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National Accounting & Role of the Government

AAT Level I

ECN - Economics

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CHAPTER 04

NATIONAL INCOME ACCOUNTING AND ROLE OF THE GOVERNMENT

Macro Economics

It is the branch of studying the behavior of an economy as whole and it covers national level economics phenomena such as unemployment, national income, inflation, price level, economic growth rate, GDP and balance of payment etc.

There are certain relationships with regard to national production, national income & national expenditure.

The major macro-economic objectives:

1. Full employment.

An economy achieves full employment level when all the resources in the economy are utilized in the full with maximum efficiency. Therefore it is necessary to increasing employment opportunities.

2. Price stability.

It is necessary to manage the economy without inflationary or deflationary pressures. Average price level in the economy is stable when economy experiences very lower rate of inflation.

3. Balance of payment equilibrium.

It is important to manage without any crisis when exchange across boundaries.

4. Equity or social justice or fair distribution of income

Ensuring fair level of income distribution among its population, a country is able to achieve equality.

5. Economy growth.

It means continuous improvement in capable of producing goods and services in order to satisfy the want of the member of society compared from one period to another period.

6. Sustainable development.

Enhancing level of production while protecting the quality of environment and also ensuring that benefits of developments are distributed among public. All aspects of development in ECONOMIC, ENVIRONMENT AND SOCIAL is known as SUSTAINABLE DEVELOPMENT. Therefore it includes improvement of tri components they are economic, environment and social of an economy should be developed over the period of time.

Macro-economic variables

1. Aggregate output
2. Employment
3. price level
4. balance of payment

Macro-Economic management policies

1. Monetary policy
2. Fiscal policy
3. Supply side policy
4. Foreign trade policy
5. Direct control
6. Income policy

1. <u>Monetary policy</u>

The following are the main instrument of implementing monetary policy,

a. Money supply
b. Rate of Interest

Here it is possible to influence the macroeconomic variables such as consumption, output, savings, price level etc.

2. <u>Fiscal Policy</u>

The following are the main instrument of implementing fiscal policy.

a. Taxation
b. Government Revenue
c. Government Expenditure
d. Government Debt

3. <u>Supply side policy</u>

The following facilities are given encourage production process

a. Tax reliefs
b. Privatization
c. Development of infrastructure such as communication, transportation, harbor etc.
d. Improvement of technology

4. Foreign trade policy

The following instruments are used in foreign trade policy,

a. Tariffs
b. Imports quotas
c. Export subsides
d. Adjustment of foreign exchange rate
e. Dumping
f. Prohibition of some imports

5. Direct Control

The following instruments are used in direct control policy,

a. Price control policy.
b. Minimum wage determination.
c. Restriction of land ownership.
d. Prohibition of production & distribution of certain goods.

6. Income policy

Business cycle and its impact

The upward and downward movement of real GDP over time is known as business cycle.

NOTE:

Macro-Economic Agents

1. Household sector
    - Owners of production factors
    - Factor earners by supplying its own production factors
    - Purchasing good and services from business firms
    - Paying tax to the government
    - Saving factor
2. Business firm sector
    - Private and government institutions
    - Production of goods and services
    - Receiving factors of production from household sector
    - Part of profit pay as dividends
    - Partly pay as tax
    - Remainder will be retained with the institution for investments
3. Government Sector
    - Provide social welfare such as law enforcement. National security , education, health and highways
    - Providing consumer subsidies and producer subsidies
4. Foreign sector
    - Imports and exports
    - Capital inflows and settlements

Circular flow of an Economy

1. Simple economy
    a. With savings
    b. Without savings
2. Closed economy
3. Open economy

a. <u>Without savings</u>

b. <u>Open economy</u>

<u>NOTE:</u>

1. Two sector economy (Simple economy with savings)
2. Three sector economy (Closed Economy)
3. Four sector Economy (Open Economy)

<u>In the Equilibrium Level</u>

Withdrawal – Injection Approach	Aggregate Income – Aggregate Expenditure
(W=J)	(Y=E)
1. S= I	1.Y=C+I
2. S+T=I+G	2. Y=C+I+G
3. S+T+M=I+G+X	3.Y=C+I+G+(X-M)/NX

- If transfers exists we say net tax (NT) instead of tax(T) it means NT=T-TR

<u>National income accounting</u>

It means the total value of goods and services produced in and economy within the certain time period and this is calculated through the preparation of national income accounts

Institutional units

There are five main institutional units exist within a total economic area.

