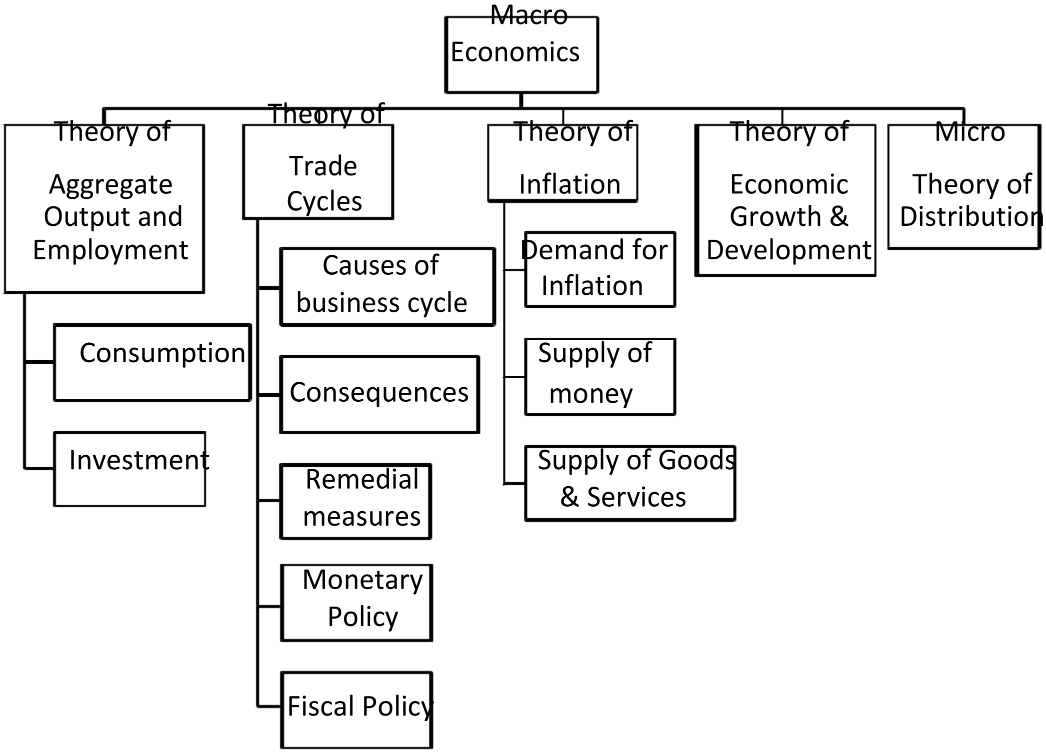
UNIT I

Macro Economics

Macroeconomics is the opposite of micro economics. It is the study of economic system as whole: it studies not one economic unit like a firm, or an industry but the whole economic system. It therefore deals with total or aggregate national income, output & employment, total consumption, saving & investment & the general level of prices. It is also called aggregative economics.

According to Kenneth.E.Boulding: "Micro economics deals not with individualquantities as such but with aggregates of these quantities not with individual income but with national income, not with individual prices but with price levels, not with individual output but with national output."



Importance & use of macro economics

1. **Helpful in understanding the functioning of an economy:** Modern economicsystem have become more complex. One cannot get clear & correct picture of the functioning & composition of the economy as whole on the basis of micro economics. The study of macroeconomics is necessary.

2. **Formulation of economic policy:** While making polices, Government dependson the aggregate statistics of economic force like national income, total employment, total investment. Total or aggregate savings, general price level etc.

3. **Solution of economic problems:** Modern government solves many economicproblems with the help of macroeconomics for e.g. the problems of employment, production & national income can be studies only with the help of macroeconomics.

4. **Study of trade cycles:** Trade Cycle or economic fluctuations are seriouseconomic problems. Economic fluctuations are very common in the capitalist economics. This comes in the way of healthy working of the economy. Trade

cycles are caused by fluctuations in aggregate income aggregate investments etc. therefore trade cycles can be studied under macroeconomics.

5. **Macroeconomics paradoxes:** It is common experience that many economicactivities are justified for individuals but they are not justifiable for the economy as a whole. E.g. increasing prices good for firms but not for savings is good for individuals but not for the economy.

6. **Helpful in furthering the scope of micro economics:** Macroeconomics isalso helpful in making laws of micro economics e.g. law of diminishing marginal utility came into being from the analysis of consumption habits of aggregates is it's principle is made by obtaining many groups.

7. **Changes in the general price levels:** The rise in general prices level &falling value of money is called inflation. Falling general price level or rising value of money is called deflation. We know that economic fluctuations are an obstacle to proper functioning of the economy. General Price Level is not just the aggregate of price of different product. Macro economics helps us to study how the rise in price of one product influences the other products. Eg. Rise in petrol price. To control these fluctuations, economists have to derive conclusions from macroeconomics.

8. **Study of national income:** National Income reflects the various economicproblems of the economy. The economic conditions of different countries can be understood with the study of their national income. National income study has become possible only with the growth economics.

Limitations of Macro Economics

1. **Too much generalization is of no good:** Excessive generalization makeMacroeconomics dependable. E.g. Borrowing is good in time of crisis, but today the countries are caught in debt crisis.

2. **All units of the aggregates may not be homogeneous :**It is not possiblethat all individual units will be homogeneous. Prof. Boulding is of the view that we can add or subtract apples or oranges but not possible to add subtract apples & buildings.

