

Macro Economics

National Income and Real Aggregates

Introduction:

This is a chapter based on numerical calculations of the country's revenue in different ways (Income, costs and method of adding value, their measures and security measures). Numerically determine your personal income, personal income, personal income, national income (net and amount) and your variance.

Gross and Net:

1. Gross means the value of a product, including depreciation. Net means product value without depreciation.
2. The difference between the two terms is depreciation.
3. Where depreciation is the expected decrease in the carrying amount of a large asset due to its normal use.
4. It is the result of the production process.

Gross = Net + Depreciation
Net = Gross - Depreciation

Other name of depreciation is:

- (a) Consumption of Fixed capital
- (b) Capital Consumption allowance
- (c) Current replacement costs.

National Income and Domestic Income:

1. National Income refers to the total amount of revenue for all final goods and services produced by ordinary citizens of the country during the year of accounting.
2. Domestic Income means the total amount of revenue earned by a production factor within the domestic area of a country during the calculation year.
3. The difference between the two benefits is Net Factor Income from abroad (NFIA), which is included in National Income (NY) and does not include Domestic Income (DY).
4. Where NFIA is the difference between the income of ordinary citizens from around the world and the same payments received by Non-residents in the local area. NFIA = Revenue Received by Citizens from the World (ROW) - Payments to Non-Residents within the domestic territory.
 $NY = DY + NFIA$
 $DY = NY - NFIA$

Note:

Case I: Income paid to abroad, and the NFIA changes the mark. In this case put foreign income 0.

For example, Payments abroad = 100

NFIA = Foreign Revenue - Income paid abroad

= 0 - 100 = -100 and vice versa.

Case II: Income from abroad is given, then NFIA = Revenue from abroad. For this add the overseas income 0.

For example, Income from abroad = 100

NFIA = Income from abroad - Income paid to abroad = 100 - 0 = 100 and vice versa

Case III: If remittances and remuneration are paid for both, then NFIA is the difference between them,

For example, imported income = 100 Overpayment income = 120

NFIA = Foreign Revenue - Overpayments = 100 - 120 = (-) 20 and vice versa

Case IV: Net Factor Income to abroad overseas are issued, and the NFIA converts the token.

Net factor income paid to abroad (NFPA) = Income to abroad - Income From abroad.

For example,

(i) Net Factor income abroad (NFPA = 100). In this NFPA it is good, which means that the revenue from overseas is greater than the Income from abroad, which,

NFIA = (-) 100

(ii) Remains of the Remnant Remote Feature [NFPA = (-) 100]. In this NFPA there is negative, which

Means that the income from abroad is less than the income from abroad, which, NFIA = (+) 100

Factor Cost and Market Price:

1. Factor Cost (FC): Refers to the amount paid for production features by their role in the production process.

2. Market Price (MP): Means the price at which a product is sold in the market. The difference between the two is Net Indirect Taxes (NIT) which is included in the MP and issued by FC. Where NIT is the difference between indirect taxes and Subsidy.

$$\text{NIT} = \text{IT} - \text{Subsidy}$$

There, Indirect Taxes are taxes levied by the government on the production and sale of goods. Sales tax, sales tax, customs tax, etc. are some of the indirect taxes, and subsidies are grants that are given to businesses to promote the production of certain goods, to encourage exports or to sell goods at lower prices. Free market Price. In India, the LPG cylinder is sold at subsidized prices.

$$\text{MP} = \text{FC} + \text{NIT (Indirect Taxes - Subsidy)}$$

$$\text{FC} = \text{MP} - \text{NIT (Indirect Taxes - Subsidy)}$$

Note:

Case I: Subsidy has been granted, and NIT has changed the mark. In this case enter the indirect tax = 0.

For example, Subsidy = 100

$\text{NIT} = \text{Indirect Tax} - \text{Subsidy} = 0 - 100 = (-) 100$ and vice versa

Case II: IT is provided, then $\text{NIT} = \text{IT}$ (In this case apply 0)

For example, $\text{IT} = 100$

$\text{NIT} = \text{Indirect Tax} - \text{Subsidy} = 100 - 0 = 100$ and vice versa

Case III: If both IT and funding are provided, then NIT is different.

For example, $\text{IT} = 100$

Support = 80

$\text{NIT} = \text{Indirect Tax} - \text{Subsidy} = 100 - 80 = 20$

Case IV: When sales tax and property tax are levied, in addition to both, we receive indirect taxes.

For example, sales tax = Rs. 1000

Property tax = Rs.1000 Subsidy = Rs.500

$\text{NIT} = \text{Indirect Tax (sales tax + property tax)} - \text{Subsidy} = (1000 + 1000) - 500 = 1500$

Case V: If a Net subsidy is granted, then to convert it into an indirect Net tax, we must change the token,

$\text{Residual Subsidy} = \text{Subsidy} - \text{Indirect Tax}$

For example,

(a) Net Subsidy = 100. In this case, the Net subsidy is a positive, meaning that the indirect tax is less than the subsidy making,

$\text{NIT} = (-) 100$

(b) Net Subsidy = (-) 100. In this Net subsidy is negative which means that the indirect tax is greater than the subsidy which makes,

$\text{NIT} = 100$

Case VI: If the Net subsidy and the Indirect Tax are both offered, then we should ignore the Indirect Tax and change the Net subsidy mark.

For example, Net Subsidy = 100

Indirect Tax = 20 Indirect Tax on Residual = (-) 100 Numerical Image in Basic Concept

Aggregate of National Income

1. Gross Domestic Product at Market Price (GDP_{MP}): GDP_{MP} is defined as the total market value of the goods and services produced locally within a year of accounting by all production units.

