**Unit - 5**

**Intorduction to Economics (BHI-106)**

**Int. MBA (HA) 2nd Semester**

**National income** is the flow of goods and services , which becomes available to a nation during a year. • National income is the aggregate money value of all goods and services produced in a country during one year. • The national income may be considered of a closed economy-an economy, which has no transactions with the rest of the world or an open economy. • In an open economy, national income also includes the net results of its transactions with the rest of the world. I.e. exports less imports.

**CONCEPT OF NATIONAL INCOME**

According to Marshall," the labour and capital of a country, acting upon its natural resources, produced annually a certain net aggregate of commodities, material and immaterial, including services of all kinds ." •

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

According to Fischer," The national dividend or income consists solery of services as received by ultimate consumers, whether from their material human environments."

Marshall and Pigou approach national income from the point of production. But Fischer approaches from the point of consumption.

This income is produced by factors of production and hence distributed between them. These are land, labour , capital and entrepreneur. Higher level of national income implies higher shares of these factors . Higher level of national income helps in removing poverty . However it should be noted that what is produced is more important. Thus if war goods or luxury goods are produced to a greater extent , the welfare of the common man will not increase.

Circular flow of income explains the flow of national income between factors of production and firms. There are 2 flows. One is that of goods and services and the other is that of money. In every economy, there are households on one hand and productive enterprises and firms on the other. A market brings them together. The objective of households is to consume goods and services for the satisfaction of their wants; and the function of firms is to get together resources or factors of production for producing respective goods or services. This can be represented as circular flow.

## CONCEPT OF CIRCULAR FLOW OF MONEY

Households give their resources and services to the firms. Firms pay for these services . Firms produce goods and services and the households with the help of income that they have received from the firms , purchase services and goods. Firms in turn receive payments made by the households. Thus there are two flows and at every stage market plays the role of bringing together the households and firms . There are three markets. 1. Labour market : In the labour market the firms demand the labour and households supply labour. According to classical theory ,equality of supplies of labour and demand for labour determines the price of labour i.e. wages.

Capital market : In the capital market there are again two sides. On the supply side there are those who save and offer their savings .On the demand side there are firms etc .who want these savings for investment purposes. The return on capital is the part of the income of those who save. households mostly supply savings ,but even firms also supply savings. 3. Goods market: In the goods market sellers sell the goods and services and the buyers purchase them. Interaction between them determines prices. One can expand this analysis by including government and rest of the word sectors.

**BASIC CONCEPTS OF NATIONAL INCOME**

1 . **Gross Domestic Product (GDP**) Money value of final goods and services produced within the geographical boundaries of a country during a year, irrespective of whether they are produced by the nationals or foreigners. The formula of GDP is :GDP ( Also denoted by Y ) = C + I + G + NX Where , C = total spending by the consumers I = total investments(spending on good & services) by businesses G = total spending by Government NX = Net exports ( exports – imports ) • Factor cost : the cost of an item of goods or a service in terms of the various factors which have played a part in its production or availability, and exclusive of tax costs. •Market price : The market price is the price that consumers will pay for the product when they purchase it from the sellers. Taxes charged by the government will be added onto the factor price while subsidies provided will be reduced from the factor price to arrive at the market price.

2**. Net Domestic Product (NDP)** In the production of goods and services certain capital is used. The value of depreciation should be deducted to arrive at net

figure. Ndp =gdp – capital depreciation. NDP is calculated as : NDPmp = Net Exports + Government Purchases + Consumption Expenditure + Net Private Investments – Depreciation NDP at factor cost = Wages + Profits + Interest + Rent – Net Indirect Taxes

3. **Gross National Product (GNP)** When we adjust foreign trade sector in the gdp,we get gdp-gross national product. we add the value of exports and deduct value of imports to get GDP to get Gnp. Thus. GNP is calculated as : GNP = Net factor income from abroad + Gross Private Investments + Net Exports + Government Purchases + Consumption Expenditure GNP = GDP +(X-M) , where X is exports and m is imports.

4. **Net National product (NNP)** NNP is obtained by deducting depreciation from GNP. Net National Product is also called as National Income at Market Prices. NNP is given as : NNP =GNP-depreciation

5. **National Income** at Factor Cost Total annual output of final goods and services valued at their cost of production where profits are included in costs. It is given as : NI = NNP + subsidies – indirect taxes

6. **Per Capita Income** The term per capita national income refers to the income per head of production. It is the average income of the individuals of country in a particular year. Per capita income is , therefore , obtained by dividing national income by total population of same year. National income in 20XX Per capita income in 20XX = ---------------------------------------- Population in 20XX.