• The non-financial corporations sector (NFC)

Various corporations and companies whose main aim is production for the market are included in this sector. Production companies in both government and private sector include under this.

• The financial corporations sector (FC)

Corporations and companies whose principal activity is providing financial services include under this category. Financial intermediation and provision of other special goods and services are the functions of this sector. Corporations in both government and private sector include under this.

• The government sector (GS)

Various government institutions that provide services aiming private and collective consumption without aiming market include under government sector. Examples: - Education, health, defense, protection of environment

• The non-profit institutions serving households sector (NPISH)

Institutions that provide services for households freely or at a price less than the market price are included in this sector. Workers or members of these institutions dedicate their labour voluntarily.

Examples:-Charities, religious organizations, political parties

• Households sector (HH) Household units that engage in production aiming own consumption or aiming market are included in this sector. Both consumers and producers exist within this sector. The clergy and prisoners are also included in this sector.

• Rest of the world (ROW)

Apart from the above mentioned five residential institutional units there is another institutional units that includes non-residential households and corporations. It is called the rest of the world (ROW).

Production boundary

It is necessary of identifying what production is covered and what production is not covered in the national income accounting

The following are production economic activities and included in national income accounting

- All goods and services that are produced for institutional units other than for the institution produced.
- All goods that are retained by their producers with themselves having produced them for their own final consumption or for purchasing of capital.
- The own-account production of housing services by owner occupiers.
- Domestic and personal services performed by paid domestic staff.

The following goods production are included in the national accounting

- Producing of agricultural crops for own consumption, storing of those, gathering of fruits and obtaining of foods from forests, chopping and gathering of wood, hunting and catching fish.

- The processing of agricultural products, the production of grain by threshing, the production of flour by milling, the preparation of meat and fish for preservation, bottling and drying of fruits, making curd, weaving of baskets, bags and mats; etc.

- Weaving cloth, dress making, making furniture.

- The supply of water (mini projects to supply water through small streams and water falls).

In this way, the goods production activities taken place within a household are included in the production boundary but the services performed by a member of a household for their own consumption are not considered as economically productive activities.

- ✓ The preparation of foods for members of a household.
- ✓ Looking after the children.
- ✓ The care of old and infirm people of a household.
- ✓ Activities such as decorating and cleaning of a house.

Unobserved economic activities

1. <u>Hidden economic activities</u>

Are those legal economics activates that are not captured in formal statistical enquiries.

Several reasons affecting to hide these economic activities purposely.

- ✓ To avoid payment of tax
- ✓ To avoid the payment of social security contributions
- ✓ To avoid having to meet certain legal standards Example:- Payment of minimum wages, laws relating to maximum work hours
- ✓ Disinclination towards complying with other administrative regulations

2. <u>Illegal economic activities</u>

There are two forms of illegal economic activities.

- ✓ The production and distribution of goods and services forbidden by law.

Example: - Alcoholic, drugs, prostitution, transportation of goods prohibited

- ✓ Some legal goods and services produced and distributed by unauthorized people.

Example: - Unlicensed medical practitioners

Productive economic activities which are included in gross domestic production

All the goods and services are produced

Domestic serviced obtained from one's own dwelling

Labour sacrificed for wages

Items produced for one's own consumption

Goods and serviced produced and provided utilizing voluntary labour

Productive economic activities not included in Gross Domestic Product.

- Unpaid household work.
- Freely obtained natural resources (Land, water, air etc.).
- Natural resources grown without the intervention of man (such as forests).
- Education and leisure.
- Change in value of resources due to natural growth or change in prices.

Nonproductive transactions excluded in national income accounting.

- Transfer payments
- Transactions relating to financial papers
- Transactions relating to second hand products

Main uses of national accounting is shown below.

- To assess the duty of an economy
- To measure economic growth
- To estimate per capita GDP
- For international comparisons

- To identify functional relationships between economic actors
- To reveal resource stock and resource utilization
- To obtain information for economic management
- To forecast behavior of macroeconomic variables

Three Approaches of National Income Accounting

There are three types of approaches normally use under the national income accounting.