(a) 'Total' in GDP_{MP} means that depreciation is included, that is, no provision is made for depreciation.

(b) 'Domestic' in the GDP_{MP} means to include all storage goods and services produced by all production units located in the economic zone (whether locally or non-resident).

(c) 'Market Price' in GDP_{MP} means that indirect taxes are included and funding is not included, that is, it indicates that Net Indirect Tax (NIT) is included.

(d) 'Product' in the GDP_{MP} indicates that only final goods and services should be included and that medium goods should not be included to avoid double counting.

2. Gross Domestic Product by Factor Cost (GDP_{FC}): GDP_{FC} is defined as the total amount of goods and services produced locally within a year of accounting by all production units other than the Net Indirect Tax.

$$GDP_{FC} = GDP_{MP} - \text{Indirect Tax Amount}$$

3. Net Domestic Product at Market Price (NDP_{MP}).

The NDP_{MP} is defined as the total market value of all final goods and services produced locally within the country of its ordinary and non-resident residents during the accounting year.

$$NDP_{MP} = GDP_{MP} - \text{Depreciation}$$

4. Net Domestic Product at Factor Cost (NDP_{FC}).

NDP_{FC} refers to the total amount of revenue generated by a manufacturing factor within a domestic country within a year of accounting.

$NDP_{FC} = GDP_{MP} - \text{Depreciation} - \text{Net Indirect Taxes}$ The NDP_{FC} is also known as Home Income or Home Feature Income.

5. Gross National Product at Market Price (GNP_{MP}).

GNP_{MP} refers to the market value of all final goods and services produced by ordinary citizens of the country during the accounting year.

$GNP_{MP} = GDP_{MP} + \text{Net factor from abroad}$ It should be noted that GNP_{MP} may be less than GDP_{MP} if NFIA is negative. However, GNP_{MP} will be higher than GDP_{MP} if NFIA approves.

6. Gross National Product at Factor Cost (GDP_{FC}) or Gross National Income

GNP_{FC} refers to the total value of all final goods and services produced by ordinary citizens of the country during the census year.

$$GDP_{FC} = GNP_{MP} - \text{Indirect Tax Amount}$$

7. Net National Product at Market Price (NNP_{MP})

NNP_{MP} refers to the residual market value of all final goods and services produced by ordinary citizens of the country during the accounting year.

$$NNP_{MP} = GNP_{MP} - \text{Depreciation}$$

8. Net National Product at Factor Cost (NNP_{FC}).

NNP_{FC} refers to the total amount of all final goods and services produced by ordinary citizens of the country during the census year.

$NNP_{FC} = GNP_{MP} - \text{Depreciation} - \text{Indirect Residual Taxes}$ It should be noted that NNP_{FC} is also known as National Income.

Real, Nominal Aggregates, Activities Excluded from GDP and does GDP Measures Social Welfare:

1. National Income at Constant Price:

(a) If the national revenue is calculated on the basis of the annual inflation index, it means that it is known as the national revenue at a fixed price.

(b) It is also called Real National Revenue as it fluctuates due to fluctuations in the flow of goods and services and the price remains the same.

2. National Income at Current Price:

(a) If National Income is calculated on the basis of current year price index, then it is known as national income at current rate.

(b) It is also called National Income as it fluctuates due to fluctuations in the flow of goods and services and the value of goods.

3. GNP at current MP: When the final goods and services included in the GNP are measured by the current MP, that is, the prices available for the year in which the GNP is measured, it is called the GNP in the current Member of Parliament or Nominal GNP.

4. GNP at Constant MP: When the goods and services included in the GNP are measured at fixed values, i.e. base annual prices; it is called GNP in the regular MP or Real GNP.

5. GNP Deflator: GNP Deflator measures the average price of all final goods and services produced in a local economic environment including NFIA. GNP deflator is rated as a GNP word for word to real GNP, multiplied by 100.

$$\text{GNP deflator} = \frac{\text{Nominal GNP}}{\text{Real GNP}} \times 100$$

6. Green GNP: Green GNP refers to a GNP that has been amended to lose value due to,

(a) Environmental degradation; and

(b) Elimination of natural resources as a result of all production activities in Economy.

7. Activities excluded from GDP_{MP}: The functions are as follows:

(a) Financial services only: It can be of three types:

(i) Buying and selling securities

(ii) Government Transfer Payments

(iii) Private Transfer Payments

(i) Buying and selling securities:

- In the financial markets potential investors also buy and sell financial assets such as stocks and bonds.
- When someone buys a stock, there is only a patent transfer. It is a property ownership claim.
- Trading in financial instruments does not mean the production of end-of-life goods and services. So these are not included in the GNP.

(ii) Government Transfer Payments:

- Transfer payments are payments that are not in exchange for goods and services provided on an exchange.
- Pensioners social security measures, etc. are examples of this
- Government Transfer Payments as there is no final production of goods and services in response to Transfer Payment, Transfer Payments are not included in the GNP.

(iii) Private Transfer Payments:

- Things like a fund that parents give to their children, adults who give children money are secret payments.

This is just a transfer of funds from one person to another. Therefore, this is not included in the GNP.

(b) Transfers of used goods:

- (i) GNP refers to the number of final goods and services produced in a particular year.
- (ii) Therefore, assets produced in the past cannot be included in the GNP. For example, Mr A sells his old bicycle to Mr B for rs. 30,000 on 25 April 2011 purchased by Mr A on 1 March 2010 for Rs. 45,000. This activity should not be included as it has already been included in the 2010 GNP and if we reassemble it, it will create a double counting problem.