7. **Personal Income** (P.I.) Personal income is that which is actually received by the individuals or households in a country during the year. It is calculated as : Personal income= National income –corporate income taxes – undistributed corporate profits – social security contributions +transfer payments.

8**. Disposable income or disposable personal income (DPI)** The whole of the personal income (P.I.) accounting to individuals or households is not available for being spent on consumption. The reason is that a part of the P.I has to be paid by individuals or households to the government by way of personal direct taxes. is the disposable income, which is spent by the individuals or the households on consumption . Therefore, it is calculated as : Disposable personal income = personal income – personal direct taxes.

9. **Nominal and real income** National income may be expressed in nominal terms or in real terms . In nominal terms it is called national income at market prices or national income at current prices. Each year's national income is measured at the current prices of that year. However ,the concept on real income also quite useful as it explains the real growth of the economy. Real income is also called national income at constant prices . It is obtained by deflating national income at market prices by inflation : Nominal income * price index in base year Real national income = ------------------------------------------ ------------------ Price index in current year Each of the above concepts of national income is also expressed at market prices or at constant prices.

**DIFFICULTIES IN ESTIMATING NATIONAL INCOME**

1. Problem of double counting: To estimate national income all goods and services produced in a year must be accounted only once .if a commodity is counted twice it is called double counting. If a commodity is counted more than twice it is called multiple counting. The problem arises in all cases where goods are used for further production .for example , when wheat is used for making flour and bread the values of wheat will be counted more than once if we take values of wheat , flour and bread and add them . National income will appear more than it is. Hence double counting must be avoided there are two methods to solve this problem. (A)Value of final product method: According to final product method we add final products only and exclude the value of those ,which are intermediates in the process of production. (B) Value added method: Under value added method ,we ascertain the value added to inputs at each stage of production and then we aggregate the same The value added method must give the same result as the final product method

2. **Non-monetised sector:** Another difficulty arises because of the prevalence of non- monetized transactions in under-developed countries like India ,so that a considerable part of output does not come into the market at all. the farmers themselves consume a large part of agriculture output – food grains-.the national income statistician ,therefore, has to face the problem of finding a suitable measure for this part of output.

3. **Level of literacy:** Because of illiteracy, most producers have no idea of the quantity and value of their output .they do not follow the practice of keeping

regular accounts. This makes the task getting reliable information from a large number of petty producers all the more difficult.

4. **Lack of specialization:** Because of underdevelopment occupational specialization is still incomplete so that there is a lack of differentiation in economic functioning. An individual may receive income partly from farm ownership , partly from manual work in industry in the slack season, etc.

5. **Data :** There is a general lack of adequate statistical data and this makes the task of estimation all the more difficult.

6. **Inventories:** It is not easy to calculate the value of inventories , i.e., raw materials , semi – finished and finished goods in the custody of the producers. Obviously , any miscalculation on this score will vitiate the estimates of the output of productive enterprises.

**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 machines. Unless from the gross national income correct deductions are made for depreciation , The estimate of net national income is bound to go wrong. 8. Estimates of expenditure : The application of the expenditure method too is full of difficulties . It is difficult to estimate all personal as well as investment expenditure . It is difficult to estimate all personal as well as investment expenditure.

Since factor incomes arise from production of goods and services, and since incomes are expended on goods and services produced, three alternative methods of measuring national income are possible.

**NATIONAL INCOME IN INDIA** In India, the estimation of national income is being done by two methods, i.e., product method and income method. Net Product Method: While estimating the -gross domestic product of the country, the contribution to GDP from various sectors like agriculture, livestock, fishery, forestry and logging, mining and quarrying is estimated with the adoption of product method. In this method, it is important to estimate the gross value of product, bi-products and ancillary activities and then steps are taken to deduct the value of inputs, raw materials and services from such gross value. In

respect of other sub-sectors like animal husbandry, fishery, forestry, mining and factory establishments, the gross value of their output is obtained by multiplying the estimated output with their market price. From such gross value of output, deductions are made for cost of materials used and depreciation charges so as to obtain net value added in each sector. In respect of secondary activities, the computations of gross domestic product are done by the production approach only for the manufacturing industrial units (both registered and unregistered). In respect of constructions activity, the estimates of the value of pucca construction are made by the commodity

**Net Income Method:** In India, the income from rest of the sectors, i.e., small enterprises, commerce, transport and communications, banking and insurance professions, liberal arts, domestic activities, house property, public authorities and rest of the world is estimated by the income method. Here, the income approach is adopted to estimate the value added from these aforesaid remaining sectors. Here, the process involves the measurement of aggregate factor incomes in the shape of compensation of employees (wages and salaries) and operating surpluses in the form of rent, interest, profits and dividends. Finally, by adding up the contribution of all different sectors to national income of the country, it is necessary to obtain net domestic product at factor cost. In order to derive the net national income at current prices, it is necessary to add the net income from abroad and net indirect taxes with the net domestic product at factor cost. This same estimate is then deflated at the prices of the base year selected to derive a series of national income at constant prices.

