UNIT – V

NATIONAL INCOME

DEFINITION OF NATIONAL INCOME

According to **Marshall: "**The labour and capital of a country acting on its natural resources produce annually a certain net aggregate of commodities, material and immaterial including services of all kinds. This is the true net annual income or revenue of the country or national dividend." In this definition, the word 'net' refers to deductions from the gross national income in respect of depreciation and wearing out of machines. And to this, must be added income from abroad.

In the words of **Pigou**, "National income is that part of objective income of the community, including of course income derived from abroad which can be measured in money."

According to **Fisher**, "The National dividend or income consists solely of services as received by ultimate consumers, whether from their material or from the human environments. Thus, a piano, or an overcoat made for me this year is not a part of this year's income, but an addition to the capital. Only the services rendered to me during this year by these things are income."

CONCEPTS OF NATIONAL INCOME

(A) Gross Domestic Product (GDP):

GDP is the total value of goods and services produced within the country during a year. This is calculated at market prices and is known as GDP at market prices.

(B) GDP at Factor Cost:

GDP at factor cost is the sum of net value added by all producers within the country. Since the net value added gets distributed as income to the owners of factors of production, GDP is the sum of domestic factor incomes and fixed capital consumption (or depreciation).

Thus GDP at Factor Cost = Net value added + Depreciation.

(C) Net Domestic Product (NDP):

NDP is the value of net output of the economy during the year. Some of the country's capital equipment wears out or becomes obsolete each year during the production process. The value of this capital consumption is some percentage of gross investment which is deducted from GDP. Thus Net Domestic Product = GDP at Factor Cost – Depreciation.

(D) Nominal and Real GDP:

When GDP is measured on the basis of current price, it is called GDP at current prices or nominal GDP. On the other hand, when GDP is calculated on the basis of fixed prices in some year, it is called GDP at constant prices or real GDP.

Nominal GDP is the value of goods and services produced in a year and measured in terms of rupees (money) at current (market) prices. In comparing one year with another, we are faced with the problem that the rupee is not a stable measure of purchasing power. GDP may rise a great deal in a year, not because the economy has been growing rapidly but because of rise in prices (or inflation).

(F) Gross National Product (GNP):

GNP is the total measure of the flow of goods and services at market value resulting from current production during a year in a country, including net income from abroad.

Profits which are not distributed by companies and are retained by them are included in the GNP.

(G) GNP at Market Prices:

When we multiply the total output produced in one year by their market prices prevalent during that year in a country, we get the Gross National Product at market prices. Thus GNP at market prices means the gross value of final goods and services produced annually in a country plus net income from abroad. It includes the gross value of output of all items from (1) to (4) mentioned under GNP. GNP at Market Prices = GDP at Market Prices + Net Income from Abroad.

(H) GNP at Factor Cost:

GNP at factor cost is the sum of the money value of the income produced by and accruing to the various factors of production in one year in a country. It includes all items mentioned above under income method to GNP less indirect taxes.

(I) Net National Product (NNP):

NNP includes the value of total output of consumption goods and investment goods. But the process of production uses up a certain amount of fixed capital. Some fixed equipment wears out, its other components are damaged or destroyed, and still others are rendered obsolete through technological changes.

NNP = GNP—Depreciation.

(J) NNP at Market Prices:

Net National Product at market prices is the net value of final goods and services evaluated at market prices in the course of one year in a country. If we deduct depreciation from GNP at market prices, we get NNP at market prices. So NNP at Market Prices = GNP at Market Prices—Depreciation.

(K) NNP at Factor Cost:

Net National Product at factor cost is the net output evaluated at factor prices. It includes income earned by factors of production through participation in the production process such as wages and salaries, rents, profits, etc. It is also called National Income. This measure differs from NNP at market prices in that indirect taxes are deducted and subsidies are added to NNP at market prices in order to arrive at NNP at factor cost. Thus

NNP at Factor Cost = NNP at Market Prices – Indirect taxes+ Subsidies

(L) Domestic Income:

Income generated (or earned) by factors of production within the country from its own resources is called domestic income or domestic product. It includes

(i) Wages and salaries, (ii) rents, including imputed house rents, (iii) interest, (iv) dividends, (v) undistributed corporate profits, including surpluses of public undertakings, (vi) mixed incomes consisting of profits of unincorporated firms, self- employed persons, partnerships, etc., and (vii) direct taxes.

