

Public Economics

- Theoretically, if market economy operates at its optimum level it reaches to a state of allocation of resources in which it is impossible to make any one individual better off without making at least one individual worse off. This optimum market efficiency is known as “Pareto Optimality”.
- If an economy operates at Pareto Optimality, then government has no role to play in economics since economy functions at its best with price mechanism (invisible hand).
- However, no economy in the world can practically reaches to Pareto Optimality.
- Thus, in order to counter inefficiencies and limitations of market mechanism government should intervene to economic activities.
- There are 4 key roles or functions are expected through government intervention in the market economy.
 - a. Allocative Function
 - b. Regulatory Function
 - c. Redistribution Function
 - d. Growth & Stabilization Function

Definition

- Public economics (or economics of the public sector) is the study of government policy with regard to resource allocation, economic regulation, wealth redistribution & economic growth and stabilization to make a mixed economy more efficient and equitable. [1]

Market Failure

- Market failure occurs when the allocation of resources and output by a free market is not efficient and thereby economy does not operate at an optimum level.
- Hence, market failure is a situation where price mechanism fails to allocate resources efficiently in a market economy.
- Thus, decisions taken by the market system do not always create positive impact to the society.
- Externalities are the main cause to market failure.
- There are 3 types of market failures. Government should intervene to the market economy to counter these market failures:
 1. Inefficiency in resource allocation
 2. Inequality in resource allocation
 3. Macro-economic instability

1. Inefficiencies in resource allocation

- This is a situation where market economic system allocates more resources to produce certain goods and fewer resources to produce certain goods without a proper resource allocation creating inefficiencies.
- Following situations can be stated as incidents for resource misallocation by market economies,
 - a. Resources are not allocated to produce certain goods (EX: public goods)
 - b. Insufficient allocation of resources to produce certain goods (EX: merit goods, semi-public goods)
 - c. Allocation of resources to produce certain goods more than the amount required (EX: demerit goods)
 - d. Lack of production with regards to certain resources (EX: common property resources)
 - e. Externalities
 - f. Imperfect competition (EG: monopoly, oligopoly, Centralizing market power)
 - g. Immobility of resources
 - h. Asymmetric/imperfect information
 - i. Missing markets

Public goods

- Public good is a good of which,
 - a. there is no ability to exclude a person or persons from the consumption of a good (non-excludable) and
 - b. one additional person's consumption does not deplete the benefit or utility of existing consumers (non-rivalrous)
- In public goods the marginal cost is zero ($MC=0$) as it doesn't incur an extra cost for an extra person to consume the same good

EX: light houses, national defense, street lighting, weather reports

Free rider problem

- This is the problem that creates due to the ability of a public good to consume collectively by many people.
- As public goods are non-excludable anyone can consume these goods without making any payment.
- Since, certain people in the society who can actually bear a price and obtain these goods by making a payment will also get the chance of consuming it freely.
- Hence, those people also obtain the benefits of public goods because of the freely available nature

of public goods. This problem is called as 'Free rider problem.'

Global public goods

- For a good to be a global public good, it should be comprised of the following characteristics,
 - Non rival
 - Non excludable
 - Benefits are received by everyone in the world

Ex: Atmosphere, ozone layer, Knowledge, world peace, financial stability

Private goods

- A private good is the total opposite a public good.
- Thus a private good is a good which,
 - a) one additional person's consumption depletes the benefit or utility of existing consumers (Rivalrous)
 - b) excludes a person or persons from the consumption of a good (Excludable)
- Hence, private goods are excludable they have a positive marginal cost.

Ex: Motor vehicles, computers, washing machines, phones etc.

Semi- Public goods (Quasi public goods / Club goods / Collective goods)

- Semi – public goods are the goods which are,
 - a) one additional person's consumption does not deplete the benefit or utility of existing consumers (Non – rivalrous)
 - Semi-public goods have no rivalry until it reaches to its optimum capacity.
 - Beyond the optimum capacity those semi-public goods might become rivalrous and turn to private goods.
 - For example, a cricket stadium can restrict people who can enter to the stadium (excludable) but entry of one additional spectator to watch a game does not deplete the benefit or utility of existing spectators until all seats are filled (non-rivalrous). However, when all seats of the stadium is filled (optimum capacity) entry of additional spectators will lead to a depletion of existing spectators' utility or benefit (rivalrous).
 - b) excludes a person or persons from the consumption of a good (Excludable)

Ex: Play grounds, cinemas, theatres, museums, beach, public parks etc.


Inefficient exclusion

- This is a situation in market economy where the suppliers of these goods charging a higher price than the marginal cost of providing these goods leading certain parts of the society to exclude by consumption.
- As semi-public goods are excludable, the marginal cost of production is positive after a particular point of consumption. But, up to a particular level of consumption it is zero. As an example, if a person owns a cinema hall, the amount of money he should spend on one movie round is same for the amount of maximum seats available in the movie hall.
- But, after that optimum consumption he should spend additionally. Due to this possibility to charge for the goods, when providing these goods suppliers sell it at a price greater than the marginal cost.
- Thus, certain consumer groups who can bear marginal cost (production cost) but not the market price (selling price), get excluded from consuming that good.
- This problem is called as “inefficient exclusion” and it’s a market failure.

Public bads

- Public bads are the commodities those which gives a negative utility / dissatisfaction / nuisance for the society or general public.
- It is a common negative utility that is received by everyone in the society.
Ex: Global warming, world terrorism, communicable diseases, wastage disposal, inequalities in wealth and income distribution in the world

Common property resources

-  Common resources are goods which are,
 - a) there is no ability to exclude a person or persons from the consumption of a good (Non – excludable)
 - b) one additional person’s consumption depletes the benefit or utility of existing consumers (Rivalrous)Ex: Forests, fisheries, atmosphere, common pastures

The tragedy of commons

- This is a situation where market mechanism fails to efficiently control the usage of these goods leading for over usage of common goods.

- As for common resources there is no proper ownership and proper management and due its freely available nature (can obtain without paying), these goods are consumed more than the required amount.
- Hence, some of these resources faces a risk of extinction.
- This problem is considered as “The tragedy of commons”.

	Excludable	Non-excludable
Rivalrous	Private goods food, clothing, cars, personal electronics	Common goods (Common-pool resources) fish stocks, common green fields, rivers, underground water resources
Non-rivalrous	Club goods (Semi-public goods) cinemas, private parks, satellite television, private beaches, private libraries, Musical shows, museums, private playgrounds	Public goods National defense, street lights, traffic lights, radio & tv broadcast, light house

Merit Goods and Demerit goods

Merit goods	Demerit goods
Goods that society values and judges that everyone should have irrespective of a) whether the individual wants them or not or b) whether the individuals can afford them or not since they create broad social merits	Goods that society values and judges to be bad for society and individual
Under-consumed due to, a) imperfect information – individuals are unaware of long-term benefits and positive externalities b) affordability – individuals are well aware of long-term benefits but cannot afford these products	Over-consumed due to a) imperfect information – individuals are unaware of long-term detriments and negative externalities b) habits or addictions
a) Consumption of merit goods is believed to generate positive externalities (MSB exceeds MPB) b) These are both excludable & rivalrous	Consumption of demerit goods leads to a fall in social welfare (MSC exceeds MPC) b) These are both excludable & rivalrous
Government should promote merit goods either a) by countering imperfect information - Increasing awareness of the long term benefits or regularising consumption OR b) by providing them free of charge or at a concessionary price for the people who cannot afford.	Government should demote merit goods either a) by countering imperfect information -Increasing awareness of the long term detriments OR b) by providing imposing taxes or controlling consumption through regulation
Healthcare, education, public libraries, Vaccinations to prevent diseases	Alcohol, cigarettes, drugs, addiction to gambling

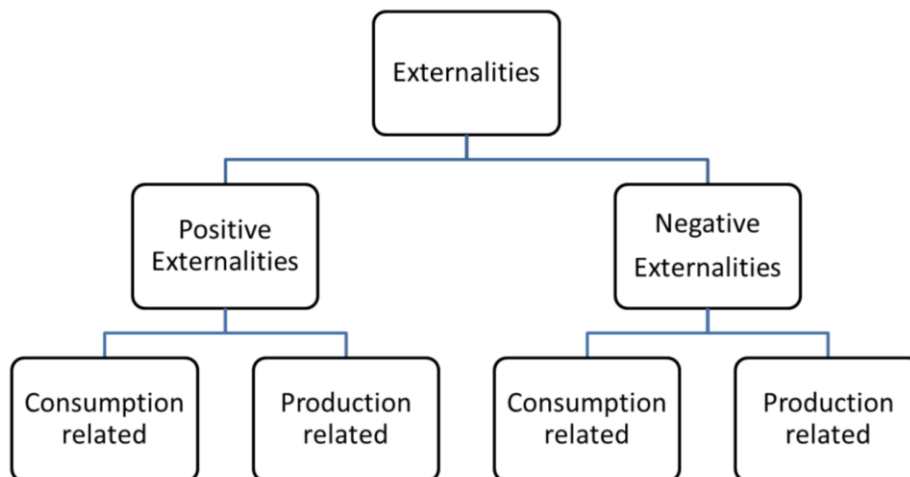
What is a bad good/"Bad"?

- Any good that provides a negative utility to consumers is called as a bad good.
- In other words these kinds of goods become an irritation to the consumer thereby creates a negative satisfaction or negative utility.
- Therefore consumers spend money not to acquire these goods but to get rid of these goods. Hence there is a negative price for these products.
Ex;- Refuse, Environmental pollution, diseases & epidemics

Important :

- Bad good is different from inferior goods
- Bad good is different from demerit goods

Externalities



- An externality is a consequence (a cost or a benefit) of an economic activity (consumption or production) that is experienced by unrelated third parties.
- These are also called as “third party effect” or “neighborhood effect”.
- There are 4 types of externalities:

1. Consumption related positive externalities

Unrelated third party is experiencing a benefit due to consumption of a good or a service.

