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MACRO ECONOMICS

मध्यप्रदेश भोज (मुक्त) विश्वविद्यालय – भोपाल

MADHYA PRADESH BHOJ (OPEN) UNIVERSITY – BHOPAL

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SYLLABI-BOOK MAPPING TABLE

Macro Economics

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INTRODUCTION

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Macroeconomics is the field of economics that studies the behavior of the economy as a whole and not just on specific companies, but entire industries and economies. This looks at economy-wide phenomena, such as Gross National Product (GDP) and how it is affected by changes in unemployment, national income, rate of growth, and price levels. Macroeconomics would look at how an increase/decrease in net exports would affect a nation's capital account or how GDP would be affected by unemployment rate. While these two studies of economics appear to be different, they are actually interdependent and complement one another since there are many overlapping issues between the two fields. The text book titled "Macroeconomics" covers the various units like Concepts of Macro Economics, National Income, Theories of Wages, Interest and Employment, Monetary theories, Quantity theory of money, Modern theory of money, Recent Industrial policy, Industrial Growth in Phase II and III Disinvestment, and Foreign Direct Investment.

This unit consists of the basic information related to macroeconomics like concepts of macroeconomics, nature, importance, limitations, difference between micro and macroeconomics. Macroeconomic theories usually relate the phenomena of output, unemployment, inflation, Economic Growth, Business Cycle and International Economics. Outside of macroeconomic theory, these topics are also extremely important to all economic agents including workers, consumers and producers. An economic system is the combination of the various agencies, entities that provide the Macroeconomics is extremely useful from the point of view of economic policy. Modern governments, especially of the underdeveloped economies, are confronted with innumerable national problems. They are the problems of overpopulation, inflation, balance of payments, general underproduction, etc.

National income means the value of goods and services produced by a country during a financial year. It is the net result of all economic activities of any country during a period of one year and is valued in terms of money. National income figures are an important tool of macroeconomic analysis and policy. National income estimates are the most comprehensive measures of aggregate economic activity in an economy. It is through such estimates that we know the aggregate yield of the economy and can lay down future economic policy for development. Gross Domestic Product (GDP) is the total market value of all final goods and services currently produced within the domestic territory of a country in a year.

The authors of this text book described in brief about the Theories of Wages, Interest and Employment. Wage is the distribution from an employer of a security expected returns or profits derived solely from others paid to an employee. Like interest is paid out to an investor on his investments, a wage is paid from company earnings to the employee on the employee's invested assets time, money, labor, resources, and thought. Wages are part of the expenses that are involved in running a business, and add value to the employee in honor of his principal protected note or net investment. Minimum wage is that wage which provides not only for the bare sustenance of life but also for the preservation of the efficiency of the worker. Gross interest refers to the entire payments made by the borrower to the lender on

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a certain amount of loan received for a period of time. It includes not only the payment for the use of money capital but also for risks, inconvenience and management. Employment refers to form of an economic activity where one person is appointed by another person to perform a particular task or job. The person who appoints another person is called an employer, whereas the person who is appointed to do the job is called as an employee.

This unit includes the concepts of Quantity theory of money, Modern theory of money, Keynes's theory of money and price. Monetary Theory is a set of ideas about how monetary policy should be conducted within an economy. Monetary theory suggests that different monetary policies can benefit nations depending on their unique set of resources and limitations. It is based on core ideas about how factors like the size of the money supply, price levels and benchmark interest rates affect the economy. Economists and central banking authorities are typically those most involved with creating and executing monetary policy.

Industrial policy is defined as the strategic effort by the state to encourage the development and growth of a sector of the economy. It refers to any type of selective intervention or government policy that attempts to alter the structure of production toward sectors that are expected to offer better prospects for economic growth than would occur in the absence of such intervention. Liberalization refers to the relaxation of the previous government restriction usually in area of social and economic policies. When government liberalized trade, it means it has removed the tariff, subsidies and other restriction on the flow of goods and services between the countries.

Privatisation means transfer of ownership and/or management of an enterprise from the public sector to the private sector. Privatisation is opening up of an industry that has been reserved for public sector to the private sector. Globalization refers to the integration of economics and societies all over the world. It involves technological, economic, political, and cultural exchanges made possible largely by advances in communication, transportation, and infrastructure. Foreign Direct Investment refers to the process whereby residents of one country (the home country) acquire ownership of assets for the purpose of controlling the production, distribution and other activities of a firm in another country (the host country).

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UNIT 1 INTRODUCTION TO MACROECONOMICS

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Structure

1.0 INTRODUCTION

Macroeconomics is the study of aggregates or averages covering the entire economy, such as total employment, National income, national output, total investment, total consumption, total savings, aggregate supply, aggregate demand, and general a price level, wage level and cost structure. Macroeconomics uses aggregates which relate them to the "economy wide total". Government and corporations use macroeconomic models to help in formulating of economic policies and strategies. Macro Economics is basically known as theory of income. It is concerned with the problems of economic fluctuations, unemployment, inflation or deflation and economic growth. It deals with the aggregates of all quantities not with individual price levels or outputs but with national output. The study of macroeconomics is crucial to understand the working of and economy. Economic Problems are mainly related to the employment, behaviour of total income and general price in the economy. Macroeconomics help in making the elimination process more understandable.

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1.1 OBJECTIVES

After reading this unit, you will understand about:

- Describe the concepts of Macroeconomics
- Explain the nature of Macroeconomics
- Discuss the importance and limitations of Macroeconomics
- Difference between Micro and Macro Economics

1.2 MACROECONOMICS

Macroeconomics is the field of economics that studies the behavior of the economy as a whole and not just on specific companies, but entire industries and economies. This looks at economy-wide phenomena, such as Gross National Product (GDP) and how it is affected by changes in unemployment, national income, rate of growth, and price levels. For example, macroeconomics would look at how an increase/ decrease in net exports would affect a nation's capital account or how GDP would be affected by unemployment rate. While these two studies of economics appear to be different, they are actually interdependent and complement one another since there are many overlapping issues between the two fields. For example, increased inflation (macro effect) would cause the price of raw materials to increase for companies and in turn affect the end product's price charged to the public.

The bottom line is that microeconomics takes a bottoms-up approach to analyzing the economy while macroeconomics takes a top-down approach. Regardless, both micro- and macroeconomics provide fundamental tools for any finance professional and should be studied together in order to fully understand how companies operate and earn revenues and thus, how an entire economy is managed and sustained.

National output is the total value of everything a country produces in a given time period. Everything that is produced and sold generates income. Therefore, output and income are usually considered equivalent and the two terms are often used interchangeably. Output can be measured as total income, or, it can be viewed from the production side and measured as the total value of final goods and services or the sum of all value added in the economy

The amount of unemployment in an economy is measured by the unemployment rate, the percentage of workers without jobs in the labour force. The labour force only includes workers actively looking for jobs. People who are retired, pursuing education, or discouraged from seeking work by a lack of job prospects are excluded from the labour force. Unemployment can be generally broken down into several types based related to different causes. Classical unemployment occurs when wages are too high for employers to be willing to hire more workers.

Economists measure these changes in prices with price indexes. Inflation can occur when an economy becomes overheated and grows too quickly. Similarly, a declining economy can lead to deflation. Central bankers, who control a country's

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money supply, try to avoid changes in price level by using monetary policy. Raising interest rates or reducing the supply of money in an economy will reduce inflation. Inflation can lead to increased uncertainty and other negative consequences. Deflation can lower economic output. Central bankers try to stabilize prices to protect economies from the negative consequences of price changes.

1.2.1 Meaning of Macroeconomics

Macroeconomics is the branch of economics that studies the behavior and performance of an economy as a whole. It focuses on the aggregate changes in the economy such as unemployment, growth rate, gross domestic product and inflation.

1.2.2 Definitions of Macroeconomics

According to Prof. Kenneth E. Boulding, "Macroeconomics deals not with individual quantities as such, but with aggregates of these quantities, not with individual income but with national income, not with individual price but with price level, not with individual output but with national output".

According to Shapiro, "Macroeconomics deals with the functioning of the economy as a whole."

According to Ackley Gardner, "Macroeconomics concerns with such variables as the aggregate volume of the output of an economy, with the extent to which its resources are employed, with the size of national income and with the general price level".

1.2.3 History of Macroeconomics

Macroeconomic theory has its origins in the study of business cycles and monetary theory. John Maynard Keynes attacked some of these "classical" theories and produced a general theory that described the whole economy in terms of aggregates rather than individual, microeconomic parts. While the term "macroeconomics" is not all that old (going back to the 1940s), many of the core concepts in macroeconomics have been the focus of study for much longer. Topics like unemployment, prices, growth, and trade have concerned economists almost from the very beginning of the discipline, though their study has become much more focused and specialized through the 20th and 21st centuries. Elements of earlier work from the likes of Adam Smith and John Stuart Mill clearly addressed issues that would now be recognized as the domain of macroeconomics. Macroeconomics, as it is in its modern form, is often defined as starting with John Maynard Keynes and the publication of his book The General Theory of Employment, Interest, and Money in 1936. Keynes offered an explanation for the fallout from the Great Depression, when goods remained unsold and workers unemployed. Keynes's theory attempted to explain why markets may not clear.

Prior to the popularization of Keynes' theories, economists did not generally differentiate between micro- and macroeconomics. The same microeconomic laws of supply and demand that operate in individual goods markets were understood to interact between individuals markets to bring the economy into a general equilibrium, as described by Leon Walras. The link between goods markets and large-scale financial variables such as price levels and interest rates was explained

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through the unique role that money plays in the economy as a medium of exchange by economists such as Knut Wicksell, Irving Fisher, and Ludwig von Mises.

Throughout the 20th century, Keynesian economics, as Keynes' theories became known, diverged into several other schools of thought.

1.2.4 Macroeconomic Schools of Thought

The field of macroeconomics is organized into many different schools of thought, with differing views on how the markets and their participants operate.

Classical

Classical economists held that prices, wages, and rates are flexible and markets tend to clear unless prevented from doing so by government policy, building on Adam Smith's original theories. The term "classical economists" is not actually a school of macroeconomic thought, but a label applied first by Karl Marx and later by Keynes to denote previous economic thinkers with whom they respectively disagreed, but who themselves did not actually differentiate macroeconomics from microeconomics at all.

Keynesian

Keynesian economics was largely founded on the basis of the works of John Maynard Keynes, and was the beginning of macroeconomics as a separate are of study from microeconomics. Keynesians focus on aggregate demand as the principal factor in issues like unemployment and the business cycle. Keynesian economists believe that the business cycle can be managed by active government intervention through fiscal policy (spending more in recessions to stimulate demand) and monetary policy (stimulating demand with lower rates). Keynesian economists also believe that there are certain rigidities in the system, particularly sticky prices that prevent the proper clearing of supply and demand.

Monetarist

The Monetarist school is a branch of Keynesian economics largely credited to the works of Milton Friedman. Working within and extending Keynesian models, Monetarists argue that monetary policy is generally a more effective and more desirable policy tool to manage aggregate demand than fiscal policy. Monetarists also acknowledge limits to monetary policy that make fine tuning the economy ill-advised and instead tend to prefer adherence to policy rules that promote stable rates of inflation.

New Classical

The New Classical School, along with the New Keynsians, is built largely on the goal of integrating microeconomic foundations into macroeconomics in order to resolve the glaring theoretical contradictions between the two subjects. The New Classical school emphasizes the importance of microeconomics and models based on that behavior. New Classical economists assume that all agents try to maximize their utility and have rational expectations, which they incorporate into macroeconomic models. New Classical economists believe that unemployment is largely voluntary and that discretionary fiscal policy is destabilizing, while inflation can be controlled with monetary policy.

New Keynesian

The New Keynesian school also attempts to add microeconomic foundations to traditional Keynesian economic theories. While New Keynesians do accept that households and firms operate on the basis of rational expectations, they still maintain that there are a variety of market failures, including sticky prices and wages. Because of this "stickiness", the government can improve macroeconomic conditions through fiscal and monetary policy.

Austrian

The Austrian School is an older school of economics that is seeing some resurgence in popularity. Austrian economic theories mostly apply to microeconomic phenomena, but because they, like the so-called classical economists never strictly separated micro- and macroeconomics, Austrian theories also have important implications for what are otherwise considered macroeconomic subjects. In particular the Austrian business cycle theory explains broadly synchronized (macroeconomic) swings in economic activity across markets as a result of monetary policy and the role that money and banking play in linking (microeconomic) markets to each other and across time.

1.3 CONCEPT OF MACROECONOMICS

Macroeconomics is a branch of economics dealing with the performance, structure, behavior, and decision-making of the entire economy. This includes a national, regional, or global economy. Macroeconomists study aggregated indicators such as GDP, unemployment rates, and price indices to understand how the whole economy functions. Macroeconomists develop models that explain the relationship between such factors as national income, output, consumption, unemployment, inflation, savings, investment, international trade and international finance. In contrast, microeconomics is primarily focused on the actions of individual agents, such as firms and consumers, and how their behavior determines prices and quantities in specific markets. While macroeconomics is a broad field of study, there are two areas of research that are emblematic of the discipline: the attempt to understand the causes and consequences of short-run fluctuations in national income (the business cycle), and the attempt to understand the determinants of long-run economic growth (increases in national income). Macroeconomic models and their forecasts are used by both governments and large corporations to assist in the development and evaluation of economic policy and business strategy.

Important Concepts of Macroeconomics are:

1. Output and Income
2. Unemployment
3. Inflation and deflation
4. Economic Growth
5. Business Cycle
6. International Economics

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1.3.1 Output and Income

National output is the total value of everything a country produces in a given time period. Since everything that is produced and sold produces income, output and income are usually considered to be equivalent and the two terms are often used interchangeably. Output can be measured as total income, or, it can be viewed from the production side and measured as the total value of final goods and services or the sum of all value added in the economy. Macroeconomic output is usually measured by Gross Domestic Product (GDP) or one of the other national accounts. Economists interested in long-run increases in output study economic growth. Advances in technology, increases in machinery and other capital, and better education and human capital all lead to increased economic output overtime. However, output does not always increase consistently. Business cycles can cause short-term drops in output called recessions. Economists look for macroeconomic policies that prevent economies from slipping into recessions and that lead to faster long-term growth.

We can divide the goods and services produced during any period into four broad components, based on who buys them. These components of GDP are personal consumption (C), gross private domestic investment (I), government purchases (G), and net exports (Xn). Thus

GDP = consumption (C) + private investment (I) + government purchases (G) + net exports (Xn),

Or,

GDP = C + I + G + Xn

Personal Consumption

Personal consumption is a flow variable that measures the value of goods and services purchased by households during a time period. Purchases by households of groceries, health-care services, clothing, and automobiles all are counted as consumption.

The production of consumer goods and services accounts for about 70% of total output. Because consumption is such a large part of GDP, economists seeking to understand the determinants of GDP must pay special attention to the determinants of consumption. In a later chapter we will explore these determinants and the impact of consumption on economic activity.

Personal consumption spending flows from households to firms. In return, consumer goods and services flow from firms to households. To produce the goods and services households demand, firms employ factors of production owned by households. There is thus a flow of factor services from households to firms, and a flow of payments of factor incomes from firms to households.

Private Investment

Gross private domestic investment is the value of all goods produced during a period for use in the production of other goods and services. Like personal consumption, gross private domestic investment is a flow variable. It is often simply referred to as "private investment." A hammer produced for a carpenter is private

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investment. A printing press produced for a magazine publisher is private investment, as is a conveyor-belt system produced for a manufacturing firm. Capital includes all the goods that have been produced for use in producing other goods; it is a stock variable. Private investment is a flow variable that adds to the stock of capital during a period.

The term "investment" can generate confusion. In everyday conversation, we use the term "investment" to refer to uses of money to earn income. We say we have invested in a stock or invested in a bond. Economists, however, restrict "investment" to activities that increase the economy's stock of capital. The purchase of a share of stock does not add to the capital stock; it is not investment in the economic meaning of the word. We refer to the exchange of financial assets, such as stocks or bonds, as financial investment to distinguish it from the creation of capital that occurs as the result of investment. Only when new capital is produced does investment occur. Confusing the economic concept of private investment with the concept of financial investment can cause misunderstanding of the way in which key components of the economy relate to one another.

Gross private domestic investment includes three flows that add to or maintain the nation's capital stock: expenditures by business firms on new buildings, plants, tools, equipment, and software that will be used in the production of goods and services; expenditures on new residential housing; and changes in business inventories. Any addition to a firm's inventories represents an addition to investment; a reduction subtracts from investment. For example, if a clothing store stocks 1,000 pairs of jeans, the jeans represent an addition to inventory and are part of gross private domestic investment. As the jeans are sold, they are subtracted from inventory and thus subtracted from investment.

Government Purchases

Government agencies at all levels purchase goods and services from firms. They purchase office equipment, vehicles, buildings, janitorial services, and so on. Many government agencies also produce goods and services. Police departments produce police protection. Public schools produce education. The National Aeronautics and Space Administration (NASA) produces space exploration.

Government purchases are the sum of purchases of goods and services from firms by government agencies plus the total value of output produced by government agencies themselves during a time period. Government purchases make up about 20% of GDP.

Government purchases are not the same thing as government spending. Much government spending takes the form of transfer payments, which are payments that do not require the recipient to produce a good or service in order to receive them. Transfer payments include Social Security and other types of assistance to retired people, welfare payments to poor people, and unemployment compensation to people who have lost their jobs. Transfer payments are certainly significant they account for roughly half of all federal government spending in the United States. They do not count in a nation's GDP, because they do not reflect the production of a good or service.

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Net Exports

Sales of a country's goods and services to buyers in the rest of the world during a particular time period represent its exports. A purchase by a Japanese buyer of a Ford Taurus produced in the United States is a U.S. export. Exports also include such transactions as the purchase of accounting services from a New York accounting firm by a shipping line based in Hong Kong or the purchase of a ticket to Disney World by a tourist from Argentina. Imports are purchases of foreign-produced goods and services by a country's residents during a period. United States imports include such transactions as the purchase by Americans of cars produced in Japan or tomatoes grown in Mexico or a stay in a French hotel by a tourist from the United States. Subtracting imports from exports yields net exports.