3. **Indiscriminate use of macroeconomics may be irrelevant:** We shouldtake all precautions while using macroeconomics, as an economic model might be suitable for one country but the same might not be suitable for the other.

4. **Statistical & Conceptual difficulties:** While estimating national Income likeaggregates we face these difficulties.
5. **Aggregates may not be important always:** A solution found in general mightnot be applied to all individual units.
6. **Limited applicability:** Macroeconomics also suffers from the problem oflimited applicability.

Difference between Micro & Macro Economics

1. **Difference in the degree of aggregation:** Microeconomics studies theindividual unit of the economy like a firm, individual saving, individual income, macroeconomics deals with aggregates like national income & aggregate savings. It studies the problem of the economy as a whole.
2. **Difference in objective:** Microeconomics studies the principles, problems &policies concerning the optimum allocation of resources of a firm and individual. Macroeconomics studies the principles, problems & polices relating full employment of resources & growth of resources of a Nation.
3. **Difference of subject matter:** Microeconomics deals with the determinationof price, consumer equilibrium, distribution & welfare. Macroeconomics deals with full employment national income, general price level, trade cycle, economic growth etc.
4. **Difference of method of study:** Micro economics establishes relationshipbetween cause & effect of economic phenomenon. Macroeconomics are categorized into aggregate demand, aggregate supply, total consumption, and total investment etc., their independence is studied under macroeconomics.
5. **Macroeconomics paradoxes:** The same thing has different analysis in bothmicro &macroeconomics. E.g. savings is beneficial for an individual & his family but if entire society starts saving, consumption will decrease leading to decrease in demand, decrease in supply & decrease in income etc.
6. **Different assumptions:** Micro Economics assumes full employment, constantproduction & income. On this basis we can know how production, factors of production are allocated & distributed among different uses. Macroeconomics assumes how factors of production are distributed and thus how full employment can be achieved.

7. **Difference of the forces of equilibrium:** Micro economics studies theequilibrium between the forces of individual or market demand & supply. Macroeconomic analysis deals with the equilibrium between the forces of demand & supply of the whole economy.

8. **Mortal & immortal subjects:** Microeconomics deals with individuals andindividuals are mortal. Micro economics tool is man who is mortal. Macroeconomics is concerned with aggregates. The tool of its study is society. Society never ends, hence macroeconomics is immortal.

Thought both are different, micro economics depends on macro economics&macro economics in turn on micro economics.

UNIT II& III

NATIONAL INCOME &TRADECYCLE

NATIONAL INCOME:

National income is the result of all economic activities done in a country. It is the total amount of goods and services produced in a country expressed in monetary terms. If anybody wants to know about the economic situation of a country, the first thing onehastolook at it is the national income. Through the concepts and components of the national income, one can infer a lot. Their decisions, future plans must be based on national income.

DEFINITIONS:

Marshall defines national income in his “Principles of Economics” as “The labourandcapital of the country, acting on its natural resources, produce annually certain net aggregate of commodities, material and immaterial including services of all kinds. Thelimiting word ‘net’ is needed to provide for the using up of raw and half –finished commodities and for the wearing out and depreciating of plant which is involved inproduction of all such waste, must of course, be deducted from the gross produce beforethe true or net income can be found and net income due on account of foreign investmentsmust be added in. This is the true net annual income or revenue of the country or thenational dividend.”

Pigou defines the national income as, “That part of objective income of the community including, of course, and income derived from abroad which can be measured in money.”

Marshall and Pigou viewed national income from the production side, whereas Irving Fisher viewed from consumer side. Even though the definition is the best of its kind, it is highly impractical.

Irving Fisher defines national income as, “The national income or dividend, consistssolely of services as received by ultimate customers, whether fromtheir material or from their human environments. thus, a piano or an overcoat made for me this year isnot a part of this year’s income but an addition to the capital .only the services renderedto use during this year are income”.

General definition: The total income of the nation is known as national income. National income is the flow of goods and services, produced in an economy, in a year, at aparticular period of time.
National Sample Survey has defined national income as – “Money measure of newaggregates of all commodities and services acquiring to the inhabitants of a communityduring a specific period”

National income is the value of goods and services produced during a given periodcounted without

duplication. National income is usually measured and shown with reference to a year or as an annual flow. It is the total production per unit of time.

- ***NATIONAL PRODUCT***: It consists of all the goods and services produced by the community and exchanged for money.

- ***NATIONAL DIVIDEND***: All incomes in cash and kind accruing to the factor of production in the course of generating national product. National Dividend is equal to National product.

- ***NATIONAL EXPENDITURE***: It is the total spending or outlay of the community onthe goods and services produced during a given year. Therefore, national Expenditure = National Income or Dividend = National Product.

BASIC CONCEPTS OF NATIONAL INCOME:

- ***GROSS NATIONAL PRODUCT (GNP)*** : GNP is defined as the aggregate market value of all final goods and services produced during a given year, where final goods and services refer to finished goods ready for consumption by household and firms. Total productionexcludes raw material, semi-finished goods etc.

In an open economy, GNP, by expenditure method, may be obtained by adding up.

1. The value of all types of expenditure on consumption goods (C) by the individuals of the country. It includes expenses on durable and non-durable goods and services.