(M) Private Income:

Private income is income obtained by private individuals from any source, productive or otherwise, and the retained income of corporations. It can be arrived at from NNP at Factor Cost by making certain additions and deductions.

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(N) Personal Income:

Personal income is the total income received by the individuals of a country from all sources before payment of direct taxes in one year. Personal income is never equal to the national income, because the former includes the transfer payments whereas they are not included in national income.

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(O) Disposable Income:

Disposable income or personal disposable income means the actual income which can be spent on consumption by individuals and families. The whole of the personal income cannot be spent on consumption, because it is the income that accrues before direct taxes have actually been paid. Therefore, in order to obtain disposable income, direct taxes are deducted from personal income. Thus Disposable Income=Personal Income – Direct Taxes.

(P) Real Income:

Real income is national income expressed in terms of a general level of prices of a particular year taken as base. National income is the value of goods and services produced as expressed in terms of money at current prices. But it does not indicate the real state of the economy.

(Q) Per Capita Income:

The average income of the people of a country in a particular year is called Per Capita Income for that year.

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$$\text{Real Per Capita Income for 2001} = \frac{\textit{Real national income for 2001}}{\textit{Population in 2001}}$$

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METHODS OF MEASURING NATIONAL INCOME

There are four methods of measuring national income. Which method is to be used depends on the availability of data in a country and the purpose in hand.

(1) Product Method:

According to this method, the total value of final goods and services produced in a country during a year is calculated at market prices. To find out the GNP, the data of all productive activities, such as agricultural products, wood received from forests, minerals received from mines, commodities produced by industries, the contributions to production made by transport, communications, insurance companies, lawyers, doctors, teachers, etc. are collected and assessed at market prices. Only the final goods and services are included and the intermediary goods and services are left out.

(2) Income Method:

According to this method, the net income payments received by all citizens of a country in a particular year are added up, i.e., net incomes that accrue to all factors of production by way of net rents, net wages, net interest and net profits are all added together but incomes received in the form of transfer payments are not included in it. The data pertaining to income are obtained from different sources, for instance, from income tax department in respect of high income groups and in case of workers from their wage bills.

(3) Expenditure Method:

According to this method, the total expenditure incurred by the society in a particular year is added together and includes personal consumption expenditure, net domestic investment, government expenditure on goods and services, and net foreign investment. This concept is based on the assumption that national income equals national expenditure.

(4) Value Added Method:

Another method of measuring national income is the value added by industries. The difference between the value of material outputs and inputs at each stage of production is the value added. If all such differences are added up for all industries in the economy, we arrive at the gross domestic product.

Major Difficulties in the Measurement of National Income

1. Prevalence of Non-Monetized Transactions:

There are certain transactions in India in which a considerable part of output does not come into the market at all.

2. Illiteracy:

The majority of people in India are illiterate and they do not keep any accounts about the production and sales of their products. Under the circumstances the estimates of production and earned incomes are simply guess work.

3. Occupational Specialisation is Still Incomplete and Lacking:

There is the lack of occupational specialisation in our country which makes the calculation of national income by product method difficult. Besides the crop, farmers are also engaged is supplementary occupations like—dairying, poultry, cloth-making etc. But income from such productive activities is not included in the national income estimates.

4. Lack of Availability of Adequate Statistical Data:

Adequate and correct production and cost data are not available in our country. For estimating national income data on unearned incomes and on persons employed in the service are not available. Moreover data on consumption and investment expenditures of the rural and urban population are not available for the estimation of national income. Moreover, there is no machinery for the collection of data in the country.

5. Value of Inventory Changes:

The value of all inventory changes (i.e., changes in stock etc.) which may be either positive or negative are added or subtracted from the current production of the firm. Remember, if in the change in inventories and not total inventories for the year that are taken into account in national income estimates.