Ex:- A person who doesn't have a 3D TV at home watching a 3D film at one of his friends place when his friend is watching a 3D film.

2. Production related positive externalities

Unrelated third party is experiencing a benefit due to production of a good or a service.

Ex:- Pig farmer is benefiting from the waste food of a hotel

3. Consumption related negative externalities

Unrelated third party is experiencing a cost due to consumption of a good or a service.

Ex:- Passive smokers are getting cancers due to cigarette smoke of an active smoker.

4. Production related negative externalities

Unrelated third party is experiencing a cost due to production of a good or a service.

Ex:- Due to air pollution by a factory nearby villages are experiencing respiratory problems.

Private Cost/Benefit Vs. Social Cost/Benefit

- Externalities creates a difference between private benefit/cost and social benefit/cost.

Private, external and social cost

- Private cost is the cost that is incurred by the decision maker of a certain economic activity (production or consumption).
- This is also called as an “internal cost” as the decision maker him/herself involves in the cost incurring.
- External cost is the cost to the ‘external party’ or “third party” by the activity (production or consumption) carried by the decision maker.
- Social cost is the cost to the society by the economic activity (production or consumption) by the decision maker.
- Social cost is the summation of private cost and external cost.

$$\text{Social cost} = \text{Private cost} + \text{External cost}$$

- If there are negative externalities (consumption or production) social cost is higher than the private cost thereby market mechanism allocates higher amount of resources for these products than the optimum level of resource allocation. (Current market quantity will be higher than optimum market quantity)

Private, external and social benefit

- Private benefit is the benefit received by the person who involves in the economic activity (production or consumption) whom which makes the decision. Hence, it is also called as “internal benefit”.
- External benefit is the benefit received by the “external party” or the “third party” due to the economic activity of the decision maker.
- Social benefit is the total benefit received by the society due to the decision made by the person who carries out the economic activity (production or consumption).
- This is created by the summation of private benefit and external benefit.

$$\text{Social benefit} = \text{Private benefit} + \text{External benefit}$$

- If there are positive externalities (consumption or production) social benefit is higher than the private benefit thereby market mechanism allocates lesser amount of resources for these products than the optimum level of resource allocation. (Current market quantity will be lesser than optimum market quantity)

External cost (negative externalities) of consumption**External benefits (positive externalities) of consumption**

External Cost (Negative externalities) of production



External benefit (positive externalities) of production



Global Externalities

- A global externality is a consequence (a cost or a benefit) of an economic activity of one country (consumption or production) that is experienced by unrelated third party countries.

Global Externalities	
Negative	Positive
Damage Ozone layer	World Peace
Global warming	Experiments & Knowledge building
Acid rains	
World terrorism	

How to Minimize Externalities

Minimizing Externalities	
Private Sector initiatives	Public Sector initiatives
1. Creating Pressure Groups Ex;- Green Peace	1. Discourage negative externalities by imposing taxes
2. Individual bargaining to get compensation for negative externalities	2. Encourage positive externalities by granting subsidies
3. Internalization of externalities Ex;- recycling, waste water treatments	3. Controlling mechanisms to avoid externalities Ex;- evacuating people who live near nuclear power plants
	4. Imposing regulations
	5. Entering in to international agreements

2. Inequalities in resource allocation

- In market economy due to private property ownership and property rights, the distribution of factors is not equal for every person in the society.
- Due to unequal resource allocation, minority of the society owns a higher amount of factors whereas majority of the society owns a small amount of factors.
- Thus, a disparity of rich-minority and poor-majority can be seen in the society.
- Determination of income in a market economy depends on several factors such as, labour sacrificed, educational level, factor prices and ownership etc.

3. Macro – economic instability

- Macro – economic instability in the market economy is created mainly due to the changes of aggregate demand and aggregate supply created as a result of business cycle (expansion/recession).
- Due to these changes to macro-economic variables in the economy, creates an instability in the market which leads for many other negative effects.

EX: inflation, BOP crisis, Unemployment, economic recession and decline

✓ Summary note

	Inefficiency in resource allocation	Inequality in resource allocation	Macro-economic instability
Definition	<i>Due to the weaknesses of the price mechanism market economy fails to allocate resources efficiently</i>	<i>Even if an economy has reached its optimum efficiency in resource allocation (through price mechanism), it might not have achieved socially optimum resource allocation that eradicates poverty and establishes social equity</i>	<i>The negative economic impacts those can make the economy unstable which are caused due to sudden fluctuations in main macro-economic variable. These impacts are mainly influenced by aggregate demand and supply.</i>
Examples	1. Zero provision of public goods	1. In adequate supply of merit goods	1. High level of Inflation
	2. Externalities	2. Absolute poverty	2. Negative economic growth & economic depression
	3. Anti- competitive situations (Monopoly)	3. Relative poverty	3. High level of unemployment
	4. Excess production of demerit goods	4. Having a Gene co-efficient close closer to one	4. BOP crisis
	5. Imperfect information	5.Provision of demerit goods	

Functions of government in the market economy

- 1) Making the legal base and social environment required for the efficient operation of price mechanism.
- 2) Taking steps to correct inefficiencies of resource allocation as a result of market failures.
- 3) Ensuring equality in resources allocation
- 4) Fostering higher economic growth and development
- 5) Ensuring macro-economic stability

1. Making the legal base and social environment required for the efficient operation of price mechanism.

- As government, it is their responsibility to provide a sound legal foundation and to provide other primary civil services required for the efficient economic functionality.
- Following can be stated as the functions of government towards a good and steady legal base and social environment,
 - Protecting and defining private property rights and other rights
 - Entering and enforcing contracts and agreements
 - Formulation of rules and regulations for the effective functioning
 - Establishing units and forces to monitor the functioning of above set rules and regulations, take necessary actions for any violation
- Core services established by the government to ensure a sound legal base and a social environment for an efficient functioning of price mechanism are,
 - A. Ensuring internal peace and order (Ex: police service)
 - B. Formulation of standards and rules for consumer protection (Ex: consumer affairs authority)
 - C. Establishing a sound financial system for efficient functioning of exchange and economic activities (Ex: CBSL, CSE)

2. Taking steps to correct inefficiencies of resources allocation as a result of market failures

- As discussed in previous topics there are many reasons for market failure due to inefficient resource allocation such as public goods, common property resources, externalities, asymmetric information etc.
- In following ways government tries to maximize the resources allocation in the economy by abolishing market failures,
 - a) Providing public goods by the government

- b) Monitoring and controlling usage of common property resources through a government body or a private sector firm under government monitoring
- c) Taking necessary steps to control externalities in an efficient way
 - I. When there are negative externalities government should discourage their production and consumption by taking legal actions and by imposing taxes.
 - II. When there are positive externalities government should encourage their production and consumption in following ways,
 - Increasing demand for those goods
 - Increasing supply for those goods
 - Providing those goods and services by government as it generates external benefits
- d) Limiting market power
 - If the control over goods and services are vested with only one party (producer or factor owner) in the market economy, resource allocation will be inefficient.
 - Thus, government follows below given policies to improve resource allocation by scattering market power with one entity to others,
 - Direct control and monitoring over monopolies and oligopolies
 - Taking steps to abolish imperfect competition
 - Providing information for economic agents (reduce asymmetry in information dissemination)
 - Monitoring

Privatization and Deregulation

- Privatization is the act of transferring public/government owned assets to private sector.
- Privatization takes place in following ways,
 - 1. Selling public assets to private sector
 - 2. Transferring certain activities/ functions done by government to private sector
Ex: waste disposal, laundering in public hospitals, providing food for canteens in government hospitals
 - 3. Selling shares of public companies to private sector

Social benefits of privatization

- I. Improve efficiency
- II. Helps to reduce fiscal deficit
- III. Makes decision making more independent and fast with lower political interference

- IV. Creates a public (population) with business shares
- V. Increase competition
- VI. Creates new investment opportunities

Social demerits of privatization

- I. Ignores welfare on general public
- II. Can create a private sector monopoly without any government involvement
- III. Reduces employee motivation
- IV. Looting public property

Deregulation

- Deregulation is the process of reducing or removing the rules and regulations imposed by government in controlling business organizations to make those less stringent.

Public – Private Partnership – PPP

- Public – private partnership is the mechanism of getting the support of private sector in order to improve efficiency in providing public services to general public by government.
- This is a very famous method in financing for developing infrastructure facilities in countries.
- PPP can take various forms and among those most popular types are,
 - 1. BOT – Build, Operate, Transfer
 - 2. BOO – Build, Own, Operate
 - 3. BOOT – Build, Own, Operate, Transfer
 - 4. Leasing
 - 5. Joint ventures
 - 6. Operations/management contracts
 - 7. DFBOT – Design, Finance, Build, Operate, Transfer
- Examples for PPP in Sri Lanka are Norochchole coal power plant, wind & solar power plant in Kankasanthurei, electricity plant in Colombo harbor etc.

3. Ensuring equality in resources allocation

- Ensuring equality in resource allocation also known as equity in income distribution is having no or less inequalities in between income variations of certain consumer groups in the economy.
- On the other hand, not having severe disparities in income distribution (resource allocation).