2. The value of expenditure on new investment and on investment of old capital, including provision for consumption of capital assets i.e. depreciation and includes inventory (I).
3. The value of the expenditure of government for the benefit of the economic community (G).By central, state and local.

4. The value of net exports (Total Export – Total Import) i.e. (X – M), the value may be positive or negative.

1. The net amount received from abroad (R – P).i.e. Receipts from(R) other countries other than exports minus payments (P) made to other countries other than imports.

Therefore, **GNP = C + I + G + (X – M) + R – P).**

According to the income method, **GNP** = Wages and Salaries + Rents + Interest +Dividends

- Undistributed Corporate Profit + Mixed Income + Direct Taxes + Indirect Taxes+ Depreciation +Net Income from abroad

[Mixed Income include profits of incorporated business, self-employed persons andpartnerships.]

GNP_{mP} = GDP_{mP} + NIFA [Where, mp = Market Price & NIFA = Net Income fromabroad.]

GNP_{FC} = GNP_{MP} – Indirect Taxes + Subsidies [Where, FC = Factor Cost]

- **GROSS DOMESTIC PRODUCT (GDP):** The sum of all the values of output of goods and services produced in the country without adding net factor incomes receivedfrom abroad is

  GDP. According to Dernberg, “GDP at market price is the market value of theoutput of the total goods and services produced in the domestic territory of acountry during an accounting year”

  $GDP_{MP} = C + I + G + (X – M)$.

$GDP^{FC} = GDP^{MP} + (S – T)$ whereas S = Government Subsidies ,T = Indirect Taxes

GDP by income method is the sum of all factor incomes

i.e. GDP^{Y} = Wages + Rent + Interest + Profit.

- **NET NATIONAL PRODUCT (NNP):** It is obtained by deducting the value of depreciation or replacement allowances of the capital asset fromtheGNPi.e. – itincludes the value of total output of consumption of goods or industrial goodsexcluding depreciation.

NNP = GNP – D ,Where, D = Depreciation Allowances

$NNP_{mp} = GNP_{mp}$ - depreciation

$NNP_{fc} = NNP_{mp}$-- Indirect taxes +subsidies

NNP_{mp}generally is higher than the NNP_{fc}because indirect taxes exceeds government subsidies

NET DOMESTIC PRODUCT (NDP): GDP includes products which are to be replaced duetodepreciation or wearing out. If the foreign market income is excluded it is NDP.

NDP = GDP – DEPRECIATION

NDP can be defined as net value added by all the producers within the domestic territoryof the country. The income generated within the domestic territory of a country by all producers is called domestic factor income

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 withreference to a particular year [Generally that year which doesn't have any inflationor deflation] is called as GDP at constant price or real GDP.

Nominal GDP is the value of goods and services produced in a year. Calculated in terms of the prevailing market price (or current price). If the economy undergoes inflationary pressure then the GDP at current price will be under-estimation. To overcome this andfindreal GDP following formula is used:

REAL GDP = GDP for the current year X (base year (100) /current year index)

- ***PERSONAL INCOME*** : It is the current income of persons or households fromall sources before payment of direct taxes in one year.

  Personal Income = Net National Income + Transfer Payment – (Corporation Taxes + Ploughed Back Profits) (Profits not distributed are ploughed back profits).

Transfer payments: This is not a payment for production of goods and services, but transferof income through state or similar public body from one set of individual to another, e.g. –old age pension etc.

Personal income can also be calculated like this.

PERSONAL INCOME = National Income – Corporate Profits – Employer's Contributionfor social insurance + Government Transfer Payments + Business Transfer Payments +Net

Interest paid by Government + Interest Paid by Consumers + Dividends – Employee Contribution for social insurance.

· ***PERSONAL DISPOSABLE INCOME:***Personal income – Direct Taxes paid – Miscellaneous

Payments to the government. It is the income available with households for spending. People spend a part of this disposal income and savethe rest.

Disposal Income = National Income – Business Service – Indirect Taxes + Subsidies – Direct Taxes on persons – Direct Taxes on business – Social Security for payments +Transfer Payments + Net Income from abroad.

- ***PER CAPITA INCOME:***Per Capita income or National Income / Total Population. Per capita income is the average income of the people of a country in a particular year. Economists consider that per capita income is a better representation of aneconomy than GNP. This represents the average standard of living of the people. Sometimes an increase in the real national income (National Income at constant price) may not improve the levels of living of the people. An increase in income of few rich people may increase per capita income. For economic growth, the growth of real national income should be faster and greater than growth of population.

TO MEASURE NATIONAL INCOME :

Estimates of national income provide economists a powerful tool in the analysis of theperformance of an economy. There are three techniques to estimate national incomei.e. (i) Product Method (ii) Income Method (iii) Expenditure Method.

- ***PRODUCT METHOD:*** Product method is also called as output method, inventoryor census method. It is used for finding out market value of all goods and services manufactured during a year. In this case, economy is divided into various sectors like, industry, agriculture, direct services etc. In every sector, we find stocks of finished products produced and make an addition of the values of those commodities. In direct service sector, value of services of professionals like dramatists, soldiers, politicians, doctors, engineers etc are taken into account andadded up. In case of international transactions, value of commodities exportedand imported payments received & made from abroad are clubbed to get national income at market price.

