

ANGLO-CHINESE JUNIOR COLLEGE JC2 Economics 2024

H1GOVERNMENT BUDGETH2Government Revenue & Expenditure

Section		Content	Page
1	Gover		
	1.1	Sources of Government Revenue	5
	1.2	Types of Taxes	6
	1.3	Structure of Tax Rates	6
	1.4	Impact of Taxes on the Economy	8
2	Government Expenditure		
	2.1	Types of Government Expenditure	10
	2.2	Impact of Government Expenditure on the Economy	11
3	Using	the Budget	
	3.1	Goals of Using the Budget / Fiscal Policy	12
	3.2	Financing a Budget Deficit and Public Debt	14
	3.3	Singapore: Fiscal Sustainability	15
4	Annex	c · · · ·	

Reference Texts:

- Singapore Budget 2024 (https://www.mof.gov.sg/singaporebudget)
- Inland Revenue Authority of Singapore (https://www.iras.gov.sg/irashome/default.aspx)

UNIT SUMMARY

In microeconomics, we have learnt about the active role of the government in correcting market failure, such as in the provision of public and merit goods, regulating competition, and redistributing incomes in order to maximise welfare in the economy.

We have learnt that **government expenditure (G)** forms part of the aggregate demand of the economy: **increasing G will increase aggregate demand and expand the economy**. On the other hand, **taxation (T) is** a withdrawal out of the circular flow of income, leading to a **decrease in aggregate demand and a contractionary effect** on the economy.

In this topic on the government budget, you will learn about the types of government expenditure and taxes which a government adopts to achieve the country's microeconomic and macroeconomic goals.

A government's budget is **the financial plan of a government for a given period**, usually for a fiscal year, which shows how the government generates its revenue to finance its various types of expenditure. The budget balance, whether in surplus or deficit, and its composition, in terms of the revenue sources and expenditure patterns, reflect the areas and aims of intervention that the government is focusing on for the year.

This knowledge will enable you to understand and appreciate the objectives and workings of the fiscal policy in macroeconomic management.

LEARNING OUTCOMES

Enduring Understanding:

The types and levels of government expenditure and taxes and the overall budget balance will have consequences on the macroeconomic performance of an economy.

Knowledge Objectives:

Students will be able to understand:

- The types of expenditure and taxation in the annual budget
- The types of budget balance
- The relationship between the budget balance and the change in the level of aggregate demand

Skills Objectives:

Students will be able to explain the role of the budget balance (deficit, surplus or balanced) and the types of expenditure and taxes in the attainment of both micro and macroeconomic goals.

The Overarching Essential Question:

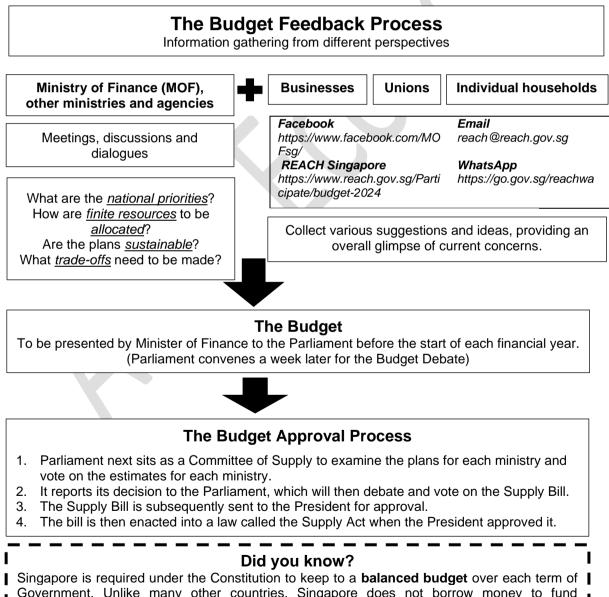
How may the government's budget impact the attainment of economic goals for the government?