- As market economy with private property ownership has severe disparities in income distribution, it is the responsibility of the government to minimize these disparities. For that government uses following steps,
 - I. Redistribution of income and wealth (Ex: progressive taxes)
 - II. Transfer payments (Ex: Samurdhi)
 - III. Limiting property and wealth ownership
 - IV. Providing merit goods to poor free of charge
 - V. Direct intervention to the market (Ex: price ceiling and price floor)
 - VI. Other rules and regulations (Ex: Minimum wage policy, Maximum working hours)

4. Fostering higher economic growth and development

- Economic growth is the process of increasing real GDP of the economy over a long period of time.
- For that government should increase some other factors such as human capital, technology, innovations along with the GDP.
- In following ways government budget can be used to achieve growth objective of the economy,
 - I. Allocating funds in the budget to develop and build infrastructure facilities
 - II. Encouraging private investments by providing subsidies, tax concessions, tax holidays to investors
 - III. Reducing fiscal deficit so that government borrowings can be reduced and more funds are available in the market for private sector to invest
 - IV. Allocating funds to develop human capital and technology
 - V. Ensuring macro-economic stability by controlling inflation, exchange rates to build confidence among investors
 - VI. Allocating funds to improve research and development activities
- Even though, in above ways government can foster economic growth, it should ensure development among people in the economy.
- Although in that economic growth plays a major role, economic development doesn't yield through economic growth only.
- Hence, following steps can be taken by government to ensure economic development in the economy along with the economic growth,
 - I. Ensuring equal and fair income distribution by minimizing income disparities
 - II. Promoting projects to reduce poverty such as providing transfer payments (Ex: Samurdhi)

- III. Government intervention, monitoring and control in the cases where private sector works against common interest of the society (Ex: monopolies, negative externalities of production)
- IV. Providing merit goods (necessities) to poor free of charge (Ex: Education & health care facilities)

Important:

Infrastructure type	Hard	Soft
Economic	Ex: highways, roads, ports, bridges, terminals, air ports, harbor, transportation	Ex: Financial institution facilities, technology exchanging, vocational training
Social	Ex: Hospitals, schools, Elder homes, Prisons, Garbage disposal systems	Ex: Social security, Environmental preservation

5. Ensuring macro-economic stability

- In order to achieve macro-economic stability, government should control macro-economic variables.
- For that government highly uses its policies such as fiscal policy, monetary policy and foreign trade policies.
- By using above policies government ensures macro-economic stability by,
 - a) Making necessary adjustments to minimize fiscal deficit
 - b) Financing budget deficit using non – expansionary sources to avoid inflationary trends
 - c) Use monetary policy to control inflation by controlling money supply, credit supply and interest rates
 - d) Controlling indirect taxes to control inflation
 - e) Creating a positive impact on BOP by minimizing imports and encouraging more exports

Allocative Function	Regulatory Function	Redistribution Function	Growth & Stabilization Function
1. Provide Information	1. Maintain general law & order of the economy Ex;- Police service	1. Establish a tax policy to ensure equity	1. Promote private investments through incentives Ex;- Tax exemptions, subsidy
2. Promote competitiveness	2. Reinforce quality standards of goods & services traded in the economy Ex;- ISO, SLS	2. Provide transfer payments	2. Infrastructure Development
3. Provision of Public goods	3. Company registration	3. Limiting excess accumulation of wealth & property ownership	3. Establish economic stability Ex:- Control inflation, Forex controls
4. Reduce negative externalities & promote positive externalities	4. Reinforce private property rights Ex;- Vehicle registration, Land registration	4. Provision of merit goods	4. Develop human capital
	5. Reinforce commercial law	5. Intervene to market mechanism to establish equity Ex:- Guaranteed price, price ceiling	5. Promote savings & reduce government budget deficit
	6. Monitor and regulate monetary system	6. Establish minimum wage policy	6. Promote employment opportunities

Government Failure

- Government failure arises when government intervention in the market system (to improve market failure) worsens the situation.
- In other words, government intervention in the market system increases market distortions and reduces welfare and economic efficiency.
- Government failure occurs due to:

1. Rigidities in the government policies

- The rules and regulations taken by government to control market activities may be much more inflexible than what is expected by the market economic agents.
- Thus, due to these inflexibilities, the inefficiencies with the market mechanism will worsen off by creating more cost and negativities.
- As an example, although a government owned enterprise makes losses, government will still continue it with losses due to rigid nature of the policies apart from closing it and starting another profit making business.

2. Political self-interest

- Taking decisions to maximize the private benefits received by politicians and other government officials is known as political self-interest.
- In here, mostly politicians will allocate resources inefficiently during election seasons to capture more votes by building unnecessary constructions and providing unplanned welfare to people.
- Sometimes, government may not involve in activities that may really needed to provide welfare to society and instead they might build unnecessary constructions, infrastructure etc. to maximize the benefit to them.

3. Policy myopia

- Providing short term solutions by the governments elected for the problems in the economy is called as policy myopia.
- In this situation, as in a country for every 5 to 6 years, governments are changing from elections, the existing government will provide a plan to the objectives of the economy to that particular period that they are in power.
- Hence, certain long term economic problems may be addressed shortly by appointed government time to time with no proper long term solutions which may lead to worse off the country's overall economic performance.

4. Decision making based on imperfect information

- Due to problems with the dissemination of information among economic agents, certain people will get an advantage and certain people may face disadvantages in the decision making process.
- Hence, it may lead to create inefficiencies in economy without proper functioning of the market mechanism.

Ex: If consumers don't know about the existing prices of goods and services, certain sellers might sell the goods at very unfair prices to consumers which will create a disadvantage to consumers without them knowing.

5. Problems on incentives

- With the intervention of the government it may create a negative impact on incentives on the economic activities.

- Due to certain policies and actions taken by the government, it may create a demotivation to the investors and producers in numerous ways.

EX: Imposing income taxes on income may discourage private investments

Minimum wage policy and Maximum working hour policies (labour policies) may demotivate producers to increase production

6. High administrative expenditures of the government

- Using the money of public vested with the government for government functions such as elections, opening ceremonies etc. will lead for less allocation on funds to provide social welfare and other infrastructure development.

7. Corruption, bribery and wastage associated with public sector

8. Creation of black markets and gray economic activities

Fiscal policy

- Policy used by changing government expenditures, income and borrowings to achieve macro-economic objectives in the economy is called the fiscal policy.
- This is also called as a “Demand management policy” as it can be used to change aggregate demand to achieve macro – economic objectives.
- There are 3 forms of fiscal policies,
 1. **Expansionary fiscal policy** – this is the situation where fiscal reports a deficit with more government expenditures and less tax income which creates an expansionary effect on aggregate demand (Output and employment).
 2. **Contractionary fiscal policy** – in this situation government’s fiscal has a surplus with government tax income being greater than expenditure which leads for a contraction in the aggregate demand (Output and employment).
 3. **Moderate/Neutral fiscal policy (Balanced budget)** – here, the total government expenditure and government tax income is equal to each other. So, in this kind of a situation the impact on aggregate demand is a passive one. But, in this situation government increases its taxes and expenditure by the same amount it’ll create an expansionary effect on aggregate demand (Output and employment).

Counter cyclical fiscal policies

- These are the two ways where government's fiscal policy can be used to achieve macro-economic objectives.
 - 1) Automatic stabilization policy
 - 2) Discretionary policy

1. Automatic stabilization policy

- In this policy, the government let fiscal balance to automatically adjust and stabilize the macro economic variables (aggregate demand).
- Hence, in here when economy undergoes an expansionary stage, as expenditure is greater than income (taxes) the amount of consumption rises as income with people is higher.
- Hence, as government imposes income taxes and indirect taxes, the taxes will automatically control the expansionary effect brought by fiscal deficit.
- At the same time when economy undergoes a contractionary effect on aggregate demand, it will get automatically stabilized by the transfers given by the government as it will reduce the income reduction from unemployment during the contractionary stage.

2. Discretionary policy

- Discretionary policy is the way of using the consent of the government and policy makers to control government expenditure and income to achieve stability in the economy.
- If economy undergoes an expansionary situation, then policy makers will increase taxes so that the taxes will stabilize the expansionary effect on aggregate demand.
- Similarly, in a contractionary stage of aggregate demand, policy makers will increase government expenditure in order to stabilize economy by creating economic expansion.
- As these policies can be used to encounter the stages in business cycle, these are called as 'Counter – cyclical fiscal policies'.

Important:

- Although, these economic policies can be used in stabilizing economy, in order to account whether there is a deficit or surplus in aggregate demand it takes time.
- In other words, in order to identify whether there is a shortage or an excess in aggregate demand, government takes time and after identifying also it takes time for economy to stabilize even after applying the above policies.
- Thus, it can identify two types lags/delays in identifying the problem with the instability by the government,
 - 1) **Recognition lag** – this is the delay faced by government in identifying that there is a problem with macro-economic stability and aggregate demand.
 - 2) **Administrative lag** – this is the problem faced by government when implementing above mentioned policies, as it takes time for those changes to take place and stability to take place.

Supply side policy

- Although, fiscal policy is used as a demand management policy, due to its ability to impact to aggregate demand it may create an inflationary trend in the economy.
- Hence, certain economists suggest that, more than changing demand it is suitable to increase the supply of the economy by improving efficiency of resource allocation by taking the maximum productivity of factors of production and improving participation of private sector for economic activities.
- In other words, supply side economics suggest to increase real output without increasing aggregate demand but by increasing aggregate supply directly in order to foster higher economic growth and development.
- Following are most important among supply side economic policies,
 - I. Privatization and deregulation
 - II. Improving competition
 - III. Designing programs to develop small and medium scale enterprises (SMEs)
 - IV. Increase capital investments to stimulate innovations
 - V. Abolishing rigidities in the labour market
 - VI. Trade union reforms
 - VII. Reforming the tax system and reducing direct taxes