NATIONAL INCOME = C + I + G + (X – M) + (R – P)

C -Value of the consumer goods, I – value of the investment goods, G – value of the government products , x-exports, M – imports, R – receipts from other countries other thanexports, P- payment to other countries other than imports

In the simplest form, if a nation produces n type of goods and services and themarketprices of these products are p_1, p_2,…., $p_n$then

National Income = $P_1Q_1 + P_2Q_2 + ….. + P_nQ_n$.

This is called as final product method. This includes the value of intermediary goodswhich will have double counting problem. So, nowadays it is replaced by Valueadded method.

National income value added method, N.I. = value of output – value of input

- ***INCOME METOD***: This is called as factor income method or factor share methodornational income by distributive share method. Income method refers togrossnational income obtained by addition of wages and salaries, profits, interests andrents of individuals and institutions and including government income earnedeitherfrom property or through work.

National income = (rent + wages + interest + profit) + net factor fromabroad

– transfer payments

OR

National income = ∑ Yi

According to the economists, N.I consists of three components i.e. labour income, capital income, mixed income.(1) labour income consists of wages, salaries ,bonus, social security& welfare contributions.(2)capital income includes dividends, pre-tax retained earnings, interest on savings & bonus, rent ,royalties,& profits of government enterprises.(3) mixedincome comprises the earnings from professions, farming enterprises etc.

- ***EXPENDITURE METHOD:*** Expenditure method is also called as "consumptionandinvestment method" or "outlay method". In order to use this method, we will consider expenditure on consumption and investment on finished products by thecommunity.

NATIONAL INCOME = $E_C + E_I + E_G + E_F$

Where, E_C = Expenditure by consumers on commodities and services.

E_I = Expenditure by the industries on manufacture on asset creation, production

of goods. E_G = Expenditure by government on consumption and capital goods

E_F = Net foreign trade expenditure and other expenditure on payments to other countries.

OR NATIONAL INCOME = C + I + G + (X – M) + (R – D)

Where, C = Consumption expenditure, I = Investment expenditure, G-government expenditure, (X-M) =net expenditure on foreign trade, (R-D)=net expenditureon foreign relation.

NATIONAL INCOME CALCULATION IN INDIA:

In developed countries national income is calculated in all the three methods and verifiedfor perfectness. Depending upon the problem and utility, various methods are utilized.

But in India, because of lack of reliable statistical date and funds, we are not findingthe national income by all three methods. Use of expenditure method is completely ruledout. The expenditure done is not at all known .because of this , nowadays our government is making a rule that all transactions must be done through banking sector only, so that theexpenditure can be calculated. Output method is used in the commodity producing sectors like agriculture and manufacturing. The income method has been used in thetertiary or service sector like government and banking sector etc. Value added approachisused for output method.

C.S.O. has divided the economy into 13 sectors, grouped under five main headings-primary, secondary, transport, communication, & trade, finance & real estate, community &personal services.

N.S.S.O. has categorised the sectors into A, B, C, D to calculate national Income. In U.S. it isdivided into 71 sectors.

IMPORTANCE OF NATIONAL INCOME:

National income is generally believed to be the most important single index of the overall economic situation of a country and as such commands a great deal of public interest. Anindividual as well as the government have to maintain the accounts of their incomes andexpenditures in one form or another. The growing importance of national income studiesinrecent years is due to the following reasons:

- ***ECONOMIC POLICY:*** National income figures are an important tool of macroeconomic analysis and policy. National income estimates are most comprehensive measures of aggregate economic activity in an economy. It is through such estimates that we know the aggregate yield of the economy andalaydown future economic policy for development.

- ***ECONOMIC PLANNING:*** National income statistics are the most important tools for long-term and short- term economic planning. A country cannot possibly frameaplan without having a prior knowledge of the trends in national income. The planning commission in India also kept in view the national income estimates before formulating the five-year plans. As on today also all the future plans of thecountry is based on the national income only.

- ***ECONOMY'S STRUCTURE:*** National income statistics enable us to have clear ideaabout the structure of the economy. It enables us to know the relative importanceof the various sectors of the economy and their contribution towards national income. From these studies, we learn how income is produced, howit is distributed, how much is spent, saved or taxed, etc.
- ***INFLATIONARY AND DEFLATIONARY GAPS***: National income and national product figures enable us to have an idea of the inflationary and deflationary gaps. For accurate and timely anti-inflationary and deflationary policies, we need regular estimates of national income.

- ***BUDGETARY POLICIES:*** Modern governments try to prepare their budgets withinthe frameworks of national income data and try to formulate anti-cyclical policies according to the facts revealed by the national income estimates. Even the taxation and borrowing policies are so framed to avoid fluctuations in national income.

- ***NATIONAL EXPENDITURE:*** National income studies show how national incomeexpenditure is divided between consumption expenditure and investment expenditure. Expenditure on different sectors, it enables us to provide for reasonable depreciation to maintain the capital stock of a expenditure patternof the citizens can be known. Community. Too liberal allowance of depreciation may prove harmful as it may unnecessarily lead to reduction inonsumption.