6. The Calculation of Depreciation:

The calculation of depreciation on capital consumption presents another formidable difficulty. There are no accepted standard rates of depreciation applicable to the various categories of machine. Unless from the gross national income correct deductions are made for depreciation the estimate of net national income is bound to go wrong.

7. Difficulty of Avoiding the Double Counting System:

The very important difficulty which a calculator has to face in measurement is the difficulty of avoiding double counting.

8. Difficulty of Expenditure Method:

The application of expenditure method in the calculation of national income has become a difficult task and it is full of difficulties. Because in this method it is difficult to estimate all personal as well as investment expenditures.

BUSINESS CYCLE

What is a Business Cycle?

"Business cycles are a type of fluctuation found in the aggregate economic activity of nations…a cycle consists of expansions occurring at about the same time in many economic activities, followed by similarly general recessions…this sequence of changes is recurrent but not periodic.

Phases of Business Cycles

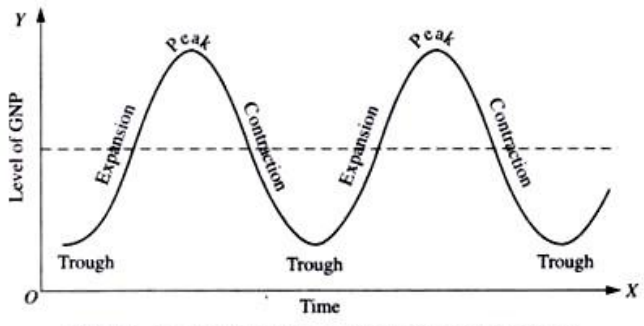

Fig. 27.1. *Four Phases of Business Cycles without Growth Trend*

1] Expansion or Boom

This phase is characterized by an increase in output and employment. There is also an increase in the demand in the market, capital expenditure, sales and subsequently an increase in income and profits. This cycle will continue till there is hundred percent utilization of available resources.

And the production level will be at the maximum capacity. The unemployment rates will be zero with the exception of voluntary unemployment and frictional or structural employment (which is temporary).

In this phase both the prices and cost increase at a somewhat faster rate. But generally, the public enjoy prosperity and a higher standard of living. The growth rate will eventually deaccelerate as the economy approaches its peak.

2] Peak

As the name suggests this is the highest point of all the phases of business cycles. At this point the output is maximum, and the involuntary unemployment is basically zero. As the economy goes through expansion, inputs become rarer. Their demands increase and so does their prices.

This leads to an increase in the price of consumer goods as well. Income does not see a proportional increase. So consumers have to review their expenses and cut back on their consumption.

Aggregate demand in the market will stagnate. This will mark the end of the expansion phase. The growth of the economy stabilizes at the peak for a short period. Then it goes in the reverse direction.

3] Contraction

At the peak of an economy, demand is stagnant. Then very soon, demand starts falling in certain sections of the economy. This is the start of the contraction phase of the trade cycle, which is the opposite of the expansion phase.

Even the investment levels and employment levels decrease along with the demand. Now there is a mismatch between demand and supply in the market. Once producers become aware of the shift in the economy they start disinvesting, scaling back operations, canceling orders for goods and labor etc.

This will start a domino effect. Now producers of capital goods and raw materials will also start canceling orders and holding off investment.

At this turning point in the economy, the prices of the goods also fall. Income levels decreases which decrease consumer spending as well. The outlook about the economy is pessimistic and we will see a contraction in economic activities across all sectors. We call this phase recession

4] Depression

Depression is the lowest of the phases of business cycles. It is a severe form of recession. In this phase, we will see a negative growth rate in the economy. There is a continuous decrease in demand.

The companies that cannot dispose of their stocks keep reducing the prices. Some companies will be forced to shut down due to mounting losses. This will adversely affect employment rates.

The capital and money market also suffer greatly. The interest rate is at its lowest. After this phase, the economy will recover by additional investments, and the business cycle will continue.