## Business Cycle:

**The Business cycle** is the upward and downward movements of levels of Gross domestic product and refers to the period of expansions and contractions in the level of economic activities around a long term growth trend.

The term Business cycle refers to economy – wide fluctuations in production, trade, and general economic activity.

**The Very Long Period Cycle:** This is also known as Kondratieff Cycle. This was propounded by N. D. Kondratieff the Russian

**The Major Cycle**: This has been emphasized as the fluctuation of business activity between successive crises. This is also known as “The Long Jugler Cycle.” A French economist Clement Jugler

showed that the periods of prosperity, crisis and liquidation followed each other always within a span of the average of nine to ten years.

**The Minor Cycle**: These are the short term trade cycles named after Joseph Kitchin. Kitchin cycle is the regular 40 month fluctuation in prices, production and employment.

**Types of Business Cycle**

**Kuznets Cycle:** This type of business cycle was propounded by the famous American economist Professor Simon Kuznet. His view was that the secular swing of the cycle generally occurs in between 7 to 11 years and this can show effect within that period.

**Building Cycles**: Economic fluctuations of a longer duration than the business cycles have taken place in the building construction activities. These cycles run from 15 and 20 years and on an average to 18 years.

**PHASES OF THE BUSINESS CYCLE**

**Peak**: After a period of growth, an economy will reach a peak, where business is producing at or near full capacity, and the economy is at or near full employment.

**Expansion/Growth**: During this phase of the business cycle, consumer and business spending rise. Unemployment will drop during this phase, which will further aid consumer spending.

**Trough/Depression**: This is the lowest point of the business cycle. Factories will be operating below capacity, allowing unemployment to reach high levels. Jobs are difficult to find in this phase, and many businesses may fail.

**Recession:** This is a phase when real GDP begins to decline. Consumers and business reduce their spending, unemployment rises, investment declines, and pessimism about the economy is likely to grow.

**CAUSES OF BUSINESS CYCLES**

**Internal Factors**:

**1. Consumption**: When consumer spending increases, businesses will increase production- causing them to hire more workers and purchase more materials and capital goods. When consumer spending decreases, the opposite will occur.

**2. Business investment:** The purchasing of capital goods increases the number of jobs in the economy because people have to make those goods. If investments increases, the economy will grow, if investment decreases, the economy will contract.

**3. Government activity**: The government can influence the business cycle through fiscal policy (its tax and spend policies) and monetary policy (its control of the money supply, largely through the federal reserve).

**Purchasing Power :** Another cause of business cycle is under consumption or over saving. During the period of boom, the income of wealthier people will increase and they will start investing it into the

production, as a result supply increases. But majority of people cannot buy them because of less purchasing power.

**Monetary Effect:** The trade cycle is caused by the expansion and contraction of bank credit. The trade cycle will be in the upward phase when the banking systems create more money, results in Expansion. Soon the banks start restricting credits as hey exhaust their reserves, results in Contraction.

**Cyclical Changes in Weather :** Cyclical changes in the weather is also a cause of the business cycle. If the weather is favorable then agricultural production will increase and business cycle also will see the expansion.

**Human Psychology :** Psychological Cause refers to men's attitude of mind towards actual economic conditions. When businessmen except better times, they expand investment and output, This gives rise to expansion. A small shock or small failure will reverse the process, expansion comes to an end.
**Over Investment :** According to Frederick A. Hayek, if money supply increases the investors will invest more money in the capital goods which results in expansion but soon it turns into contraction because of over investment.

A THOUGHT ON THE BUSINESS CYCLE

The business cycle tends to be self- sustaining. In other words, when in a period of growth, the economy will continue to grow (jobs leading to jobs) until some event (internal or external) intercedes.

These changes occur in the form of change in volume of employment, output and income. The sequence of changes in business cycle occurs frequently and in a similar pattern.

## MONETARY POLICY

Monetary policy refers to the use of instruments under the control of the central bank (RBI) to regulate the availability, cost and use of money and credit.