Government Expenditure

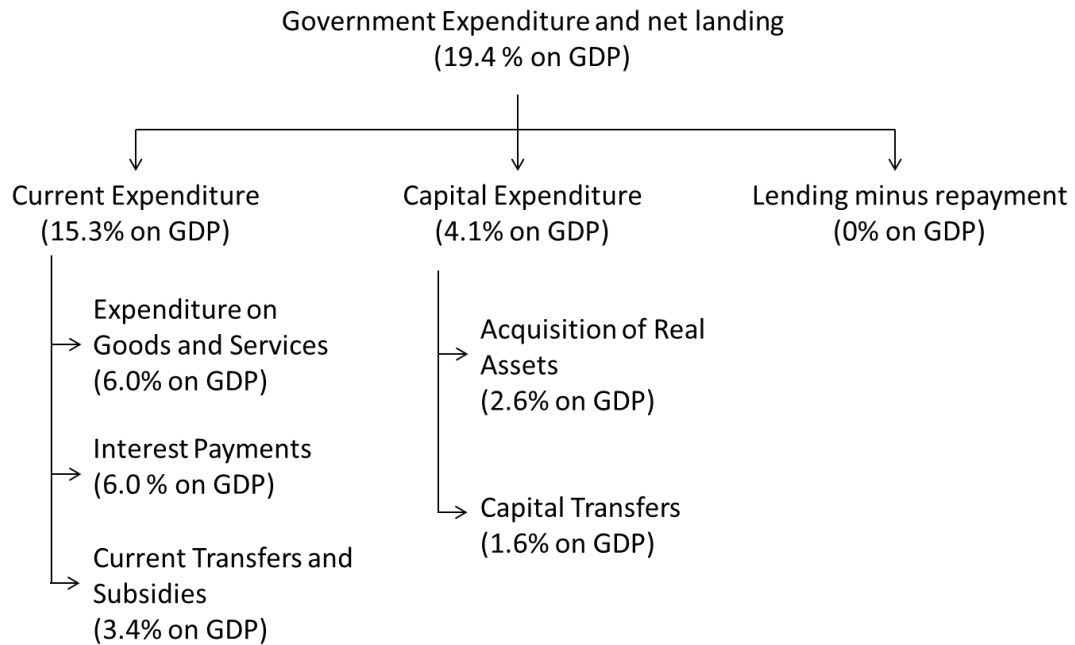
- Government expenditure is the total cost incurred by the central government and the provincial councils for particular period (normally one year) in conducting national mandate of the government.
- Total government expenditure as a percentage of GDP was 19.4 per cent in 2019 whereas 19.2 per cent it was in 2018.
- There are several reasons for government expenditure (expectations of government expenditure).
 1. Provision of public goods and merit goods
 2. Infrastructure development
 3. Promote Private investments
 4. Increase economic growth
 5. Macro-economic stability
 6. Redistribution of income

Classification of Government Expenditure

- Government expenditure can be classified using 2 main bases.
 1. Economic Classification
 2. Functional Classification

Economic Classification

- Economic classification refers to classifying resources allocated by government to various economic activities based on the significance of economic value of each category.
- According to the economic classification there are 3 main expenditure items.
 1. Current expenditure
 2. Capital expenditure
 3. Lending minus repayments



Current Expenditure

- Current expenditure is recurring spending or spending on items that are consumed and only last a limited period of time. In other words, within a particular year cost incurred to maintain day today activities and maintenance.
- In the case of the government, current expenditure would include wages and salaries and expenditure on consumables - stationery, drugs for health service, bandages and so on.
- Current expenditure includes both bilateral and unilateral payments.
- Benefit of the current expenditure only limited to the period to which it is spent. (Does not create a trail of benefits that speared in to a longer term)

1. **Expenditure on goods and services** is the cost incurred to purchase goods and services to conduct government activities continuously and uninterruptedly. These are bilateral payments and this is considered as “public consumption” national accounting.

Ex:- Salaries and wages, travelling expenditure, stationary

2. **Interest payment** is the cost incurred to pay interest for the domestic and foreign loans obtained by the government. These are unilateral payments and thereby do not included into national accounting.

3. **Current transfers and subsidies** are the unilateral payments that are included in current expenditure of the government. There are main two sub segments of this expenditure item.

a. Current transfer to Households

These payments make a resource transfer from government to households. Current transfers to Households are made with the intentions of income redistribution and promote equity. Thus, these payments are mainly flowing in to poorest of the society or to promote social welfare. Both financial and real transfers include in to these payments.

Ex;- Samurdhi, Pension, School uniforms, Fertilizer subsidy, School text books, government scholarships, rehabilitation expenses

b. Current transfers to government corporations, government institutes & provincial institutions

These current expenditures are made in order to run government institutions and enterprises which are either operate with non-profit motive or currently operate at a loss.

Ex;- Samurdhi Authority, Ceylon Transport Board, Mahaweli authority

	2019	
	As a percentage of GDP	As a percentage of total government expenditure
Current Expenditure	15.3	79%
Expenditure on Goods and Services	6.0	31%
Salaries and Wages	4.6	24%
Interest Payments	6.0	31%
Domestic	4.3	22%
Foreign	1.7	9%
Current Transfers and Subsidies	3.4	17.5%
To Households and Other Sectors	2.7	14%
Samurdhi	0.3	1.5%
Pensions	1.5	8%
Fertilizer Subsidy	0.2	1%

Economic consequences of having high current expenditure structure

1. Negative impact on current account & overall balance of government budget
2. Limiting the funds that can be invested in capital expenditure that contributes to future growth & development of the economy
3. Increase government debt burden
4. Negative impact on BOP balance when government finance budget deficit via foreign sources

Capital Expenditure

- Capital expenditure is the expenditure government spends to acquire, repair and develop real assets or investment goods that last for more than a year.
- Benefits of the investments goods do not get restricted only to the period that it spent for but benefits get extended to a longer period of time. Ex;- roads, schools, hospitals.
 - a. **Expenditure on acquisition of real assets** bears on investment goods such as buildings, machinery infrastructure etc. those have long lasting and creates long term benefits to the economy. These are unilateral transactions and captures in gross domestic investment in national accounts.
 - b. **Capital transfers** are the funds allocated to finance capital expenditures of government corporations and other government and provincial institutions. These are unilateral payments that contribute to future development of the economy. Ex;- Capital transfer payments to Road Development Authority, Water Board, Samurdhi Authority, Ceylon Transport Board.
 - c. **Provision for under expenditure** is even though an expenditure item is allocated for the financial year if there is a prediction as it might not be able to spend (fully or partially) within the financial year such expenditure (part that is not be able to spend) is shown as a provision for under expenditure. Due to provision for under expenditure total capital expenditure allocated for the year gets reduced.

	2019	
	As a percentage of GDP	As a percentage of total government expenditure
Capital Expenditure	4.1	21%
Acquisition of Real Assets	2.6	13%
Capital Transfers	1.6	8%

Lending minus Repayment (Net lending)

- Lending minus repayment refers to net value between the lending of the government to the government enterprises and repayment of those loans by the government enterprises to the government.
- This includes following items,
 - a. Advance account
 - b. Government lending to government enterprises
 - c. Recruiting out
 - d. Repayment of loans by government enterprises to the government

Sources of funding capital expenditure

1. Current account surplus
2. Income generated from selling capital assets and capital taxes
3. Collections from loans and advances
4. Capital transfers from abroad
5. Net domestic borrowings
6. Money balances

Effects of increasing capital expenditure

1. By increasing gross fixed capital formation, improve production capacity
2. Increasing growth rate by increasing output
3. Create problems on fiscal and fiscal deficit increases
4. Increase inflationary trends by increasing government expenditure
5. Social welfare will reduce as a result of allocating more funds for capital development and investments
6. Improve level of employment
7. Improve market activities

Functional Classification

- Functional classification refers to arranging the public expenditures by the function that it does.
- According to the functional classification there are 4 main expenditure items categorized under two main broad headings.

1. Current expenditure

- a. General Public Services
- b. Social Services
- c. Economic Services
- d. Other Services

2. Capital expenditure & lending

- a. General Public Services
- b. Social Services
- c. Economic Services
- d. Other Services

General Public Services

- General Public Services are the services those are essential for all citizens to have a safe and orderly day today public life. Such services include civil administration, defense, maintaining public order and safety.
- These services are expected to be performed by the government.
- In conducting such services government has to make both recurrent expenditure as well as investment expenditure. Based on the nature of the expenditure it will be classified under two broad headings of capital or current expenditure.

Social Services

- Social Services are the services those contains exceeding amount of social benefits than its private benefits. If government does not involve in to the provision of these services under privileged parties of the society might not be able to enjoy these services.
- Thus, it can lead to various social issues and unrest.
- Hence with the intention of creating social equity and welfare government provides these services.
Ex:- education, health, community service, welfare

- Based on the nature of the expenditure social services are classified under two broad headings of capital or current expenditure.

Economic Services

- Social Services are the services those provided by the government to make the economic activities more efficient and convenient. Ex;- Agriculture and irrigation, Energy and water supply, transport and communication
- Based on the nature of the expenditure economic services are classified under two broad headings of capital or current expenditure.

Other Services

- Various other government activities those cannot be carried as either of the above headings are classified as other services
- Based on the nature of the expenditure other services are classified under two broad headings of capital or current expenditure.