INFLATION

What is Inflation? Inflation refers to the rise in the prices of most goods and services of daily or common use, such as food, clothing, housing, recreation, transport, consumer staples, etc. Inflation measures the average price change in a basket of commodities and services over time. The opposite and rare fall in the price index of this basket of items is called 'deflation'. Inflation is indicative of the decrease in the purchasing power of a unit of a country's currency. This is measured in percentage.

TYPES OF INFLATION

1. Demand-pull inflation – this occurs when the economy grows quickly and starts to 'overheat' – Aggregate demand (AD) will be increasing faster than aggregate supply (LRAS).
2. **Cost-push inflation – this occurs when there is a rise in the price of raw materials, higher taxes, e.t.c**

We can also categorise inflation by how fast the price increases are, such as:

- Disinflation – a falling rate of inflation
- Creeping inflation – low, but consistently creeping up.
- Walking/moderate inflation – (2-10%)
- Running inflation (10-20%)

Creeping inflation (1-4%)

When the rate of inflation slowly increases over time. For example, the inflation rate rises from 2% to 3%, to 4% a year. Creeping inflation may not be immediately noticeable, but if the creeping rate of inflation continues, it can become an increasing problem.

Walking inflation (2-10%)

When inflation is in single digits – less than 10%. At this rate – inflation is not a major problem, but when it rises over 4%, Central Banks will be increasingly concerned. Walking inflation may simply be referred to as moderate inflation.

Running inflation (10-20%)

When inflation starts to rise at a significant rate. It is usually defined as a rate between 10% and 20% a year. At this rate, inflation is imposing significant costs on the economy and could easily start to creep higher.

Galloping inflation (20%-1000%)

This is an inflation rate of between 20% up to 1000%. At this rapid rate of price increases, inflation is a serious problem and will be challenging to bring under control. Some definitions of galloping inflation may be between 20% and 100%. There is no universally agreed definition, but hyperinflation usually implies over 1,000% a year.

Hyperinflation (> 1000%)

This is reserved for extreme forms of inflation – usually over 1,000% though there is no specific definition. Hyperinflation usually involves prices changing so fast, that it becomes a daily occurrence, and under hyperinflation, the value of money will rapidly decline.

MEASURES TO CONTROL INFLATION

Some of the important measures to control inflation are as follows: 1. Monetary Measures 2. Fiscal Measures 3. Other Measures.

Inflation is caused by the failure of aggregate supply to equal the increase in aggregate demand. Inflation can, therefore, be controlled by increasing the supplies of goods and services and reducing money incomes in order to control aggregate demand.

The various methods are usually grouped under three heads: monetary measures, fiscal measures and other measures.

1. Monetary Measures:

Monetary measures aim at reducing money incomes.

(a) Credit Control:

One of the important monetary measures is monetary policy. The central bank of the country adopts a number of methods to control the quantity and quality of credit. For this purpose, it raises the bank rates, sells securities in the open market, raises the reserve ratio, and adopts a number of selective credit control measures, such as raising margin requirements and regulating consumer credit. Monetary policy may not be effective in controlling inflation, if inflation is due to cost-push factors. Monetary policy can only be helpful in controlling inflation due to demand-pull factors.

(b) Demonetisation of Currency:

However, one of the monetary measures is to demonetise currency of higher denominations. Such a measures is usually adopted when there is abundance of black money in the country.

(c) Issue of New Currency:

The most extreme monetary measure is the issue of new currency in place of the old currency. Under this system, one new note is exchanged for a number of notes of the old currency. The value of bank deposits is also fixed accordingly. Such a measure is adopted when there is an excessive issue of notes and there is hyperinflation in the country. It is a very effective measure. But is inequitable for its hurts the small depositors the most.

2. Fiscal Measures:

Monetary policy alone is incapable of controlling inflation. It should, therefore, be supplemented by fiscal measures. Fiscal measures are highly effective for controlling government expenditure, personal consumption expenditure, and private and public investment.