Exports (X) – imports (M) = net exports (Xn)

In 2011, foreign buyers purchased $2,087.5 billion worth of goods and services from the United States. In the same year, U.S. residents, firms, and government agencies purchased $2,664.4 billion worth of goods and services from foreign countries. The difference between these two figures, -$576.9 billion, represented the net exports of the U.S. economy in 2011. Net exports were negative because imports exceeded exports. Negative net exports constitute a trade deficit. The amount of the deficit is the amount by which imports exceed exports. When exports exceed imports there is a trade surplus. The magnitude of the surplus is the amount by which exports exceed imports.

The United States has recorded more deficits than surpluses since World War II, but the amounts have typically been relatively small, only a few billion dollars. The trade deficit began to soar, however, in the 1980s and again in the 2000s. We will examine the reasons for persistent trade deficits in another chapter. The rest of the world plays a key role in the domestic economy and, as we will see later in the book, there is nothing particularly good or bad about trade surpluses or deficits. Goods and services produced for export represent roughly 14% of GDP, and the goods and services the United States imports add significantly to our standard of living.

Net exports represent the balance between exports and imports. Net exports can be positive or negative. If they are positive, net export spending flows from the rest of the world to firms. If they are negative, spending flows from firms to the rest of the world.

The production of goods and services for personal consumption, private investment, government purchases, and net exports makes up a nation's GDP. Firms produce these goods and services in response to demands from households (personal consumption), from other firms (private investment), from government agencies (government purchases), and from the rest of the world (net exports). All of this production creates factor income for households.

The circular flow model identifies some of the forces at work in the economy, forces that we will be studying in later chapters. For example, an increase in any of the flows that place demands on firms (personal consumption, private investment, government purchases, and exports) will induce firms to expand their production.

This effect is characteristic of the expansion phase of the business cycle. An increase in production will require firms to employ more factors of production, which will create more income for households. Households are likely to respond with more consumption, which will induce still more production, more income, and still more consumption. Similarly, a reduction in any of the demands placed on firms will lead to a reduction in output, a reduction in firms' use of factors of production, a reduction in household incomes, a reduction in income, and so on. This sequence of events is characteristic of the contraction phase of the business cycle. Much of our work in macroeconomics will involve an analysis of the forces that prompt such changes in demand and an examination of the economy's response to them.

1.3.2 Unemployment

The amount of unemployment in an economy is measured by the unemployment rate, the percentage of workers without jobs in the labour force. The labour force only includes workers actively looking for jobs. People who are retired, pursuing education, or discouraged from seeking work by a lack of job prospects are excluded from the labour force. Unemployment can be generally broken down into several types based related to different causes. Classical unemployment occurs when wages are too high for employers to be willing to hire more workers. Wages may be too high because of minimum wage laws or union activity. Consistent with classical unemployment, frictional unemployment occurs when appropriate job vacancies exist for a worker, but the length of time needed to search for and find the job leads to a period of unemployment. Structural unemployment covers a variety of possible causes of unemployment including a mismatch between workers' skills and the skills required for open jobs. Large amounts of structural unemployment can occur when an economy is transitioning industries and workers find their previous set of skills is no longer in demand. Structural unemployment is similar to frictional unemployment since both reflect the problem of matching workers with job vacancies, but structural unemployment covers the time needed to acquire new skills not just the short term search process. While some types of unemployment may occur regardless of the condition of the economy, cyclical unemployment occurs when growth stagnates. Okun's law represents the empirical relationship between unemployment and economic growth. The original version of Okun's law states that a 3% increase in output would lead to a 1% decrease in unemployment.

Meaning of Unemployment

Unemployment is a term referring to individuals who are employable and actively seeking a job but are unable to find a job. Included in this group are those people in the workforce who are working but do not have an appropriate job. Usually measured by the unemployment rate, which is dividing the number of unemployed people by the total number of people in the workforce, unemployment serves as one of the indicators of a country's economic status.

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Types of Unemployment

There are basically four types of unemployment:

1. Demand deficient unemployment

Demand deficit unemployment is the biggest cause of unemployment that typically happens during a recession. When companies experience a reduction in the demand for their products or services, they respond by cutting back on their production, making it necessary to reduce their workforce within the organization. In effect, workers are laid off.

2. Frictional unemployment

Frictional unemployment refers to those workers who are in between jobs. An example is a worker who recently quit or was fired and is looking for a job in an economy that is not experiencing a recession. It is not an unhealthy thing because it is usually caused by workers trying to find a job that is most suitable to their skills.

3. Structural unemployment

Structural unemployment happens when the skills set of a worker does not match the skills demanded by the jobs available, or alternatively when workers are available but are unable to reach the geographical location of the jobs.

An example is a teaching job that requires relocation to China, but the worker cannot secure a work visa due to certain visa restrictions. It can also happen when there is a technological change in the organization, such as workflow automation that displaces the need for human labor.

4. Voluntary unemployment

Voluntary unemployment happens when a worker decides to leave a job because it is no longer financially compelling. An example is a worker whose take-home pay is less than his or her cost of living.

Causes of Unemployment

(i) Unemployment is caused by various reasons that come from both the demand side, or employer, and the supply side, or the worker.

(ii) Demand-side reductions may be caused by high interest rates, global recession, and financial crisis. From the supply side, frictional unemployment and structural employment play a great role.

Effects of Unemployment

(i) The impact of unemployment can be felt by both the workers and the national economy and can cause a ripple effect.

(ii) Unemployment causes workers to suffer financial hardship that impacts families, relationships, and communities. When it happens, consumer spending, which is one of an economy's key drivers of growth, goes down, leading to a recession or even a depression when left unaddressed.

(iii) Unemployment results in reduced demand, consumption, and buying power, which in turn causes lower profits for businesses and leads to

budget cuts and workforce reductions. It creates a cycle that goes on and on that is difficult to reverse without some type of intervention.

1.3.3 Inflation and Deflation

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A general price increase across the entire economy is called inflation. When prices decrease, there is deflation. Economists measure these changes in prices with price indexes. Inflation can occur when an economy becomes overheated and grows too quickly. Similarly, a declining economy can lead to deflation. Central bankers, who control a country's money supply, try to avoid changes in price level by using monetary policy. Raising interest rates or reducing the supply of money in an economy will reduce inflation. Inflation can lead to increased uncertainty and other negative consequences. Deflation can lower economic output. Central bankers try to stabilize prices to protect economies from the negative consequences of price changes.

In order to proceed with this examination it is necessary to envisage the macroeconomics system or social organization of the greater community or nation in a form that can be easily understood and appreciated. This is done by means of a macroeconomics model, which is a general expression of the system that is useful for purposes of discussion. The model can take a number of different forms including block diagrams, algebraic equations, mechanical analogy, electronic analogy, Leontief Matrix, etc. A suitable model for use in representing the macroeconomic system is shown in the illustration for a closed macroeconomics system without including "The Rest of The World". Money circulates around this model and goods, services, valuable legal documents etc. pass in return between the 6 entities or agents also sometimes called sectors that comprise the basic structure of the system. The system flows of money, goods etc., continuously try to self-adjust, in order to attain a condition of equilibrium.

Inflation

Inflation is defined as a persistent increase in the average price level in the economy, usually measured through the calculation of a consumer price index (CPI). The word "persistent" is of great importance in your understanding of the concept. A single increase in prices is not called inflation. When inflation occurs, there is a sustained increase in the price level. It is also important not to confuse inflation with an increase in the price of a particular good or service.

Inflation is the rise in price levels in an economy over a given time period. This means that a given amount of currency will buy a lower number of goods as time passes as it loses its value. For this reason controlling inflation is one of the main economic objectives of a government. There are many ways to control inflation; however most of them work by either increasing aggregate supply or decreasing aggregate demand. Both actions result in the equilibrium moving down. The measures that are required to control the inflation depend on what is thought to be causing it. A government's monetary policy can decrease aggregate demand by increasing interest rates. This will discourage borrowing and increase savings, both of which constrict consumption, thereby decreasing aggregate demand. Fiscal policies can also be used to control inflation. If a government wants to decrease it then it will increase taxation and decrease government spending. This will result in

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consumers and firms having less to spend, therefore coupled with the lower government spending this will cause leakages to increase and injections to decrease, reducing aggregate demand. Subsidizing the costs of firms will decrease production cost allowing them to lower their prices, also reducing inflation. Supply side policies such as education and training will increase the quality and quantity of labour available for firms, which will result in an outward shift of the aggregate supply curve. This will move the equilibrium down, decreasing price levels and therefore also decreasing inflation. Other ways to decrease inflation is to reduce tariffs on imports, as this will lead to lower prices and therefore lower cost-push inflation. Inflation targeting can lower the chances of both types of inflation by decreasing the expectations of inflation. In conclusion short term measures to control inflation seek to decrease aggregate demand, whereas long term solutions want to increase aggregate supply.

Costs of Inflation

The reason that governments wish to have a low rate of inflation is because there are a significant number of negative consequences associated with high levels of inflation.

1. Loss of purchasing power

If the rate of inflation is 2%, then this means that the average price of all goods and services in the economy has risen by 2%. If your income remains constant, then you will not be able to buy as many goods and services as you could before the increase in the average price level. We say that there is a fall in real income, which means that there is a decrease in the purchasing power of income. If your income is linked to the inflation rate, so that you automatically get a 2% "cost-of-living" increase, then you will not face a fall in your real income. This is the case for many jobs, particularly where there are strong unions. However, many people have jobs that don't offer the security of inflation-linked incomes. This may be because they are on fixed incomes or because they have weak bargaining power or because they are self-employed. Thus inflation reduces the purchasing power of their incomes and will reduce their living standards. It is important to realize that expectations about inflation are important. Even when people's incomes are linked to inflation, they can be negatively affected if the actual rate of inflation turns out to be higher than the expected rate. For example, if the expected rate of inflation is 1.5% and wages are therefore increased by 1.5%, then workers will lose purchasing power if inflation turns out to be 2.5%.

2. Effect on saving

If you save ₹ 1,000 in the bank at 4% annual interest, then in one year's time you will have ₹1,040. If the inflation rate is 6%, then the real rate of interest (the interest rate adjusted for inflation) will be negative and your savings will not be able to buy as much as they could have in the previous year. You would have been better off spending the money rather than saving it, because it will have lost some of its purchasing power. Therefore, we say that inflation discourages saving. If people do want to save money, rather than spend on consumption, then they may choose to buy fixed assets, such as houses or art. This means that there are fewer savings available in the economy for investment purposes and this has negative implications for economic growth.

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3. Effect on interest rates

Commercial banks make their money from charging interest to people who borrow money from them. If there is a high rate of inflation, then banks raise their nominal interest rates in order to keep the real rate that they earn positive.

4. Effect on international competitiveness

If a country has a higher rate of inflation than that of its trading partners, then this will make its exports less competitive and will make imports from lower-inflation trading partners more attractive. This may lead to fewer export revenues and greater expenditure on imports, thus worsening the trade balance. It might lead to unemployment in export industries and in industries that compete with imports.

5. Uncertainty

Not only might there be reduced investment due to a fall in the availability of savings and higher nominal interest rates, but firms may be discouraged from investing due to the uncertainty associated with inflation. Again, this has negative implications for economic growth.

6. Labour unrest

This may occur if workers do not feel that their wages and salaries are keeping up with inflation. It may lead to disputes between unions and management.

Measures to Control Inflation

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 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) Demonetization of Currency: However, one of the monetary measures is to demonetize currency of higher denominations. Such a measure 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

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adopted when there is an excessive issue of notes and there is hyperinflation in the country. It is 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. The principal fiscal measures are the following:

(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 economy measures are 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 as 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 penalize 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. compulsorily. All such measures to increase savings 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 the 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

The following measures should be adopted 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 rationalization of industries should be adopted as a long-term measure. Rationalization 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 and by antagonizing 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 wage and at the same time increase productivity and hence 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 stabilize 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."

Deflation

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Deflation is defined as a persistent fall in the average level of prices in the economy. There are two broad explanations for a fall in the price level and economists have used these to categories "good deflation" and "bad deflation". The first type of deflation, "good" deflation, comes about from improvements in the supply side of the economy and/or increased productivity. A simple aggregate demand/aggregate supply diagram will illustrate that an increase in the long-run aggregate supply curve can result in an increase in real output and a fall in the price level. If the level of real output increases, then we can assume that there is a lower level of unemployment as more workers will be needed to produce the higher level of output.

The second type of deflation, "bad" deflation, finds its source in the demand side of the economy. Another simple aggregate demand/aggregate supply diagram will illustrate that a fall in aggregate demand will result in a decrease in the price level and a decrease in real output. If real output decreases, then it is assumed that the level of unemployment will rise, as firms will need fewer workers if there is less demand. Both causes of deflation result in a fall in the price level, but we might say that the first is positive because it results in an increase in real output and a fall in unemployment, while the second is negative because it results in a fall in real output and a rise in unemployment.

Costs of Deflation

Although as consumers we might be pleased to face falling prices, a significant number of problems can be associated with a fall in the price level. In fact, economists might argue that the costs of deflation are greater than the costs of inflation.

1. Unemployment

The biggest problem associated with deflation is unemployment. If aggregate demand is low, then businesses are likely to lay off workers. This may then lead to a deflationary spiral. If prices are falling, consumers will put off the purchase of any durable goods as they will want to wait until the prices drop even further. This may be referred to as deferred consumption. This will further reduce aggregate demand. If households become pessimistic about the economic future, then consumer confidence will fall. Low consumer confidence is likely to further depress aggregate demand. Thus a deflationary spiral may occur.

2. Effect on investment

When there is deflation, businesses make less profit, or make losses. This may lead them to lay off workers. Furthermore, business confidence is likely to be low and this is likely to result in reduced investment. This has negative implications for future economic growth.

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3. Costs to debtors

Anyone who has taken a loan (this includes all home owners who have taken a mortgage to buy their home) suffers as a result of inflation because the value of their debt rises as a result of deflation. If profits are low, this may make it too difficult for businesses to pay back their loans and there may be many bankruptcies. This will further worsen business confidence.

Measures to Control Deflation

Effective demand can be increased partly by consumption expenditure and partly by increasing investment expenditure. Various measures to increase consumption and investment expenditures in the economy are as follows:

1. ***Reduction in Taxation:*** The government should reduce the number and burden of various taxes levied on commodities. This will increase the purchasing power of the people. As a result, the demand for goods and services will increase. Moreover, sufficient tax relief should be given to businessmen to encourage investment.
2. ***Redistribution of Income:*** Marginal propensity to consume can be raised by a redistribution of income and wealth from the rich to the poor. Since the marginal propensity to consume of the poor is high and that of the rich is low, such a measure will help increasing the aggregate demand in the economy.
3. ***Repayment of Public Debt:*** During deflation period, the government can repay the old public debts. This will increase the purchasing power of the people and push up effective demand.
4. ***Subsidies:*** The government should give subsidies to induce the businessmen to increase investment.
5. ***Public Works Programme:*** The government should also directly undertake public works programme and thus increase expenditure in public sector. Care should, however, be taken that the public works policy of the government does not adversely affect investment in the private sector; it should supplement and not supplant, private investment. For this, it is important that only those projects should be selected for the government's public works policy, which is either too big or not so profitable to attract private investment.
6. ***Deficit Financing:*** In order to have significant expansionary effects, the government's public works schemes should be financed by the method of deficit financing, i.e., by printing new money. The government should adopt a budgetary deficit (excess of government expenditure over its revenue) and cover this deficit through deficit financing. Deficit financing makes available to the government sufficient resources for its developmental programmes without adversely affecting investment in the private sector.
7. ***Reduction in Interest Rate:*** By adopting a cheap money policy, the monetary authority of a country reduced the interest rate, which stimulates investment and thereby expands economic activity in the economy.

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8. ***Credit Expansion:*** The central bank and the commercial banks should adopt a policy of credit expansion to promote business and industry in the country. Bank credit should be made easily available to the entrepreneurs for productive purposes.

9. ***Foreign Trade Policy:*** To control deflation, the government should adopt such a foreign trade policy that, on the one hand, increases exports and, on the other hand, reduces imports. This kind of policy will go a long way in solving the problem of overproduction and help overcoming deflation.

10. ***Regulation of Production:*** Production in the economy should be regulated in such a way that the problem of overproduction does not arise. Attempts should be made to adjust production with the existing demand to avoid over-production.

1.3.4 Economic Growth

Growth economics studies factors that explain economic growth – the increase in output per capita of a country over a long period of time. The same factors are used to explain differences in the level of output per capita between countries, in particular why some countries grow faster than others, and whether countries converge at the same rates of growth. Much-studied factors include the rate of investment, population growth, and technological change. These are represented in theoretical and empirical forms as in the neoclassical and endogenous growth model and in growth accounting.

Meaning of Economic growth

Economic Growth is a positive change in the level of production of goods and services by a country over a certain period of time. Economic growth is usually brought about by technological innovation and positive external forces.

Economic Growth and GDP

Economic growth is the increase in value of the goods and services produced by an economy. It is conventionally measured as the percent rate of increase in real gross domestic product, or GDP. Growth is usually calculated in real terms, i.e. inflation-adjusted terms, in order to net out the effect of inflation on the price of the goods and services produced. In economics, "economic growth" or "economic growth theory" typically refers to growth of potential output, i.e., production at "full employment," which is caused by growth in aggregate demand or observed output. As economic growth is measured as the annual percent change of National Income it has all the advantages and drawbacks of that level variable. But people tend to attach a particular value to the annual percentage change, perhaps since it tells them what happens to their pay check.

The real GDP per capita of an economy is often used as an indicator of the average standard of living of individuals in that country and economic growth is therefore often seen as indicating an increase in the average standard of living. However, there are some problems in using growth in GDP per capita to measure general well being. GDP per capita does not provide any information relevant to

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the distribution of income in a country. GDP per capita does not take into account negative externalities from pollution consequent to economic growth. Thus, the amount of growth may be overstated once we take pollution into account. GDP per capita does not take into account positive externalities that may result from services such as education and health. GDP per capita excludes the value of all the activities that take place outside of the market place such as cost-free leisure activities like hiking.