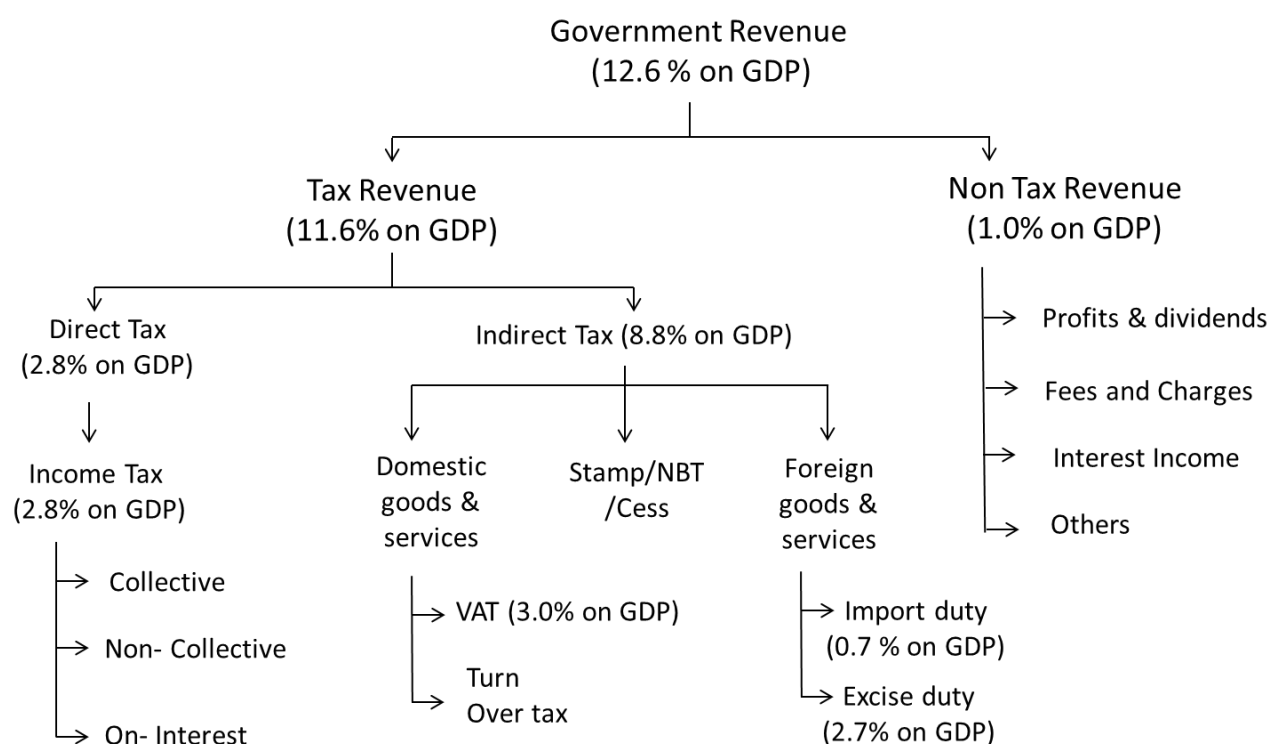
	Percentage of GDP	As percentage of Total Government Expenditure
General Public Services	3.2	16 %
Social Services	6.1	31%
Economic Services	4.1	21%
Other Services	6.1	31%
	19.4	100%

Recent trends in government expenditure

Year	Government expenditure as a percentage of GDP	Government expenditure as a percentage of government revenue
2013	17.4	145%
2014	17.3	149%
2015	20.9	157%
2016	19.6	138%
2017	19.2	141%
2018	18.6	139%
2019	19.4	154%

Government Revenue

- At a given financial period, through different income sources revenue collected by a government can be defined as government revenue. There are two main sources of government income.
 - Tax income
 - Non-tax income



Tax Revenue

- A tax is a compulsory & involuntary payment levied on either persons or institutions that contributes to common aims of the society from which no direct benefit is obtained by the tax payer but failure to pay is punishable by law.
- A Tax has following key elements:
 - a. It is a compulsory & involuntary payment
 - b. Tax is collected for a common aim of the society
 - c. Tax payer does not receive any direct benefit
 - d. Tax is levied using the legal authority of the government
 - e. Tax can be levied on either persons or institutions
- Through a tax private sector resources are legally transferred to the public sector.
- There are several objectives expected to be achieved by levying a tax
 - 1. To collect an income to the government (Income Objective)
 - 2. To minimize disparity in income & wealth distribution (Distribution objective)
 - 3. To control inflation and BOP deficit (Stability objective)
 - 4. To induce savings and investment (Incentive objective)
 - 5. To promote economic growth (Growth objective)
 - 6. To protect local & infant industries (Protectionism objective)
 - 7. To discourage the provision of demerit goods & negative externalities
 - 8. To counter special events occur in the economy Ex:- Civil war, Flood situation

Principles of Taxation

- Principles of taxation are the generally accepted key characteristics those should be included in a good tax system. In other words, these are the key yardsticks those can be used to measure a tax system.
- What is a good tax system?
 - ❖ Good tax system is a tax system that is framed as to ensure that the productive resources of the economy are optimally allocated and utilized. The tax system should be economically naturally, that is, interference with customer use of factors of production is minimal. The price mechanism should be allowed to operate freely so that there will be optimum output of goods.

- Key Principles of Taxation are;
 1. Equity
 2. Economy (cost effectiveness)
 3. Convenience (simplicity)
 4. Economic Efficiency (Neutrality)
 5. Certainty
 6. Flexibility

Equity

- Equity in taxation is the principle that ensures taxes are levied on the ability to pay. Ability to pay is determined by income, expenditure or wealth. There are main two conditions of equity;
 - a. **Horizontal equity** - meaning that individuals with comparable incomes pay comparable levels of taxes (Treat comparable equally)
 - b. **Vertical equity** - meaning that individuals with higher levels of income pay a higher level of taxes than those with lower levels of income. (Treat incomparable unequally)

	Direct tax	Indirect tax
How to Practice?	Progressive Income Tax System	Higher taxes on luxury goods & lesser tax on essentials

Economy (cost effectiveness)

- Economy (cost effectiveness) in taxation is the principle that ensures the costs to collect a tax should be kept to a minimum for both the government and taxpayers.

	Direct tax	Indirect tax
How to Practice?	PAYE tax deduction from the salary	VAT registration

Convenience (simplicity)

- Convenience (simplicity) in taxation is the principle that ensures the tax law should be simple so that taxpayers can understand the rules and comply with them correctly and in a cost-efficient manner.

	Direct tax	Indirect tax
How to Practice?	Clearly defined income tax structure	Single VAT & NBT percentage

Economic Efficiency (Neutrality)

- Economic Efficiency (Neutrality) in taxation is the principle that ensures the effect of the tax law on a taxpayer's decisions as to how to carry out a particular transaction or whether to engage in a transaction should be kept to a minimum.

	Direct tax	Indirect tax
How to Practice?	Make sure direct tax, a) does not discourage savings and investments b) does not discourage entrepreneurs (tax on profits) c) does not discourage labour supply (taxes on income)	Taxation based on elasticity of demand

Certainty

- Certainty in taxation is the principle that ensures tax rules should specify when the tax is to be paid, how it is to be paid, and how the amount to be paid is to be determined.

Flexibility

- Flexibility in taxation is the principle that ensures the tax system has the ability to change as a response to economic changes.

Determinants of Tax Income

- There are 3 key determinants those decide tax income collected by a government within a given financial period.
 - Tax Base
 - Tax Rate
 - Tax compliance

Tax Base

- Tax base is the value of an asset(s), investment(s) or income stream(s) that is subject to taxation. In other words, tax base is the base value on which tax is imposed. Based on the tax base different types of taxes are born.

Tax Base	Type of Tax
Income	Income tax
Wealth	Wealth Tax
Value Addition	VAT
Turnover	Turnover Tax
Value of Import/Export	Import/Export Duty

Tax Rate

- Tax rate is the percentage of tax levied on the tax base. There are two types of tax rates:
 1. Average tax rate (ATR) – rate of tax payment to the value of the tax base (as a percentage value)

$$\text{Average Tax Rate} = \frac{\text{Tax Payment}}{\text{Value of the tax base}} \times 100\%$$

2. Marginal tax rate (MTR) – rate of change in tax payment to the change in value of the tax base (as a percentage value)

$$\text{Marginal Tax rate} = \frac{\text{Change in Tax payment}}{\text{Change in Value of the tax base}} \times 100\%$$

Extra knowledge:

- In order to find out by how much the tax revenue got sensitive to the changes of GDP of the economy economics calculates a ratio known as “Buoyancy coefficient of the tax revenue”.
- It can be calculated as follows,

$$\text{Buoyancy coefficient of tax revenue} = \frac{\text{Percentage change in tax revenue}}{\text{Percentage change in GDP}}$$

Tax Compliance

- Tax compliance is the degree to which taxpayers comply with the tax law. Tax compliance is the opposite of tax avoidance and tax evasion.
- In other words tax compliance is taxpayers file, report and pay right amount of tax at the right time.
- There are 3 types of compliances.

1. Compliance on Tax Filing

Compliance to present organized & completed tax files at the right date to the tax authority.

2. Compliance on Tax Reporting

Compliance to report true and correct income and the taxes to the tax authority

3. Compliance on Tax payment

Compliance to pay full amount of tax payment on or before the due date

Tax Non- Compliance**1. Tax evasion**

- Tax evasion is the illegal non-payment or under-payment of taxes, usually resulting from the making of a false declaration or no declaration at all of taxes to the relevant tax authorities, resulting in legal penalties (which may be civil or criminal) if the perpetrator of tax evasion is caught.

2. Tax avoidance (Tax mitigation)

- Tax avoidance is seeking to minimize a tax bill without deliberate deception (which would be tax

evasion) but contrary to the spirit of the law.

- It therefore involves the exploitation of loopholes and gaps in tax and other legislation in ways not anticipated by the law.

Reasons for relatively lower level of tax compliance in Sri Lanka

- I. Highly complicated tax structure
- II. High level of marginal taxes
- III. Unawareness and lack of knowledge about importance of paying taxes
- IV. Attitude of the society for tax evasion
- V. Relatively lower level of equality and fairness in the tax system
- VI. Lower level of efficiency in administering the tax system

Methods to improve the level of tax compliance in Sri Lanka

- I. Simplifying the tax system
- II. Giving recognition to tax payers
- III. Make general public aware of the importance of paying taxes
- IV. Reduce tax rates
- V. Improve efficiency of the tax system administering

Tax Gap

- Tax gap is the difference between the amount of tax that taxpayers should pay and the amount that is paid on time. The tax gap can also be thought of as the sum of non-compliance with the tax law. [1] [SEP]
- Understanding the tax gap and what its components are allows the government to make better decisions about tax policy and the allocation of resources for tax administration.
- The tax gap can be divided into three components:

1. Non-filing

Non-filing occurs when taxpayers who are required to file a return do not do on time [1] [SEP]

2. Underreporting

Underreporting of tax occurs when taxpayers either understate their income or overstate their deductions, exemptions and credits.

3. Underpayment.

Underpayment occurs when taxpayers file their return but fail to remit the amount due by the payment due date.

Tax Systems

- An important feature of tax systems is the percentage of the tax as it relates to tax base (income or consumption).
- There are mainly 3 tax systems.

