and excessive government support may lower incentive to increase productivity and enhance international competitiveness.

Overall effectiveness of Supply- side policy in correcting BOP imbalance.

Whether or not supply-side policy is effective in correcting BOP imbalance is heavily dependent on the country and situation. The best policy is one that suits both the country (the economic characteristics as well as the situation).

Summary Table: Balance of Payments

Definition	The BOP of a country is a statement of all the international transactions of a country with the rest of the world over a period of time usually a year.
Structure	• Current Account • Capital and Financial Account
Meaning of BOP Equilibrium and Disequilibrium	BOP Equilibrium: trade and capital flows into and out of the country balances over a number of years. Overall balance will be zero. BOP Disequilibrium: persistent tendency for trade and capital outflows to be more or less than the corresponding inflows.
Causes of persistent Deficit in the BOP Causes of a persistent surplus in the BOP	A deficit on the current account is not matched by inflows in the capital and financial account or a net inflow on the capital and financial account not matched by a surplus on the current account. A surplus on the current account not matched by outflows from the capital and financial account or a net outflow from the capital and financial account not matched by a deficit from the current account.
Causes of current account disequilibrium (Balance of Trade)	Price factors: • Different rate of inflation between countries • Changes in Exchange Rate • Changes in domestic supply conditions Non-price factors: • Changes in interest rates • Changes in demand conditions • Establishing institutional changes • Imbalances in the Country's Capital and Financial Account
Causes of Financial and Capital Disequilibrium	• Changes in interest rate • Expected changes in exchange rate • Changes in political and social factors
Effects of BOP deficit on Government	• Ability of the government to sustain chronic deficits which may lead to depletion of reserves. • Incurrence of debts • Fall in country's competitiveness in attracting FDI and thus affect economic growth • Reflects poor economic management resulting in loss of confidence in the economy • Capital flights resulting in deterioration in exchange rate.

Effects of BOP deficit on the consumer	Future income may be affected to service country's debts resulting in a fall in consumers' income and standard of living.
Effects of BOP deficit on producer	• If deficit is planned due to demand for imported capital goods, this will lead to an improvement in the country's current account overtime. • If BOP deficit is unplanned, this is a serious problem as it shows the country is living beyond its means.
Effects of BOP surplus on the government	• Increase in government reserves which can be used to pay past loans.
Effects of BOP surplus on the consumer	• Appreciation of currency. Consumers find imports relatively cheaper resulting in increase in import expenditure and thus increase in variety of goods and a higher standard of living.
Effects of BOP surplus on producer	Producers who export goods and services will now experience a relatively more expensive price. Assuming PED of exports is greater than 1, export revenue will fall.
Correcting BOT deficit	• Contractionary Fiscal policy: Fall in G and increase in T • Contractionary Monetary Policy: increase in interest rates. Both are expenditure reducing measures which will reduce imports and thus deficit in BOT • Exchange rate policy: Depreciation of currency. • Supply side policy
Correcting BOT surplus	• Expansionary Fiscal policy: increase in G and decrease in T • Expansionary monetary policy: decrease in increase rate • Exchange rate policy: Appreciation of the currency • Supply side policy

Glossary

- **Favourable Balance of Trade**: This indicates the avoidance of persistent balance of trade surplus or deficit
- The **Balance of Payments** (BOP) refers to a country's records of all its international transactions over a period of time, usually a year.
- The **Current Account** refers to the records of all international flows of money arising from trade, property income and transfers.
- The **Capital / Financial Account** refers to the records of all international transactions arising from purchases and sale of physical and financial assets.
- **Short-term Capital Flows** (hot money / portfolio investments) refer to the flows of money arising from international transactions in financial assets. [Recorded as "Other Investment (Net)" in the Financial Account]
- **Long-term Capital Flows** refer to flows of money arising from the international transactions of physical assets. [Recorded as "Direct Investment (Net)" and "Portfolio Investment (Net)" in the Financial Account.
- A **BOP Equilibrium** refers the situation where the combined inflow of both the current and capital account is equal to the combined outflow.
- A **BOP Disequilibrium** refers the situation where combined inflow of both the current and capital account is not equal to the combined outflow.
- A **BOP Surplus** refers to the situation where the combined inflow of both the current and capital account exceeds the combined outflow.
- A **BOP Deficit** refers to the situation where the combined inflow of both the current and capital account is less than the combined outflow.