Introduction: The Budget Process

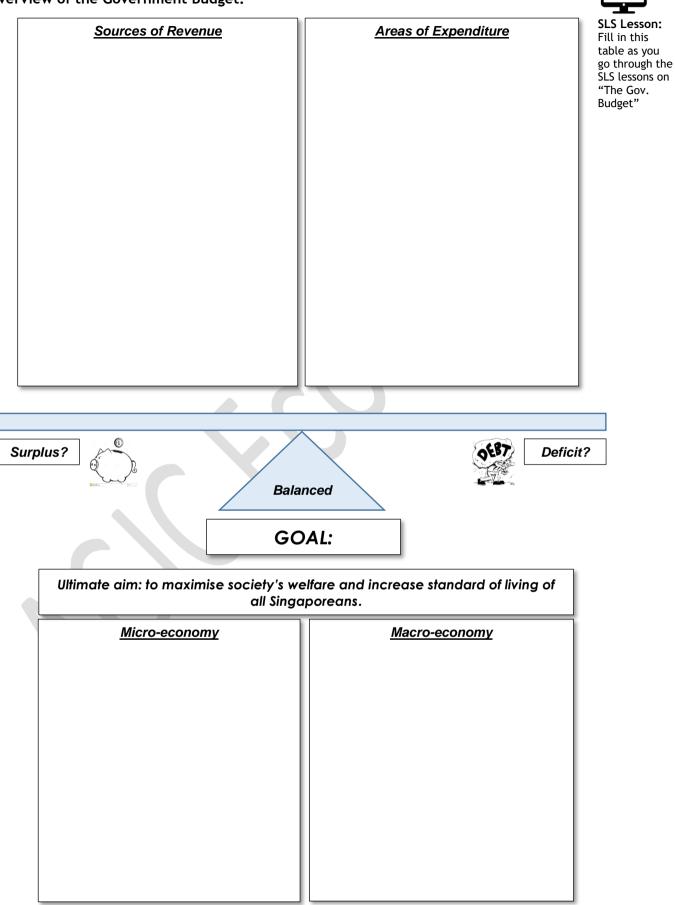
How are Singapore's finances budgeted and managed? The Singapore Government manages a 'Budget' on behalf of the nation. The Budget is prepared for every financial year which begins on 1 April. Information that you will find in the Budget include the revised revenue and expenditure projections for the financial year ending, and the planned revenue and expenditures for the next financial year.

Like a good family budget, the Government goes through a rigorous process to design a Budget that **addresses Singapore's current and future needs**, while **remaining** <u>fiscally sustainable</u> (this means that the government only spends what it can earn in their term of government and doesn't burden future generations with debts).

The following shows the budget feedback process through which the government plans its revenue and spending each year:



Government. Unlike many other countries, Singapore does not borrow money to fund government expenditure, and the Singapore government does not have any external debt. This practice of fiscal discipline ensures that government funds can be put into good use for Singapore's development in all sectors.



1. PUBLIC / GOVERNMENT REVENUE

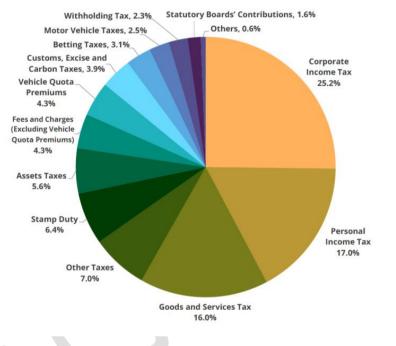
1.1 Sources of Government Revenue

There are many sources of public/government revenue to finance government expenditure. The Singapore Government's overall revenue comprises:

- the Government Operating Revenue and
- Net Investment Returns Contribution (NIRC). This refers to the returns on the government's investment returns on our reserves.

The government's Operating Revenue, which includes tax and non-tax revenues (shown below) contributes to 80.7% of the overall government revenue in FY2022. The NIRC contributes to the remaining 19.3%.

Breakdown of Government Operating Revenue in FY2022¹



Source: Singapore Budget 2023

Taxes are compulsory payments to the government by private individuals and corporations. They are usually based on a proportion of income of private individuals (income tax), a proportion of profits of corporations (corporate tax), and on consumption of goods and services (GST).