Economists are well aware of these deficiencies in GDP, thus, it should always be viewed merely as an indicator and not an absolute scale. Economists have developed mathematical tools to measure inequality, such as the Gini Coefficient. There are also alternate ways of measurement that consider the negative externalities that may result from pollution and resource depletion. The flaws of GDP may be important when studying public policy, however, for the purposes of economic growth in the long run it tends to be a very good indicator. There is no other indicator in economics which is as universal or as widely accepted as the GDP. Economic growth is exponential, where the exponent is determined by the PPP annual GDP growth rate. Thus, the differences in the annual growth from country A to country B will multiply up over the years. For example, a growth rate of 5% seems similar to 3%, but over two decades, the first economy would have grown by 165%, the second only by 80%.

Historical Economic Growth

During colonial times, what ultimately mattered for economic growth was the institutions and systems of government imported through colonization. There is a clear reversal of fortune between the poor and wealthy countries, which is evident when comparing the method of colonialism in a region. Geography and endowments of natural resources are not the sole determinants of GDP. In fact, those that were blessed with good factor endowments experienced colonial extraction which only provided limited rapid growth; whereas, countries that were less fortunate in their original endowments experienced European settlement, relative equality and demand for rule of law. These initially poor colonies end up developing an open franchise, equality and broad public education, which helps them experience greater economic growth than the colonies that had exploited their economies of scale.

Since the Industrial Revolution, a major factor of productivity was the substitution of energy for human and animal labor and water and wind power and since that replacement, the great expansion of total power, which was driven by continuous improvements in energy conversion efficiency. Other major historical sources of productivity were mechanization, transportation infrastructures (canals, railroads and highways), new materials (steel) and power, which includes steam and internal combustion engines and electricity. Other productivity improvements included mechanized agriculture and scientific agriculture including chemical fertilizers and livestock and poultry management and the Green Revolution. Interchangeable parts made with machine tools powered by electric motors evolved into mass production, which is universally used today. Great sources of productivity improvement in the late 19th century were the railroads, steam ships, horse-pulled reapers and combine harvesters and steam-powered factories. By the late 19th century, power and machinery were creating overproduction, which eventually

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caused a reduction of the hourly work week. Prices fell because less labor, materials and energy were required to produce and transport goods; however, workers real pay rose, allowing workers to improve their diet and buy consumer goods and better housing.

Mass production of the 1920s created overproduction, which was arguably one of several causes of the Great Depression of the 1930s. Following the Great Depression, economic growth resumed, aided in part by demand for entirely new goods and services, such as household electricity, telephones, radio, television, automobiles and household appliances, air conditioning and commercial aviation (after 1950), creating enough new demand to stabilize the work week. Building of highway infrastructures also contributed to post World War II growth, as did capital investments in manufacturing and chemical industries. The post World War II economy also benefited from the discovery of vast amounts of oil around the world, particularly in the Middle East. Economic growth in Western nations slowed after 1973, but growth in Asia has been strong since then, starting with Japan and spreading to Korea, China, the Indian subcontinent and other parts of Asia. The Japanese economy has been growing very slowly since about 1990.

Economic Growth Per Capita

Often, the concern about economic growth focuses on the desire to improve a country's standard of living the level of goods and services that, on average, individuals purchase or otherwise gain access to. It should be noted that if population has grown along with economic production, increases in GDP do not necessarily result in an improvement in the standard of living. When the focus is on standard of living, economic growth is expressed on a per capita basis.

Economic growth per capita is primarily driven by improvements in productivity, also called economic efficiency. Increased productivity means producing more goods and services with the same inputs of labour, capital, energy and/or materials. For example, labour and land productivity in agriculture were increased during the Green Revolution. The Green Revolution of the 1940s to 1970s introduced new grain hybrids, which increased yields around the world.

However, there is not necessarily a long term one-to-one relationship between improvements in productivity and improvements in average standard of living. Among other factors that might prevent a long-term improvement in standard of living despite economic growth is the potential for population growth matching or outstripping productivity improvements. When increased food supplies spur population growth rather an improvement in the standard of living, people are said to be caught in the "Malthusian trap," named for Thomas Robert Malthus, the first observer to detail out this dilemma. There is considerable controversy, for example, as to whether the Green Revolution resulted in long-term improvements in the standard of living as it was accompanied by rapid population growth creating population sizes that may be unsustainable.

Economic growth can also be of interest without reference to per capita changes in standard of living. An example of this is the economic growth in England during the Industrial Revolution. Certainly, per capita increases in productivity occurred due to the replacement of hand labour by machines. However, economic

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growth during this period was in large part so dramatic because England's population simultaneously increased very rapidly. The two factors together, more production per worker combined with many more workers, resulted in a six fold increase in production between 1700 and 1860. Population growth alone accounted for most of this increase.

India's GDP Growth Rate For 2011-12

Government of India released its much awaited Economic Outlook for 2011-12 that pegs the India's GDP growth rate for 2011-12 at 8.2% as compared to 8.5% registered last year. The current adverse global circumstances and high Inflation to boot, expected growth rate of 8.2% looks quite good.

The Indian economy has been catching up quickly in the past two decades and weathered the global recession well. Wide-ranging reforms and increased investment have lifted potential growth to almost 9%, the highest in Indian history, helped by improvements in infrastructure. The government should step up efforts to restructure public expenditure; reduce the fiscal deficit; relax some of the constraints facing the financial sector and further promote international integration.

1. Sustaining higher growth

Administrative burdens have held back the expansion of private firms and these impediments need to be eased. Public-sector governance should be made more transparent and accountable by separating operational and regulatory functions in the provision of public services and by strengthening the anti-corruption agency. Further reductions in trade and FDI barriers are also needed.

2. Improving fiscal policy and outcomes

The government resumed fiscal consolidation in 2010 and more is planned for 2011. The government needs to ensure subsidies stemming from higher world oil prices do not throw these plans off course. A binding medium-term framework is also needed, presenting the budget on a rolling three-year basis and with rules to limit deficit spending. An independent fiscal monitoring agency might strengthen fiscal discipline. The proposed goods and services tax is an important reform and its coverage should be as broad as possible to minimize distortions.

3. Making growth more inclusive

Poverty rates continue to fall but remain high despite strong growth: making growth more inclusive is therefore a top government priority. The introduction of the national rural employment guarantee has helped. However, only seven governments in the world spend less on health than India (in per cent of GDP). Government spending is higher in other areas aimed at lowering poverty, such as subsidization of kerosene, liquefied petroleum gas and fertilisers. However, a large part of such outlays do not reach the poor. More widespread use of cash transfers conditional on participation in health and education programmes could boost outcomes in these areas.

4. Continuing with financial sector reform

India's financial sector proved resilient in the face of the global crisis. The government is committed to further financial reforms to deepen the financial system

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and improve access. The entry of new privately-owned banks has heightened competition in the sector and yielded efficiency gains. Granting more banking licenses would help in this regard. Reforms are called for to ease wide-ranging and highly prescriptive operating constraints faced by the financial sector for lending, portfolio management and branch location.

5. Improving education access and quality

Enrolment and literacy are improving and the 2009 Right to Education Act should help to speed up progress towards universal elementary education. However, high dropout rates, low student attendance and teacher absence remain severe problems, holding back educational achievements. Teacher effectiveness in the public sector ought to be enhanced through better accountability, incentives and development pathways. In higher education regulation is often ineffective, restricting choice and hampering entry and innovation. Institutions ought to be granted greater autonomy, quality assessment should be strengthened and a higher proportion of funding tied to outcomes.

Important highlights of Economic Outlook 2011-12

- Agriculture grew at 6.6% in 2010-11. This year's monsoon is projected to be in the range of 90 to 96 per cent, based on which Agriculture sector is pegged to grow at 3.0% in 2011-12
- Industry grew at 7.9% in 2010-11. Projected to grow at 7.1% in 2011-12
- Services grew at 9.4% in 2009-10. Projected to grow at 10.0% in 2011-12
- Investment rate projected at 36.4% in 2010-11 and 36.7% in 2011-12
- Domestic savings rate as ratio of GDP projected at 33.8% in 2010-11 & 34.0% in 2011-12
- Current Account deficit is $44.3 billion (2.6% of GDP) in 2010-11 and projected at $54.0 billion (2.7% of GDP) in 2011-12
- Merchandise trade deficit is $ 130.5 billion or 7.59% of the GDP in 2010-11 and projected at $154.0 billion or 7.7% of GDP in 2011-12
- Invisibles trade surplus is $ 86.2 billion or 5.0% of the GDP in 2010-11 and projected at $100.0 billion or 5.0% in 2011-12
- Capital flows at $61.9 billion in 2010-11 and projected at $72.0 billion in 2011-12
- FDI inflows projected at $35 billion in 2011/12 against the level of $23.4 billion in 2010-11
- FII inflows projected to be $14 billion which is less than half that of the last year i.e. $30.3 billion
- Accretion to reserves was $15.2 billion in 2010-11. Projected at $18.0 billion in 2011-12
- Inflation rate would continue to be at 9 per cent in the month of July-October 2011. There will be some relief starting from November and will decline to 6.5% in March 2012.

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India's GDP Growth Rate

India's economic growth rate in the current financial year has been estimated at 4.9 per cent, a faster pace than in the previous year, mainly on an improved performance in the agriculture and allied sectors. The growth in GDP during 2013-14 is estimated at 4.9 per cent as compared to the growth rate of 4.5 per cent in 2012-13, according to advanced estimates released today by the Central Statistics Office (CSO). The CSO had lowered growth for 2012-13 to 4.5 per cent in its revised estimates from an earlier provisional forecast of 5 per cent. For 2013-14, the CSO has projected a growth rate of 4.6 per cent in agriculture and allied sectors, up from 1.4 per cent a year earlier. Manufacturing, however, is expected to register a contraction of 0.2 per cent in this financial year compared with growth of 1.1 per cent in the previous year. The latest estimate of 4.9 per cent for 2013-14 implies that the pace of economic expansion improved in the second half, given that GDP grew 4.6 per cent in the April-September period. According to the advance estimates, the services sector, including finance, insurance, real estate and business services sectors, is likely to grow 11.2 per cent this year compared with 10.9 per cent in 2012-13. Mining and quarrying is likely to contract 1.9 per cent, compared with a 2.2 per cent decline in production a year ago. Growth in construction is likely to improve to 1.7 per cent from 1.1 per cent in 2012-13. According to the CSO's advance estimates, growth in electricity, gas and water production is likely to improve to 6 per cent in 2013-14 from 2.3 per cent in 2012-13. The trade, hotel, transport and communication sectors are projected to grow by 3.5 per cent, as against 5.1 per cent in the previous financial year. Community social and personal services growth would be better at 7.4 per cent, compared with 5.3 per cent previously. The CSO releases advance GDP estimates before the end of the financial year to enable the government to formulate various estimates for inclusion in the Budget. Per capita income in real terms (at 2004-05 prices) during 2013-14 is likely to attain a level of ₹ 39,961 as compared to the first revised estimate for the year 2012-13 of ₹ 38,856. The growth rate in per capita income is estimated at 2.8 per cent as against the previous year's estimate of 2.1 per cent, CSO said. Per capita income at current prices during 2013-14 is estimated to be ₹ 74,920 compared with ₹ 67,839 during 2012-13, a rise of 10.4 per cent. Gross Fixed Capital Formation (GFCF), an indicator of investment, is forecast at ₹ 32.2 lakh crore at current prices as against ₹ 30.7 lakh crore in 2012-13. At constant (2004-05) prices, GFCF is estimated at ₹ 20.1 lakh crore in 2013-14 as against ₹ 20.0 lakh crore. In terms of GDP at market prices, the rates of GFCF at current and constant (2004-05) prices during 2013-14 are estimated at 28.5 per cent and 32.5 per cent, respectively, as against the corresponding rates of 30.4 per cent and 33.9 per cent, respectively in 2012-13. The rate of expenditure on valuables at current prices has gone down from 2.6 per cent in 2012-13 to 2.1 per cent in 2013-14, the statement added.

Sources of Capital Formation for Economic Growth

The stock of capital goods can be built up and increased through two main sources:

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Internal Resources

(i) ***Voluntary savings of businesses and the households:*** The amount of voluntary savings depends on a large number of factors such as the income per capita, distribution of wealth, availability of banking facilities, value system of the society, etc. instinctive savings which is adopted by the government to restrict consumption and increase the amount of savings. This is done with the help of taxation and other compulsory schemes of lending to the government.

(ii) ***Government borrowing:*** The volume of domestic savings can also be increased through government borrowing. The government issues long and short term bonds of various denominations and mobilizes saving from the general public as well as from the financial institutions.

(iii) ***Using the idle resources:*** The usage of untapped resources in a proper and efficient manner can result in the increasing the rate of capital formation in the country.

(iv) ***Deficit financing:*** This method is used for increasing the effective demand and ensuring continued high levels of economic activity, hence, resulting in capital formation.

External Resources

(i) ***Foreign assistance:*** If the government of a country is ineffective in increasing the rate of capital formation, the capital and technical resources would go a waste. Hence, foreign economic assistance would be helpful in absorbing capital and technical knowledge. This helps in closing the trade gap and providing greater employment opportunities.

(ii) ***Economic assistance:*** Developed countries generally provide economic assistance due to various reasons. Two of the main reasons include humanitarian grounds and self – interest grounds such as protecting the developing country from the influence of other camp countries, dumping, remove economic disparities etc.

1.3.5 Business Cycle

The economics of a depression were the spur for the creation of "macroeconomics" as a separate discipline field of study. During the Great Depression of the 1930s, John Maynard Keynes authored a book entitled "The General Theory of Employment", Interest and Money outlining the key theories of Keynesian economics. Keynes contended that aggregate demand for goods might be insufficient during economic downturns, leading to unnecessarily high unemployment and losses of potential output.

Over the years, the understanding of the business cycle has branched into various schools, related to or opposed to Keynesianism. The neoclassical synthesis refers to the reconciliation of Keynesian economics with neoclassical economics, stating that Keynesianism is correct in the short run, with the economy following neoclassical theory in the long run.

Characteristics of Business Cycle

Business Cycles posses the following characteristic features:

1. It is a wave-like movement and it is not a random fluctuation.
2. It is synchronic in nature. It is all embracing, it covers the entire economy. The entire business of the economy acts like a living organism. Hence, any change in one part of the economy affects the entire economy.
3. It occurs periodically and hence recurrent in nature. It is repetitive in the sense that it has some recognized pattern.
4. It is to be noted that different trade cycles are similar but not identical in their nature. Prof. Pigou points out that all recorded trade cycles are the members of the same family but among them there are no twins.
5. The effects of different trade cycles are different on different activities.
6. It is self - generating. The process is cumulative and self-reinforcing. The self-generating forces terminate one phase and start another phase. No phase is permanent.
7. It is international in character.
8. The prosperity phase takes double the time taken by the depression phase.
9. The downward movement is more sudden and violent than the change from downward to upward.
10. Profits fluctuate more than the other incomes.
11. Employment and output in durable goods and capital goods industries fluctuate more than in the consumption goods industries.
12. It is characterized by the presence of a crisis according to Lord Keynes. No two phases are quite symmetrical. Each phase distinctly represent a crisis of different nature.

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Causes of Business Cycles

The following are some of the important causes, which deserve our attention.

1. William Stanley Jevons points out those climatic conditions good or bad create boom and depression
2. Pigou is of the opinion that variations in business confidence, over optimism and over pessimism and other psychological factors cause fluctuations in business.
3. Schumpeter highlights that cyclical fluctuations are caused by innovations carried out in industrial and commercial organizations.
4. According to JA Hobson business cycles are due to either under consumption or over consumption.
5. In the opinion of Hawtrey non-monetary factors such as wars, earthquakes, strikes, crop failures etc., may only cause partial or temporary fluctuations. But substantial changes in total money supply in an economy are one of the major causes for cyclical oscillations or alternate phase of prosperity and depression of good and bad trade conditions.

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6. According to Prof. Hayek business cycles are caused by the excess of investment over voluntary savings.
7. According to Lord Keynes business cycles are caused by variations in the rate of investment, which are caused by fluctuations in Marginal Efficiency of Capital and Interest rate.
8. JR Hicks is of the opinion that autonomous Investment and Induced Investment cause cyclical fluctuations in economic activity via. Multiplier and accelerator respectively.
9. Mitchell recognizes the fact that different parts of an economy are inter-related and inter-connected and as such any maladjustment started in one-part spreads out to the entire economy.
10. Kaldor stresses that changes in the stock of capital brings about changes in the level of savings and investment which in its turn causes variations in the level of output, income and employment in an economy.
11. Samuelson is of the opinion that either multiplier or accelerator can explain the process of cyclical fluctuations in any economy. On the other hand, these two forces working together can satisfactorily explain the whole income generation and income fluctuations.
12. Friedman and Schwartz observe that a change in the total stock of money supply will have its rapid transmission effect on the level of income and prices in an economy.

Phases of Business Cycle

Basically, a business cycle has only two parts- expansion and contraction or prosperity and depression. Burns and Mitchell observe that peaks and troughs are the two main mark-off points of a business cycle. The expansion phase starts from revival and includes prosperity and boom. Contraction phase includes recession, depression and trough. In between these two main parts, we come across a few other interrelated transitional phases. In its broader perspective, a business cycle has five phases. They are as follows:

1. Depression, contraction or downswing

It is the first phase of a trade cycle. It is a protracted period in which business activity is far below the normal level and is extremely low. According to Prof. Haberler depression is a "state of affairs in which the real income consumed or volume of production per head and the rate of employment are falling and are sub-normal in the sense that there are idle resources and unused capacity, especially unused labor". During depression, all construction activities come to a more or less halting stage. Capital goods industries suffer more than consumer goods industries. Since costs are 'sticky' and do not fall as rapidly as prices, the producers suffer heavy losses. Prices of agricultural goods fall rapidly than industrial goods. During this period purchasing power of money is very high but the general purchasing power of the community is very low. Thus, the aggregate level of economic activity reaches its rock bottom position. It is the stage of trough. The economy enters the phase of depression, as the process of depression is complete. It is also called, the period of slump.