(a) Reduction in Unnecessary Expenditure:

The government should reduce unnecessary expenditure on non-development activities in order to curb inflation. This will also put a check on private expenditure which is dependent upon government demand for goods and services. But it is not easy to cut government expenditure. Though this measure is always welcome but it becomes difficult to distinguish between essential and non-essential expenditure. Therefore, this measure should be supplemented by taxation.

(b) Increase in Taxes:

To cut personal consumption expenditure, the rates of personal, corporate and commodity taxes should be raised and even new taxes should be levied, but the rates of taxes should not be so high as to discourage saving, investment and production. Rather, the tax system should provide larger incentives to those who save, invest and produce more.

Further, to bring more revenue into the tax-net, the government should penalise the tax evaders by imposing heavy fines. Such measures are bound to be effective in controlling inflation. To increase the supply of goods within the country, the government should reduce import duties and increase export duties.

(c) Increase in Savings:

Another measure is to increase savings on the part of the people. This will tend to reduce disposable income with the people, and hence personal consumption expenditure. But due to the rising cost of living, people are not in a position to save much voluntarily.

Keynes, therefore, advocated compulsory savings or what he called ‘deferred payment’ where the saver gets his money back after some years. For this purpose, the government should float public loans carrying high rates of interest, start saving schemes with prize money, or lottery for long periods, etc. It should also introduce compulsory provident fund, provident fund-cum-pension schemes, etc.

All such measures increase savings and are likely to be effective in controlling inflation.

(d) Surplus Budgets:

An important measure is to adopt anti-inflationary budgetary policy. For this purpose, the government should give up deficit financing and instead have surplus budgets. It means collecting more in revenues and spending less.

(e) Public Debt:

At the same time, it should stop repayment of public debt and postpone it to some future date till inflationary pressures are controlled within the economy. Instead, the government should borrow more to reduce money supply with the public.

Like monetary measures, fiscal measures alone cannot help in controlling inflation. They should be supplemented by monetary, non-monetary and non-fiscal measures.

3. Other Measures:

The other types of measures are those which aim at increasing aggregate supply and reducing aggregate demand directly.

(a) To Increase Production:

(i) One of the foremost measures to control inflation is to increase the production of essential consumer goods like food, clothing, kerosene oil, sugar, vegetable oils, etc.

(ii) If there is need, raw materials for such products may be imported on preferential basis to increase the production of essential commodities,

(iii) Efforts should also be made to increase productivity. For this purpose, industrial peace should be maintained through agreements with trade unions, binding them not to resort to strikes for some time,

(iv) The policy of rationalisation of industries should be adopted as a long-term measure. Rationalisation increases productivity and production of industries through the use of brain, brawn and bullion,

(v) All possible help in the form of latest technology, raw materials, financial help, subsidies, etc. should be provided to different consumer goods sectors to increase production.

(b) Rational Wage Policy:

Another important measure is to adopt a rational wage and income policy. Under hyperinflation, there is a wage-price spiral. To control this, the government should freeze wages, incomes, profits, dividends, bonus, etc.

But such a drastic measure can only be adopted for a short period as it is likely to antagonise both workers and industrialists. Therefore, the best course is to link increase in wages to increase in productivity. This will have a dual effect. It will control wages and at the same time increase productivity, and hence raise production of goods in the economy.

(c) Price Control:

Price control and rationing is another measure of direct control to check inflation. Price control means fixing an upper limit for the prices of essential consumer goods. They are the maximum prices fixed by law and anybody charging more than these prices is punished by law. But it is difficult to administer price control.

(d) Rationing:

Rationing aims at distributing consumption of scarce goods so as to make them available to a large number of consumers. It is applied to essential consumer goods such as wheat, rice, sugar, kerosene oil, etc. It is meant to stabilise the prices of necessaries and assure distributive justice. But it is very inconvenient for consumers because it leads to queues, artificial shortages, corruption and black marketing. Keynes did not favour rationing for it "involves a great deal of waste, both of resources and of employment."

Conclusion:

From the various monetary, fiscal and other measures discussed above, it becomes clear that to control inflation, the government should adopt all measures simultaneously.

SOURCE

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Website Address

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