- In relatively low-income countries, the amount of taxable income is very low. Thus, taxes may not contribute much revenue to the government.
- In structuring its tax system, the government has to be careful not to discourage work effort, savings and investment incentives of firms.

The Inland Revenue Authority of Singapore (IRAS) is the main tax administrator to the Government. IRAS collects taxes that account for more than 70% of the Government's Operating Revenue that supports the Government's economic and social programmes to achieve sustainable growth and an inclusive society.



1.2 Types of Taxes

(a) Direct taxes

- These are taxes levied on the income or earnings of an individual or an organisation. They are paid directly by the taxpayers to the tax authorities.
- Direct taxes are named as such because:
 - the burden of the tax **cannot** be shifted to other people, and
 - the impact and incidence of the tax fall directly on the taxpayers

Examples:

- 1. Personal income tax
- 2. Corporate income tax
- 3. Property tax

(b) Indirect taxes

- These are usually levied on expenditure (on goods and services). They are collected through intermediaries, e.g. retailers.
- The burden of tax can be shifted to another party; the extent of the tax burden (on consumer and producer) depends on the price elasticities of demand and supply.

Examples:

- 1. Excise duties: a tax charged on the sale of a particular good
- 2. Custom duties: a tax charged on imports
- 3. GST: a tax on all goods and services; tax is paid when money is spent on goods and services, including imports

1.3 Structure of Tax Rates

Taxes may be classified as proportional, progressive or regressive:

(a) Proportional tax (flat rate tax)

As income rises, the percentage of income paid as tax is unchanged.

<u>Example</u>: When income is \$1,000 and the tax rate is 10%, the amount paid in tax would be \$100. When income increases to \$2,000 and the tax rate remains at 10%, the amount of tax is \$200.

Income (Y)	Tax Paid (T)	% income paid in tax $\begin{pmatrix} T \\ Y \end{pmatrix}$ x 100
\$1,000	\$100	10%
\$2,000	\$200	10%

(b) Regressive tax

As income rises, the percentage of income paid as tax falls.

Example: With 7% GST chargeable on a handphone (price \$100) purchased by 2 individuals Mr Tan and Mr Lee, with differing income.

	Income (Y)	Tax Paid (T)	% income paid in tax $\begin{pmatrix} T \\ Y \end{pmatrix}$ x 100
Mr Tan	\$1,000	\$7	0.7%
Mr Lee	\$2,000	\$7	0.35%

- This structure imposes a heavier burden on the lower income group and thus worsens the distribution of income in the economy.
- A specific tax is usually regressive in nature.
- In general, direct taxes tend to be progressive while indirect taxes tend to be regressive. The reason is that the rich tend to spend a smaller proportion of their income than the poor do. The burden of an indirect tax on consumption is thus felt more by the poor than the rich.

(c) Progressive tax

As income rises, the percentage of income paid as tax rises.

Chargeable Income	Income Tax Rate (%)	Gross Tax Payable (\$)
First \$20,000	0	0
Next \$10,000	2	200
First \$30,000	-	200
Next \$10,000	3.50	350
First \$40,000	-	550
Next \$40,000	7	2,800
First \$80,000	-	3,350
Next \$40,000	11.5	4,600
First \$120,000	-	7,950
Next \$40,000	15	6,000
First \$160,000	-	13,950
Next \$40,000	18	7,200
First \$200,000	-	21,150
Next \$40,000	19	7,600
First \$240,000	-	28,750
Next \$40,000	19.5	7,800
First \$280,000	-	36,550
Next \$40,000	20	8,000
First \$320,000	-	44,5503
Next \$180,000	22	9,600
First \$500,000	-	84,150
Next \$500,000	23	115,000
First \$1,000,000 In excess of \$1,000,000	- 24	199,150

Singapore resident tax rates from 2024 onwards

Source: www.iras.gov.sg

Based on the data from the table above:

	Income (Y)	Tax Paid (T)	% income tax $\left(\frac{T}{Y}\right)$ x 100
Bryan	\$20,000	\$0	0%
Marie	\$30,000	\$200	0.666%
Jonathan	\$100,000	\$5650	5.65%

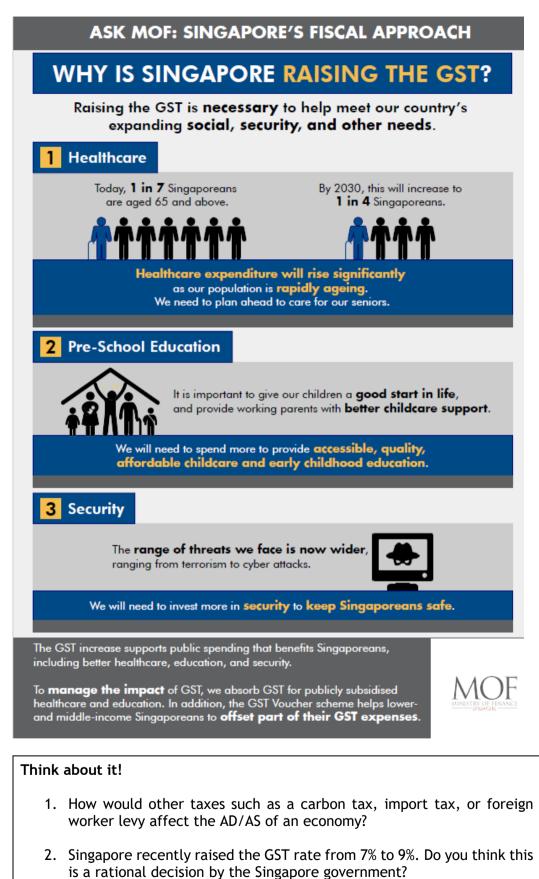
Jonathan, who earns the highest income, also pays the highest proportion of his income as tax.

1.4 Impact of taxes on the economy

As the government implements taxes for various purposes, these are likely to have an impact on the economy. The impact of these taxes could be intended or unintended. The following table summarises how some common examples of taxes could affect the economy:

Type of Tax	Impact on the AD/AS of an economy		
Personal	Personal income tax is a direct tax. It is levied on an individual's		
Income Tax	income.		
	An increase in personal income tax reduces the disposable income of households. This reduces the willingness and ability of households to consume, and results in a fall in consumer expenditure. Thus, AD would fall.		
Corporate Tax	Corporate tax is a direct tax. It is levied on a firm's profits. An increase in corporate tax reduces the after-tax profits of a firm. This reduces the willingness and ability of firms to invest, and results in a fall in investment expenditure. Thus, AD would fall. In the long run, the fall in investments may also result in a stagnant productive capacity and LRAS. Note: Corporate tax does not affect a firm's cost of production		
	as firms only have to pay the tax after they have made profits.		
Goods and Services Tax (GST) or Value-Added	Goods and Services Tax (GST) (also known as value-added tax or VAT in some countries) is a tax that is levied on goods or services consumed domestically, including imports.		
Tax (VAT)	Since GST is an indirect tax paid for by firms, an increase in GST would lead to an increase in cost of production. With a higher cost of production, firms are less willing and able to produce, leading to a fall in SRAS.		
	Note: Students often try to explain how GST would affect consumption expenditure and decrease the AD (shown by a leftward shift). This would be incorrect. Since the increase in GST has caused a fall in SRAS, this has led to an increase in general price level. It is this inflation that affects consumer expenditure, and the impact on consumer expenditure can be seen as a <u>movement along</u> the AD curve. Thus, there should be <u>no shift</u> in the AD curve.		