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This period is characterized by:

(a) A sharp reduction in the volume of output, trade and other transactions.

(b) An increase in the level of unemployment.

(c) A sharp reduction in the aggregate income of the community especially wages and profits. In a few cases, profits turns out to be negative.

(d) A drop in prices of most of the products and fall in interest rates.

(e) A steep decline in consumption expenditure and fall in the level of aggregative effective demand.

(f) A decline in marginal efficiency of capital and hence the volume of investment.

(g) Absence of incentives for production as the market has become dull.

(h) A low demand for Loan able funds, surplus cash balances with banks leading to a contraction in the creation of bank credit.

(i) A high rate of business failures.

(j) An increasing difficulty in returning old debts by the debtors. This forces them to sell their inventories in the market where prices are already falling. This deepens depression further.

(k) A decline in the level of investment in stocks as it becomes less attractive and less profitable. This reduces the deposits with the banks and other financial institutions leading to a contraction in bank credit.

(l) A lot of excess capacity exists in capital and consumer goods industries which work much below their capacity due to lack of demand.

2. Recovery or Revival

Depression cannot last long, forever. After a period of depression, recovery starts. It is a period where in, economic activities receive stimulus and recover from the shocks. This is the lower turning point from depression to revival towards upswing. Depression carries with itself the seeds of its own recovery. After sometime, the rays of hope appear on the business horizon. Pessimism is slowly replaced by optimism. Recovery helps to restore the confidence of the business people and create a favorable climate for business ventures.

As a result of these factors, business people take more risks and invest more. Low wages and low interest rates, low production costs, recovery in marginal efficiency of capital etc. induce the business people to take up new ventures. In the early phase of the revival, there is considerable excess capacity in the economy so, the output increases without a proportionate increase in total costs. Repairs, renewals and replacement of plants take place. Increase in government expenditure stimulates the demand for consumption goods, which in its turn pushes up the demand for capital goods. Construction activity receives an impetus. As a result, the level of output, income, employment, wages, prices, profits, start rising. Rise in dividends induce the producers to float fresh investment proposals in the stock market. Recovery in stock market begins. Share prices go up. Optimistic expectations generate a favorable climate for new investment. Attracted by the profits, banks lend more money leading to a high level of investment. The upward

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trends in business give a sort of fillip to economic activity. Through multiplier and acceleration effects, the economy moves upward rapidly. It is to be noted that revival may be slow or fast, weak or strong; the wave of recovery once initiated begins to feed upon itself. Generally, the process of recovery once started takes the economy to the peak of prosperity.

The recovery may be initiated by the following factors:

(a) Increase in government expenditure so as to increase purchasing power in the hands of consumers.

(b) Changes in production techniques and business strategies.

(c) Diversification in investments or Investment in new regions.

(d) Explorations and exploitation of new sources of energy etc.

(e) New innovations- developing new products or services, new marketing strategy etc.

3. Prosperity or Full-employment

The recovery once started gathers momentum. The cumulative process of recovery continues till the economy reaches full employment. Full employment may be defined as a situation where in all available resources are fully employed at the current wage rate. Hence, achieving full employment has become the most important objective of all most all economies. Now, there is all round stability in output, wages, prices, income, etc. According to Prof. Haberler "Prosperity is a state of affair in which the real income consumed, produced and the level of employment are high or rising and there are no idle resources or unemployed workers or very few of either." During the period of prosperity an economy experiences-

(a) A high level of output, income, employment and trade.

(b) A high level of purchasing power, consumption expenditure and effective demand.

(c) A high level of Marginal Efficiency of Capital and volume of investment.

(d) A period of mild inflation sets in leading to a feeling of optimism among businessmen and industrialists.

(e) An increase in the level of inventories of both inputs and outputs.

(f) A rise in Interest Rate.

(g) A large expansion in bank credit and financial institutions lend more money to business men.

(h) Firms operate almost at full capacity along with its production possibility frontier.

(i) Share markets give handsome gains to investors as dividends and share prices go up. Consequently, idle funds find their way to productive investments.

(j) A state of exuberance and enthusiasm exists in business community.

(k) Industrial and commercial activity, both speculative and non-speculative show remarkable expansion.

(l) There is all round expansion, development, growth and prosperity in the economy. Everyone seems to be happy during this period.

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4. Boom or Over full Employment or Inflation

The prosperity phase does not stop at full employment. It gives way to the emergence of a boom. It is a phase where in there will be an artificial and temporary prosperity in an economy. Business optimism stimulates further investment leading to rapid expansion in all spheres of business activities during the stage of full employment, unutilized capacity gradually disappears. Idle resources are fully employed. Hence, rise in investment can only mean increased pressure for the available men and materials. Factor inputs become scarce commanding higher remuneration. This leads to a rise in wages and prices. Production costs go up. Consequently, higher output is obtained only at a higher cost of production. The boom carries with it the gems of its own destruction. The prosperity phase comes to an end when the forces favoring expansion becomes progressively weak. Bottlenecks begin to appear. Scarcity of factor inputs and rise in their prices disturb the cost calculations of the entrepreneurs. Now the entrepreneurs realize that they have over stepped the mark and become over cautious and their over-optimism paves the way for their pessimism. Thus, prosperity digs its own grave. Generally the failure of a company or a bank bursts the boom and ushers in a recession.

Once full employment is reached, a further increase in the demand for factor inputs will lead to an increase in prices rather than an increase in output and income. Demand for Loan able funds increases leading to a rise in interest rates. Now there will be hectic economic activity. Soon a situation develops in which the number of jobs exceed the number of workers available in the market. Such a situation is known as overfull employment or hyper-employment. During this phase:

(a) Prices, wages, interest, incomes, profits etc. move in the upward direction.

(b) MEC raises leading to business expansion.

(c) Business people borrow more and invest. This adds fuel to the fire. The tempo of boom reaches new heights.

(d) There is higher output, income and employment. Living standards of the people also increases.

(e) There is higher purchasing power and the level of effective demand will reach new heights.

(f) There is an atmosphere of "over optimism" all round, which results in over investment. Cost of living increases at a rate relatively higher than the increase in household incomes.

(g) It is a symptom of the end of prosperity phase and the beginning of recession.

5. Recession: A turn from prosperity to Depression

The period of recession begins when the phase of prosperity ends. It is a period of time where in the aggregate level of economic activity starts declining. There is contraction or slowing down of business activities. After reaching the peak point, demand for goods decline. Over investment and production creates imbalance between supply and demand. Inventories of finished goods pile up. Future investment plans are given up. Orders placed for new equipments and raw materials and other inputs are cancelled. Replacement of worn out capital is postponed.

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The cancellation of orders for the inputs by the producers of consumer goods creates a chain reaction in the input market. Incomes of the factor inputs decline this creates demand recession. In order to get rid of their high inventories and to clear off their bank obligations, producers reduce market prices. In anticipation of further fall in prices, consumers postpone their purchases. Production schedules by firms are curtailed and workers are laid-off. Banks curtail credit. Share prices decline and there will be slackness in stock and financial market. Consequently, there will be a decline in investment, employment, income and consumption. Liquidity preference suddenly develops. Multiplier and accelerator work in the reverse direction. Unemployment sets in the capital goods industries and with the passage of time, it spreads to other industries also. The process of recession is complete. The wave of pessimism gets transmitted to other sectors of the economy. The whole economic system thereby runs in to a crisis.

Failure of some business creates panic among businessmen and their confidence is shaken. Business pessimism during this period is characterized by a feeling of hesitation, nervousness, doubt and fear. Prof. M. W. Lee remarks, "A recession, once started, tends to build upon itself much as forest fire. Once under way, it tends to create its own drafts and find internal impetus to its destructive ability". Once the recession starts, it becomes almost difficult to stop the rot. It goes on gathering momentum and finally converts itself in to a full- fledged depression, which is the period of utmost suffering for businessmen. Thus, now we have a full description about a business cycle. A detailed study of the various phases of a business cycle is of paramount importance to the management. It helps the management to formulate various anti-cyclical measures to be taken up to check the adverse effects of a trade cycle and create the necessary conditions for ensuring stability in business.

1.3.6 International Economics

International trade studies determinants of goods-and-services flows across international boundaries. It also concerns the size and distribution of gains from trade. Policy applications include estimating the effects of changing tariff rates and trade quotas. International finance is a macroeconomic field which examines the flow of capital across international borders, and the effects of these movements on exchange rates. Increased trade in goods, services and capital between countries is a major effect of contemporary globalization.

Meaning of International Economics

International economics refers to the studies of economic and political issues surrounding trade, international finance and related issues. International economics studies the economic interactions of nations and how international issues affect world economic activity. This specialty within the larger discipline of economics examines and explains patterns of interaction among nations in such areas as trade and investment.

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Scope of International Economics

The scope of International economics is to provide detail information with an understanding of the principles and applications of international economics to face the future complexities of the world economy. This scope considers the law of comparative advantage, theory and international trade policy, the Heckscher-Ohlin theory, tariff and non-tariff barriers, customs unions, and international factor movements, balance of payments and adjustment policies, fixed and flexible exchange rates, the internationalization of financial markets, Purchasing power parity etc.

1. The law of comparative advantage

The law of comparative advantage says that two countries will both gain from trade if, in the absence of trade, they have different relative costs for producing the same goods. Even if one country is more efficient in the production of all goods absolute advantage than the other, both countries will still gain by trading with each other, as long as they have different relative efficiencies.

2. Theory and international trade policy

The Ricardian theory of comparative advantage became a basic constituent of neoclassical trade theory. Any undergraduate course in trade theory includes a presentation of Ricardo's example of a two-commodity, two-country model. This model has been expanded to many-country and many-commodity cases. Major general results were obtained by McKenzie and Jones, including his famous formula. It is a theorem about the possible trade pattern for N-country N-commodity cases.

3. The Heckscher–Ohlin theorem

The Heckscher–Ohlin theorem is one of the four critical theorems of the Heckscher–Ohlin model. It states that a country will export goods that use its abundant factors intensively, and import goods that use its scarce factors intensively. In the two-factor case, it states: "A capital-abundant country will export the capital-intensive good, while the labor-abundant country will export the labor-intensive good." The critical assumption of the Heckscher–Ohlin model is that the two countries are identical, except for the difference in resource endowments. This also implies that the aggregate preferences are the same. The relative abundance in capital will cause the capital-abundant country to produce the capital-intensive good cheaper than the labor-abundant country and vice versa.

4. Tariff and non-tariff barriers

Tariffs, which are taxes on imports of commodities into a country or region, are among the oldest forms of government intervention in economic activity. They are implemented for two clear economic purposes. First, they provide revenue for the government. Second, they improve economic returns to firms and suppliers of resources to domestic industry that face competition from foreign imports. Non-tariff barriers to trade (NTBs) are trade barriers that restrict imports but are not in the usual form of a tariff. Some common examples of NTB's are anti-dumping measures and countervailing duties, which, although they are called "non-tariff" barriers, have the effect of tariffs once they are enacted.

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5. Customs union

A customs union is a type of trade bloc which is composed of a free trade area with a common external tariff. The participant countries set up common external trade policy, but in some cases they use different import quotas. Common competition policy is also helpful to avoid competition deficiency. Purposes for establishing a customs union normally include increasing economic efficiency and establishing closer political and cultural ties between the member countries.

6. Balance of Payments

Balance Of Payments is a record of all transactions made between one particular country and all other countries during a specified period of time. The Balance of Payment accounts summarize international transactions for a specific period, usually a year, and are prepared in a single currency, typically the domestic currency for the country concerned. Sources of funds for a nation, such as exports or the receipts of loans and investments, are recorded as positive or surplus items. Uses of funds, such as for imports or to invest in foreign countries, are recorded as negative or deficit items.

7. Theory and policy of international financial or monetary

The global financial system (GFS) is the financial system consisting of institutions and regulators that act on the international level, as opposed to those that act on a national or regional level. The main players are the global institutions, such as International Monetary Fund and Bank for International Settlements, national agencies and government departments, e.g., central banks and finance ministries, private institutions acting on the global scale, e.g., banks and hedge funds, and regional institutions, e.g., the Euro zone.

International monetary systems are sets of internationally agreed rules, conventions and supporting institutions that facilitate international trade, cross border investment and generally the reallocation of capital between nation states. They provide means of payment acceptable between buyers and sellers of different nationality, including deferred payment. To operate successfully, they need to inspire confidence, to provide sufficient liquidity for fluctuating levels of trade and to provide means by which global imbalances can be corrected. The systems can grow organically as the collective result of numerous individual agreements between international economic actors spread over several decades.

8. Purchasing power parity (PPP)

Purchasing power parity (PPP) is a condition between countries where an amount of money has the same purchasing power in different countries. The prices of the goods between the countries would only reflect the exchange rates. The idea originated with the School of Salamanca in the 16th century and was developed in its modern form by Gustav Cassel in 1918. The concept is based on the law of one price, where in the absence of transaction costs and official trade barriers, identical goods will have the same price in different markets when the prices are expressed in the same currency.

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Significance of International Economics

International economics include world trade, international finance and the movement of factors of production, such as labor and capital. Trade is especially important for economists, who contend that international trade benefits all parties involved. Through trade, nations can specialize in producing certain goods and export them to obtain other goods. International finance examines the flow of financial assets across borders, as well as currency exchange rates, such as the value of the U.S. dollar against the euro or the Japanese yen. Finally, international economics also studies migration of labor, such as immigrants moving to other countries in search of better opportunities.

Nations traded agricultural products and mineral-based goods, such as oil, coal and precious metals. Today, however, the majority of trade involves manufactured goods, such as automobiles, computers and clothing, according to economist Paul Krugman and Maurice Obstfeld, authors of "International Economics: Theory and Policy." For some nations, including the United States, the majority of trade involves a small number of countries with which a country has close trade relations. Krugman and Obstfeld identified Canada, Mexico, China, Japan and Germany as the United States' top trading partners.

Economics has examined international issues since the discipline's earliest days. In the early 19th century, English economist David Ricardo advocated international trade based on what he called comparative advantage, which refers to the ability to produce a good at a lower cost relative to other goods. Ricardo contended that nations should specialize in producing goods in which they enjoy comparative advantage, while trading for other goods.

Globalization, or the trend toward greater mobility of goods, labor and capital, has forged closer links among the nations of the world, according to Krugman and Obstfeld. Meanwhile, trade pacts such as the World Trade Organization and the North American Free Trade Agreement, as well as actions by more governments, have lowered trade barriers and opened markets around the world. This has resulted in more economic integration, increasing the diversity of goods available for consumers. Thanks to these and related economic trends, international economics has grown in significance.

Check Your Progress

1. Discuss the history of Macroeconomics.
2. Explain the concepts of Macroeconomics.

1.4 SCOPE OF MACROECONOMICS

Macroeconomics is an essential field of study for economists. Government, financial bodies and researchers analyze the general national issues and economic well-being of a nation. It mainly covers the measure fundamentals which are macroeconomic theories and macroeconomic policies. The study of macroeconomics is crucial to understand the working of and economy. Economic problems are mainly related to the employment, behaviour of total income and

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general price in the economy. Macroeconomics help in making the elimination process more understandable. The study of macroeconomics has wide scope and it covers the major areas as follows:

1. ***National Income:*** Measurement of national income and its composition by sectors are the basic aspects of macroeconomic analysis. The trends in National Income and its composition provide a long term understanding of the growth process of an economy.
2. ***Inflation:*** Inflation refers to steady increase in general price level. Estimating the general price level by constructing various price index numbers such as Wholesale Price Index, Consumer Price Index, etc. are needed.
3. ***Business Cycle:*** Almost all economies face the problem of business fluctuations and business cycle. The cyclical movements (boom, recession, depression and recovery) in the economy need to be carefully studied based on aggregate economic variables.
4. ***Poverty and Unemployment:*** The major problems of most resource - rich nations are poverty and unemployment. This is one of the economic paradoxes. A clear understanding about the magnitude of poverty and unemployment facilitates allocation of resources and initiating corrective measures.
5. ***Economic Growth:*** The growth and development of an economy and the factors determining them could be understood only through macro analysis.
6. ***Economic Policies:*** Macro Economics is significant for evolving suitable economic policies. Economic policies are necessary to solve the basic problems, to overcome the obstacles and to achieve growth.

1.5 NATURE AND IMPORTANCE OF MACROECONOMICS

As a method of economic analysis macroeconomics is of much theoretical and practical importance.

(1) To Understand the Working of the Economy:

The study of macroeconomic variables is indispensable for understanding the working of the economy. Our main economic problems are related to the behaviour of total income, output, employment and the general price level in the economy.

These variables are statistically measurable, thereby facilitating the possibilities of analysing the effects on the functioning of the economy. As Tinbergen observes, macroeconomic concepts help in "making the elimination process understandable and transparent". For instance, one may not agree on the best method of measuring different prices, but the general price level is helpful in understanding the nature of the economy.

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(2) In Economic Policies

Macroeconomics is extremely useful from the point of view of economic policy. Modern governments, especially of the underdeveloped economies, are confronted with innumerable national problems. They are the problems of overpopulation, inflation, balance of payments, general underproduction, etc.

The main responsibility of these governments rests in the regulation and control of overpopulation, general prices, general volume of trade, general outputs, etc. Tinbergen says: "Working with macroeconomic concepts is a bare necessity in order to contribute to the solutions of the great problems of our times." No government can solve these problems in terms of individual behaviour. Let us analyse the use of macroeconomic study in the solution of certain complex economic problems.

(i) In General Unemployment

The Keynesian theory of employment is an exercise in macroeconomics. The general level of employment in an economy depends upon effective demand which in turn depends on aggregate demand and aggregate supply functions.

Unemployment is thus caused by deficiency of effective demand. In order to eliminate it, effective demand should be raised by increasing total investment, total output, total income and total consumption. Thus, macroeconomics has special significance in studying the causes, effects and remedies of general unemployment.

(ii) In National Income

The study of macroeconomics is very important for evaluating the overall performance of the economy in terms of national income. With the advent of the Great Depression of the 1930s, it became necessary to analyse the causes of general overproduction and general unemployment.

This led to the construction of the data on national income. National income data help in forecasting the level of economic activity and to understand the distribution of income among different groups of people in the economy.