1. Production approach
2. Income Approach
3. Expenditure Approach

A. Production Approach

To estimate the value of the national output by eliminating the multiple counting error two approaches are being used.

1. Final product approach

2. Value addition approach

- ✓ If national output is estimated either by using final product approach or value addition approach it should provide the same value.
- ✓ The value of goods and services which have passed the final stage of production process or in other words goods and services that can be consumed or invested without processing further is called the final product approach.
- ✓ Although the final product approach is used to eliminate the problem of multiple counting error it also has problems.
- ✓ This happens due to the difficulty of identifying consumer goods and intermediate goods separately.
- ✓ Example: - Although sugar is considered as a final good it can be an intermediate good for a confectionary producer.
- ✓ The most suitable approach to estimate the value of national output avoiding these weaknesses of final product approach would be the value addition approach.

- ✓ The financial value of goods and services produced is identified as the gross value of output. (GVO)

- ✓ Goods and services purchased from outside to the production process are identified as intermediate inputs.

- ✓ Gross value added (GVA) means the value received after deducting the value of intermediate inputs (Intermediate consumption) from the gross value of output (GVO).

- ✓ Gross value added can be estimated in two ways.

a. Product source
b. Income source

- ✓ Gross value added is estimated using product source by deducting all the values of inputs purchased from outside from the value of output.

- ✓ Gross value added is estimated using income source by adding all factor incomes received for all production factors engaged in the production process and by adding the cost of depreciation for the utilization of fixed capital.

A. **Production Approach**

1. Agriculture Sector		
• Agriculture, livestock ,forestry	xxx	
• Fishing	xxx	
		xxx
2. Industrial Sector		
• Mining & Quarrying	xxx	
• Manufacturing	xxx	
• Electricity ,gas, water	xxx	
• Construction	xxx	
		xxx
3. Service sector		
• Whole sale & retail	xxx	
• Hotel & restaurant	xxx	
• Transportation & communication	xxx	
• Banking ,insurance, real state	xxx	
• Ownership & dwelling	xxx	
• Private sector service	xxx	
• Public sector service	xxx	
		xxx
Gross value added at basic price		xxx
(+)Taxes on product		xxx
(-)Subsidy on product		(xxx)
GDP at market price		xxx

Net primary income from ROW	xxx
GNI at market price	xxx
Net secondary income from ROW	xxx
Disposable GNI at market Price	xxx

B. Income Approach

1. Employment compensation		xxx
2. Gross operational surplus		
i. Net operational surplus	xxx	
ii. Fixed capital consumption	xxx	xxx
3. Mixed income		xxx
4. Other taxes and subsidies on product		xxx
Gross value added at basic price		xxx
(+)Taxes on product		xxx
(-)Subsidy on product		(xxx)
GDP at market price		xxx
Net primary income from ROW		xxx
GNI at market price		xxx
Net secondary income from ROW		xxx
Disposable GNI at market Price		xxx

C. Expenditure Approach

1. Final consumption expenditure		
i. Household consumption expenditure	xxx	
ii. Nonprofit institutions expenditure	xxx	
iii. Government consumption expenditure	xxx	xxx
2. Gross domestic capital expenditure		
i. Fixed capital formation	xxx	
ii. Change in inventory	xxx	
iii. Change in valuables	xxx	xxx
GDE at market price		xxx
(+) Net exports (X-M)		xxx
GDP at market price		xxx
Net primary income from ROW		xxx
GNI at market price		xxx
Net secondary income from ROW		xxx
Disposable GNI at market Price		xxx

Drawbacks in National Income Accounting

1. Multiple counting error.
2. It does not take house wives service.
3. It does not take illegal economic activities.
4. It does not take hidden economic activities
5. Difficulties in collection of accurate & realistic data.
6. It is not adjusted to Externalities. (Ex: Environmental Pollution)

FISCAL POLICY

The implementation of Macro Economic management through guiding macro-economic variables by creating economic behaviours through Government planned expenditures, planned income & Government debt in the Government budget in order to achieve macro-economic objectives of,

1. Full Employment Level
2. Economic Growth
3. Sustainable Development
4. Economic Stability
5. Equity/fair distribution of income

It is the policy of managing aggregate demand Level of an Economy.