- ***DISTRIBUTION OF GRANTS-IN-AID:*** National income estimates help a fair distribution of grants-in-aid by the federal governments to the state governments and other constituent units. • ***STANDARD OF LIVING COMPARISON***: National income studies help us to comparethe standards of living of people in different countries and of people living inthe same country at different times, different states etc. • ***INTERNATIONAL SPHERE***: National income studies are important even in the international sphere as these estimates not only help us to fix the burden of international payments equitably amongst different nations but also enable us todetermine the subscriptions and quotas to international organizations like the U.N.O. , I.M.F. , I.B.R.D. Etc. • ***DEFENSE AND DEVELOPMENT***: National income estimates help us to divide the national product between defense and development purposes. Fromsuch figures we can easily know how much can be spread for a war by the civilian population. Even though defense is essential, Amartya sen has always adviced more money should spent towards development than defense.

- ***PUBLIC SECTOR***: National income figures enable us to know the relative roles of public and private sectors and the economy. If most of the activities are performed by the state, we can easily conclude that public sector is playing a dominant role.

NATIONAL INCOME GROWTH RATE IN INDIA :

According to the press release of CSO, at constant basic price (‘11-'12), GDP during '50-'51was 9464 cores, during '14-15 it was 105.52 lakh crore, during '15-'16 it was 113.5lakhcrore. The annual growth rate at constant price for 2015 - 2016 is 7.6% whereas at current price it is 8.7%.

GVA (Gross Value Added) at basic price in “15 - “16 is 104.38 lakh crores which is growing by 7.2% whereas in “14 – “15 it was 97.27 lakh crore.

Per-Capita Income during '50-'51 was Rs. 264/- whereas according to current price, per-capita income during ''14-‘'15 was Rs.86,879/- and ‘'15-’'16- Rs.93,293/- which has grown by 7.4%.

PROBLEMS IN ESTIMATION OF NATIONAL INCOME:

Various problems in measurement of national income can be segregated into three heads (i) Conceptual Problems (ii) Statistical Problems (iii) Practical Problems.

- (i)CONCEPTUAL PROBLEMS : National Income-Committee has mentioned thefollowing

Conceptual difficulties:-

1. Considerable portion of our produced goods are not offered for sale in the market - whichiseither retained for self consumption or for barter system. It is especially applicable for agricultural products.

2. In maximum cases, manufacturers do not maintain appropriate records of their total production, depreciation details, etc. Gross value of output is taken into account.

3. Lack of occupational specification prevails. An individual is engaged in diverse economic activities simultaneously. Thus, it becomes difficult to collect accurate statistics of occupationwise distribution.

4. There is difference of opinion relating to the term “nation” in the concept of national income. It requires clarification about what does it signify? Whether it is geographical entity of thecountry or nationals those residing abroad also should be considered or not? Since national income comprises a quantitative measure of economic activity, problem of including international free services has become a controversial one.

5. As everything has to be equated to money value, services rendered in the economy, non-material services like love for humanity, affection, patriotism, etc. can’t be taken into account incomputing national income. But the world is watching, how patriotism of Japanese is progressing its country.

6. In rural sector of underdeveloped economies, artisans , cottage industry workers, cultivators, do not have exact idea of expenses of their occupation. Net value of their products cannot becomputed accurately.

7. Where large sector of non-monetised sector and barter system prevails it becomes difficult tocalculate the correct value.

(ii) STATISTICAL PROBLEMS

1) In the underdeveloped countries, many a times proper statistical data will not beavailable and will not be possible to get also because of their illiteracy. Moreover whatever statistics available are not always complete, reliable and correct. To obtainaccurate consumption expenditure and savings potentialities of rural populationisverydifficult.

2) Heterogeneous economic conditions prevail in various parts of a country. Thus, it becomes impossible to apply information collected for one area to other areas.

(iii) PRACTICAL PROBLEMS

1) Due to ignorance, illiteracy and lack of accounting habits of the ruralpeople of U.D.C., data may not be available or unreliable, which makes the task of estimating national income very difficult.

2) Lack of availability of trained personal makes calculation of national income estimation difficult

3) Even banking sector is unorganized in U.D.C. village money lenders and indigenousbankers maintains absolute secret of their transactions and does not providetrueinformation

4) Self consumption and error of double counting is another setback in the estimationof national income

5) In, Indian units of production are generally very small and scattered. It also makesthe task cumbersome.

6) Incomes earned by foreign companies set up in India and by our nationals abroadalso make complications.

7) Lot of black money exists in the economy, which makes national income calculationvery difficult

8) Recognising transfer payments creates lot of difficultly

GDP & GVA

With the economic development, electronic and communication development, theworldis becoming a global village.

With the free movement of factors of factors of production, capital, money,firms etc. all the countries of the world are converging towards common calculations, common accounting methods (IFRS),common taxing system(GST) etc. one of the movements towardsthis is the changes made by the nation regarding GDP & GDA.

In 2015, as per recommendation of the united nations system of national accounts 2008&pranob sen (chairman of National statistical committee) committee, three major changeswere made regarding calculation of National income .Already many changes have beenmade like including services of housewives, villagers, self consumption etc. first the basicyear is changed from 2004-2005 to 2011-2012. Next GDP at factor cost has been replacedby gross value added product (GVA).The third one is GDP at market price will be referredasGDP in government accounts. Economic growth of our country can be known by GDP_{mp}.Bythis India's GDP can be compared with any other country's GDP. This will help the developed countries in starting the industries in India. It helps the foreigners to comparethe investment opportunities & their yields from our country.in 2001-2007,India'sshareinthe global GDP was 4.8%.in 2014-2015,it stands at 7%.