(iii) In Economic Growth

The economics of growth is also a study in macroeconomics. It is on the basis of macroeconomics that the resources and capabilities of an economy are evaluated. Plans for the overall increase in national income, output, and employment are framed and implemented so as to raise the level of economic development of the economy as a whole.

(iv) In Monetary Problems

It is in terms of macroeconomics that monetary problems can be analysed and understood properly. Frequent changes in the value of money, inflation or deflation, affect the economy adversely. They can be counteracted by adopting monetary, fiscal and direct control measures for the economy as a whole.

(v) In Business Cycles

Further macroeconomics as an approach to economic problems started after the Great Depression. Thus its importance lies in analysing the causes of economic fluctuations and in providing remedies.

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Importance of Macro Economics

The importance of macroeconomics is summarized as follows:

1. It helps to understand the problems faced by the various countries.
2. It facilitates to understand the functioning of the economic system.
3. It helps in formulation of economic policies.
4. It assists in dealing with the problem of allocation of goods and services.
5. It helps in understanding the business cycle.
6. Its effects and helps in formulating ways of reducing or minimizing the negative effects through formulation of monetary and fiscal policies.
7. It helps in understanding the importance of savings.
8. It helps in analyzing the effects of inflation and deflation.
9. Businesses use macroeconomic analysis to determine whether expanding production will be welcomed by the market.
10. It helps to analyse the GDP and economic growth of any Nation.

Check Your Progress

3. Discuss the nature of Macroeconomics.
4. Explain the importance of Macroeconomics.

1.6 LIMITATIONS OF MACROECONOMICS

There are certain limitations of macroeconomic analysis. Mostly, these stem from attempts to yield macroeconomic generalization's from individual experiences.

(1) Fallacy of Composition

In Macroeconomic analysis the "fallacy of composition" is involved, i.e., aggregate economic behaviour is the sum total of individual activities. But what is true of individuals is not necessarily true of the economy as a whole.

For instance, savings are a private virtue but a public vice. If total savings in the economy increase, they may initiate a depression unless they are invested. Again, if an individual depositor withdraws his money from the bank there is no ganger. But if all depositors do this simultaneously, there will be a run on the banks and the banking system will be adversely affected.

(2) To Regard the Aggregates as Homogeneous

The main defect in macro analysis is that it regards the aggregates as homogeneous without caring about their internal composition and structure. The average wage in a country is the sum total of wages in all occupations, i.e., wages of clerks, typists, teachers, nurses, etc.

But the volume of aggregate employment depends on the relative structure of wages rather than on the average wage. If, for instance, wages of nurses increase but of typists fall, the average may remain unchanged. But if the employment of nurses falls a little and of typists rises much, aggregate employment would increase.

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(3) Aggregate Variables may not be Important Necessarily

The aggregate variables which form the economic system may not be of much significance. For instance, the national income of a country is the total of all individual incomes. A rise in national income does not mean that individual incomes have risen. The increase in national income might be the result of the increase in the incomes of a few rich people in the country. Thus a rise in the national income of this type has little significance from the point of view of the community.

Prof. Boulding calls these three difficulties as "macroeconomic paradoxes" which are true when applied to a single individual but which are untrue when applied to the economic system as a whole.

(4) Indiscriminate Use of Macroeconomics Misleading

An indiscriminate and uncritical use of macroeconomics in analysing the problems of the real world can often be misleading. For instance, if the policy measures needed to achieve and maintain full employment in the economy are applied to structural unemployment in individual firms and industries, they become irrelevant. Similarly, measures aimed at controlling general prices cannot be applied with much advantage for controlling prices of individual products.

(5) Statistical and Conceptual Difficulties

The measurement of macroeconomic concepts involves a number of statistical and conceptual difficulties. These problems relate to the aggregation of microeconomic variables. If individual units are almost similar, aggregation does not present much difficulty. But if microeconomic variables relate to dissimilar individual units, their aggregation into one macroeconomic variable may be wrong and dangerous.

1.7 DIFFERENCE BETWEEN MICROECONOMICS AND MACROECONOMICS

Microeconomics

1. Microeconomics is the study of decisions that people and businesses make regarding the allocation of resources and prices of goods and services.
2. Micro Economics studies the problems of individual economic units such as a firm, an industry, a consumer etc.
3. Micro Economic studies the problems of price determination, resource allocation etc.
4. While formulating economic theories, Micro Economics assumes that other things remain constant.
5. Micro economics study is what will be the consequence of increase in salary of an individual will have on his or her purchasing power.

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Macroeconomics

1. Macroeconomics is the field of economics that studies the behavior of the economy as a whole and not just on specific companies, but entire industries and economies.
2. Macro Economics studies economic problems relating to an economy viz., National Income, Total Savings etc.
3. Macro Economics studies the problems of economic growth, employment and income determination etc.
4. In Macro Economics, economic variables are mutually inter-related independently.
5. Macro economics study what will be the consequence of higher inflation on growth of the economy or how rise in gross domestic product will help in generating employment opportunities.

1.8 MACROECONOMICS AND ITS INTERFACE WITH BUSINESS AND INDUSTRY

Macroeconomics is intertwined with business because business is affected by the factors that constitute macroeconomics. Macroeconomics is a branch of economics that deals with issues relating to factors that affect the economy of the country as a whole. Such factors include areas like the rate of unemployment, inflation, business cycles and Gross Domestic Product (GDP). Entrepreneurs and other people related to business must take such factors into consideration as part of their market analysis.

The role of macroeconomics in business can be seen in way the condition of the economy affects individual businesses. For instance, during a recession, the behavior of customers and consumers of goods and services change to reflect the change in the economy. Such changes can be seen in the way the demand for goods and services drop and the manner in which such a reduction affects the balance sheets of the various businesses.

An example of the role of macroeconomics in business is the way in which the reduction or increase in demand for products affects the decisions by companies to expand or to scale down their rate of production. For instance, a boom in the economy may lead to a demand for goods. Then companies will increase production, hire more employees and even expand their businesses, all with the aim of meeting up with the increase in demand.

The effect of microeconomics in business can be seen in the way businesses plan their sales and marketing strategies based on the effect of macroeconomic factors like inflation, business booms and recessions. When there is a recession and the demands for goods are low, businesses usually change their marketing strategies to reflect the inevitable low demand for products and services. Such marketing strategies may be based more on aspects like reduced prices and cheaper alternatives that will appeal more to customers trying to conserve finances during such periods.

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One of the important effects of macroeconomics in business is the effect of governmental policies on the businesses. Such governmental policies may include facets like the imposition of heavy taxes, stringent rules and regulations, a reduction in taxes and other facets like the imposition of import quotas. For example, a cigarette company may find out that the government regulations regarding tobacco companies are very strict. Such regulations may include precise requirements as to labeling, packaging and the payment of hefty taxes. Companies must evaluate these effects of macroeconomics in business in order to find out how they affect the success of their business.

Macroeconomics is essential background for the business manager and policymaker. Consequently macroeconomics is an integral part of the business curriculum in mature and developing countries alike. And well it should be. The economy affects decisions by investors, manufacturers, distributors, importers and exporters, etc. in all parts of the world. Often, it is the difference between growth and profitability on one hand, and stagnation or failure on the other. In recent years as the world economy has undergone overwhelming changes, especially in East Asia and now in the advanced countries, understanding what is going on in the local economy and "out there in the world" has become a particular challenge to managers. The new developments, of which the "new economy" is the most recent one, do not supersede the basic theoretical framework of macroeconomics. But they add greatly to the challenge of understanding the economic situation and to its uncertainty.

India, the Central Statistical Organization is the official source for the national accounts statistics. The Ministry of Finance provides the public finance data and the Reserve Bank of India provides data on money and on balance of payments.

The Business Beacon is a database of time-series over ten thousand of them all at the all India level and in different frequencies, covering all the macro-economic series and more. This is the ideal database for the economic researcher / analyst. While the Business Beacon provides detailed information on India, the International Economics database provides time-series data on all countries.

1. Macro-economic factors impeding Indian IT industry

Indian IT services companies' biggest markets the US, UK and Europe are going through the worst financial turmoil. Economic growth for G7 nations, which had witnessed a surge in GDP growth post tech bubble bust, saw a sharp decline in 2008 and the situation is expected to worsen in 2009. According to IMF, recovery is not expected before the year ending 2011. This economic downturn has put IT spending on hold.

The industry is experiencing multiple headwinds along with the slowdown that will play out in terms of reduced growth rates, pricing pressures, project cancellations, delays or no orders and return of economic nationalism resulting in sluggish top-line growth.

The current macro-economic outlook appears bleak in the near term. GDP of the US and Europe, which contributes about 85% of revenue for top 4 Indian IT companies, is expected to de-grow. BFSI, Telecom and Retail that contributes 65% of revenue for top 4, are suffering because of declining consumer confidence, write-offs and bankruptcies. M&A has further decreased the size of the pie.

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A closer look at the customer profile of the Indian IT sector explains why the industry is in trouble. The U.S. accounts for 58% of the market and the UK another 19%. This is not too different from the respective values of 68.2% and 14.5% in financial year 2003-04. The growth for Indian IT companies has come from the US and Europe which grew at a CAGR of 29% and 46% respectively from FY04-08. When the US and Europe in the grip of recession the earnings growth for the Indian IT companies at risk.

Given the deepening recession in the global economy the effect of depreciating rupee is getting squashed by cut in the top-line growth. Hence overall IT companies are currently under tremendous pressure. According to me unless giant economies like US & Europe starts spending on IT infrastructure & services, one won't see any revival in the stock prices.

2. Macro-economic factors impeding Indian Textile industry

The textile industry in India including the garment industry is vital to the macro economy of the country. It contributes to over 6 per cent of the gross domestic product of India and earns 18 per cent of the total foreign exchange earnings of the country.

The textile industry consists of three distinct sectors, viz, spinning, weaving and processing. The industry is the largest employer next only to agriculture which is the mainstay of the economy. Over 50 per cent of the employees are women who help to sustain the family income. The garment industry alone employs four million workers and helps to support labour working in ancillary manufacturing buttons, zippers, sewing thread, embroidery thread, metal studs, polybags, cartons, cardboard sheets, etc.

The country follows very strict labour laws which govern inter alia safety, lighting, working conditions, age at entry, and restriction on storage to prevent fire hazards, emoluments, and welfare services, supervised by ever-vigilant labour officers of the state governments.

The country has the largest acreage under cotton in the world but is almost totally dependent on monsoon, yielding a poor 308 kgs/hectare. The country has a well-developed textile industry of cotton as well as synthetic fibres/yarn supported by silk, wool and jute.

The textile industry is diversified with an unorganized sector inter-mingled, with the organized sector. The organized mill sector of the textile industry (excluding garments) which is over a century old is currenly a decimated lot with the bulk of the production of fabrics having been taken over by the power loom sector which purchases yarn from spinners. Each unit of the organized cotton mill sector consists of departments ranging from the opening and mixing of cotton, up to spinning of yarn which is subsequently reeled into larger packages preparatory to the weaving of grey fabric for further processing in its processing section for final finishing. Textile production of fabrics on hand-operated looms makes a significant contribution to fabric production. The industry produces 42,000 million square meters of fabrics, of all fibres, per annum.

While the spinning sector is very well-organized producing yarn as course as 6s to as superfine as 160s, both in singles and multiples, the weaving sector,

especially the power loom sector has considerable leeway to make good with up gradation in technology. Even as of today, the power loom sector is keenly interested in setting up automatic air-jet/water-jet looms which are of vintage variety with a balance life-span of 10 to 15 years. On the other hand, the organized mill sector is keen to keep in touch with the latest technology. It is currently passing through a phase of rehabilitation partly from its own resources and partly with the help of finances made available by government and through public investment.

The processing sector is the weakest link in the chain of the textile industry. This sector too has an organized as well as unorganized sector. While the unorganized sector concentrates only on certain processes, the organized sector concerns itself with the processing of fabric from the grey stage up to its finished state. It may be noted that this organized sector is independent of the sector installed by the organized mill industry. This sector concerns itself only with processing of fabric.

The garment industry in India is a $23 billion industry at the current rate of exchange of (₹ 48 = $). Like its textile counterpart, this industry also comprises the organized and unorganized sector. The unorganized sector largely consists of job workers who carry out jobs given by their principals, under their supervision. The organized sector generally consists of units having a minimum of 10 sewing machines less than one roof. This sector also covers large brands having in the vicinity with overseas partners. The organized sector is, by and large, update with modern technology, has economies of scale, is cost-competitive and is in a position to execute orders on time. The garment industry produces over 100 varieties of garments for different end-uses. Additionally, a section of the industry concentrates on manufacture of ethnic garments, or what are traditionally called "India Items".

Exports

Exports of textiles including garments from India are worth around US $14 billion of which the share of garments is close to US$. 6.5 billion. The country is aiming at an exchange earnings of $.50 billion by 2010. At the current rate, the country bids fair to reach the target. A break-up of export earnings for various arms of the textile industry is given below:

Per capita availability

For people of a country of the size of India, the per capita consumption of garments, even after accounting for ethnic garments consumption is barely 6 pieces per annum whereas in countries like US much smaller in population than India, it is close to 100 pieces per year.

Reforms and the future

The Indian textile industry including garments is just emerging from the shadows of a debilitating quota system, a system which only skewed production for as long as ten years without any reward in return. Government of India is going full steam on economic reforms. To begin with, government has steadily raised the ceiling for investment in plant and machinery of a unit from ₹ 1 crore to ₹ 4 crore for the unit to be considered as a unit in the small-scale sector. Insofar as garments are concerned the government, realizing its potential, has removed both the woven

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and knitted sectors from the limits fixed for the small-scale sector. This has resulted in investments flowing into this sector.

Amalgamations are the order of the day in the woven garment sector. Backward and forward integrations in the spinning and knitted garment sectors are in evidence, both with the object of ensuring a steady supply of inputs as well as to add value.

Foreign Direct Investment (FDI) has been permitted in the garment sector in the shape of joint ventures. FDI in retail is almost on the cards but, for the present, the franchise route is favoured.

Economic reforms have increased the spending power of the middle-income group which is growing bigger by the day. Consequently, purchasing power is on a high with malls, department stores, discount stores, all springing up in various parts of the country. The consumer today demands value for money. Quality is of prime importance and the consumer is prepared to pay a price for it. Government has been divesting of its resources sunk into various state-owned companies and utilizing the released resources to improve infrastructure, reform rural economy, undertake electrification of villages, provide clean drinking water to rural folk and generally uplift the rural economy and rural agriculture.

1.9 RECENT CHANGES IN INDIAN ECONOMY

GDP Growth Profile

According to the first advance estimates of national income for the year 2012-13 of the Central Statistics Office (CSO), the Indian economy is expected to grow at its slowest pace in a decade at a mere 5 per cent in 2012-13, on the back of dismal performance by the farm, manufacturing and services sectors. The estimate is lower than the 6.2 per cent growth clocked in 2011-12 and is the lowest since 2002-03, when the economy grew by 4 per cent only. According to the CSO's advance estimates, the growth in agriculture and allied activities are likely to lower to 1.8 per cent in 2012-13, compared to 3.6 per cent in 2011-12 and manufacturing growth is also expected to drop to 1.9 per cent in this fiscal, from 2.7 per cent achieved during the last year. Services sector, including finance, insurance, real estate and business services are likely to grow by 8.6 per cent during this fiscal, against 11.7 per cent in the last fiscal. Meanwhile, mining and quarrying is likely to be slightly better at 0.4 per cent, compared to a negative growth of 0.6 per cent a year ago. Growth in construction is also likely to be 5.9 per cent in 2012-13, against 5.6 per cent last year.

Per Capita Income

The per capita income at current price during 2012-13 is estimated to be ₹ 68,747 as compared to ₹ 61,564 during 2011-12. India's per capita income, a gauge for measuring living standard, is estimated to have gone up by 11.7 per cent to ₹ 5729 per month in 2012-13.

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Agriculture

In the advance estimate of GDP for 2012-13, the CSO had pegged farm growth at a three-year low of 1.8 per cent against last year's 3.6 per cent. Production of food grain is expected to decline by 2.8 per cent as compared to the growth of 5.2 per cent in the previous year. The output of all crops, barring pulses and mustard, is expected to be less than last year. Production of wheat in the ongoing rabi sowing season is expected to be 92.3 mt from 94.88 mt. in last year. Production of rice, mainly grown during the kharif sowing season, is estimated to be 101.8 mt from 105.31 mt in last year coarse cereals' production in 2012-13 at 38.5 mt, as against 42 mt last year. Production of protein-rich food crops such as pulses is estimated to be better this year especially that of gram. Production of all pulses this year is estimated to be 17.6 mt, about 0.5 mt more than last year. Oilseed production is expected at 29.5 mt, marginally less than last year's 92.3 mt

Industry

Industrial growth has remained subdued since July 2011 due to weak global demand, weak supply linkages, high import costs, and sluggish investment activities. During 2012-13 (April to November), industrial growth slowed to 1.0 per cent. The Industrial sector was mainly affected by the contraction in the output of capital goods and the mining sector. Excluding capital goods, the growth rate of overall IIP during April to November 2012 was 3.0 per cent. The slowdown in consumption demand has affected the growth of motor vehicles, food products and apparel industries.

The subdued growth of the core industries has remained a drag on industrial production. Policy uncertainties in areas such as iron ore and coal mining have adversely affected the output of the steel and power industries. The recent initiatives taken by the government for the allocation of new coal blocks and commencement of production from Coal India Limited (CIL)'s new coalfields are expected to boost coal output going forward.