(c) Non-market goods and services:

- (i) Many storage goods and services are not acquired through normal market trading. Vegetables can be grown in the yard instead of buying them at the super market or the electrical fault can be fixed by the homeowner himself instead of hiring an electrician.
- (ii) These are examples of goods that can be sold and services utilized using a fixed market as the GNP covers only those activities that are carried out through market activities.

(d) Illegal Services: Activities such as gambling, black marketing, etc., should be excluded because all illegal activities are in NY and also because there is a statistical problem with its rating.

(e) Leisure activities: Activities such as drawing, planting flowers in the kitchen garden, etc. it is not included as its purpose is not to make money but to pass free time in one's work for leisure or entertainment, there is also a mathematical problem of balance. their satisfaction gained by drawing and any other hobby.

8. Limits on using GDP as an indicator of national welfare: Many reasons after this. These are:

(a) Many goods and services that contribute to the economic well-being are not included in GDP or non-financial trading:

- (i) There are many goods and services left out of the national income scale due to practical measurement problems e.g., services for housewives and other members, production of your account, etc.
- (ii) This omission is due to data unavailability and problem analysis.
- (iii) It is generally agreed that these factors contribute to economic well-being.
- (iv) Thus, if we rely solely on GDP, we would be undermining economic well-being.

(b) Externality:

(i) If the activities of another person result in the benefits or harms of others other than the proceeds of the interest and compensation incurred for the damages incurred, those benefits and damages are called external.

(ii) Services that result in the benefit of others are external and that promote well-being; and those that lead to harm to others are called negative external factors, and thus reduce well-being.

(iii) GDP does not take into account these external factors.

For example, the construction of a flyover or highway reduces transportation costs and travel time for its users who have contributed nothing to its costs. Construction costs are included in GDP but not the positive external factors from it. GDP and positive external factors both increase well-being. Therefore, taking GDP alone as an indicator of welfare undermines welfare. It means that welfare is more than what is reflected in GDP.

(iv) Similarly, GDP also does not look at negative external factors. For example, industries produce goods but at the same time create water and air pollution. The Yamuna River, now a water source, is a living example. Pollution harms people. Firms do not have to pay anything for harming people. Material production increases well-being but creating pollution reduces well-being. Therefore, taking GDP alone as an indicator of welfare exceeds welfare. In this case, welfare is much lower than GDP.

(c) Changes in revenue distribution (GDP) may affect welfare:

(i) All persons do not receive the same amount of income. Some earn more and others earn less. In other words, there is an unequal distribution of revenue.

(ii) At the same time, it is also true that in the event of an increase in 'per capita income' everything is not equally good. 'Per capita' is the only measure. Some may be slightly higher and some may be higher than the national average. In some it may fall.

(iii) Means that income inequality may increase or decrease.

(iv) Increasing means that the rich get richer and the poor get poorer.

(v) The use of the rupee of income for the poor is higher than for the rich.

Suppose that the income of the poor decreases by one rupee and that by the rich rises by one rupee. In such a situation, the decline of the poor will outweigh the increase in the welfare of the rich.

(vi) Therefore, if an increase in individual income inequality increases, it may lead to a decrease in social (in the main sense).

(d) All products must not contribute equally to economic well-being:

(i) GDP includes various types of products, such as food, housing, clothing, police services, military services, etc.

(ii) Some of these products contribute significantly to human well-being, such as food, clothing, housing, etc. Other products like police, military etc. it may offer relatively little and may not directly affect the quality of life of the people.

(iii) Therefore, how much economic prosperity will depend on the types of goods and services produced, not just the quantity produced.

(iv) It means that if GDP increases, social growth may not be the same.

(e) The contribution of other products may be negative:

(i) GDP includes all storage products whether milk or alcohol.

(ii) Milk can provide both immediate and lasting satisfaction to consumers.

Alcohol, on the other hand, may provide some instant gratification, but because of its harmful effects on health it can lead to social decline.

(iii) GDP covers only the monetary value of the product and not its contribution to the welfare.

(iv) Therefore, economic well-being depends not only on the quantity of consumption but also on the type of goods and services used.

Methods of National Income and How to Determine National Income by Revenue and Its Numbers, Measures and Monitoring:

There are three ways to calculate national income.

These are:

(a) Income Method

(b) Cost Method

(c) Value Added Method / Product Method / Output Method

Determination of national revenue under the revenue system:

(a) "Production creates revenue". If we want to calculate National Income by Income, we have to add different benefits from the economy.

(b) The addition of all these revenues gives us the nearest figure to National Revenue, namely, Net Domestic Product in FC (NDP_{FC}).

(c) Elements of income method

1. Employee Compensation (COE) / Employee Salaries: Amount received by employees from their employers, either in cash or in kind or in any other way another social security system is known as workers' compensation.

This is broadly divided into the following three sections:

(a) Wages and Salaries and payable in cash:

- Wages and salaries received by employees in respect of their duties.
- Special overtime allowances.
- Travel costs to and from work, and parking.
- Bonuses
- Commissions, grants, tips, living expenses (i.e., charity grants paid in our country) award, holiday, sick leave grant etc.
- Retirement Pensions (Postponed Salary): Retirement pensions are related to the services provided to the recipient before retirement. It is also known as postponed pay. Any costs incurred by employees and subsequently reimbursed by the entity should be deducted from Employee Compensation (COE) as such costs are part of the entity's internal use.