According to Johnson, "Monetary policy is defined as policy employing central bank's control of the supply of money as an instrument for achieving the objectives of general economic policy."

**OBJECTIVES OF MONETARY POLICY**

1. Balance of Payments

2. Economic Growth

3. Price Stability

4. Full Employment

**INSTRUMENTS OF MONETARY POLICY**

**BANK RATE**

Bank Rate is also known as discount rate. It is the rate at which RBI lends to the commercial banks or rediscounts their bills. If bank rate is increased ,then commercial banks also charge higher rate of interest on loans given by banks to public because now commercial banks get funds from RBI at higher rate of interest. Higher rate of interest will contract credit in the economy i.e. public will take lesser loans because of higher rate of interest.

**CASH RESERVE RATIO (CRR)**

Cash Reserve Ratio is a certain percentage of bank deposits which banks are required to keep with RBI in the form of reserves or balances . Higher the CRR with the RBI lower will be the liquidity in the system and vice-versa. RBI is empowered to vary CRR between 15 percent and 3 percent. But as per the suggestion by the Narshimam committee Report the CRR was reduced from 15% in the 1990 to 5 percent in 2002.

**Statutory Liquidity Ratio (SLR)**

It means a certain percentage of deposits is to be kept by banks in form of liquid assets. This is kept by bank itself the liquid assets here include government securities, treasury bills and other securities notified by RBI. If SLR is more then banks have to keep more part of deposits in specified securities and banks will have less surplus funds for granting loans. It will contract credit. SLR is fixed by RBI and usually it has been ranging between 25% to 40%. By an amendment of the Banking regulation Act(1949) in January 2007, the floor rate of 25% for SLR was removed.

**REPO RATE & RESERVE REPO RATE**

Repo rate is the rate at which RBI lends to commercial banks generally against government securities. Reverse Repo rate is the rate at which RBI borrows money from the commercial banks. Reduction in Repo rate helps the commercial banks to get money at a cheaper rate and increase in Repo rate discourages the commercial banks to get money as the rate increases and becomes expensive. As the rates are high the availability of credit and demand decreases resulting to decrease in inflation. This increase in Repo Rate and Reverse Repo Rate is a symbol of tightening of the policy.

**OPEN MARKET OPERATIONS**

It means that the bank controls the flow of credit through the sale and purchase of securities in the open market. When securities are purchased by central bank, then RBI makes payment to commercial banks and public. So, the public and commercial banks now have more money with them. It increases money supply with commercial banks and public. This will expand credit in the economy.

## FISCAL POLICY

“It refers to a policy concerning the use of state treasury or the government finances to achieve the macro-economic goals” OR “Government policy of changing its taxation and public expenditure programs intended to achieve its objective”. OR “Government uses its expenditure and revenue program to produce desirable effects on National Income , production and employment”.

**OBJECTIVES OF FISCAL POLICY**

1. To Achieve Equal Distribution of Wealth
2. Increase in Savings
3. Degree of inflation
4. To Achieve Economic Stability
5. Price stability

**INSTRUMENTS OF FISCAL POLICY**

**DEFICIT POLICY**

Deficit Financing refers to financing the budgetary deficit. Budgetary deficit here means excess of government expenditure over government income. It means "Taking loans from reserve bank of India by the government to meet the budgetary deficit" . Reserve bank gives loans buy issuing new currency notes. Increase in money supply leads to fall in value of money. Fall in value of money in turn leads to increase in price level. So deficit financing should be kept low as it leads to price rise in economy. Thus due to deficit financing necessary funds are made available for economic Growth and on the other inflation of country increases.

**PUBLIC EXPENDITUTRE**

Public expenditure influences the economic activities of country very much. Public expenditure may be of two kinds i.e. developmental and non developmental. Expenditure on developmental activities requires huge amount of capital. So much capital cannot be made available by private sector alone. It requires substantial increase in public expenditure.

Public expenditure may be made in many ways:- (1) Development of state enterprises, (2) Support to private sector, (3) Development of infrastructure & (4) Social Welfare.

**TAXATION POLICY**

Taxes are the main source of revenue of government. Government levies both direct and indirect taxes in India. Direct taxes are those which are directly paid by the assesses to the government i.e. income tax, wealth tax etc. Indirect tax are paid indirectly by the public to the government i.e. excise duty, custom duty, VAT etc. Direct tax are progressive in nature. Indirect taxes are not progressive. These change from all the segments of society at same rate.

The main objectives of taxation policy are: (1) Mobilization of resources, (2) To promote saving, (3) To promote saving & (4) To bring Equality of income and wealth