In economic terms, GVA is the measure of the value of goods & services producedinanarea, industry or sector of an economy. According to national accounts GVA is the total value of the output produced by various sectors minus total value of the intermediategoods used in the process of production. for e.g. If you want to find the value of the flour making companies like Annapurna, pilsberry, etc. From the total value of the flour, thevalueof the wheat must be deducted under value added method.

GDP is the money value of all the final goods & services produced in the domestic territoryof a country during an accounting year. Here double counting error is a big terror.

$GDP_{mp} = \sum GVA_{bp}$+production taxes – production subsidies

Gross domestic product is the sum of the gross value added at basic price including production taxes & excluding production subsidies. Because the producer transfer thetaxescollected from the buyers to the government & transfers the subsidies fromthegovernment to the buyers or it can be coated as GDP. GDP is equal to the gross valueaddedincluding the difference between indirect tax and subsidy.

$GVA_{fc} = GVA_{BP}$ –production taxes –production subsidies

GVA_{BP} = CE +MI+CFC +production taxes-production subsidies

CE – compensation for employees

MI – mixed income

CFC –consumption of fixed capital

In short GDP represents the picture of the whole economy.

GVA represents the entrepreneurs, government, household level productionof our Economy

I.e. the sectoral growth of the economy .new methodology of GVA is profitmetricthansales, GDP is product metric.

BUSINESS CYCLE

Introduction:

Great depression of (England) 1930 taught the world a great lesson. When J.MKeyneswas looking into the reasons for unemployment caused by this depression, he came out with the explanation of the business cycle. Business cycle or trade cycle is a special featureof capitalist economy. Because the classical group of economists believed in capitalism&believed that invisible hand of price mechanism allocates the resources optimally by it. But that was the main cause of depression. During depression the resources was not allocatedoptimally.

Keynes suggested that regular monitoring of the stage in which the economy is travelling is very necessary and all countries must adopt contra cyclical policies, includingthe capitalist economy and industries must adopt preventive and relief measures. By this ups and downs can be smoothened. By following his suggestions the economies are not going to the extreme cases as in 1930's. Many present day economist are suggesting twostage expansion and contraction of economy instead of four (boom, recession ,depressionand revival) phases of trade cycle.

When business is done without any control by government, ups and downs or goodtimesand bad times occur in a cyclical manner which gives rise to business cycle. By the inter relations of different sectors of the economy, when depression or boomstarts in onesectorit spreads to the other sector easily, this leads to fluctuations in employment, income, consumption, saving, demand, price, profit, investment etc. Here the seasonal fluctuationsand random fluctuations should not be confused with business cycle.

Definitions:

1. **Mitchell** – "A business cycle is a fluctuation of the aggregate economic activity of anation, it consists of expansion occurring at the same time and many lines followedby contraction. The contraction, in its turn, is followed by Revival which merges intoexpansion of the next cycle".
2. **Keynes** – " Business cycle is primarily unemployment cycle. The main featureofaboom is shortage of a labour and main feature of depression is Mass employment. Total output, income and price fluctuate along with the fluctuations in the level of employment, partly as a cause and partly as a consequence".
3. **Hebler**– "The business cycle in the general sense may be defined as an alterationof periods of prosperity and depression of good trade and bad trade.

Nature /FEATURES of Business Cycle:

Nature of business cycle is reflected by its characteristics

1. It is a wave like movement. When the economy expands it cannot stay there foreverand it has to be followed by contraction. This we will study in detail in causes. 2. Business cycle is a wide phenomenon and it affects the entire economy. For example, if boom starts in construction sector, it easily spreads to industrial sector, thentoagriculture, trade, transport, service, etc. It is self feeding and automatically spreadswithout any effort because as on today each sector is dependent on other sector. 3. Trade cycle occurs again and again. The period of repetition need not be sameandintensity also maybe the same . for example boom may exist for a short time anddepression for long time.
4. The downward movement towards trough is more sudden and violent than changefrom downward to upward.

5. The cycles differ in timing and amplitude but have a common pattern of phases which are sequential in nature
6. Professor knight discovered that during prosperity, business activity is 10%to25%above the trend and in depression 5% or 25% below the trend. He also foundthat when boom is severe, succeeding depression also will be severe but this relationshipmay not hold good in the reverse.

7. Business cycles are not seasonal fluctuations such as up swings in retail tradeduringdiwali, or ramzan or Christmas or demand for woolen clothes in winter. 8. Business cycle is self reinforcingi.e if boom or depression starts in one sector automatically it spreads to all other sectors. We have observed many times that increase in the price of petrol affects the entire economy.

9. In upturn generally inflation is seen and during downturn deflation is seen.

Phases of Business Cycle:

Phases is also called as stages of business cycle

A typical business cycle, in the terminology of Wesley Mitchell, consists of four phases. 1.Expansion 2. Recession 3. Contraction & 4. Revival. The ups and downs of economic activity brings upward and downward movement which brings different phases of businesscycle.

1. Revival or Recovery:

Recovery stage starts with lower turning point after existing in depression stagefor sometime. Among all the phase or point, lower turning point is difficult to over come. In a capitalist economy, reviving i.e. recovering the economy automatically is verydifficult and keynes suggested “Pump Primming Method” to achieve this andhesaidgovernment intervention is needed here.