GST in Singapore:



2. PUBLIC / GOVERNMENT EXPENDITURE

2.1 Types of Government Expenditure

Government expenditure can be divided into three categories:

i. Operating (Current) Expenditure

- Operating expenditure is incurred in day-to-day routine work.
- The expenditure is recurrent year after year.
- Singapore's operating expenditure includes:
 - Ministries' expenditure on labour
 - Other operating expenditure e.g. the Armed Forces' payment of salaries and allowances for NSmen, maintenance of equipment and camps, purchases of military equipment; and
 - Grants-in-aid (GIA) to statutory boards and aided educational institutions.

ii. Development Expenditure

- Development expenditure is extra expenditure for the purpose of economic and social development
- The expenditure in anticipation of possible returns in future
- Direct expenditure for projects undertaken by the ministries, including capital grants & capital injections for projects undertaken by the statutory boards & aided institutions.
- Singapore's development expenditure includes:
 - Rail projects like the Thomson-East Coast Line, North-South Corridor Expressway
 - Upgrading of public residential precincts and rejuvenation of the neighbourhoods

iii. Special Transfers

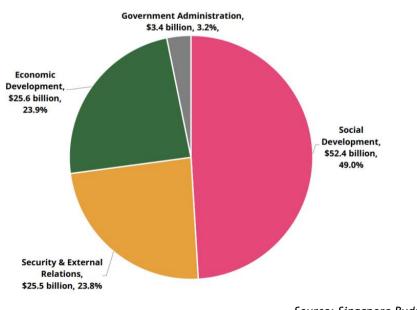
- These refer to one-off transfers given by the Government to businesses and households.
- They could also be top-ups to endowments and trust funds, usually for social protection, income redistribution or other targeted economic objectives.
- Examples of one off-transfers include the Wage Credit Scheme, MediSave topups in the Central Provident Fund and GST vouchers.



2.2 Impact of Government Expenditure on the Economy

Type of Government Expenditure Operating expenditure	 Impact on AD/AS of the economy Operating expenditure keeps the economy running but does not have long term impacts. It affects the Government Spending (G) component of a country's AD.
Development expenditure	 Development expenditure is usually spent to develop the economy in the long run. It affects the Government Spending (G) component of a country's AD. It usually improves the infrastructure, capital, or productivity of the economy too. With the resulting increase in productive capacity, LRAS would also increase.
Special transfers	 Special transfers are paid from the government to firms or households, and the government does not get any goods or services in return. As such, it <u>would not</u> increase the Government Spending (G) component of the AD. If special transfers are given to households, such as CDC vouchers, this increases the purchasing power of households and increase the Consumer Expenditure (C) component of the AD. If they are given to firms, such as a subsidy for innovation, this increases the firm's willingness and ability to invest, increasing the Investment Expenditure (I) component of the AD.

Breakdown of Government Spending by Sector in FY2022²



Source: Singapore Budget 2023

3. USING THE BUDGET

The primary objective of the government's tax system is to raise revenue. However, there may also be other purposes. These are achieved using the government budget.

A government budget is an estimate of government revenue and expenditure for the coming year, presented by the Minister of Finance to the legislature (Parliament) for approval.

The use of the 'Budget' in macroeconomics is termed 'fiscal policy'. (Refer to section on Fiscal Policy in the future topic, "Macroeconomic Policies").

3.1 Goals of Budget / Fiscal Policy

Although fiscal policies differ across countries, they generally share three common goals: efficiency, equity and economic growth. The Singapore government also aims to achieve fiscal sustainability (see Section 3.3), where it maintains a sound and sustainable fiscal system that to realise its long-term plans for Singapore.

(a) Improve efficiency in resource allocation

Although it is not possible to achieve complete efficiency, government expenditure and taxation policies are generally devoted towards increasing efficiency in areas where the market is unable to do so. Examples include the provision of public goods, subsidising merit goods, and taxing demerit goods.

(b) Improve equity

While the concept of equity may be different for different individuals, government expenditure and taxation policies are often used to redistribute income for the purpose of achieving greater equity. A *progressive* fiscal system fosters continued social mobility and uplifts the vulnerable in society, achieving inclusive growth.