(b) Salaries and Remuneration: Income forms include goods and services that are not needed in the workplace and can be used by employees at their

discretion, to meet their own needs or the needs of themselves or other members of their household. . Includes:

- Food and drink include those for drinking when traveling on business.
- Accommodation.
- Vehicle or other durable services provided for personal use by employees.
- Goods and services produced as a result of the employer's own production process such as free movement of railway workers or airlines, or free coal for miners.
- Sport, recreation or holiday facilities for employees and their families.
- Children's kindergartens for staff.
- The interest rate charged by employers in providing employees with loans at reduced or zero interest rates for the purpose of purchasing houses, furniture or other goods and services.

It should be borne in mind that it does not include any resources needed for the job and where employees have no choice.

For example, uniforms or other types of special clothing that will be used only for work. Examples are police uniforms, drivers' uniforms, hospital nurses' uniforms. This is because such payments are a medium-term use for business ventures.

(c) Employees' Contribution to Social Security Programs: Employers pay for social security schemes such as health insurance, cause insurance, pension schemes etc. Employer contributions to these programs are part of the compensation of employees.

It should be noted that the contribution of employers to the social security system should be included and the contribution of employees to the Social Security Scheme should not be included as the COE is what the employer pays the employee and if anything the employee is entitled to. can be placed under COE.

2. Operating Surplus: The CSO (Central Statistics Organization) has defined operating costs as “total product value under average consumption, employee compensation, mixed pay, depreciation and NIT.”

Operating Surplus = GVOMP - Medium Expenditure - COE - Mixed Income - Depreciation - NIT

In other words, it is the amount of revenue from goods and income from business. The active amount consists of the following two components:

(a) Income from property: It is income from rent, interest and royalty.

It is divided into three parts:

- **Rent:** The income from ownership of a property is known as rent. Includes rent withheld. If a person lives in his own house, it is thought that in the economy he pays the rent. This concept is known as imputed rent.
- **Royalty:** Royalty payments made for the use of deposits of minerals such as coal, oil, etc. or the use of copyrights, copyrights, trademarks, etc.

- Interest: The amount earned by borrowing from production units. It also includes the calculated interest on the business provider's proceeds. But interest rates include interest on loans made only for productive resources. The following categories of interest should not be included:
- Interest on a national debt or government interest on a national debt should not be included as it is considered that interest is payable on a debt incurred.
- Interest paid by one company to another firm as it is already included in the profits of the paying company.

(b) Business income: It is the refund of the entrepreneur after paying all other aspects of production. It is of the following three types:

- Distributed Profit (Budget): This is the portion of the total benefit provided to shareholders. It should be noted here that the profits made by one company to another should not be included under this heading because they are already included in the profits of the company paying for it.
- Non-Distributed Profit (Saving the Private Sector or Saved Earnings): That is the part of the total profit that can be given to shareholders and kept as a safe haven for future uncertainties.
- Organization Tax (Interest Tax): That is the portion of the total profit that a company gives to a government as a Tax. The concept of capital investment applies to all productive businesses, whether private or public. State-owned enterprises are also expected to earn a fair return on investment.

However, the surplus money does not come from the general public sector as it produces goods and services for the country and not for profit purposes i.e., why rent, interest and profits are not in the public sector as a whole.

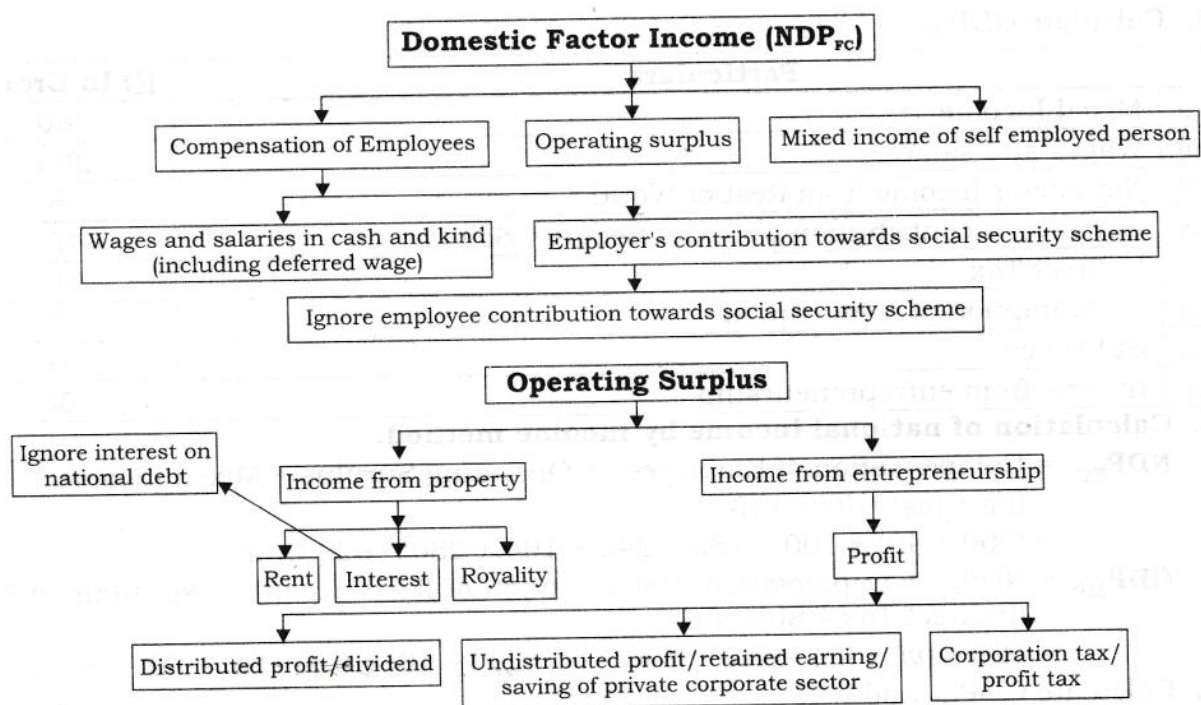
3. Mixed Income: Salaries of account workers (such as farmers, doctors, hairdressers, etc.) and unincorporated businesses (such as small shop owners, repair shops) are known as mixed pay. They do not keep proper accounts. They often rent the main resources in the market instead of using their own resources such as land, workers, funds, etc. As a result, it is difficult to distinguish income between rent, wages, interest, and profits.