To come over depression and start revival, we need a starting force.“originatingforces” or “starter “ may be exogenous or endogenous forces. Consumers cannot postpone their consumption for long. The replacement demand for semi durablegoods comes from consumer side and replacement of machineries fromthe industry side may work as starting point. The demand for machineries, semi durablegoods leads to production of these goods and certain industries start employingandthe cyclical flow of the economy towards upward movement starts.

Increase in demand➡ increase in price➡increase of profit➡increaseininvestment➡ increase in production➡increase in output➡increaseinemployment➡ increase in consumption ➡increase in saving With the increase in demand and production, Demand for bank loan increases, stockmarket starts becoming bullish. Even though this stage starts slowly once optimismstarts, banks start providing credit facility. production, consumption, price, employment, output starts increasing. It starts in one sector and automatically it spreads to other sector very easily and self-reinforcing proceeds to boomstage. Economists opine service sector easily catches up the change.

2. Prosperity:

Prosperity is also called as peak or boom or expansion From the lower turning revival takes the business cycle to highest boompoint or peak point. Cyclical flow of economic activity gains momentumand gains special effect. The entire economy will start working with optimism. Here inflation occursand economy reaches full employment level. Here demand, price, profit, employment, investment, output, consumption, everything increases. Price riseexceeds wages, interest rates, rentals and taxes. Increase in income leads toincreasein effective demand, with the multiplier effect, investment and employment increases to a greater extent. Optimism spreads from one sector to the other sector. Increase in the gap between cost and price increases the profit and further thedemand for factor of production increases and their price increases. High profits attract more producers, they demand for more factor of production. When their demand exceeds supply, their price rises, which leads to inflation. When cost of production increases beyond the limit, it will lead to loss or recession. The demandfor bank loan increases and the interest rates increases, by which prices further increases. When it moves higher and higher l, the real income starts falling, thebankcredit facility crosses it's limits, stock exchange with the highest performancetakesthe seed of destruction. The stage being short passes to the next stage. 3. Recession:

Recession is also called as falling stage. Recession starts when there is a downwardmovement from the peak. It is the starting of the downturn. The contractionforcestake over the expansion forces. The increase in the wage is not sufficient tomatchincrease in price so the purchasing power starts falling and so the demand for theproducts starts falling & the over optimistic traders who have increased the inventories find the stock is piling and cancel the orders and the producers decreasethe production and the downward cycle starts falling fast with the decreasing viciouscircle of economic activity.

Decrease in Demand➡ **decrease** in price➡decrease in profit➡decreaseininvestment➡ decrease in production➡decrease in output➡decreaseinemployment➡ decrease in consumption ➡decrease in saving

The psychology of the producers become pessimistic and bankers compel theproducers to return back the loans & the traders wanting to dispose the stock, decrease the price and downturn gains momentum moves down swiftly. If not controlled it passes to the most dangerous stage of depression.

4. Depression:

Depression is also called trough or contraction of business cycle.

Recession forms into depression when there is a General decline in economic activity. A depression is characterized by mass unemployment. There will be general fall inprices, wages, interest rate, consumption, expenditure, investment, bank depositsand loan, etc. Factories close down and construction of all types of capital goods, buildings, etc comes to a standstill. There will be lack of effective demand. Stockexchanges become bearish even foreign investment will be withdrawn during thesestages. All recession doesn't leads to dangerous depression when checked by stabilization policy & relief measures. When the stocks are cleared and the fall inprice is checked and when the bad debts are closed, economy starts reviving. As coming out of depression is very difficult, economist have suggested that government should take earlier action, before it becomes vigorous, to comeout of it.

Causes or determinants of business cycle:

Business cycle is caused by many factors. Let us group them into internal andexternal factors.

I. Internal factors:

More than internal factor we call this as economic factor. According to samuelson "Mechanism within the economic system itself will give rise to self generating business cycleso that every expansion will breed recession and contraction and every contractionwill breed Revival and expansion". Different theories of business cycles were given by different economist with change in time. Internal factors are based on those important theories. 1. Bank credit or changes in money supply:

According to Hawtrey& Friedman, "trade cycle is purely monetary phenomenon". They opined that bank credit is major cause of tradecycle. when banks expand credit, expansion of business cycleoccur and when bank credit was contracted, business cycle was also contracted. With increase in loan facility and less interest rate, traders take the loan and order more products which leads to increase in investment, employment , etc., which leads to prosperity. With increase in price, prosperity and heavy demandfor loans, banks can't lend limitlessly and banks stop giving loans and increase the interest rate and also start asking themto repay theloan. With this the downturn starts and reduction in production, trade, price, etc. starts.

2. Over Investment:

According to hayek, Robertson and others over investment is the cause of Business Cycle. When bank loans are free and cheap, business people invest in capital goods industries; this attracts funds & inputs from the consumer goods industries. After certainpoint, scarcity of consumer goods occurs and it also starts attractingfund and input which leads to increase in the price of consumer goods . Consumer goods industries also starts giving rise to income, which leads to consumption & further increase in price, which leads to prosperity. Due to demand from both the sectors, the price of inputs, loan increases and the profit starts falling. After certainpoint, profit starts to become even negative in some sector and investment starts falling in capital goods sector first and spreads toconsumer goods sector. Contraction of business cycle starts and leads to depression.