Thus, the better-off contribute more taxes (higher personal income taxes and consumption taxes), while lower- and middle-income households receive more in benefits than the taxes they pay. At the same time, the Singapore budget also strengthened support for low-wage workers, vulnerable seniors, and households with greater caregiving burdens, through programmes like Workfare and Silver Support. Additionally, resources are redistributed in a way that enhances the capability of the people, through investments in areas like education and housing.

(c) Achieve non-inflationary sustained economic growth

Sound and sustainable fiscal policies provide macroeconomic stability and the conditions that are conducive for sustained economic growth. In addition, it plays a critical role in enhancing the economy's long-term capabilities for growth.

Towards this end, governments set aside development expenditure to build capacity. For example, governments may invest strongly to accelerate innovation and digitalisation of industries, grow innovative enterprises, and pursue new frontiers of growth. Governments also may invest in research in areas like health and biomedical sciences, climate change and artificial intelligence. The **type of fiscal policy** adopted will depend on the following:

(i) <u>Current state of the economy, projected economic performance for the fiscal year</u>.

E.g. As unemployment rate increases with the fall in AD and economic growth rate during the Covid-19 pandemic, many governments adopted a budget deficit i.e. expansionary fiscal policy.

However, fiscal discipline requires the government to balance the budget in the long term, i.e. gradually move towards a surplus budget when the economic performance improves.

(ii) <u>Stage of development of economy</u>.

E.g. For developing or emerging economies with low domestic savings due to the high poverty level, governments need to adopt budget deficit to boost capital resources e.g. infrastructure development.

BUDGET POSITION	FEATURES	OBJECTIVES
Surplus budget (Contractionary Fiscal Policy)	Taxation revenue is more than government expenditure. Government cuts expenditure or raises tax, or both.	A policy that aims to reduce inflation through reducing AD → prevent overheating of economy
Deficit budget (Expansionary Fiscal Policy)	Taxation revenue is less than government expenditure. Government cuts taxes or increases expenditure, or both.	A policy that aims to boost economic growth & employment through increasing AD
Balanced budget	Taxation revenue is equal than government expenditure.	To stabilise economy by maintaining healthy fiscal position and hence, economic growth.

Singapore's Tax System

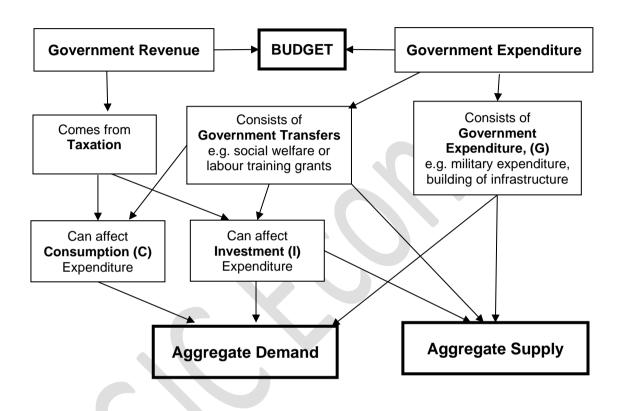
Tax policy is an integral part of fiscal policy. The main objectives of tax policy in Singapore are:

- <u>Revenue Raising</u> This is the traditional aim of tax policy. Tax revenue is a substantial source of funding for government operations.
- <u>Promotion of Economic and Social Goals</u> Tax has been used to influence behaviour towards desirable social and economic goals. For instance, to encourage mechanisation and automation, the government allows accelerated capital allowance for most assets used for business purposes. Tax rebates are given to encourage Singaporeans to have more children.

The fundamental tenet of Singapore's tax policy is to keep tax rates competitive both for corporations as well as individuals. Keeping our corporate rate competitive will help us to continue to attract a good share of foreign investment. Keeping our individual rates low will encourage our people to work hard. It will also make risk-taking worthwhile and encourage entrepreneurship. To increase the resilience of taxes as a source of government revenue, Goods & Services Tax (GST) was introduced in 1994. This balanced mix of tax on consumption and income reduces the vulnerability of revenue intake to adverse changes in economic conditions and strengthens the resilience of Singapore's fiscal position.