Coal production recorded a growth of 5.7 per cent during April-December 2012-13 compared to its negative growth at (-) 2.7 per cent during the same period of 2011-12. Crude Oil production recorded a negative growth of (-) 0.4 per cent during April-December 2012-13 compared to its growth at 1.9 per cent during the same period of 2011-12. Natural Gas production registered a negative growth of (-) 13.3 per cent during April-December 2012-13 which was (-) 8.8 per cent during the same period of 2011-12. Petroleum Refinery Products (0.93% of Crude Throughput) Petroleum refinery production registered a growth of 6.9 per cent during April-December 2012-13 compared to its 4.0 per cent growth during the same period of 2011-12. Fertilizers production registered a growth of (-) 3.4% during April-December 2012-13 compared to its (-) 0.5% growth during the same period of 2011-12. Steel (Alloy + Non-Alloy) Steel production registered 3.6% growth during April-December 2012-13 compared to its 9.1% growth during the same period of 2011-12. The cumulative growth of Cement Production was 6.1% during April-December 2012-13 compared to its 5.8% growth during the same period of 2011-12. Electricity generation decelerated sharply due to a weak monsoon and shortages in coal supply. The cumulative growth of Electricity

generation was 4.6% during April-December 2012-13 compared to its 9.3% growth during the same period of 2011-12.

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1.10 INDIAN ECONOMY AND ROAD AHEAD

A survey by global consultancy firm Ernst & Young (E&Y) sees India as the world's most attractive investment destination. With the opening up of foreign direct investment (FDI) in several sectors, India is today an eye-catching destination for overseas investors. The relaxation of norms by the government has created a vast opportunity for foreign players, who are competing for a greater role in the Indian market. Sectors projected to do well in the coming years include automotive, technology, life sciences and consumer products.

India has also become a hotbed for research and development (R&D) and the country is now a preferred destination for automotive R&D, as per a study on the Global Top 500 R&D spenders by globalisation advisory and market expansion firm, Zinnov. The study noted that there was strong potential for growth in areas such as engineering analytics and that significant talent could be found in 'Deccan Triangle' region, which encompasses Pune, Bangalore and Hyderabad.

The US$ 1.2 trillion investment planned for the infrastructure sector in the 12th Five-Year Plan will go a long way in improving export performance of Indian companies and the Indian growth story, according to Mr. Anand Sharma, Union Minister for Commerce and Industry, Government of India.

Market Size

The World Bank has projected an economic growth rate of 5.7 per cent in FY 15 for India, due to a more competitive exchange rate and several significant investments going forward.

India is the third biggest economy in the world in terms of purchasing power parity (PPP), according to a World Bank report. The country was ranked 10th in the previous survey conducted in 2005.

India will become the third largest economy in the world by 2043, as per Mr. P Chidambaram, Union Finance Minister, India. The country has been consistently rated among the world's top three investment destinations by international bodies such as the World Bank and UNCTAD, supported by its liberal foreign investment policies.

Key Developments/Investments

While digitization in India continues to grow, the country's demand for paper is expected to increase by 53 per cent over the next six years, on the back of sustained growth in the number of school-going children in the hinterlands. Improved consumerism; modern retailing; rising literacy, backed by government spending on education and the growing use of documentation is expected to sustain demand for writing and printing paper.

The US Green Building Council (USGBC) has ranked India third in a list of the top 10 countries (excluding the US) for Leadership in Energy and Environmental Design (LEED) certified buildings. The list reflects the global adaptability of the

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most widely used and recognised system in the world guiding the design, construction, maintenance and operations of green buildings.

Merchandise exports grew at a five-month high of 5.3 per cent in April 2014 to touch US$ 25.6 billion, against US$ 24.35 billion in April 2013, according to official data. Outbound shipments grew on the back of high-value engineering goods, drugs and pharmaceuticals, and textile products. Engineering exports rose by 21.3 per cent to touch US$ 5.7 billion, while pharma rose 10.4 per cent to touch US$ 1.3 billion.

With European corporations taking a cue from their US counterparts to make outsourcing mainstream, India's software companies, sensing the opportunity, are hiring and looking for acquisitions to grow in Europe. Tata Consultancy Services, India's largest information technology (IT) provider, invested in on-site hiring in Europe and also acquired French IT services player Alti for US$ 75 million in 2013. Infosys bought Zurich-based consultancy firm Lodestone for US$ 349 million, in 2012. More acquisitions look likely in future.

The stakes held by foreign institutional investors (FII) in Indian companies touched a record high in the fourth quarter of FY 14. The estimated value of FII holdings in India stands at US$ 279 billion.

The cumulative amount of FDI equity inflow into India stood at US$ 212,031 million in the period April 2000 - February 2014, while FDI equity inflow during April 2013 - February 2014 was recorded as US$ 20,766 million, as per data published by Department of Industrial Policy and Promotion (DIPP).

Private equity (PE) investments in the Indian real estate sector grew by 13 per cent at ₹ 7,000 crore (US$ 1.17 billion) in 2013 as against ₹ 6,200 crore (US$ 1.03 billion) in 2012, as per a report by Cushman and Wakefield.

Government Initiatives

In a bid to bring more investments into India's debt and equity markets, the Reserve Bank of India (RBI) has set up a framework for investments which will enable foreign portfolio investors to take part in open offers, buyback of securities and disinvestment of shares by the Central and State governments.

FIIs and non-resident Indians (NRIs) will now be able to invest in the insurance sector, within the 26 per cent cap on FDI. DIPP confirmed in a press note that the norms would also apply to insurance brokers, third-party administrators (TPAs), loss assessors and surveyors. The investments can be made through the automatic route.

The Government of India along with the industry has been working towards fashioning a more dynamic environment for small and medium enterprises (SMEs) and startups over the last few years. Indian SMEs employ about 40 per cent of the country's workforce and contribute 45 per cent to the overall manufacturing output. A positive policy framework allied with the growth of angel funds and a vibrant entrepreneurial culture is contributing to the growth of first generation entrepreneurs in the country.

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Road Ahead

In an effort to take bilateral trade relations to another level, the Cabinet has given the green signal to the proposal of the free trade agreement (FTA) on services and investment with the Association of Southeast Asian Nations (ASEAN). The two-way partnership is targeting US $100 billion by 2019, for which an integrated and comprehensive transport network is necessary.

Thus, the emphasis is on a massive road connectivity plan which will tie the region together and subsequently enhance economic objectives. Also, agricultural gross domestic product (GDP) in the country is projected to grow by over five per cent in the current agricultural year.

Check Your Progress

5. Discuss the limitations of Macroeconomics.
6. Explain the recent trends of Macroeconomics.

1.11 ANSWERS TO 'CHECK YOUR PROGRESS'

1. Macroeconomic theory has its origins in the study of business cycles and monetary theory. John Maynard Keynes attacked some of these "classical" theories and produced a general theory that described the whole economy in terms of aggregates rather than individual, microeconomic parts. While the term "macroeconomics" is not all that old (going back to the 1940s), many of the core concepts in macroeconomics have been the focus of study for much longer. Topics like unemployment, prices, growth, and trade have concerned economists almost from the very beginning of the discipline, though their study has become much more focused and specialized through the 20th and 21st centuries. Elements of earlier work from the likes of Adam Smith and John Stuart Mill clearly addressed issues that would now be recognized as the domain of macroeconomics. Macroeconomics, as it is in its modern form, is often defined as starting with John Maynard Keynes and the publication of his book The General Theory of Employment, Interest, and Money in 1936. Keynes offered an explanation for the fallout from the Great Depression, when goods remained unsold and workers unemployed. Keynes's theory attempted to explain why markets may not clear.
2. Output and Income: National output is the total value of everything a country produces in a given time period. Output can be measured as total income, or, it can be viewed from the production side and measured as the total value of final goods and services or the sum of all value added in the economy.

   Unemployment: The amount of unemployment in an economy is measured by the unemployment rate, the percentage of workers without jobs in the labour force. Unemployment can be generally broken down into several types based related to different causes.

   Inflation and Deflation: Inflation can occur when an economy becomes overheated and grows too quickly. Similarly, a declining economy can lead

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to deflation. Central bankers, who control a country's money supply, try to avoid changes in price level by using monetary policy. Deflation can lower economic output. Central bankers try to stabilize prices to protect economies from the negative consequences of price changes.

Business Cycle: The economics of a depression were the spur for the creation of "macroeconomics" as a separate discipline field of study. During the Great Depression of the 1930s, John Maynard Keynes authored a book entitled "The General Theory of Employment", Interest and Money outlining the key theories of Keynesian economics. Keynes contended that aggregate demand for goods might be insufficient during economic downturns, leading to unnecessarily high unemployment and losses of potential output.

International Economics: International trade studies determinants of goods-and-services flows across international boundaries. It also concerns the size and distribution of gains from trade.

3. To Understand the Working of the Economy: The study of macroeconomic variables is indispensable for understanding the working of the economy. Our main economic problems are related to the behaviour of total income, output, employment and the general price level in the economy.

   In Economic Policies: Macroeconomics is extremely useful from the point of view of economic policy. Modern governments, especially of the underdeveloped economies, are confronted with innumerable national problems. They are the problems of overpopulation, inflation, balance of payments, general underproduction, etc.

4. Importance of Macroeconomics
   (i) It helps to understand the problems faced by the various countries.
   (ii) It facilitates to understand the functioning of the economic system.
   (iii) It helps in formulation of economic policies.
   (iv) It assists in dealing with the problem of allocation of goods and services.

5. Fallacy of Composition: Macroeconomic analysis the fallacy of composition is involved, i.e., aggregate economic behaviour is the sum total of individual activities. But what is true of individuals is not necessarily true of the economy as a whole.

   To Regard the Aggregates as Homogeneous: The main defect in macro analysis is that it regards the aggregates as homogeneous without caring about their internal composition and structure. The average wage in a country is the sum total of wages in all occupations, i.e., wages of clerks, typists, teachers, nurses, etc.

6. GDP Growth Profile: According to the first advance estimates of national income for the year 2012-13 of the Central Statistics Office (CSO), the Indian economy is expected to grow at its slowest pace in a decade at a mere 5 per cent in 2012-13, on the back of dismal performance by the farm, manufacturing and services sectors.

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Per Capita Income: The per capita income at current price during 2012-13 is estimated to be ₹ 68,747 as compared to ₹ 61,564 during 2011-12. India's per capita income, a gauge for measuring living standard, is estimated to have gone up by 11.7 per cent to ₹ 5729 per month in 2012-13.

Industry: Industrial growth has remained subdued since July 2011 due to weak global demand, weak supply linkages, high import costs, and sluggish investment activities. During 2012-13 (April to November), industrial growth slowed to 1.0 per cent.

1.12 SUMMARY

- Macroeconomics is the field of economics that studies the behavior of the economy as a whole and not just on specific companies, but entire industries and economies. This looks at economy-wide phenomena, such as Gross National Product (GDP) and how it is affected by changes in unemployment, national income, rate of growth and price levels.
- Macroeconomic theories usually relate the phenomena of output, unemployment, inflation, Economic Growth, Business Cycle and International Economics. Outside of macroeconomic theory, these topics are also extremely important to all economic agents including workers, consumers and producers.
- An economic system is the combination of the various agencies, entities that provide the
- Macroeconomics is extremely useful from the point of view of economic policy. Modern governments, especially of the underdeveloped economies, are confronted with innumerable national problems. They are the problems of overpopulation, inflation, balance of payments, general underproduction, etc.
- Macroeconomic analysis the fallacy of composition is involved, i.e., aggregate economic behaviour is the sum total of individual activities. But what is true of individuals is not necessarily true of the economy as a whole.
- The main defect in macro analysis is that it regards the aggregates as homogeneous without caring about their internal composition and structure. The average wage in a country is the sum total of wages in all occupations, i.e., wages of clerks, typists, teachers, nurses, etc.
- Unemployment is a term referring to individuals who are employable and actively seeking a job but are unable to find a job. Included in this group are those people in the workforce who are working but do not have an appropriate job.
- Inflation is defined as a persistent increase in the average price level in the economy, usually measured through the calculation of a consumer price index (CPI). The word "persistent" is of great importance in your understanding of the concept. A single increase in prices is not called inflation. When inflation occurs, there is a sustained increase in the price level. It is

also important not to confuse inflation with an increase in the price of a particular good or service.

- Deflation is defined as a persistent fall in the average level of prices in the economy. There are two broad explanations for a fall in the price level and economists have used these to categories "good deflation" and "bad deflation".
- Growth economics studies factors that explain economic growth – the increase in output per capita of a country over a long period of time. The same factors are used to explain differences in the level of output per capita between countries, in particular why some countries grow faster than others, and whether countries converge at the same rates of growth.
- The business cycle is the natural rise and fall of economic growth that occurs over time. The cycle is a useful tool for analyzing the economy. The economics of a depression were the spur for the creation of "macroeconomics" as a separate discipline field of study.
- International trade studies determinants of goods-and-services flows across international boundaries. It also concerns the size and distribution of gains from trade. Policy applications include estimating the effects of changing tariff rates and trade quotas.

1.13 KEY TERMS

- **Macroeconomics:** Macroeconomics is the branch of economics that studies the behavior and performance of an economy as a whole. It focuses on the aggregate changes in the economy such as unemployment, growth rate, gross domestic product and inflation.
- **Output and Income:** National output is the total value of everything a country produces in a given time period. Output can be measured as total income, or, it can be viewed from the production side and measured as the total value of final goods and services or the sum of all value added in the economy.
- **Personal Consumption:** Personal consumption is a flow variable that measures the value of goods and services purchased by households during a time period. Purchases by households of groceries, health-care services, clothing, and automobiles all are counted as consumption.
- **Unemployment:** Unemployment is a term referring to individuals who are employable and actively seeking a job but are unable to find a job. Included in this group are those people in the workforce who are working but do not have an appropriate job.
- **Inflation:** Inflation is defined as a persistent increase in the average price level in the economy, usually measured through the calculation of a consumer price index (CPI). The word "persistent" is of great importance in your understanding of the concept. A single increase in prices is not called inflation. When inflation occurs, there is a sustained increase in the price level. It is

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also important not to confuse inflation with an increase in the price of a particular good or service.

- **Deflation:** Deflation is defined as a persistent fall in the average level of prices in the economy. There are two broad explanations for a fall in the price level and economists have used these to categories "good deflation" and "bad deflation".
- **Economic Growth:** Growth economics studies factors that explain economic growth – the increase in output per capita of a country over a long period of time. The same factors are used to explain differences in the level of output per capita between countries, in particular why some countries grow faster than others, and whether countries converge at the same rates of growth.
- **Business Cycle:** The business cycle is the natural rise and fall of economic growth that occurs over time. The cycle is a useful tool for analyzing the economy. The economics of a depression were the spur for the creation of "macroeconomics" as a separate discipline field of study.
- **International Economics:** International trade studies determinants of goods-and-services flows across international boundaries. It also concerns the size and distribution of gains from trade. Policy applications include estimating the effects of changing tariff rates and trade quotas.

1.14 SELF-ASSESSMENT QUESTIONS AND EXERCISES

Short Answer Questions

1. Give the meaning of Macroeconomics.
2. Define the term Macroeconomics.
3. What is Output and Income?
4. What is Unemployment?
5. Give the meaning of Inflation.
6. Give the meaning of Deflation.
7. What is Economic Growth?
8. What is Business Cycle?
9. What is International Economics?

Long Answer Questions

1. Discuss the history of Macroeconomics.
2. Explain the Macroeconomic Schools of Thoughts.
3. Discuss the nature of Macroeconomics.
4. Explain importance of Macro Economics.

5. Discuss the limitations of Macro Economics.
6. Explain significance of International Economics.
7. Difference between Microeconomics and Macroeconomics.
8. Explain about Indian Economy and Road Ahead.
9. Discuss the concepts of Macroeconomics.
10. Explain various components of Economic Growth.
11. Discuss various stages of Business Cycle.
12. Explain about Macroeconomics and its interface with business and industry.

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UNIT 2 NATIONAL INCOME

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Structure

2.0 INTRODUCTION

National income is the sum total of the value of all the goods and services manufactured by the residents of the country, in a year, within its domestic boundaries or outside. It is a net amount of income of the citizens by production in a year. A variety of measures of national income and output are used in economics to estimate total economic activity in a country or region, including gross domestic product (GDP), gross national product (GNP), net national income (NNI), and adjusted national income NNI adjusted for natural resource depletion also called as NNI at factor cost. All are especially concerned with counting the total amount of goods and services produced within the economy and by various sectors. The boundary is usually defined by geography or citizenship, and it is also defined as the total income of the nation and also restricts the goods and services that are counted.

2.1 OBJECTIVES

After reading this unit, you will understand about:

- Describe in details about National Income
- Explain about the Concepts of National Income
- Discuss about the methods for measuring National Income
- Analyze the Problems of National Income

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2.2 NATIONAL INCOME

National income is the total value a country's final output of all new goods and services produced in one year. Understanding how national income is created is the starting point for macroeconomics. This relationship is expressed in the national income identity, where the amount received as national income is identical to the amount spent as national expenditure, which is also identical to what is produced as national output.

The first attempt to calculate national income of India was made by Dadabhai Naoroji in 1867 – 68, who estimated per capita income to be ₹ 20. The first scientific method was made by Professor VKRV Rao in 1931-32, but was not very satisfactory. The first official attempt was made by National Income Committee headed by Professor PC Mahalanobis in 1949. According to the National Income Committee Report (1954), National Income of India was ₹ 8710 crore and Per Capita Income was ₹ 225 in 1948 – 49. In India, Central Statistical Organisation (1949) now renamed as Central Statistical Office (CSO) has been formulating National Income.

Throughout macroeconomics the terms income, output and expenditure are interchangeable. Since, the 1940s, the UK government has gathered detailed records of national income, though the collection of basic data goes back to the 17th Century. The published national income accounts for the UK, called the 'Blue Book', measure all the economic activities that 'add value' to the economy.

National output, income and expenditure, are generated when there is an exchange involving a monetary transaction. However, for an individual economic transaction to be included in aggregate national income it must involve the purchase of newly produced goods or services. In other words, it must create a genuine addition to the 'value' of the scarce resources. In the case of a transaction involving selling a second-hand good, and which was new two years ago, no value is added to national income though the original purchase of the new good does. Transactions which do not add value are called transfers, and include second-hand sales, gifts and welfare transfers paid by the government, such as disability allowance and state pensions.

The simplest way to think about national income is to consider what happens when one product is manufactured and sold. Typically, goods are produced in a number of 'stages', where raw materials are converted by firms at one stage, then sold to firms at the next stage. Value is added at each, intermediate, stage, and, at

the final stage, the product is given a retail selling price. The retail price reflects the value added in terms of all the resources used in all the previous stages of production.