$AD = C + I + G + (X - M)$

Government Finance Policy Instruments (Fiscal Policy/ Budgeted Policy)

- Government Income
- Government Expenditure
- Government debt

} Planned Income /Expenditure /Debt

1. Government Revenue

It has two types,

- Tax Revenue
- Non-Tax Revenue

a. Tax Revenue

- Government tax Revenue means the income which is obtained as the compulsory Payment which is imposed on public income, wealth, assets, production, sale of goods & Services and international trade in order to compensate government expenditures.

- The Tax Revenue can be classified into two,
    - Direct Tax
    - Indirect Tax

The base for classification of Tax Revenue

- Tax Burden/Tax Incidence
- Tax Shift

✓ Tax Burden is meant by finally who is going to bear the burden of tax.
✓ Tax Shift is meant by possibility of transferring tax burden to another party.

Differentiate Direct Tax & Indirect Tax

Direct Tax

The Individual or the business firm who is eligible to pay tax & that same person takes the tax burden also is known as Direct Tax.

These are tax on Income, wealth and assets here it is impossible for incidence.

What are the main Direct Taxes in Sri Lanka?

1. Income Tax
    - On Individual
    - On Corporate Companies
    - On Interest

2. Tax on Assets

Indirect Tax

The Individual or the business firm who are eligible to pay tax and where they are possible to shift tax burden on the third parties is known as Indirect Tax.

These are the tax on production, sales and international trade.

Since tax Burden can be shifted to third party, there is a possibility for tax Shift

What is the main Indirect Tax in Sri Lanka?

1. Tax on Production & Expenditure
    - VAT
    - Selective Sales Tax / Excise Duty

2. Tariffs on International Trade
    - Import Tariff
    - CESS Tax
    - Tariffs on development of Harbour & Airport

Three Types of Imposition of Tax

- Proportional Tax
- Progressive Tax
- Regressive Tax

1. Proportional Tax

    Proportional Tax Means the tax rate will be remaining same even though Income, assets, wealth, production and sales of goods & services value increase.

    E.g.: - VAT
    Import Tariff / Import Duty
    Turnover Tax

    Tax Rate – No Change
    Tax Amount – Change (Either Increase or Decrease)

2. Progressive Tax

    Progressive Tax means the tax rate will be increasing as income, assets, wealth, production and sales of goods & services value increase

    E.g.: - Income Tax
    Assets Tax

3. Regressive Tax

    Regressive tax means the tax rate will be decreasing as income, wealth, production and sales of goods & services value increase.

    E.g.: - Investment Promotional Tax
    Export Promotional Tax

b. Non Tax Revenue of Government

The following revenues which are receiving other than the tax revenue in order to compensate the government expenditure will be known as non-tax Revenue

1. Recurrent Revenue
    - Revenue on Assets
      Rent, Interest, Profit, NLB Income, Profit of transfer of Central Bank
    - National Security Levy
    - Charges administration payments

2. Capital Revenue
    - Sale of Capital Assets
    - Receipt from Privatization

Characteristics of good tax system

1. Equity

2. Certainty

3. Simplicity

4. Economy
   Tax expenses should be lower than the tax amount received.
5. Convenience
   Time period & flexible place should be given to the tax payers.
6. Neutrality
   Not discouraging investments or savings