1. Progressive Tax System

Tax rate increases with the increase of tax base (income or consumption).

This tax system ensures the principle of equity

Ex: - Personal income tax

Corporate income tax

2. Regressive Tax System

Tax rate decreases with the increase of tax base (income or consumption) .

Ex: - Turnover tax

Excise duties

3. Proportionate Tax system

Tax rate is fixed irrespective of the tax base.

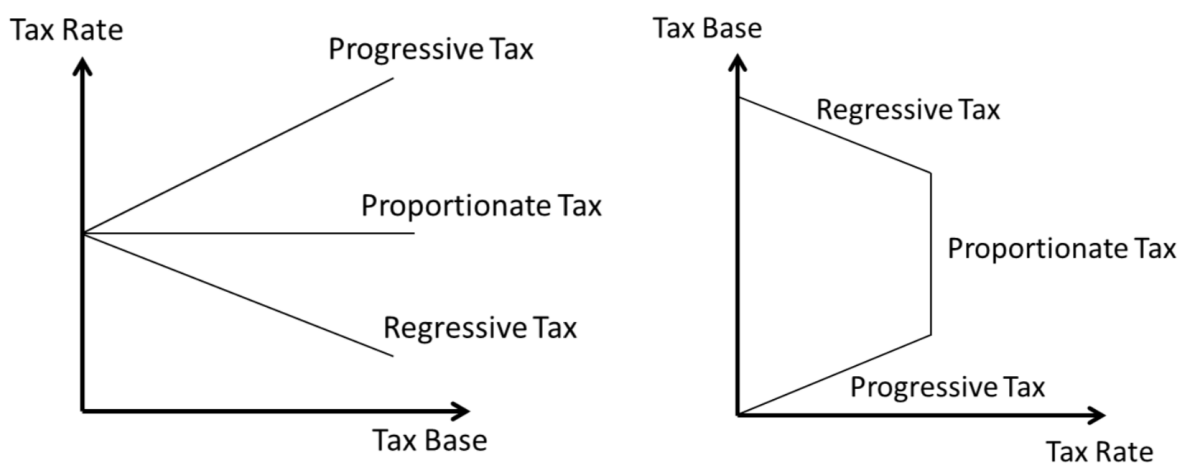
This tax system violates the principle of equity

Ex: - Value Addition Tax (VAT)

Economic service charge tax

Import duty

Relationship between tax base & tax rate in different tax systems



Incidence of Tax

- Incidence of tax means finally who bears the burden of tax. In the Incidence of tax there are two faces.

1. Statutory or legal incidence of tax / Formal tax incidence

This is legal who is liable to pay the tax to the government.

Ex;- In Income tax – Income earner

In goods and services tax – Producer

2. Economic or real incidence of tax / Actual tax incidence

This is the change in real income of the parties who involved in tax. For example, the division of a tax burden between buyers and sellers

- Real tax incidence is related to the price elasticity of supply and demand. Party who has higher inelasticity has to bear higher tax burden. If a higher tax burden is passed on to supplier it is known as **backward shift** & If a higher tax burden is passed on to consumer it is known as **forward shift** of tax incidence.

Different taxes based on the Incidence of Tax

- Whether the tax burden is born by the taxpayer alone or whether there is a ability to shift the tax burden to another party taxes are sub divided in to two types.
 1. Direct Taxes
 2. Indirect Taxes

Direct Tax

- The term direct tax generally means a tax paid directly to the government by the persons on whom it is imposed and real incidence of tax is totally borne by the taxpayer.
- Direct tax is chargeable on income, property or wealth owned by a person.
Eg- Income Tax, Wealth Tax, Corporate tax
- Direct taxes are:
 1. Paid directly to the government by the persons on whom it is imposed
 2. Burden cannot be shifted from the tax payer to other person
 3. Chargeable on income, property or wealth

Advantages of direct taxes

- I. Comply with the principle of equity
- II. Reduce disparities in income distribution through income re-distribution
- III. Minimize frequent fluctuations of total tax revenue due to the ability to pre-estimate
- IV. As the cost to collect taxes is low it adheres with the principle of economy

Disadvantages of direct taxes

- I. Private investments get demotivated
- II. Encourage tax evasion
- III. In certain countries as personal income is lower, direct tax income also will be a small amount
- IV. Create a mental pressure and stress on tax payers

Indirect Tax

- Indirect tax is a tax of its burden can be shifted from the taxpayer to other person.
- This tax is levied by the State on consumption, expenditure but not on income or property.
- Indirect taxes are imposed by the government on producers - but the burden of the tax can be passed onto consumers depending on the price elasticity of demand and elasticity of supply for the product. Eg- VAT, GSV, Service tax, Excise Duty, Custom Duty etc .
- Indirect taxes are:
 1. Burden can be shifted from the taxpayer to other person
 2. Charged on consumption, expenditure, privilege, or right but not on income or property
 3. Imposed on producers - but the burden of the tax can be passed onto consumers

Advantages of indirect taxes

- I. Lower chance of tax avoidance
- II. Can used to finance BOP deficit by tax imposition on imports (import tariffs)
- III. No undue influence on a single tax payer

Disadvantages of indirect taxes

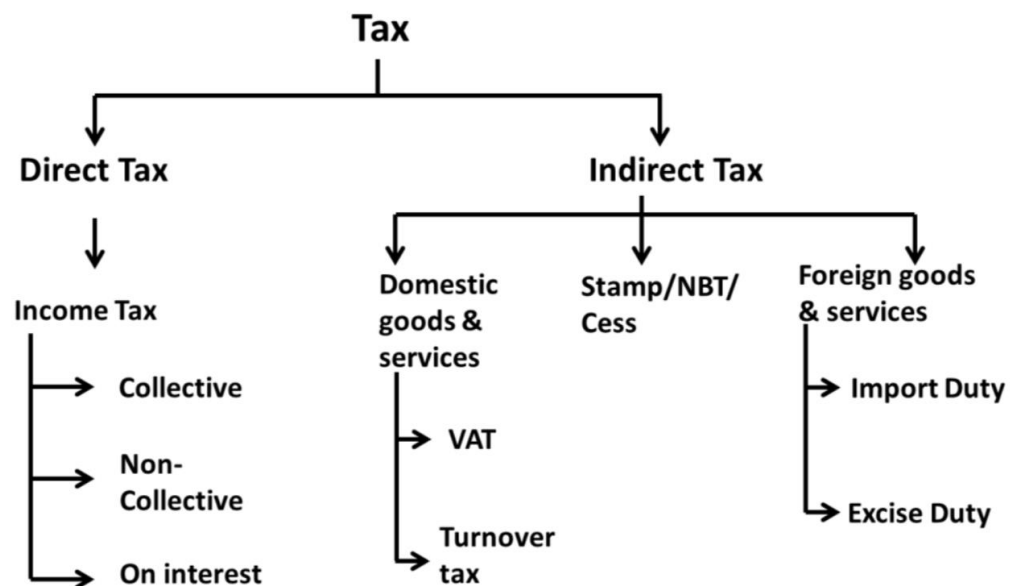
- I. Sometimes not complying with the principle of equity
- II. Expenses on collecting tax is high
- III. In forward shifting of tax (tax is shifted from producer to the consumer), cost of living increases
- IV. Can create inflationary effect by increasing product prices

Reasons for relatively lower level of tax income in Sri Lanka

1. Higher amount of tax evasion
2. Inefficiencies in tax administration
3. Providing more subsidies, tax holidays and tax concessions
4. Eliminating of import tariffs to control domestic inflation

Steps to improve tax revenue

1. Implementing awareness programs about the importance of paying taxes
2. Improving tax compliance
3. Simplifying tax system
4. Improving tax administration and implementation
5. Amending tax rates



	2019		
	As a percentage of GDP	As a percentage of Total Government Income	As a percentage of Total Tax Income
Direct Tax	2.8	22%	24%
Income Tax	2.8		24%
Indirect Tax	8.8	70%	76%
VAT	3.0		26%
Excise Taxes	2.7		23%
Import Duties	0.7		6%
Other taxes	2.4		21%
Total Tax Revenue	11.6	92%	100%

Non-Tax Revenue

- This is the revenue of the government from other sources other than direct and indirect taxes.
- Non tax revenue has two main elements;
 1. Current revenue Ex:- Property income
 2. Capital revenue Ex:- Purchase of capital goods

Non-Tax revenue of Sri Lanka

1. Profits and dividends of state owned enterprises (public enterprises)
2. Fees and Charges
3. Interest income
4. Rent
5. National lotteries board
6. Social security payments (EPF / ETF)
7. Sale of capital goods
8. Fines and confiscation
9. License fees

	2019		
	As a percentage of GDP	As a percentage of Total Government Income	As a percentage of Total Non-Tax Income
Profits & Dividends	0.12	1%	12.5%
Fees and charges	0.5	4%	50%
Interest Income	0.12	1%	12.5%
Other	0.25	2%	25%
Total Non-Tax Revenue	1.0	8%	100%

Recent trends in government revenue

	As a percentage of GDP		
	Non -Tax Revenue	Tax Revenue	Total Government Revenue
2013	1.4	10.5	11.9
2014	1.4	10.1	11.5
2015	0.9	12.4	13.3
2016	1.9	12.3	14.2
2017	1.2	12.6	13.8
2018	1.4	11.9	13.4
2019	1.0	11.6	12.6

	Composition of Tax and non- Tax revenue in government revenue	
	Non- Tax Revenue	Tax Revenue
2014	12%	88%
2015	7%	93%
2016	13%	87%
2017	9%	91%
2018	10%	90%
2019	8%	92%

Yardsticks to measure intervention of the government in an economy

Government Expenditure as a percentage of GDP	$\frac{\text{Government Expenditure}}{\text{Gross Domestic Production}} \times 100$
Government Income as a percentage of GDP	$\frac{\text{Government Income}}{\text{Gross Domestic Production}} \times 100$
Government contribution to GDI	$\frac{\text{Government Investment}}{\text{Gross Domestic Investment}} \times 100$
Government contribution to total employment	$\frac{\text{Government employment}}{\text{Total employment}} \times 100$