2.2.1 Meaning of National Income

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National income means the value of goods and services produced by a country during a financial year. It is the net result of all economic activities of any country during a period of one year and is valued in terms of money.

2.2.2 Definition of National Income

According to Marshall, "The labor and capital of 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."

According to A.C. 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."

According to Simon Kuznets, "National income is the net output of commodities and services flowing during the year from the country's productive system in the hands of the ultimate consumers."

2.2.3 Nature and Characteristics of National Income

National income is the total net value of all goods and services produced within a nation over a specified period of time, representing the sum of wages, profits, rents, interest and pension payments to residents of the nation. It is the total amount of income earned by the citizens of a nation. All incomes are based on production. In this sense, national income reflects the level of aggregate output.

The total net value of all goods and services produced within a nation over a specified period of time, representing the sum of wages, profits, rents, interest and pension payments to residents of the nation. National income is a measure of the total flow of earnings of the factor-owners through the production of goods and services. In a simple way, it is the total amount of income earned by the citizens of a nation. All incomes are based on production. In this sense, national income reflects the level of aggregate output.

National income is the measurement of flow of services and goods in economic system. The national wealth is the measurement of present assets available on a given time while the National income is the measurement of the production power of economic system in a given time period.

The figures of National income are based on the financial year (i.e. from 1st April to 31st March). The base of one year is taken for calculating National income which is called base year, as all the seasons come in a year. The data of estimation of India's National income are issued by Central Statistical Organization (CSO).

The Circular Flow of Economic Activities

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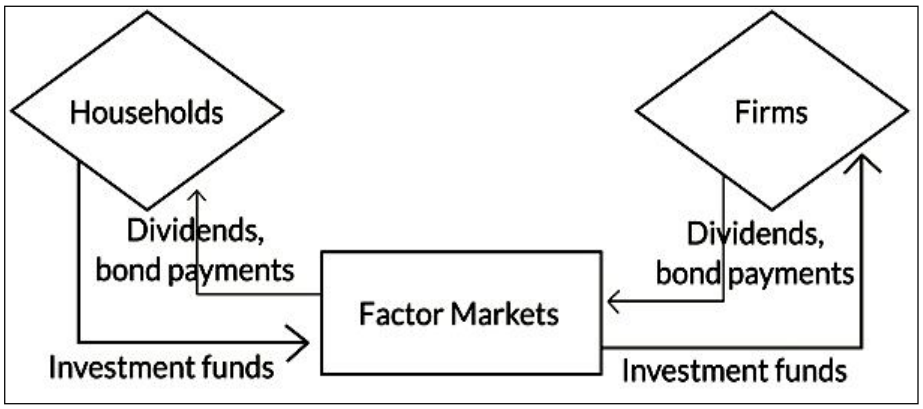

Fig. 2.1: The Circular Flow of Economic Activities

The 3 arrows in the diagram show the overall level of economic activities. Based on these 3 directions of flows, i.e. a flow of income, a flow of output and a flow of expenditures, economists develop 3 approaches to measure GNP.

1. ***Output or Value-Added Approach:*** The total value of all final goods and services (i.e. outputs) can be found by adding up the total values of outputs produced at different stages of production. This method is to avoid the so-called double-counting or an over-estimation of GNP. However, there are difficulties in the collection and calculation of data obtained.
2. ***Expenditure Approach:*** The amount of expenditures refers to all those spending on currently-produced final goods and services only. In an economy, there are 3 main agencies which buy goods and services. They are the households, firms and the government. In economics, we have the following terms:

   C = Private Consumption Expenditure (of all households)

   I = Investment Expenditure (of all firms)

   G = Government Consumption Expenditure (of the local government)

   The expenditure approach is to measure the GNP. We could not buy all our outputs because some are exported to overseas. Similarly, our consumption expenditures may include the purchases of some imports. In order to find the GNP, the value of exports must be added to C, I & G whereas the value of imports must be deducted from the above amount. Finally, we have:

   G N P at market prices = C + I + G + X - M

   G N P = G D P + Net Income from abroad
3. ***Income Approach:*** The income approach tries to measure the total flows of income earned by the factor-owners in the provision of final goods and services in a current period. There are 4 types of factors of production and 4 types of factor incomes accordingly.

National Income = Wages + Interest Income + Rental Income + Profit

The term profit can be further sub-divided into: Profit Tax; Dividend to all those shareholders and Retained Profit or retained earnings.

NOTES

2.3 IMPORTANCE OF NATIONAL INCOME

Importance of National Income can be summarized as follows:

1. Economic Policy

National income figures are an important tool of macroeconomic analysis and policy. National income estimates are the most comprehensive measures of aggregate economic activity in an economy. It is through such estimates that we know the aggregate yield of the economy and can lay down future economic policy for development.

2. Economic Planning

National income statistics are the most important tools for long-term and short-term economic planning. A country cannot possibly frame a plan 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.

3. Economy's Structure

National income statistics enable us to have clear idea about the structure of the economy. It enables us to know the relative importance of the various sectors of the economy and their contribution towards national income. From these studies we learn how income is produced, how it is distributed, how much is spent, saved or taxed.

4. 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.

5. Budgetary Policies

Modern governments try to prepare their budgets within the framework 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 as to avoid fluctuations in national income.

6. National Expenditure

National income studies show how national expenditure is divided between consumption expenditure and investment expenditure. It enables us to provide for reasonable depreciation to maintain the capital stock of a community. Too liberal allowance of depreciation may prove harmful as it may unnecessarily lead to a reduction in consumption.

7. 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.

NOTES

8. Standard of Living Comparison

National income studies help us to compare the standards of living of people in different countries and of people living in the same country at different times.

9. 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 to determine the subscriptions and quotas of different countries to international organisations like the UNO, IMF, IBRD etc.

10. Defence and Development

National income estimates help us to divide the national product between defence and development purposes. From such figures we can easily know how much can be spared for war by the civilian population.

11. Public Sector

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

Check Your Progress

1. Discuss in brief about National Income.
2. Explain in details about Importance of National Income.

2.4 TRENDS IN NATIONAL INCOME

India began the process of planned development nearly thirty years ago with the start of the First Five year plan in April, 1951. The central purpose of planning was identified as that of initiating "a process of development" which will raise living standards and open out to the people new opportunities for a richer and more varied life. In a broad sense, the basic objectives of planning in India can be grouped under four heads: growth, modernization, self-reliance and social justice. Since 1951, the NNP increased at a modest rate of 3.4 percent per annum.

Between 1950-51 and 1978-79 the underlying trend rate of growth of national income was 3.5 percent, of agricultural production 2.7 percent and of industrial production 6.1 percent. In per capital terms, income has grown at a trend rate of 1.3 percent, which, after allowing for the rising share of investment in national income, has meant a modest 1.1 percent per annum rise in per capita consumption.

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The growth of the economy during the planning era has to be judged in the context of the prolonged period of stagnation that preceded Independence. Judging by expert estimates of the national income of undivided India, the trend growth rate between 1900-01 and 1945-46 was 1.2 percent for national income, about 0.3 percent for agricultural production and 2.0 percent for industrial production.

The trend rate of growth suddenly picked up and for ten years during the eighties, the NNP increased at the rate of 5.6 percent per annum. In the two years 1990-91 and 1991-92 the country was trapped in a deep economic crisis and this resulted in a decline in the growth rate. The new economic policy of 1991 charted out a high growth path for India. The Eight Plan Period saw an increase in NNP of 6.7 percent per annum and the per capita income was as high as 4.6 percent per annum. In 2002-03, the economy slowed down and national income rose by only 4.2 percent. However, 9.0 percent increase in national income in 2003-04 kindled false hopes that the Indian economy was treading on the growth path. But high economic growth in this period was the result of remarkably good monsoon performance resulting in 9.6 percent increase in agricultural production and thus was illusory. The last three years have recorded an average annual rate of growth of national income of over 8%. The Eleventh Five year Plan has set a target for attaining an annual growth rate of 9%. Given the current trends and the general policy direction, this is a feasible proposition.

The Central Statistics Office (CSO) released the Quick Estimates of national income aggregates including savings and investment for 2010-11 on January 31, 2012 and the Advance Estimates of national income for 2011-12 on February 7, 2012.

Real GDP growth dropped sharply to 6.9 per cent in 2011-12, after two successive years of fairly robust growth of 8.4 per cent (Table 1). The growth rate in 2011-12 was only slightly higher than that recorded in 2008-09, the year in which the Indian economy was indirectly and adversely affected by the global financial crisis and reflected the impact of myriad factors viz., sharp deterioration in the external environment mainly due to the seemingly intractable sovereign debt ramifications in the Euro area, domestic monetary policy actions to restrain unabated inflation and inflationary expectations and non-monetary factors such as hindrances to execution of investment projects.

The deceleration in real GDP during 2011-12 vis-à-vis the previous year was evident across the major sectors – largely in agriculture on account of the base effect, followed by industry and, to some extent, in services. Within industry, while the mining & quarrying sector contracted and the growth rate of the manufacturing sector (which accounts for around 80.0 per cent of the industrial sector) nearly halved, the electricity, gas & water supply sector picked up sharply in 2011-12. Within services, the growth rates of all the sub-sectors moderated except those of 'trade, hotels and restaurants' and 'community, social and personal services'.

Thus, during the four years since the global financial crisis indirectly impacted on the Indian economy, the growth rate of real GDP averaged 7.6 per cent which was lower by nearly 2 percentage points than that during 2005-06 to 2007-08, with moderation reflected across most sub-sectors. Only, the 'community, social

and personal services' sub-sector accelerated sharply during the latter period, largely reflecting the impact of the fiscal stimulus measures during 2008-09 and 2009-10. Even so, the Indian economy generally outperformed the other economies, with the notable exception of China, right through 2007 to 2010 and is expected to continue to do so in 2011 and 2012.

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2.5 TRENDS IN DOMESTIC SAVING AND INVESTMENT

As per quick estimates released by CSO, gross domestic savings (GDS) rate moderated to 32.3 per cent of GDP in 2010-11 from 33.8 per cent in 2009-10 and a record high of 36.8 per cent in 2007-08.The decrease in the overall savings rate in 2010-11 was mainly due to fall in household sector and private corporate sector saving rates. The public sector savings, however, increased which was largely due to a decline in the deserving of Government Administration rather than an improvement in the savings of non-departmental enterprises.

The household sector continued to account for the predominant share (over 70 per cent) of overall savings. The household sector savings rate, which had hovered around 23 per cent since 2003-04, had shot up to a record high of 25.4 per cent in 2009-10 largely on account of a sharp jump in savings in life insurance. The household savings rate declined to 22.8 per cent in 2010-11. Within household savings, while the financial savings rate declined sharply to 10.0 per cent, physical savings rate increased to 12.8 per cent in 2010-11. As explained in the RBI's Annual Report for 2010-11, the decline in the net financial savings rate of the household sector reflected the slower growth in households' savings in bank deposits and life insurance as well as an absolute decline in investment in shares and debentures, mainly driven by redemption of mutual fund units. Even so, there was a shift in favour of small savings and currency during the year.

Households' financial liabilities, however, increased reflecting higher borrowings from commercial banks.

Notwithstanding the robust growth in real GDP growth rate during 2010-11, persistently high inflation, relatively slower adjustment of bank deposit rates and the volatility in the Indian equity market impacted by global macroeconomic uncertainties, affected the level and composition of net financial savings of the household sector.

2.6 CONCEPTS OF NATIONAL INCOME

The important concepts of national income are:

1. Gross Domestic Product (GDP)
2. Gross National Product (GNP)
3. Net National Product (NNP)

4. Personal Income
5. Disposable Income

NOTES

2.6.1 Gross Domestic Product (GDP)

Gross Domestic Product (GDP) is the total market value of all final goods and services currently produced within the domestic territory of a country in a year.

Four things must be noted regarding this definition.

First, it measures the market value of annual output of goods and services currently produced. This implies that GDP is a monetary measure.

Secondly, for calculating GDP accurately, all goods and services produced in any given year must be counted only once so as to avoid double counting. So, GDP should include the value of only final goods and services and ignores the transactions involving intermediate goods.

Thirdly, GDP includes only currently produced goods and services in a year. Market transactions involving goods produced in the previous periods such as old houses, old cars, factories built earlier are not included in GDP of the current year.

Lastly, GDP refers to the value of goods and services produced within the domestic territory of a country by nationals or non-nationals.

Gross domestic product is the money value of all final goods and services produced within the domestic territory of a country during a year.

Algebraic expression under product method is,

$GDP = (P \times Q)$

Where,

GDP = Gross Domestic Product

P = Price of goods and service

Q = Quantity of goods and service denotes the summation of all values.

According to expenditure approach, GDP is the sum of consumption, investment, government expenditure, net foreign exports of a country during a year.

Algebraic expression under expenditure approach is,

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

Where,

C = Consumption

I = Investment

G = Government expenditure

(X – M) = Export minus import

The components used to calculate GDP include:

Consumption:

(i) Durable goods (items expected to last more than three years)

(ii) Nondurable goods (food and clothing)

(iii) Services

Government Expenditures:

(i) Defense

(ii) Roads

(iii) Schools

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Investment Spending:

(i) Nonresidential (spending on plants and equipment), Residential (single-family and multi-family homes).

(ii) Business inventories

Net Exports:

(i) Exports are added to GDP

(ii) Imports are deducted from GDP

The GDP report also includes information regarding inflation:

(i) The implicit price deflator measures changes in prices and spending patterns.

(ii) The fixed-weight price deflator measures price changes for a fixed basket of over 5,000 goods and services.

2.6.2 Gross National Product (GNP)

Gross National Product is the total market value of all final goods and services produced annually in a country plus net factor income from abroad. Thus, 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 factor income from abroad. The GNP can be expressed as the following equation:

GNP = GDP + NFIA (Net Factor Income from Abroad)

or, GNP = C + I + G + (X – M) + NFIA

Hence,

GNP includes the following:

(i) Consumer goods and services.

(ii) Gross private domestic investment in capital goods.

(iii) Government expenditure.

(iv) Net exports (exports-imports).

(v) Net factor income from abroad.

2.6.3 Net National Product (NNP)

(a) Net National Product (NNP) at Market Price

NNP is the market value of all final goods and services after providing for depreciation. That is, when charges for depreciation are deducted from the GNP we get NNP at market price. Therefore'

NNP = GNP – Depreciation

Depreciation is the consumption of fixed capital or fall in the value of fixed capital due to wear and tear.

(b) Net National Product (NNP) at Factor Cost (National Income)

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NNP at factor cost or National Income is the sum of wages, rent, interest and profits paid to factors for their contribution to the production of goods and services in a year. It may be noted that:

NNP at Factor Cost = NNP at Market Price – Indirect Taxes + Subsidies.

2.6.4 Personal Income (PI)

Personal income refers to an individual's total earnings from wages, investment enterprises, and other ventures. It is the sum of all the incomes actually received by all the individuals or household during a given period. Personal income is that income which is actually received by the individuals or households in a country during the year from all sources. Personal Income is the total money income received by individuals and households of a country from all possible sources before direct taxes. Therefore, personal income can be expressed as follows:

PI = NI – Corporate Income Taxes – Undistributed Corporate Profits – Social Security Contribution + Transfer Payments

2.6.5 Disposable Income (DI)

The income left after the payment of direct taxes from personal income is called Disposable Income. Disposable income means actual income which can be spent on consumption by individuals and families. Thus, it can be expressed as:

DI = PI – Direct Taxes

From consumption approach,

DI = Consumption Expenditure + Savings

2.7 PER CAPITA INCOME

Per Capita Income refers to the measure of amount of money that is being earned per person in a certain area. Income per capita can apply to the average per-person income for a city, region or country and is used as a means of evaluating the living conditions and quality of life in different areas. It can be calculated for a country by dividing the country's national income by its population.

Per capita income is a useful economic indicator for an area. Basically, the per capita income is how much income each individual of a population would receive if the area's total income is divided equally among all members of the population. Per capita income is often used as a measure of the wealth of the population of a particular nation, especially when compared to other nations.

Formula:

To find the per capita income of an area, use the following formula:

PCI = I/P

Where,

PCI = Per Capita Income

I = Total Personal Income

P = Total Population

Per Capita Income in India

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The Gross Domestic Product per capita in India has recorded at 1165 US dollars in 2013-14. The GDP per Capita in India is equivalent to 9 percent of the world's average. GDP per capita in India averaged 462.43 USD from 1960 until 2013, reaching an all time high of 1165 USD in 2014 and a record low of 228.34 USD in 1960. GDP per capita in India is reported by the World Bank.

2.8 DETERMINANTS OF NATIONAL INCOME

1. Natural and Human Resources

The quantity and quality of a country's resources exert perhaps the most important influence on its national income. For example, fertile soil, ready sources of power, easily worked mineral deposits; a favourable climate, navigable rivers, etc. will have a beneficial effect on a country's productive capacity. Capital equipment may range from simple hand tools to the most up-to-date forms of industrial machinery. Generally, the achievement of an increasing output of goods is associated with increased investment in capital equipment. For example, a miner can extract a greater quantity of mineral resources from the earth with the aid of machinery than with only a pick and shovel. Thus, the effectiveness with which natural and human resources are used depends to a large extent on the capital equipment available.

The size of the working population is deter-mined by factors such as the age structure of the population and social attitudes. For example, the social attitude towards women is important in this respect. If the community judges that 'a woman's place is in the home', then the talents of many women may be wasted. The quality of the labour force will depend partly on the innate intelligence of the people and partly on the skills acquired through education and training.

Entrepreneurial skill, that is, the ability to make decisions, calls for sound judgment and some courage. The availability of the skill will affect the use of resources and, hence, the size of the national income.

2. State of technical knowledge

State of technical knowledge is also one of the very important factors which influence the size of the national income. The methods of production now-a-days have become so much roundabout that unless advance technical knowledge is available in the country, they cannot be adopted. The roundabout methods of production have considerably increased the production capacity of the country. If the state of technical knowledge is poor in the country, the size of the national income will be small, but if advance technical knowledge is available, then the size of the national income will be large. New methods of production and new ways of utilizing resources may increase the output of goods and services. A community which is keen to try

out new ideas or inventions in industry and commerce is likely to enjoy a higher standard of living than a country which is slow to adopt new ideas.