Differentiate Neutrality & Equity

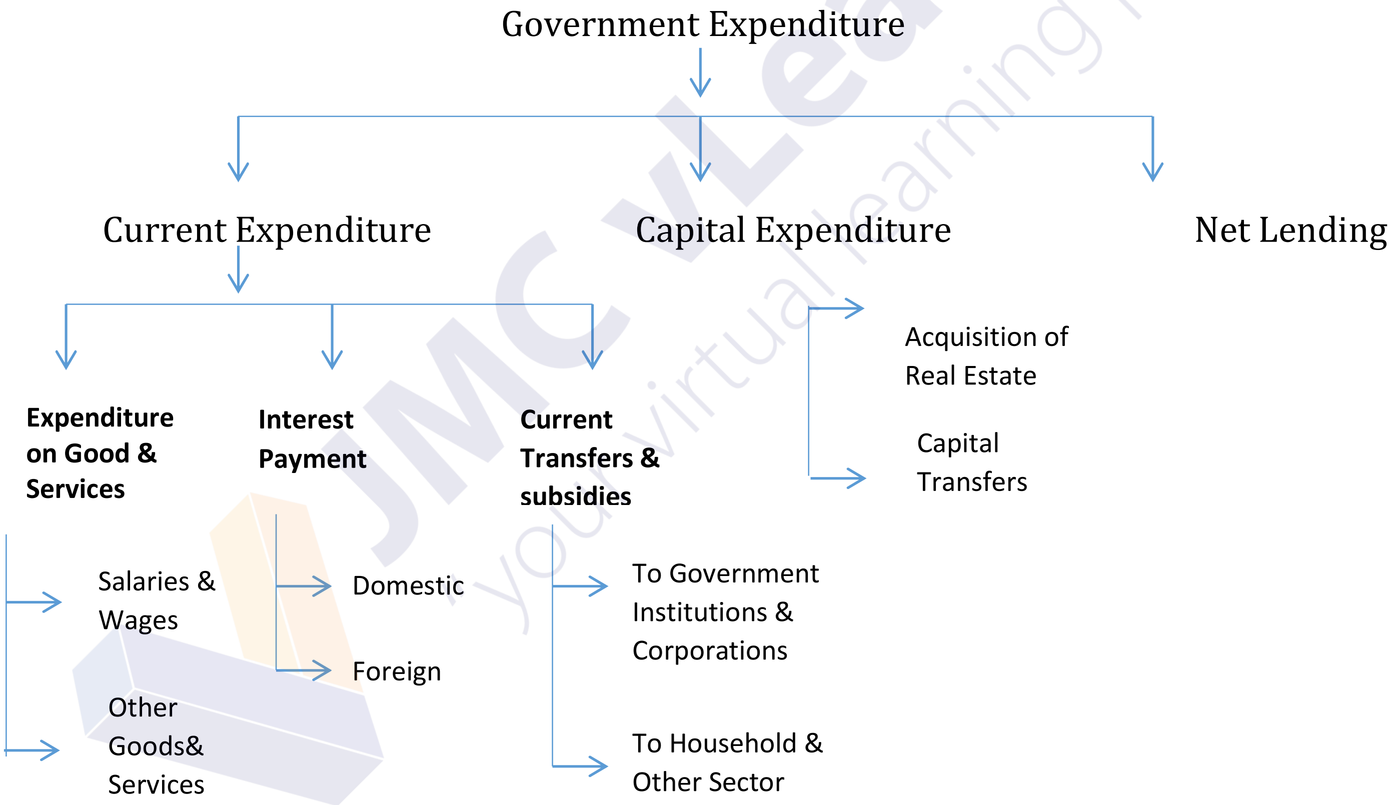
- ✓ Neutrality means avoiding excessive tax burden, because it causes increase in the general price level with inflationary effects. Therefor it affects production, consumption, investment of the relevant industry & ultimately it affects economic growth.

- ✓ The Government should impose lower tax rate on all goods & services in order to maintain neutrality.

- ✓ Equity means maintain social justice, that is there should be the higher tax burden for higher earners & lower tax burden for lower earners and equal tax burden for equal earners. It should maintain through vertical & horizontal equity.

- ✓ In order to maintain equity in direct tax the government can impose progressive tax rate system. In order to maintain equity in indirect tax the government should avoid taxes on necessity goods & imposing taxes on luxury goods & habit-forming goods.

Government Expenditures



Other Goods & Services:

- Office maintenance
- Stationary expenses

- Travelling
- Water bill
- Telephone & electricity bill

Current Transfers:

1. To government institutions & corporations
    - This the payment made to the government institutions & corporations which do not earn sufficient revenue to meet their current expenditure.
2. To household & other sectors
    - Pensions, school uniforms, free education, food stamp, and other relief payments to the household sector.
    - Subsidies given to farmers, fishermen & infant industry.
    - Studies given to exporters in foreign trade business.

Government Debt