NDPFC Employee Compensation (COE) + Operating Accounts (OS) + Mixed Earnings (MY).

Calculate National Income by Income Method:

If we want to calculate National Income by Income, we have to add different benefits from the economy.

Addition of all this revenue gives us a figure close to National Income, namely Net Domestic Product at FC (NDP_{FC}).



Important note:

1. Profit from one company to another should not be included because it is part of the medium expenditure.

2. If Profit after tax is given and business tax is levied, then in addition we receive a profit. Profit after tax = 1000

Business tax = 100 Profit = 1100

3. If Profit before tax and business tax are provided, do not ignore business tax. Profit before tax = 1000

Business tax = 100 Profit = 1000

Steps to calculate national income in the form of income method:

Step 1: Identify businesses that use key assets (Land, Labour, and enterprise).

Step 2: Separate different types of income such as:

(a) Employee compensation: The amount that employees receive from their employer, whether in cash or some other form or any other social security scheme is known as 'Compensation of Employees'.

(b) Operating Surplus: Total amount of revenue from assets and income from business.

(c) Mixed Income: Income from account workers (such as farmers, doctors, hairdressers, etc.) and unincorporated businesses (such as small shop owners, repair shops) is known as mixed income.

Step 3: Measure the amount of payloads produced by each manufacturing unit.

Step 4: Add all income / payments within your home area to earn home income, i.e., NDP_{FC} .

$NDP_{FC} = \text{Employee Compensation} + \text{Operating Surplus} + \text{Miscellaneous Salary}$

Step 5: Addition of NFIA to NDP_{FC} to get NY, that is, NNP_{FC} .

$NNP_{FC} = NDP_{FC} + NFIA$

Precautions of income method:

(a) Avoid transfers: The national wage includes only component payments, i.e., payment for services rendered by production units by property owners. Any payment for which no service is provided is called a transfer, not a production function. Gifts, donations etc. they are prime examples. Since money transfers are not a productive activity they should not be included in the national income.

(b) Avoid capital gains: Big profits refer to revenue from the sale of used goods and financial assets. Revenue from the sale of old cars, old house, bonds, loans, etc. some examples. This performance is not productive. Therefore, any revenue received by the owners of such items is not revenue.

(c) Include income from utilities: If the landlord lives in his own house, he does not pay rent. But in fact you pay your own rent. As such, rent is a payment for services rendered, even if provided by the owner himself, should be calculated as part of the payment.

(d) Include free services provided by production unit owners: Owners work in their units but do not charge a fee. The owners provide the funds but do not charge interest. The owners do the production on their property but do not charge rent. Although they do not charge, services have been performed. The calculated amount of this should be included in the national income.

How to Determine National Income by Expenditure method and its Numerical, steps and Precautions:

National Income determined by Expenditure Method

(a) "Production creates revenue, revenue creates costs". If we want to calculate National Revenue in this way, we have to add the last resort that is different from the economy.

(b) The addition of all those final expenditures gives us the approximate amount of National Income, i.e. GDP_{MP} .

Components of expenditure Method

1. Government Final Consumption Expenditure (GFCE): Expenditure incurred by the general government on current costs for goods and services such as public health, defence, law and order, education, etc. These goods and services are not profitable because they are produced by the general government without any profit.

These goods and services are costly to the government as they can be sold to a citizen and for the benefit of citizens. Therefore, $GFCE = \text{Intergovernmental Expenditure} + \text{Employee compensation (salaries and wages in cash or type) by}$

government + Direct government purchases abroad (purchases made by foreign embassies and consulates) + Expenditure (depreciation)) - Sales of goods and jobs by the government.

2. Private Final Consumption Expenditure (PFCE): Private Final Consumption Expenditure (PFCE): Cost of Private Final Consumption Expenditure (Cost of Expenditure Expenditure) and NPISH (Non-profit Institution Providing Expenditure) for all types of consumer goods.

PFCE = Cost of last residential use + A non-profit private institution that works for households.

The amount of the following items is calculated to determine the Private Cost.

(a) Procurement of goods and services currently produced in the domestic market by consumers and NPISH.

(b) Direct purchases made overseas by residential properties are added but direct purchases in the domestic market by non-resident households and additional deductive bodies.

PFCE = Procurement of currently manufactured goods and services in the domestic market by consumer families and NPISH + families direct purchases made abroad by their own homes - direct purchase in the domestic market by non-resident households.

Note: If in the test case the final cost of using the home is not provided, they can be listed below

Final Cost of Household Use = Personal Income Expenditure - Personal (Family) Savings.

3. Gross Domestic Capital Formation or Gross Investment or Investment Expenditure:

It's Refers to the increase in visual cash flow over a period of time. Includes building machinery, housing, factory construction, etc. It is divided into the following sections.

(a) Gross Domestic Fixed Capital Formation (GDFCF): Costs incurred in purchasing fixed assets. There are three types:

(i) Gross Business Fixed Investment: The amount of business units it uses to buy large newly manufactured goods such as industries and equipment. The amount of a fixed business investment is the total amount spent on freshly produced assets that do not change. When depreciation is deducted from it, we acquire Net Business Fixed Investment.