Source: www.iras.gov.sg

Summary of how the government budget affects the economy:



3.2 Sources of Deficit Financing & National / Public Debt

When the government implements a budget deficit (tax revenue < government expenditure), the government has to find ways to finance the deficit, hence the term deficit financing.

INTERNAL SOURCES	EXTERNAL SOURCES	
a) Draw from accumulated reserves (past surpluses) e.g. Singapore's Net Investment Return Contributions (NIRC)	Borrow from other governments and/or international financial	
 b) Borrow from households, firms, financial institutions <pre>Government borrows by selling government securities (treasury bills, bonds) → borrowed funds channelled to government.</pre> c) Print new notes <pre>Government pays for her expenditure with the new notes printed.</pre> 	institutional international institutions like the World Bank, International Monetary Fund (IMF). This can come in the form of direct loans or through sale of government securities.	

Burden of Public Debt

The burden of debt is not just the actual money payments that go into repayments, but it also includes the real burden of the loss of economic welfare and other negative consequences on the economy.

In order to assess the burden of public debt, we must consider the **nature** and **purpose** of the public debt.

- If the government borrows to finance economic activities that are <u>productive</u>, e.g. for infrastructure development projects like irrigation and rail transport, it can be self-financing → no real burden as there are future income streams, employment and growth to sustain the debt.
- If the debt is obtained for <u>unproductive activities</u> e.g. finance war → real burden as this debt has to be repaid from future incomes.
- Borrowing from external sources poses higher welfare loss to society as the interest payment (in future) not only takes away opportunities for future generations, but also represents an outflow from the economy.
- Excessive fiscal debt may result in capital flight and sovereign debt defaults which can create severe macroeconomic instability.
- Additionally, the economy may have to undertake painful austerity measures to restore investor confidence.
- When the government is in debt, there will be less resources available in the future for the government to spend on social and developmental needs, the main consequence of budget deficits is the intergenerational transfer of welfare from future generations to the current ones.

3.3 Singapore: Fiscal Sustainability

Singapore's fiscal policies have helped to steward the country's progress over the years. They aim to create the conditions for macroeconomic stability, support economic growth, and promote social equity. We achieve this by <u>maintaining a balanced budget, investing for the future, and ensuring a fair</u> <u>and progressive fiscal system.</u>

The Singapore government has to operate on a balanced budget policy. It can only spend from the fiscal reserves accumulated in its term unless the President approves a draw on the Past Reserves. This framework has in turn allowed the government to invest its reserves for long term returns. Part of these returns supplement government revenues, and forms one of the largest contributors to government revenues.

The Government likewise adopts a disciplined and prudent approach towards borrowing. Borrowings are not revenues and have to be repaid. Hence, the Government does not borrow for recurrent spending needs, so as not to overly burden our future generations who will have to service the debt incurred by current and previous generations. Instead, the Government issues debt instruments (e.g. bonds) to meet specific long-term objectives.

Thus, the Singapore government has a strong balance sheet with no net debt. Singapore has assets that are well in excess of its debts.

4. Annex

4.1 Glossary of Terms

Assets Taxes

Assets Taxes refer to Property Tax and Estate Duty. Property Tax is a tax on the ownership of property and is payable by all property owners on the properties owned by them.

Estate Duty is a tax on the total market value of a person's assets (cash and non-cash) at the date of his or her death. Estate Duty will not apply to a person who dies after 15 February 2008.

Customs Duties

Taxes on goods imported into Singapore. In Singapore, Customs Duties are principally imposed on alcoholic beverages.

Development Expenditure

Expenses that represent a longerterm investment or result in the formation of a capitalisable asset of the Government. Examples of spending areas are the acquisition of heavy equipment, as well as capitalisable assets, e.g. buildings and roads.

Excise Duties

Taxes on goods, whether manufactured in Singapore or elsewhere. In Singapore, Excise Duties are imposed principally on tobacco, petroleum products, motor vehicles and liquor to achieve social and transport policy objectives.