3 Under consumption or over saving:

According to Malthus, Sismondi, Marx and Hobson - trade cycle comes due toover saving or under consumption due to unequal distribution of wealth. Due to unequal distribution, rich people save more because of their richness. More saving leads tolarge investment in capital formation and increases output which leads to boom. But due to Income inequality and because many poor people are also there, all goodsare not consumed. Thus boom cannot last long and depression sets in. 4

Business psychology:

According to pigou, a wave of optimism and pessimisminbusinesscommunity causes business cycle. When the business communityis optimistic it expands the business and all sectors starts upward journey and business starts moving in the expansion path of thebusiness cycle. when they make an error of over expansiondueto optimism and start correcting it, downturn starts and pessimisminbusiness sets in & contraction of business starts. It drags downthebusiness cycle down further and when they realize the error of overcontraction due to over pessimism upturn starts. Thus ups anddown continues. A wave like movement in economic activity occurs. 5 Innovations:

According to Schumpeter, innovation is the cause of business cycle. Innovation is equal to inventions plus marketing. When a firmorabusiness enterprise innovates a new product, it leads to hugeprofits, taking the economy to boom. But once they are copiedbycompetitors the profit decreases leading to depression andcyclecontinues.

6 Changes in marginal efficiency of capital:

According to Keynes, changes in marginal efficiency of capital causes business cycle. Marginal efficiency of capital means theexpected rate of profitability on investment. The collapse of marginal efficiency and capitals leads to crisis and this changeis sudden. This leads to recession. When marginal efficiency of capital gradually increases Revival takes place. This recovery time dependson the durability of capital Assets and carrying cost of surplus stockwhich influence liquidity. So when managerial efficiency of capital is high, expansion of Business Cycle occurs and vice versa.

II. **External Factors:**

Some external factors which influence business cycle are Sunspots, weather conditions, war, Revolution, rate of growth of population, discoveries of new lands, resources, scientific breakthrough and technological advancement, politics, etc. These are the factors whichareoutside the economic sphere , which influence business cycle. War maychannelize all the money into wasteful economic expenditure of war leads to depression. Sunspot may bring depression and when it goes away it may lead to prosperity. Technical Advancement may start theupswing of Business Cycle. when weather conditions and harsh situationslike Tsunami, floods, drought occurs contraction of Business Cycleoccursand when it is favorable, expansion occurs. When political instability exists business cycle will contract and when it stabilizes business cyclewill expand. Not only this, many other factors like influence of international trade also affects the business cycle.

Measures to be taken by the firms to overcome business cycle

Managerial economists must always be watchful about business cycle. Because it will affect their business. They should adjust their production & sales according to it. Amongthefactors which affect the firm’s business environment is government policy. After that, business cycle is the major factor which affects the firm.some preventive measures andrelief measures must be taken by the firm accordingly.

1. Preventive measures: These are undertaken during the prosperity

periodtoavoid the ill effects of sudden crisis of the boom.

It includes:

(a) The management of plant in such a way as to

i> Avoid increase in the unit cost of production,

ii> Avoid increase in the unit over heads,

iii> Maintain satisfactory labor conditions and steady employment thought out the year.

(b) Conservation of capital assets of the firm (c) Creation of reserve

funds

(d) Regulation of inventories

(e) Business credit planning with a flexible credit standard (f) Avoiding

over expansion, over investment and over sales

(g) Avoiding purchase commitments in excess of financial capacity and of reasonablyquick use.

2. Relief measures: These are undertaken to deal with problem arising during recessionand depression.

(a) Cost reduction

(b) Liquidation of investors

(c) Qualitative improvement in production

(d) Sale promotion effect

(e) Innovation

(f) Development of plant

(g) Improvement of plant

(h) Transferring surplus labor to departments where there is shortage.

MEASURES TO CONTROL BUSINESS CYCLES OR STABILISATION POLICIES

Various measures have been suggested and put into practice fromtimetotimeto control fluctuations in an economy. They aim at stabilizing economic activity soastoavoid the ill effect of a boom and a depression .The following three measures are adopted for this purpose

1. MONETARY POLICY: Monetary policy as a method to control business fluctuations is operated by the central bank of a country. The central bankadopts a number of methods to control credit. To control the expansionof money supply during a boom it raises its bank rate, sells securities intheopenmarket, raises the reserve ratio, and adopts a number of selective credit control measures such as raising margin requirements and regulating consumers credit. Thus the central bank adopts a dear money policy. Borrowing by business and trade becomes dearer, difficult and selective. Efforts are made to control excess money supply in the economy. To control arecession or depression, the central bank follows an easy or cheap moneypolicy by increasing the reserves of commercial banks. It reduces the bank rate and interest of banks. It buyssecurities in the open market. It lowers margin requirements on loans andencourages banks to lend more to consumers, businessmen, traders, etc.

2. FISCAL POLICY:

Monetary policy alone won't be sufficient to control business cycles. It should, therefore be supplemented by compensatory fiscal policy. Fiscal measures arehighly effective to control boom by controlling excessive government expenditure, personal consumptions expenditure and private and public investment On the other hand; they help in controlling depression by increasing government expenditure, personal consumption expenditureandprivate and public investment.

During boom more tax will be levied & during depression tax will be decreased. During recession During boom government should borrow more moneyfromthe public & during recession it should pay back the borrowed money .duringboom government must go for surplus budget & during recession government should go for deficit fiscal policy.

3. DIRECT CONTROL

Government must adopt price stability, wage control, rationing, monopolycontrol, exchange control etc. to control the business cycle, whenever necessary.