Gross Business Fixed Investment = Net Business Fixed Investment + Depreciation

(ii) Housing Expenditure: This is the expenditure on the construction of apartments and houses. Investment is said to be higher if depreciation is deducted and net if depreciation is deducted.

(iii) Gross Public Investment: This includes government funding through the construction of roads, bridges, schools, hospitals, etc. This investment is called

a Gross if the depreciation can be deducted with the remainder when the depreciation is reduced.

(b) Stock Exchange (Stock Closure - Stock Opening) These are included as they represent the goods currently being produced, which are not included in the current sale of the final product. It is the difference between a closing stock and a stock that opens the year.

(c) Discovery of Heritage Objects: These are those items of long lasting value such as gold, silver, antiques, etc. taken at market price.

GDCF = Domestic Fixed Income (GDFCF) + Stock Changes (Closing Stock - Opening Stock) + Total Acquisitions

Or

GDCF = Fully Enterprise Investment + Residential Housing + Comprehensive Public Investment + Inventory Investment + Acquisition of Valuables

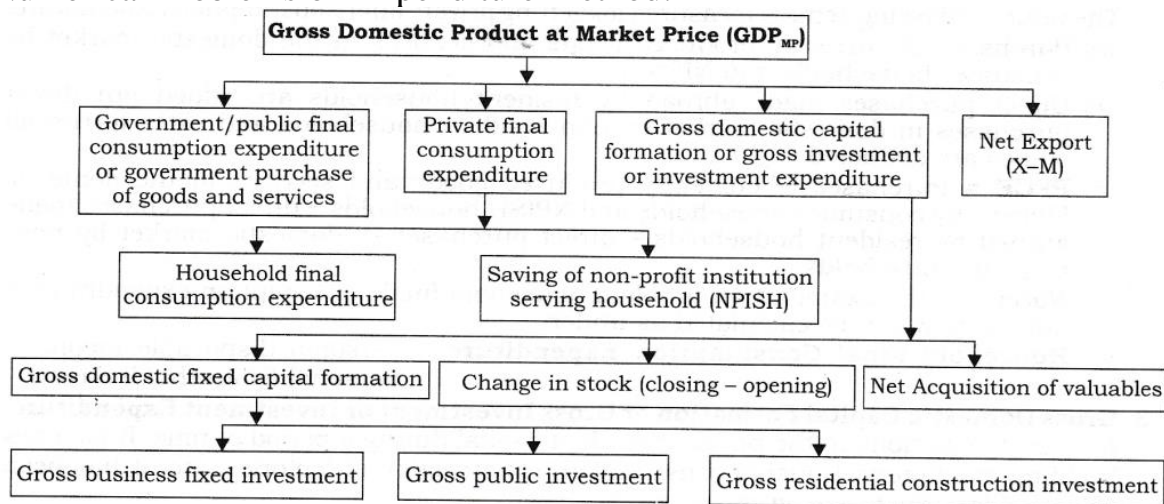
4. Net Export (Export – Import): Indicates the difference between the cost of home and mortgage on foreign goods (i.e., imports) and foreign costs on domestic goods (i.e., exports).

Therefore, the difference between export and import is called Net Exports.

Net Exports = Export - Import

GDPMP = Government Expenditure + Private Expenditure + Complete Domestic financing + Export Amount

Numerical Problems on Expenditure Method:



- Q.1** Consumption of all goods and services in the economy during the period of an accounting year is known as:
- (a) Aggregate demand
 - (b) Aggregate supply
 - (c) Aggregate consumption
 - (d) None of these
- Q.2** Which of the following statements is associated with general equilibrium analysis?
- (a) It is the method of study in microeconomics
 - (b) It is the method of study in macroeconomics
 - (c) There is no change in the labor market
 - (d) None of these
- Q.3** GDP equals to GNP when
- (a) The value of export of goods is equal to the value of import of goods
 - (b) The value of exports of goods and services is equal to the value of imports of goods and services
 - (c) There is no net factor income from abroad
 - (d) None of the above
- Q.4** Purchase of refrigerator by a restaurant is:-
- (a) Consumption expenditure on durable good
 - (b) Consumption expenditure on non-durable good
 - (c) Intermediate expenditure
 - (d) Final expenditure
- Q.5** Capital loss is:-
- (a) Normal wear and tear of fixed capital goods
 - (b) Foreseen obsolescence
 - (c) Unforeseen obsolescence
 - (d) All the above
- Q.6** Let us assume that the GDP of some country was Rs.100 at current price in 2012-13 and that was Rs.90 in 2011-12: and that the GDP at constant 2004-05 prices was Rs.59 in 2012-13 and that was Rs.56.1 in 2011-12, then in GDP of 2011-12 at 2012-13 (constant) prices would be-
- (a) Rs.59.1
 - (b) Rs.90
 - (c) Rs.95.08
 - (d) Rs.100
- Q.7** With every increase in the level of GDP, social welfare definitely increases in an economy. The given statement is
- (a) True, if increase in GDP is associated with disparities of income.
 - (b) True, if increase in GDP is associated with skewed distribution of income.
 - (c) False, if increase in GDP is associated with disparities in the distribution of income.
 - (d) False, if increase in GDP is associated with normality in the distribution of income
- Q.8** Other things remaining the same, when foreign currency becomes cheaper, the effect on national income is likely to be
- (a) positive
 - (b) Negative
 - (c) Both
 - (d) No effect
- Q.9** Combined factor income, which can't be separated into various income components, is known as _____
- (a) Mixed income of self employed
 - (b) Compensation of employees
 - (c) Deferred income
 - (d) Any of the above