Fiscal Impulse

The fiscal impulse provides a measure of the macroeconomic impact of the Budget. A positive impulse indicates а more expansionary fiscal stance than the previous year while a negative indicates less impulse а expansionary more (or contractionary) stance.

Financial Year (FY)

The Singapore Government's Financial Year 2020 is from 1 April 2020 to 31 March 2021.

Government Endowment Fund

A fund established with an injection of government monies as principal on which the income generated will used to finance specific be programmes on an ongoing basis. Examples of government endowment funds include the Community Care Fund. Endowment Edusave Endowment Fund, ElderCare Fund, Lifelong Learning Endowment Fund and Medical Endowment Fund.

Government Trust Fund

A fund established with an injection of government monies as principal, which is drawn down to finance specific programmes on an ongoing basis. Examples of government trust funds include the National Research Fund and the GST Voucher Fund.

Motor Vehicle Taxes

Motor Vehicle Taxes comprise additional registration fees, road tax, special tax on heavy-oil engines, passenger vehicle seating fees and non-motor vehicle licences, but exclude excise duties on motor vehicles which are classified under Customs and Excise Taxes.

Net Investment Returns Contribution

Contributions from the investment returns on our reserves, where Net Investment Returns Contributions (NIRC) is the sum of: (1) up to 50% of the expected long term real return on the relevant assets specified in the Constitution; and (2) up to 50% of the net investment income on the remaining assets.

Operating Revenue

Government receipts credited to the Consolidated Revenue Account and Development Fund Account, excluding investment and interest income, and capital receipts (lumpy and less regular in timing). The main components are Corporate Income Tax, Personal Income Tax and Goods and Services Tax.

Operating Expenditure

Expenses incurred to maintain the operations and other regular activities of the Government. Components include expenditure on manpower, other operating expenditure and operating grants to Statutory Boards and other institutions.

Other Taxes

Other taxes comprise the Foreign Worker Levy, Development Charge, Annual Tonnage Tax and Water Conservation Tax.

Output Gap

The **difference** between the actual level of activity in an economy (as measured by GDP) versus the sustainable amount of activity given the capacity of the economy (i.e. the level of GDP that the economy could potentially achieve without creating unhealthy inflationary pressures). It measures the degree of **resource utilisation** of the economy.

The output gap is typically reported as a percentage of GDP to give a sense of the proportion to which the economy is over or under capacity. Where the **output gap is negative**, it means the economy is **not** operating at full capacity, with **higher** levels of unemployment. Where the **output gap is positive**, it indicates that the economy is operating at **over**capacity, resources are stretched and **inflation** pressures are strong.

To promote macroeconomic stability, the Government's fiscal policies aim to be counter-cyclical contractionary to prevent overheating when the economy has a positive output gap, and expansionary to stimulate growth when the economy has a negative output gap.

Past Reserves

The reserves not accumulated by the Government during its current term of office, with reserves being the excess of assets over liabilities.

Primary Budget Position

The Primary Budget Position, defined as Operating Revenue less Total Expenditure, measures the ability of the Government to meet its annual expenditures through its regular collection of revenue (taxes, fees and charges).

Stamp Duty

A tax imposed on commercial and legal documents relating to unlisted stocks and shares and immovable Statutory Boards' property. Contributions Statutory Boards are reauired the under Statutorv Corporations (Contributions to Consolidated Fund) Act to provide revenue not allocated to specific purposes by any written law into the Government Consolidated Fund.

Total Expenditure

Sum of Operating and Development Expenditure. It excludes Special Transfers unless otherwise mentioned.

Withholding Tax

A non-resident is liable to pay income tax on Singapore-sourced income. Under the law, when a person makes payment of a specified nature to a non-resident, he has to withhold a percentage of that payment and pay the amount withheld to IRAS. The amount withheld is called the Withholding Tax.

Year of Assessment (YA)

Year in which tax on the income earned in the preceding year is assessed. For e.g. a taxpayer's income income earned in 2019 will be assessed in YA 2020