Appendix 1: Canada slips into surprise trade deficit in ominous sign that demand is weakening

Canada's trade balance unexpectedly swung into deficit in November, as the country's energy producers shipped less product amid a drop in prices.
Statistics Canada reported Jan. 5 that the value of exports dropped 2.3 per cent, while imports declined 2.1 per cent, resulting in a deficit of about $41 million, only the second shortfall in 2022.
Canada recorded a trade surplus of $130 million in October and surveys of analysts showed Bay Street was expecting the surplus to widen to about $500 million. Instead, eight of 11 broad export categories posted declines, led by energy products, which plunged 4.7 per cent from the previous month.
Coal dropped 24.3 per cent from October, natural gas fell 13.1 per cent, refined petroleum products fell 7.9 per cent and crude oil/bitumen declined 1.8 per cent.
Prices played a significant role, but Capital Economics economist Stephen Brown noted that export volumes declined 1.4 per cent, an ominous sign as it signals weaker demand for exports, an important driver of Canadian economic growth.

"Lower commodity prices have now wiped out the goods trade surplus, while the falls in export and import volumes present downside risks to the preliminary estimate that GDP edged up in November," Brown said,"The latest surveys suggest that export and import volumes will weaken further."

Statistics Canada last month forecast a month-over-month increase in gross domestic product for November of 0.1 per cent when it reported GDP for October.

Another sour note in the trade data was the 6.4 per cent drop in exports of automotive parts, the third time that has happened in four months, according to Desjardins Economics. Including this most recent drop, Desjardins estimates that international shipments are now 20.4 per cent below pre-pandemic levels.

"This suggests current setbacks could have more to do with a drop in demand than with lingering pandemic disruptions," Jocelyn Paquet said in a note.

The export news wasn't all grim. Agricultural shipments increased for the seventh time in eight months, Paquet noted, with wheat and canola reaching new all-time highs.

"The conflict in Ukraine has certainly stimulated demand for these crops, but the massive increase in exports would not have been possible without the particularly good harvest experienced last summer," she wrote.

Among the import segments that recorded pullbacks: aircraft and transportation equipment fell 14 per cent; forestry products and building materials fell 6.1 per cent, and consumer goods declined 5.7 per cent.

Weaker pharmaceutical imports were partly to blame for the drop in consumer goods imports. But Statistics Canada noted that other consumer goods imports also fell, "a worrying sign for domestic demand," Brown wrote.

Source: https://financialpost.com/news/economy/canada, Jan 05, 2023

Appendix 2: Singapore economy will take longer to recover from Covid-19 crisis than past recessions: MAS

SINGAPORE - The Covid-19 shock has affected Singapore's domestic-oriented industries more severely than in past recessions, so economic recovery will likely take longer, the Monetary Authority of Singapore (MAS) said on Wednesday (Oct 28).

MAS said the pace of recovery is expected to moderate in the quarters ahead, as firms and households continue to be restrained by income loss and increased uncertainty, in turn holding back on investment and discretionary spending.

Downside risks to the growth outlook could also materialise if a resurgence in worldwide Covid-19 infections prompts more shutdowns and results in weaker-than-expected external demand, or if domestic labour market conditions deteriorate further and hamper a decisive pickup in consumer demand.

MAS reiterated the Government's forecast for the economy to shrink by a record 5 per cent to 7 per cent this year because of the coronavirus pandemic. It said the economy will post above-trend growth for 2021 due to the effects of the low base in 2020.

"The path ahead remains clouded with uncertainty," MAS warned in its twice-yearly macroeconomic review released on Wednesday.

"Some pockets of the economy, particularly the travel-related and some contact-intensive domestic services, are not expected to recover to pre-pandemic levels even by the end of next year."

The Singapore economy registered its worst performance ever in the second quarter because of the circuit breaker measures, before experiencing a growth rebound in the July to September period when most of the movement curbs were relaxed.

The nation's gross domestic product (GDP) contracted in the second quarter by 13.2 per cent on a quarter-on-quarter seasonally adjusted basis. The rebound in the third quarter saw the economy expanding by 7.9 per cent on the same measure.

While some of the sectors, mainly export-driven manufacturing, have since seen a pickup as the economy reopened, overall output is still some 7 per cent below pre-Covid-19 levels, MAS noted.

The rebound in the third quarter was also aided by the Government's budgetary support measures. The impetus from fiscal support is likely to abate in the fourth quarter even as some measures such as the Jobs Support Scheme may persist.

DBS Bank’s senior economist Irvin Seah said that while the Singapore economy is on the mend, amid the phased reopening at home and rebound in some regional markets, the recovery will remain uneven, and growth performance across sectors will differ considerably.

“The services sector has borne the brunt of the crisis and is expected to remain a drag on growth and employment,” Mr Seah said.