- Q.10** Which of the following is not included in national income?
 (a) Receipt of a gift cheque sent by your parents settled abroad
 (b) Repatriation of wages earned by the NRIs to their parents in India
 (c) Excise duty on domestic production
 (d) All of these
- Q.11** Inventory investment is used as a component to calculate national income in which of the following methods?
 (a) Product method and income method
 (b) Income method and expenditure method
 (c) Product method and expenditure method
 (d) Product method, income method and expenditure method
- Q.12** Food Items purchased by a production unit are
 (a) Single-use consumer goods
 (b) Durable use consumer goods
 (c) Single-use Capital goods
 (d) Durable use capital goods
- Q.13** Capital goods are those goods:
 (a) which are used in the production process for several years
 (b) which are used in the production process for few years
 (c) which involve depreciation losses
 (d) both a) and c)
- Q.14** Net investment is equal to:
 (a) Gross investment + depreciation
 (b) gross investment – depreciation
 (c) gross investment * depreciation
 (d) gross investment / depreciation
- Q.15** Net capital formation causes:
 (a) Increase in production capacity
 (b) increase in depreciation
 (c) increase in profits
 (d) increase in cost
- Q.16** Domestic product is equal to
 (a) National product + Net factor income from abroad
 (b) National product – Net factor income from abroad
 (c) National product / Net factor income from abroad
 (d) National Product * Net factor income from abroad
- Q.17** Which of the following is not correct?
 (a) $NNP \text{ at market price} = GNP \text{ at market price} + \text{Depreciation}$
 (b) $NDP \text{ at market price} = NNP \text{ at market price} - \text{net factor income from abroad}$
 (c) $NDP \text{ at factor cost} = NDP \text{ at market price} - \text{Indirect taxes} + \text{subsidies}$
 (d) $GDP \text{ at Factor cost} = NDP \text{ at factor cost} + \text{Depreciation}$
- Q.18** GDP Deflator =
 (a) $\text{Real income/Nominal income} * 100$
 (b) $\text{Nominal Income/Real Income} * 100$
 (c) $\text{Real Income/Population} * 100$
 (d) none of these
- Q.19** Which of the following statement are correct?
 (i) Value added and Value of output identical constant.
 (ii) Sum of total value added by all the producing units with in the domestic territory of the country is equal to national income.

- (a) Both are true
- (b) Both are false
- (c) (i) is true but (ii) is false
- (d) (ii) is true but (i) is false

Q.20 Which of the given statement is incorrect?

- (a) $GDPMP = GDPFC + NIT$
- (b) $NNPMP = NNPFC$
- (c) $GNPMP = GDPMP + NFIA$
- (d) $NNPFC = \text{National Income}$

Q.21 Which of the following is an example of normal residents of India?

- (a) Foreign worker working in WHO located in India.
- (b) The German working as director in IMD office located in India.
- (c) Ambassador in India from the rest of the world
- (d) Ambassador of India in rest of the world

Q.22 With a positive externalities

- (a) There is under consumption in the free market
- (b) There is over consumption in the free market
- (c) The government may tax to decrease production
- (d) Society could be made better-off if less was produced

Q.23 Depreciation means:

- (a) Destruction of a plant in a fire accident
- (b) Losses of fixed assets over time due to wear and tear
- (c) Loss of fixed assets in an earthquake
- (d) Closure of the plant due to lockout

Q.24 Sugar purchased by a Sweet shop is an.....good, while it is agood when it is purchased by a consumer

- (a) Capital, final
- (b) final, intermediate
- (c) intermediate, final
- (d) final, producer

Q.25 If factor income received from abroad is equal to factor income paid abroad, then which of the following is not a valid statement?

- (a) $\text{National income} = \text{Domestic Income}$
- (b) $\text{NDP at FC} + \text{Depreciation} = \text{GNP at FC}$
- (c) $\text{NDP at FC} + \text{Depreciation} = \text{GNP at MP}$
- (d) All are valid

Q.26 Net domestic product at factor cost is less than national income when:

- (a) Net factor income from abroad is positive
- (b) Net factor income from abroad is negative
- (c) Net factor income from abroad is zero
- (d) Net exports are positive

Q.27 From the following information, compute GNP at MP. GDP at FC = ₹ 3,000; Net factor income to abroad = ₹ 200. Indirect Taxes = ₹ 420, Subsidies = ₹ 200.

- (a) 3,380
- (b) 2,980
- (c) 3,020
- (d) 2,620

Q.28 GDP at MP = ₹ 1000 and Subsidies = ₹ 50, then GDP at FC will be:-

- (a) 1050
- (b) 950

- (c) 1000
- (d) 900

Q.29 Net Exports is calculated as:

- (a) Exports + Imports
- (b) Exports – Imports
- (c) Imports – Exports
- (d) None of these

Q.30 “Operating surplus” refers to:

- (a) Income from property
- (b) Income from entrepreneurship
- (c) Income from property and entrepreneurship
- (d) None of these

Q.31 GNP exceeds NNP by:

- (a) Amount of total taxes
- (b) Government expenditure
- (c) Transfer Payments
- (d) Difference between gross and net investment

Q.32 Problem of double counting can be avoided by using:

- (a) Final output method
- (b) value-added method
- (c) both a) and b)
- (d) neither a) nor b)

Q.33 Which of the following leads to unexpected obsolescence?