	Government Expenditure as a percentage of GDP	Government Income as a percentage of GDP	Government contribution to total employment
2011	19.9	13.4	14.3
2012	17.8	12	15.1
2013	17.4	11.6	15.1
2014	17.3	11.5	16
2015	20.9	13.3	16
2016	19.6	14.2	16
2017	19.4	13.8	17
2018	18.6	13.4	14.5
2019	19.4	12.6	17.5

Government Budget

- Government budget is the financial plan that is presented by the financial minister to the parliament stating expected government revenue, expected government expenditure and the methods of financing the budget deficit (if any) for the forthcoming financial year.
- Before it is approved by the parliament government budget proposal is known as appropriation bill. When the budget proposal is approved by the parliament it is known as appropriation act.
- **Appropriation Act/Bill** – In order to spend money in the forthcoming year government requires a necessary legal authority (legislature). An appropriation bill or running bill is a legislative motion (bill) that authorizes the government to spend money. It is a bill that sets money aside for specific spending of government.
- **A Vote on Account** – this is a “Resolution” submitted to the parliament by the ruling party to obtain the financial provision of the ongoing commitments of the government for a particular period, usually for a period of three or four months, when generally there is not enough time to present an annual budget. This only includes expenditure of the government.
- **Supplementary estimate** – supplementary estimate is a resolution submitted to the parliament by the minister of the respective ministry or the department when there is a need of extra funds to be used to an ongoing project or to start a new project even after using the funds allocated by appropriation act.
- There are two key accounts in a government budget.
 1. Current Account
 2. Capital Account

Current Account		
Total Government Revenue		XXXX
Tax revenue	XXX	
Non Tax revenue	XXX	
Less - Current Expenditure		(XXXX)
Balance of Current Account		XXXX
<i>(Government Savings/Negative savings)</i>		
Current Account & Capital Account		
Total Government Revenue		XXXX
Tax revenue	XXX	
Non Tax revenue	XXX	
Add - Grants		XXXX
Total Government Revenue and Grants		XXXX
Less - Current Expenditure		(XXXX)
Less - Capital Expenditure & lending minus repayment		(XXXX)
Overall Fiscal Balance (surplus/deficit)		XXXX
Add - Interest Payment		XXXX
Primary Account Balance		XXXX

Current Account

- The account that captures government revenue and current expenditure is known as current account.
 - In the account government revenue is tax and non-tax revenue only. It does not capture grants.
 - Surplus of this account is known as Government savings and deficit is known as negative savings.
 - In year 2019 as a percentage to GDP current account balance was -2.7

Economic consequences of current account balance

Consequences of Current account balance		
	Positive Balance	Negative Balance
1	Helps to finance capital expenditure of the government	Government needs to borrow even to finance public consumption and this indicates weakness in fiscal management
2	By reducing the overall budget deficit government can minimize its debt	Reduces domestic savings
3	Since government need not to borrow to finance its public consumption this indicates strength in fiscal management	Affects growth of the economy since government has no surplus to invest in to capital expenditure
4	Help in improving domestic savings	Leads to a higher overall balance and higher government debt

Overall fiscal balance

- The difference between total government revenue & grants and total government expenditure (current + capital + lending minus repayment) is known as overall fiscal balance.
 - a. When calculating overall balance apart from tax and non-tax revenue government grants are also considered
 - b. When calculating total expenditure capital expenditure, current expenditure and lending minus repayments are considered.
 - c. In year 2019 as a percentage to GDP **overall fiscal balance was -6.8**

Consequence of overall fiscal deficit

1. If overall fiscal deficit is financed through inflationary sources economy will face inflationary pressure
2. If overall fiscal deficit is financed domestic non-inflationary effect it can lead to crowding out effect and domestic interest rates can rise.
3. If overall fiscal deficit is continuously financed through foreign sources economy can lose its international credit worthiness
4. Overall fiscal deficit can hinder economic growth and it can lead to economic instability.
5. By financing overall fiscal deficit continuously through foreign sources local currency can get depreciated and it can lead to lose external value of local currency
6. Domestic saving gets weaken

Primary Account Balance

- The difference between total government revenue & grants and total government expenditure (current + capital + lending minus repayment) except interest payment is known as primary account balance.
 - a. Primary account balance can be obtained by adding interest payment back to the overall budget balance.
 - b. In year 2018 as a percentage to **GDP primary account balance was -0.8**

Net Cash Deficit

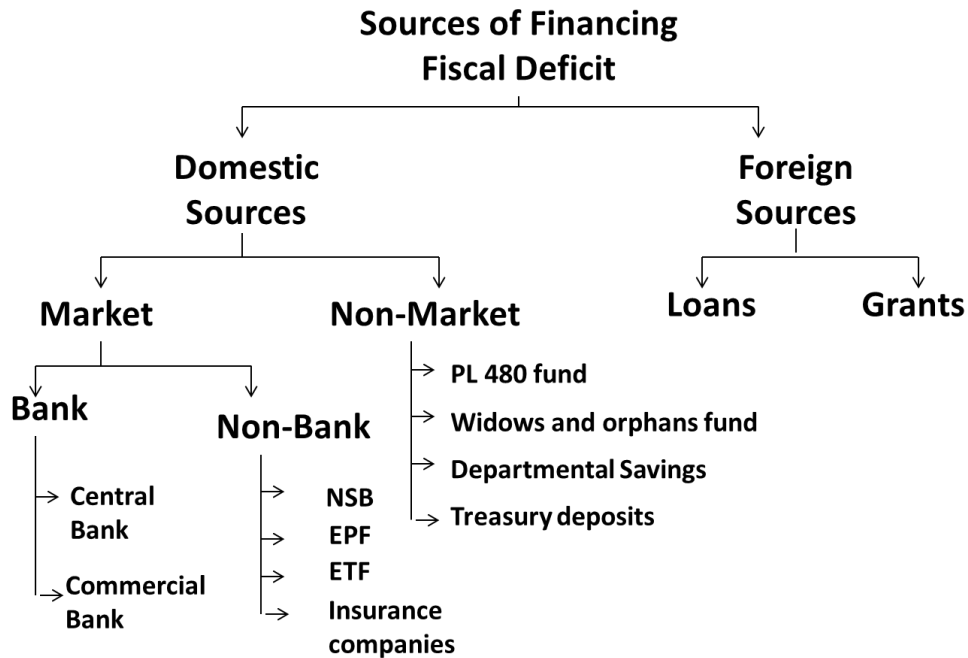
- Net Cash deficit is the difference between total government revenue & grants and total government expenditure excluding;
 - a. Sinking funds
 - b. Direct payment of public debt and
 - c. Subscription to international financial organizations
- The budget deficit estimated without loan repayments (domestic & foreign) is called Net Cash Deficit.

Recent trends in government budget

	2014	2015	2016	2017	2018	2019
Government Revenue and grants	11.6	13.3	14.2	13.8	13.4	12.6
Government Expenditure	17.3	20.9	19.6	19.4	18.6	19.4
Current Account Balance	-1.2	-2.3	-0.6	-0.7	-1.2	-2.7
Primary Account Balance	-1.5	-2.9	-0.2	0.0	0.6	-0.8
Overall fiscal Balance	-5.7	-7.6	-5.4	-5.5	-5.3	-6.8

Financing fiscal deficit (Budget financing)

- There are main two ways of financing fiscal deficit of an economy.
 1. Domestic sources
 2. Foreign sources
 - a. Foreign loans
 - b. Foreign grants



Financing fiscal deficit (Budget financing) in recent years

	Composition of budget deficit				
	2015	2016	2017	2018	2019
Total Budget deficit	100%	100%	100%	100%	100%
Domestic loans (Net)	58%	57%	54%	57%	31%
Foreign loans (Net)	42%	43%	46%	43%	69%

Domestic sources in financing fiscal deficit

- There are main two domestic sources used in financing fiscal deficit of an economy.
 - Market sources
 - Non-Market sources

Domestic market sources in financing fiscal deficit

- If funds are sourced through domestic financial market to finance fiscal deficit it is known as financing fiscal deficit through domestic market sources.
- In other words financing fiscal deficit through domestic market sources means financing fiscal deficit by selling various financial instruments in the domestic financial market.

- In sourcing funds from the domestic sources following financial instruments/debt collection instruments are used.
 1. Treasury bills
 2. Treasury bonds
 3. Rupee notes
 4. Development bonds
 5. International sovereignty bonds
- By financing the fiscal deficit whether a particular source makes an impact on money supply of the economy, domestic market sources are categorized in to two main sub categories.
 1. Banking sources (Inflationary sources/expansionary sources)
 2. Non- Banking sources (Non-inflationary/ non-expansionary sources)

Banking Sources

- If fiscal deficit is financed through loans obtained from local financial market sources those make an impact to money supply of the economy is known as banking sources.
- When fiscal deficit is financed through these sources there can have an impact to inflation of the economy (Money supply leads to an increase in aggregate demand. When AD rises, if AS does not get adjusted to the rising AD, it leads to a rise in price levels). Thus, these sources are known as inflationary sources.
- There are two banking sources;
 1. Commercial Banks
 2. Central Bank
- Commercial banks provide loans to the government by **creating credit**. Thus, Money supply gets increased when fiscal deficit is financed through commercial banks.
- Central bank provides loans to the government by issuing **new currency (reserve money)**. Thus, when fiscal deficit is financed through central bank there is **dual impact on money supply**.
 - a. First impact –increase in currency circulation
 - b. Second impact – When newly injected currency gets to commercial banks they create credit money.