MAS said that unlike the global financial crisis of 2008 when the resident unemployment rate returned to pre-crisis levels after six quarters, the recovery in employment is likely to be uneven and slow.

Indeed, the resident unemployment rate continued to rise to an average of 4.3 per cent in July to August even after phase two of the economy’s reopening in June when the rate was at 3.8 per cent.

MAS said the unemployment rate among Singaporeans and permanent residents is likely to stay elevated in 2021, keeping wage growth low.

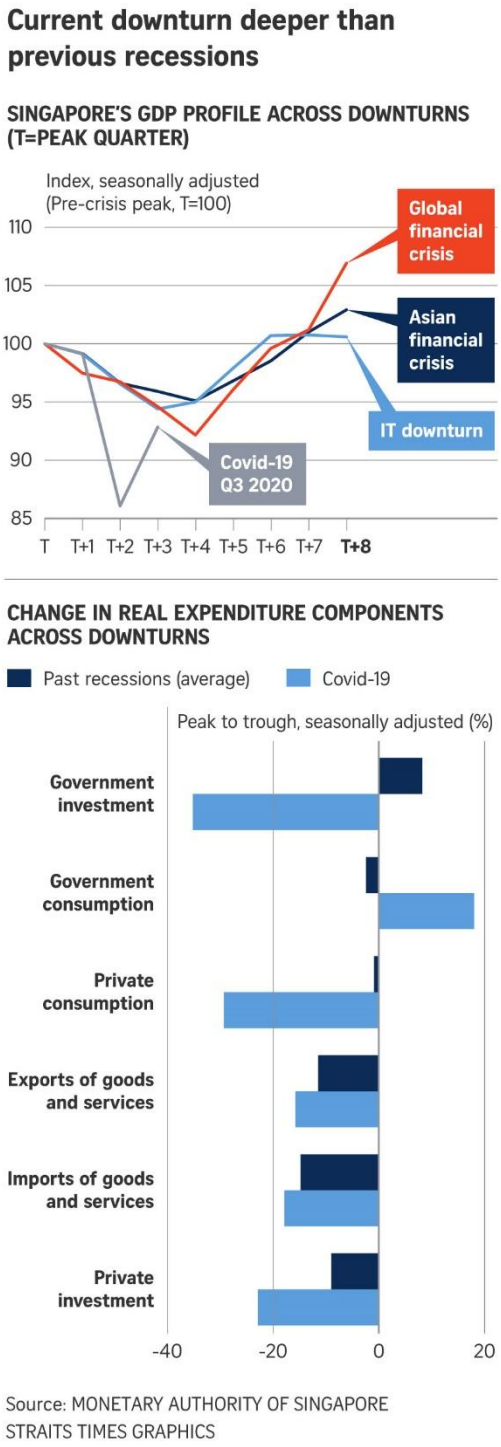
The central bank also said that the Covid-19 recession has been unprecedented in its intensity, having resulted in a cumulative 14 per cent decline in GDP from pre-crisis levels in the fourth quarter of 2019 to the trough in the second quarter of 2020. This compares with an average contraction of 6.1 per cent across the previous recessions.

Explaining why the recovery would take longer, MAS said the Covid-19 shock has disproportionately affected domestic-oriented and travel-related services in Singapore - such as food and beverage, retail, construction and aviation and hospitality - unlike previous recessions that were typically driven by the external-oriented manufacturing sector. These sectors have stronger interlinkages with firms and households within the domestic economy, thus amplifying the negative shock.

"Although the domestic-oriented sectors account for a smaller share of GDP compared to the external-oriented sectors, they generate significant indirect effects or negative spillovers on the economy through the production and consumption channels," MAS said.

The loss in final demand in the worst-hit sectors generates ripple effects through supply chains, affecting other firms in the same or different industries. The drop in final demand also prompts companies in the worst-hit sectors to make a proportional cut in wages for their employees, thus weakening household consumption.

Thus, MAS said: "In all likelihood, the recovery will be more protracted than those in the past."



For the global economy, the central bank expects the near-term rebound - supported by unprecedented fiscal and monetary policies - to fade into an incomplete recovery.

World economic growth is forecast to return to trend during 2022 as the recovery fades, but from a lower end-2021 level, leaving the global economy on a permanently lower GDP trajectory, it said.

Global GDP is projected to contract by 3.9 per cent in 2020. While the world economy will recover to grow by 6.2 per cent in 2021, it will still be about 4 per cent below the level projected before the Covid-19 shock.

Source: *The Straits Times*, Oct 30, 2020