- (a) Change in demand
- (b) Natural calamities
- (c) change in technology
- (d) None of these

Q.34 T.V, radio, washing machine, etc. are examples of:

- (a) Durable consumer goods
- (b) semi-durable consumer goods
- (c) single use consumer goods
- (d) capital goods

Q.35 Capital at the end of the year 2012 was ₹ 100crore and at the end of the year 2013 was ₹ 110crore. Depreciation during the year 2013 was ₹ 5crore. Gross investment during 2013 is:-

- (a) ₹ 5crore
- (b) ₹ 10crore
- (c) ₹ 15crore
- (d) ₹ 110crore

Q.36 Given GDP at mp = 100, subsidies = 5 and depreciation = 10, then NDP at fc equals:

- (a) 95
- (b) 100
- (c) 105
- (d) 115

Q.37 Classification of goods depends on the:

- (a) consumption of goods
- (b) production of goods
- (c) first – use of goods
- (d) end -use of goods

Q.38 Which of the following leads to depreciation?

- (a) Normal wear and tear
- (b) Damages due to floods

(c) Damages due to market crash

(d) None of these

Q.39 Which of the following is the cause of expected obsolescence?

(a) Natural calamities

(b) Change in demand

(c) Change in technology

(d) Both b) and c)

Q.40 The value of intermediate consumption will be....., If the purchase of raw material is ₹ 1200, exports are ₹ 600 and imports are ₹ 200.

(a) 1200

(b) 800

(c) 1800

(d) 1400

SOLUTION

1. (c)
2. (b)
3. (c)
4. (d)
5. (c)
6. (c) GDP of 2011-12 at 2012 Rs.13 (constant) prices would be:
GDP at Constant Price of 2011-21 / GDP at Constant Price of 2021-13 x 100
= $56.1 \times 100 / 59$
= 95.08
7. (c)
8. (b) Price of foreign exchange and growth of national income is directly related. When foreign currency becomes cheaper, it indicates that demand of foreign exchange is higher than the supply of foreign exchange. Hence, other things remaining the same, when foreign currency becomes cheaper, the effect on national income is likely to be negative.
9. (a)
10. (d)
11. (c)
12. (c)
13. (d) Capital goods are those goods that are used in the process of production for several years and are of higher value. These goods are fixed assets of the producers. The Use of these goods leads to depreciation. Example: Plant and machinery.
14. (b) The only difference between gross and net investment is the depreciation of capital assets that happens over a period of time. Gross investment consists of depreciation whereas net investment does not include depreciation. Hence, if depreciation is deducted from gross investment it can be equal to net investment.
15. (a)
16. (b)
17. (a)
NNP at Market Price=GNP at market price + Depreciation
Out of the given options, this option is wrong. The correct formula is:
NNP at Market Price = GNP at Market Price - Depreciation.
18. (b)
19. (b) Value of output refers to the market value of the goods produced while value added refer to the market value of the goods produced minus the market value of the goods used as inputs/raw materials in the process of production. Sum total of value added by all the producing units within the domestic territory of the country is equal to domestic product.
20. (b)
21. (d)
22. (b)
23. (b) Depreciation means loss of fixed assets overtime due to wear and tear. Depreciation is also called consumption of fixed capital. Loss of fixed assets happens on account of normal wear and tear, normal rate of accidental damages and expected obsolescence.
24. (c)
25. (c) $NDP(\text{at factor cost}) + \text{Depreciation} = GNP(\text{at market price})$ is not a valid statement if factor income received from abroad is equal to factor income paid abroad.
Correct statement would be as follows:
 $NDP(\text{at factor cost}) + \text{Depreciation} + \text{Net indirect tax} = GNP(\text{at market price}).$

26. (a) Net domestic product at factor cost is less than national income when Net factor income from abroad is positive.
 NNP (at FC) > NDP (at FC): This situation will be seen when net factor income from abroad is Positive.
27. (b) GNP (at MP) = 2980
 Calculation:
 Formula: $GNP(\text{at MP}) = GDP(\text{at FC}) - \text{Net factor income to abroad} + \text{Indirect Tax} - \text{Subsidies}$
 $= 3000 - 200 + 420 - 200$
 $= \text{Rs}2980.$
28. (a)
29. (b)
30. (c)
31. (d)
32. (c)
33. (b) Loss of value of fixed assets because of unexpected obsolescence is called capital loss. Natural calamities such as earthquake, floods, etc. are one way that unexpected obsolescence can happen.
34. (a)
35. (c) Capital at the end of year 2012 was Rs.100crore and at the end of the year 2013 Rs.110crore. Depreciation during the year 2013 was Rs.5crore. Gross investment during 2013 is: $GI = \text{Net investment} + \text{Depreciation} = (110 - 100) + 5 = \text{Rs.}15\text{crore}.$
36. (a) $NDP \text{ at Factor Cost} = GDP \text{ at Market Price} - \text{Depreciation} - \text{NIT}$
 $= GDP \text{ at Market Price} - \text{Depreciation} - (\text{Indirect tax} - \text{Subsidies})$
 $= 100 - 10 - (0-5)$
 $= \text{Rs.}95$
37. (d)
38. (d) None of these because The main causes of depreciation include the following:
 1. Physical wear and tear - When the fixed assets are put to use, the value of such assets may decrease. Such decrease in the value of assets is said to be due to physical wear and tear.
 2. Within the passage of time - When the assets are exposed to the forces of nature like weather, winds, rains, etc. the value of such assets may decrease even if they are not put to any use.
 3. Expiration of legal rights - When the use of an asset is governed by the time bound arrangement, the value of such assets
39. (d)
40. (a) The value of intermediate consumption will be rupees 1200 because purchase of raw material only cause intermediate cost and thus it is referred as intermediate consumption. Exports and imports will not be accounted as intermediate consumption.