Non- Banking Sources

- If fiscal deficit is financed through loans obtained from local financial market sources those do not make an impact to money supply of the economy is known as non-banking sources.
- Thus, these sources are known as non-inflationary sources (since it is only a transfer of private sector savings to the public sector). However, these sources create crowding out effect.
- ***Crowding out effect is private investors are losing the opportunity to obtain funds for their investments since government is absorbing funds available in commercial banks and non-banking financial institutions to finance fiscal deficit.***
- Crowding out effect creates due to,
 - a. Funds are getting limited in the market when government absorb funds available in the financial market
 - b. With the increase of demand for funds (Demand of both government & private sector), Interest rates get increased. Thus, private sector gets discouraged to invest.
- Main non- Banking sources are,
 - a. National Savings Bank
 - b. Employee Providence Fund
 - c. Employee trust Fund
 - d. Insurance companies

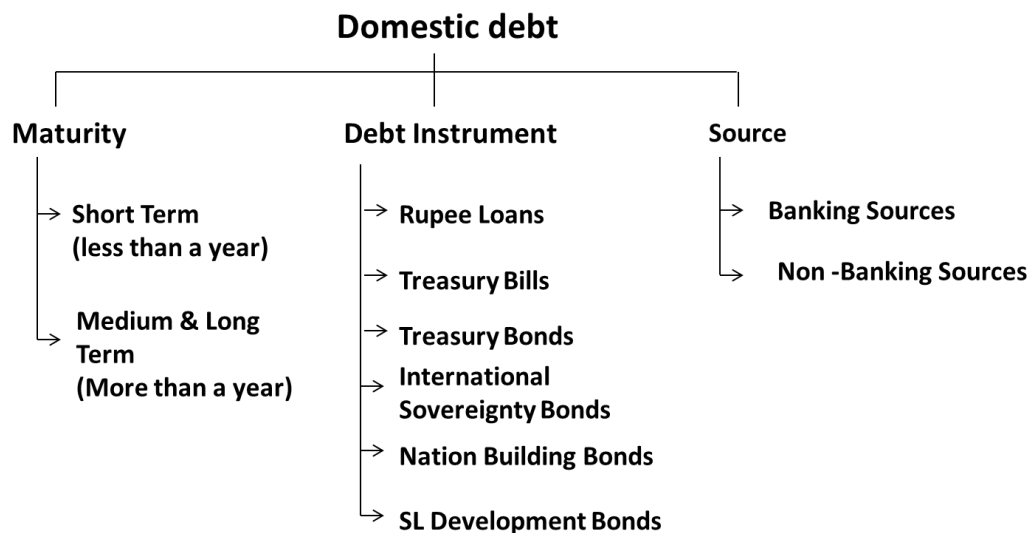
Domestic non-market sources in financing fiscal deficit

- On temporary basis if government funds and deposits are utilized to finance fiscal deficit is known as financing fiscal deficit through domestic non-market sources.
- In other words, this is a situation that the government borrows from the government itself on temporary basis.
Ex:- PL 480 fund, Widows and orphans fund, Departmental savings, Treasury deposits
- This source is non-inflationary and non-crowding out.

Economic consequences of financing the budget deficit through domestic sources

- Banking sources create expansionary effect and inflationary effect
- Crowding out effect
- Due to higher demand for credit domestic interest rates can get increased
- Difficulty in fiscal financial management

Alternative classification of domestic debt



Foreign sources in financing fiscal deficit

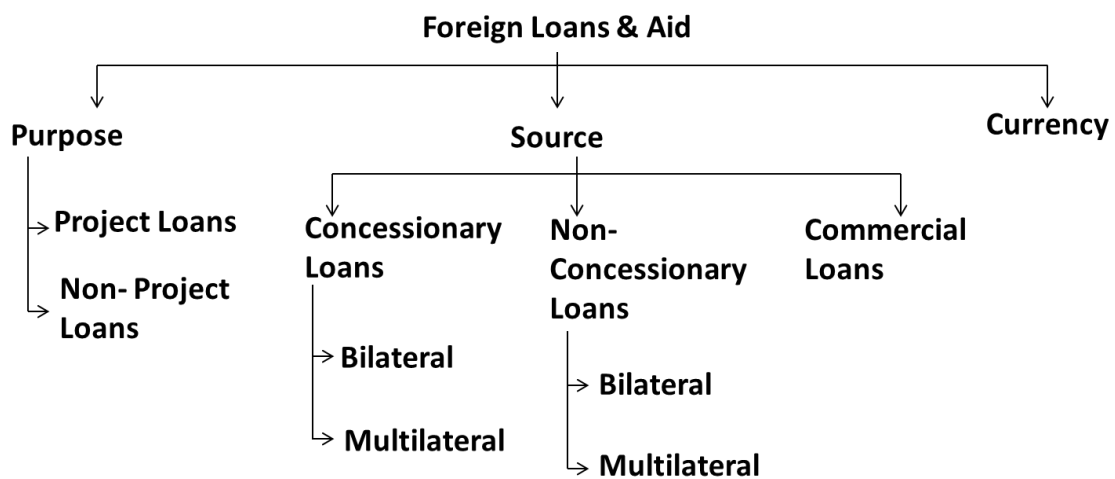
- If fiscal deficit is financed through funds obtained from foreign governments, international organizations and international financial market is known as financing fiscal deficit through foreign sources.
- There are two main foreign sources,
 - Foreign grants
 - Foreign loans & aid

Foreign Grants

- Money & goods/services donations provided by either a foreign government or an international organization without an intention of receiving back. Hence there is no either capital or interest repayment on foreign grants.

Foreign Loans & Aid

- Foreign loans and aid are monetary or real goods loans obtained from either from a foreign government, international organization or from a private sector financial institution on either concessionary terms or on commercial terms.
- Foreign Loans can be classified based on 3 main bases.
 - a. Purpose
 - b. Source
 - c. Currency



Project Loans

- These are loans granted on concessionary terms for a specific project/ development initiative. These loans are granted as either
 - a. Real goods loans or
 - b. Monetary loans or
 - c. Expert services
- Concessionary terms refers to
 1. Zero interest rate or very low interest rates compared to commercial rates
 2. Granting a longer pay back period
 3. Grace period to start the pay back
- Important – in recent years project loans have mainly obtained from Japan, International Development Agency, Asian Development Bank, China and Germany.

Ex;- Southern Highway – Asian Development Bank

Maththala International Airport – China

Colombo South Harbour – China (Merchant Harbour Bank & Chinese Development Bank)

Upper Kothmale Electricity project – Japan

Non - Project Loans

- Loans obtained not for a specific development project but for any other purpose. These loans can be obtained as monetary loans or as real goods.
- Important – in recent years non-projected loans have mainly obtained USA, India and Asian Development Bank.

Concessionary Loans

- These loans are the loans those are granted based on concessionary terms. In other wards these loans are provided on terms such as
 - a. Zero interest rate or very low interest rates compared to commercial rates
 - b. With a longer pay back period
 - c. With a grace period to stat the pay back
- These loans are known as foreign aid.
- Concessionary loans can be either bilateral or multilateral.
 - a. Bilateral Loans are the loans directly obtained by one county from another country. In the recent years Sri Lanka has mainly obtained bilateral loans from Japan, China, Germany, India, USA, France & Canada.
 - b. Multilateral loans are the loans obtained by one country from an international financial organization. In the recent years Sri Lanka has mainly obtained multilateral loans from Asian Development Bank, International Development Agency, European Investment Bank.

Non-Concessionary Loans

These are the bilateral or multilateral loans obtained by a country on less concessionary terms. These loans contain better terms (for the loan receiver) than commercial loans but worse terms (for the loan receiver) than concessionary loans.

Commercial Loans

These are the loans obtained on normal market terms based on commercial purposes. These loans need to be paid back in relatively shorter period of time and should pay a higher interest rate.

Ex;- Foreign commercial bank loans,

Euro Credit loans (A loan whose denominated currency is not the lending bank's national currency)

Classifying foreign loans based on currency Loans

Based on the currency in which loan is obtained foreign loans can be classified as,

- a. Special Drawing Rights Loans
- b. USD
- c. Yen
- d. Euro

Economic consequences of financing the budget deficit through foreign sources

- a. There is no negative impact on either to BOP or to fiscal budget when fiscal deficit is financed through foreign grants
- b. Less crowding out effect on private sector since demand for domestic funds gets reduced.
- c. Foreign debt service rate rises
- d. Negative impact on international trust and diplomatic relationships
- e. Negative impact on external value of local currency (negative impact on foreign exchange rate)

Debt Service Payment

Debt service payment is the total payment (Interest + capital repayment) paid in a particular year by the government for its debt suppliers.

$$\text{Debt Service Payment} = \text{Capital repayment} + \text{Interest payment}$$

Due to debt service payment,

- a. Creates a pressure on fiscal balance
- b. Creates a pressure on BOP
- c. Creates a pressure on external value of local currency

Debt service payment in recent years

	2015	2016	2017	2018	2019
Central Government Debt/GDP	77.7	79.0	77.9	83.7	86.8
Total Debt Service/GDP	12	11.3	12.0	14.5	13.5
Total Debt Service/Government Revenue	90.6	80.2	87.5	108.8	107.0
Total Debt Service/Government Expenditure	42.5	44	46.6	53.1	50.1
Total Interest/GDP	4.7	5.1	5.5	5.9	6.0

Yardsticks to measure debt service payment

Debt Service Payment as a percentage of GDP

$$\frac{\text{Debt Service Payment}}{\text{Gross Domestic Product}} \times 100$$

Debt Service Payment as a percentage of Government Revenue

$$\frac{\text{Debt Service Payment}}{\text{Government Revenue}} \times 100$$

Debt Service Payment as a percentage of Government Expenditure

$$\frac{\text{Debt Service Payment}}{\text{Government Expenditure}} \times 100$$

Foreign Debt Service Rate

$$\frac{\text{Foreign Debt Service Payment}}{\text{Goods \& Services Exports}} \times 100$$

Domestic interest payment as a percentage of government current expenditure

$$\frac{\text{Domestic interest payment}}{\text{Government Current Expenditure}} \times 100$$