3. Political Stability

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Political stability is essential for the expansion of business activities. War and internal revolution interfere with production because they add to normal commercial risks. Thus, peace and a stable government promote confidence and encourage production. Political instability greatly hampers economic progress. If there is political stability in the country, the production can be maintained at the highest level. The size of the national income will be large. In case of political instability, the production will be adversely affected and so the size of the national income will be small.

4. Terms of Trade

Trade benefits all countries which engage in it, but the degree of benefit enjoyed by a particular country will vary according to changes in the price levels at which it sells its exports and imports. Favorable terms of trade occur if the prices of imports fall relatively to the prices of exported goods. This means that a larger quantity of imports can be obtained for a given quantity of exports. Hence, more goods are available and national income is increased.

5. Enterprise

The size of the national income also greatly depends upon the number and skill of the entrepreneurs. If the captains of the industries are efficient, they will combine; the various factors of production to the optimum proportion and so the volume of total production will be quite large, if managerial skill is lacking in the country, the size of the national income will be small.

6. The stock of factors of production

One of the very important factors which influence the size of the national income is the quality and quantity of the country's stock of factors of production. The factors of production are land, labor, capital and organization. Land supplies man with gifts of nature. It provides him with agricultural goods and. raw material for production. The production of land depends upon fertility of the soil, latitude, and climate and irrigation system in the country. If the land is fertile and is not handicapped in any way say by salinity, water logging, shortage of rainfall and adverse climate, the size of the national income will be quite large, if the quality of land is poor, the size of the national income will be small.

7. Capital

The volume of production is also very much influenced by the quality and quantity of capital available in the country. Capital now-a-days is considered to be the lifeblood of the modern industry. If the capital consists of primitive tools, the size of the national income cannot be large. But if modern types of plants are used for production, then they can enhance the productive capacity of a country.

8. Foreign Investment

A net income from foreign investment means that the creditor country can obtain goods and services from debtor countries without having to give goods and services

in return. Thus, if two countries have the same Gross Domestic Products then the country with the more favorable net return from foreign invest-ment will have the higher national income.

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2.9 USES OF NATIONAL INCOME STATISTICS

1. ***Standard of Living:*** The per capita GNP allows us to compare the standard of living of different nations. In general, a nation has a higher standard of living if its per capita GNP is greater than that of another nation.
2. ***Policy Formulation:*** In the compilation of GNP statistics, the government had already gathered a lot of information of the economy. The government can base on these figures to plan and decide its policies.
3. ***International Comparison:*** By converting the local GNP figures into a common unit, we can compare the standard of living of different nations. It helps to show the rate of growth or development of different nations.
4. ***Business Decision:*** The GNP figures can show the level of development of different industries and sectors of an economy. It helps the businessmen to plan for production.

2.10 METHODS FOR MEASURING NATIONAL INCOME IN INDIA

Production generate incomes which are again spent on goods and services produced. Therefore, national income can be measured by three methods:

2.10.1 Output (Product) Method

The product method is based on returns made by firms and public corporations concerning the annual value of their output. In most countries these returns are obtained through the census of production.

In India, a full census is taken every 10 years and sample censuses are taken in the intermediate years. Additional information may now be obtained from returns with respect to sales tax and/or excise duty.

National income is measured by the output method by calculating the total value of goods and services produced in the country during the year. The money value of goods and services produced in an economy in an accounting year is called Gross National Product (GNP). It is defined by J. R. Hicks as "the collection of goods and services reduced to a common basis by being measured in terms of money."

In most countries GNP or GDP is measured at current (market) prices. Table shows the national income of a hypothetical economy in an accounting year.

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			(₹. Crores)
Primary	1.	Agricultural crops	296
	2.	Livestock Products	31
	3.	Forest Products	75
	4.	Fishing	6
Secondary	5.	Minerals	8
	6.	Building and Civil Engineering	42
	7.	Manufactures, Public utilities and Craft Industries	11
Tertiary	8.	Transport and Distribution	88
	9.	Other Industries and Services (Such as Building, Insurance and Tourism)	21
	10.	Government	22
		Gross National Product (GNP)	600

Fig. 2.2: GDP

Thus, we see that all types of activities are covered the primary sector, e.g., agriculture, forestry and fishing; secondary sector, e.g., manufacturing and construction; and tertiary sector, e.g., distribution, transport, banking and insurance.

The national product is the total value of everything produced in the country. It is a measure of the goods and services becoming available to the nation for consumption or adding to wealth.

Problems

When we use the output method certain problems arise:

(i) Unpaid Service

The GNP figure includes only productive activity for which payment is received. Any unpaid service (s) will not be included. For example, housewives do a lot of work such as cooking, nursing, drawing of water, coaching children and so on. But they are not paid specifically for this. Any housekeeping allowance given to the wife by her husband is regarded as a transfer within the family. If, however, another person were employed and paid to undertake the cleaning of house, the payment to him (her) would be included in the figures, because she is providing a service for which she is being paid.

Thus, any service which people undertake for themselves will be excluded from the figures. This indicates one area for caution in comparing national income figures for different countries. In less developed countries like India, people do more things for themselves grow their own food, make their own clothes, etc. They do not pay for all the commodities and services they need. The national income of such a country will be that much less because most people provide so many unpaid (free) services for themselves.

(ii) Double Counting

Another problem is drawing up the production figures is the need to avoid double-counting, i.e., including the same item twice. For example, the value of the output of the steel industry is calculated, but some of the steel has gone to the car industry to be used in the production of cars.

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So if we simply calculate the value of the output of the car industry and add it to the figure for the steel industry, then some of the steel has been included twice in the calculations once as steel and once as part of the cars.

In order to avoid this problem of double counting, it is only the value added by each industry which is included, i.e., the value of the industry's output minus the value of the materials, etc. bought from other industries. Thus, we need figures of only the final selling values of goods and services.

(iii) Stock Appreciation

Another problem arises due to stock appreciation. Some final goods will be added to stocks and not incorporated in other goods in the current year. On the other hand, the value of current output will include the using up of stocks inherited from the past. These problems are dealt with by including net additions to stocks, which may be positive or negative, in the domestic product.

Net addition to stock must refer to additions to the physical stock of assets and not just the money value (price x quantity) of stocks. The latter can rise because the normal accounting of firms writes up the value of stocks as price rise. Such a rise in the book value of stocks is recorded as stock appreciation.

This item takes account of the fact that stocks of goods will increase in value from one year to the next simply because of price rise. For example, if there was a stock of 100 cars in a factory last year and the same number of the same type of cars this year, the value of the stock will be greater this year, because the price of the cars has risen—yet there has been no increase in the number of cars involved.

A deduction, therefore, needs to be made to remove the influence of price changes on stocks. In other words, stock appreciation must be subtracted from the estimates of stock changes. (As stock appreciation affects the calculation of profits, a similar deduction has to be made when using the income method).

(iv) International Transactions

The value of goods and services produced within the country includes their import content. Imports yields incomes to owners of resources in other countries. They are part of the domestic products of other countries. Hence, they must be deducted from the GNP. Exports yield income to the domestic factors. So they are included in the domestic product. Their import is dealt with in the general deduction of imports.

So we arrive at the following estimate:

GNP – Imports = Gross Domestic Product.

The domestic product is the value of every-thing produced in a particular territory. It differs from the national product by the amount of any factor incomes paid to (or by) non-residents. This interest paid to foreigners who have provided capital in a country is included in the domestic product since it is part of the value of what has been produced in the country. But it is excluded from the national product since the income does not accrue to residents in the country.

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2.10.2 The Income Method

The income method of calculating the national incomes is based on figures collected from the income tax departments. In advanced countries the majority of people have to submit returns about income for assessment. So a fairly accurate estimate of total incomes can be obtained in this way. By contrast, in a country like India, where few people make tax returns or where there is wide-scale tax evasion, the income method is not much reliable.

The income method of calculating national income is to work out the total of all incomes received by people and organizations in the country. The national income includes the income earned by all the resources of the country from their participation in productive (i.e., money-earning) activities.

Everything that is produced in an economy belongs to someone; it may be kept by the owner of the capital used in producing it, in which case it represents the interest on his capital; it may be shared out directly among those whose labour has produced it, as with fishermen, in which case it represents their wages; or it may be bought by another man with the money income which he has earned in another form of production. It, therefore, follows that the total national product must be equal to the total national income. The following table shows the different types (sources) of income in a hypothetical economy.

The national income can thus be measured by adding up all the incomes earned by the owners of the factors of production; it includes the total of all wages and salaries earned, rents and royalties, interest received on loans, and the profits of companies, private businesses, farms, fisherman and traders. This is called national income at factor cost, because it shows the costs of production as it is paid out or imputed to the factors employed.

One can compare this with the national product and the total will be the same. It is so because the national product is the total value of everything produced in the country and is a measure of the goods and services becoming available to the nation for consumption or adding to wealth (i.e., investment).

Problems:

(i) Mixed Income

Although this table attempts to separate the payments to different factors of production, 'mixed' income are derived from a mixture of factors. So, in practice, it is virtually impossible to separate the returns to land, labour and capital. An example is a wheat farmer, whose income is derived from land, capital and labour—all supplied by himself. Again, retailers (such as grocers) provide both labour and capital, but we cannot find out how much each factor has earned.

(ii) Transfer Income

It is important to include in the calculations only those incomes which correspond to the production of goods and services. Otherwise there may be double- entry, i.e., the same income may be counted twice. For example, a worker in a jute mill may receive ₹ 2,000 per month, of which ₹ 302 is taxed away by the government.

A freedom fighter receives a pension of ₹ 300 per month. The total income for both is ₹ 2,300; yet only ₹ 2,000 of this corresponds to productive activity. Therefore, the pension should not be included. The figure for total income would then be ₹ 2,000 — corres-ponding to the amount of production involved.

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There are other payments which do not correspond to the production of goods and services—unemployment compensation and other social security payments, interest on government bonds, subsidies to poor families, scholarships to students, pocket money paid by parents to children, gift by one individual to another (within the same country). Such incomes are paid to the recipients out of the earnings of producers by means of taxes, insurance contributions and gifts. These incomes differ from the incomes of the factors of production, called factor incomes.

Interest on national debt is also counted as a transfer income of its recipients because it is paid out of taxes without any current goods and services being made available in return. Such payments are known as 'transfer payments'. These are to be excluded when calculating national income.

These are excluded from national income because such incomes do not represent payment for contributing to the production of goods and services. Thus, recipients of retirement pensions, family allowances, students' grants and social security benefits do not make any current contribution to society's output of goods and services.

Taxes which transfer income from the factors of production to the relevant beneficiaries are called transfer payment.

The sum-total of all incomes includes both factor incomes and transfer incomes. Since the latter are paid of the former without any goods and services being made available as a result, they exaggerate the flow of income in real terms. They are double-counted, once as factor incomes and again as transfer incomes. They must, therefore, be excluded from national income.

(iii) Imputed Income

One item which often creates problem is 'ownership of dwellings'. People who let out houses for rent are providing a service. So the rents received by them must be included in the national income figures. But account must also be taken of owner-occupied houses. No rent is actually paid here. But the houses provide the same service to the dwellers as rented accommodation. The problem is overcome by imputing a rent to such houses, i.e., the amount the owners would probably have received if they had rented the houses.

(iv) Government Services

There are many services provided by the government of a country which satisfy the collective wants of the community as opposed to the individual wants of the citizens. Thus, administration through the civil service, defence by the armed forces, protection by the police force, justice through the law courts, health care and education are provided by the state.

Each citizen does not pay according to the amount of such services that he (or she) wants. A pacifist has to help to pay for defence; a wealthy person has to

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help in the provision of social health and education services which he or she may never use. This list of anomalies could be greatly extended. Is it, then, realistic to include the incomes derived from producing such services as part of the income derived from satisfying wants?

In fact, government services of this kind are included in the national income on the ground that the community pays for them simply because it surely needs them.

(v) Net Factor Income from Abroad

Some people and firms earn income by producing goods and services or owning property in other countries. Such incomes will not be included in calculations based on the earnings of factors within the country (the domestic income) and must be added to the total.

On the other hand, some of the domestic income is earned by non-residents as a result, for example, of the operation of foreign firms within a country. These incomes must be deducted when computing the national income. These two adjustments can be made together by adding net income from abroad if it is positive or by deducting it if it is negative.

2.10.3 The Expenditure Method

A third way of arriving at this same total is to add up the total national expenditure. We have to include private and government expenditure and the value of newly created capital. If everything we buy were produced at home and nothing were sold abroad, then the total national expenditure would be equal to the total income and to the total national product.

But, of course, every country trades with others to a certain extent. Thus, unless the value of everything they export is equal to the value of their imports, national expenditure will be either greater or less than the national product and income.

Some countries export more than they import. They have an export surplus, which we may regard as a balance of unspent income. In such countries we have, therefore, to include the export surplus as an item in our total national expenditure. If there is an import surplus we have to deduct this from the total national expenditure.

For balancing this third account with the other two, we have to make one further adjustment. Expenditure at market prices includes, for some goods, a payment to the government as indirect tax like sales tax or excise duty. These taxes are not really a payment for any goods or services. So we deduct them from total expenditure to arrive at a final figure which is equal to the value of the national product or national income at factor cost.

The table shows that the major portion of the national product is enjoyed by the people as food, clothing, bicycles and other 'consumer' goods. A certain portion goes abroad as an export surplus. It is a form of savings which can later be turned into imports, thus enabling the country (under consideration), if necessary, to consume more at some future time than its current national product. Two other components of aggregate expenditure are: private investment (capital formation) and government expenditure (on currently produced goods and services).

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There are two other groups of spenders in the country whose expenditure must be included, namely, public authorities and firms. (Public authorities consist of central and local governments). With regard to the second item in Table, we are concerned only with the expenditure of public authorities on goods and services.

Expenditure on such items as pensions, student grants (i.e., loans and scholarships), unemployment benefit, etc. is not included, because such expenditure does not correspond to any production in the economy. The inclusion of such expenditure would not give a true indication of the value of the goods and services produced in the economy during the year. It is only expenditure on goods and services which is relevant here.

The expenditure method depends on some-what less accurate statistics because of the great number of retail outlets where most of the relevant transactions take place. Information about retailing, wholesaling and the provision of some service is obtained from the Census of Distribution. Additional information is obtained from sales tax (and excise duty) returns.

Problems:

When all the items are added, we arrive at total domestic expenditure at market prices. But this is not equivalent to national income. What we have worked out so far is the total amount spent in this country on goods and services, not the total amount spent on goods and services produced in this country.

When we use the expenditure method the following problems arise:

(i) Exports and Imports

Some of the goods produced in this country will be sold abroad. For example, when Indian cars are sold in Bangladesh, the expenditure takes place in Bangladesh and is, therefore, not included in any of the items mentioned so far in Table.

Yet the value of those cars will be included in the figure for total production in India. The same is true of all Indian exports. Therefore, if we are to ensure that Total Production = Total Expenditure, we must add to our previous figure the value of exports.

With regard to imports, the reverse is true. Money is spent in the country on goods which have not been produced in this country. For example, when we import pears from Australia, the expenditure on those pears is included in our figure for 'Total Domestic expenditure', yet the figure for the 'Production' of the pears will be included in the Australian national income statistics and not in ours. Therefore, there is again a danger of losing the equality of Total Production and Total expenditure. To remove this danger we must subtract the value of imports.

When exports and imports have been taken into account in this way, the new total is gross domestic expenditure at market prices.

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(ii) Indirect Taxes and Subsidies

However, we do not have an expenditure figure equivalent to the amount which producers receive for producing the goods and services during the year. For example, the amount paid by a consumer for a packet of cigarettes is not the amount received by the cigarette manufacturer. Part of the price is made up of tax and that money goes to the government, not to the cigarette manufacturers.

In cases like this, where there are taxes on goods and services ('indirect taxes' as they are called), the amount of the tax must be deducted from the expenditure figures.

The opposite argument applies to subsidies. These are amounts of money paid by the government to producers of certain goods in addition to the amounts received from the sale of the goods. For example, if there was a subsidy on milk production, the farmer would receive money from the buyers of the milk and also an extra amount from the government. To overcome this problem we must add subsidies to our expenditure figure.

When indirect taxes have been subtracted and subsidies added the total arrived at is gross domestic expenditure at factor cost, which will be the same as gross domestic product at factor cost.

We are now getting nearer to the final figure for national income, but there are still two more stages through which we must go before that figure is reached. The first of these is to take into account 'Net factor income from abroad.'

(iii) Factor Income from Abroad

We have covered income received from the sale of goods and services produced in this country. But some people in this country receive income as a result of their ownership of property abroad. For example, they receive interest on profits on their assets abroad.

Similarly, there is an outflow of money to people in foreign countries who own assets in this country. For example, foreign companies like the Mitsubishi Electric Company have factories in India.

When these flows of money are included in the figures under the heading 'net factor income from abroad' the result is known as Gross National Product at factor cost.

This shows the total of goods and services produced over the year together with income from property held abroad. But there has been a wearing out of machinery, etc. used in the production of that output.

So, to get a true indication of the amount that production has added to the country's wealth, one should set aside a certain amount of the year's output to cover this wearing out of capital. Hence, the final item in the calculation — capital consumption (or depreciation). When this amount is deducted, the result is Net National Product at factor cost, or, in other words, National Income.

These, then, are the various stages involved in calculating the National Income. It can be seen that at each stage one word or group of words is altered and when all the necessary alterations have been made, the National Income is found.

There are four main changes to remember and these are listed below:

Four Main Changes of National Income

A Problem Common to all Methods:

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The national income, product and expenditure can all appear inflated if no account is taken of the wearing out and using up of capital. The object of the computations is to measure the economic results of current activity. The production of any commodity involves the use of both labour and capital.

During the production process the capital depreciates, i.e., it is subject to wear and tear. This depreciation represents the contribution to production and income of assets inherited from previous periods and must be deducted from the totals if a realistic measure of the results of current activity is to be reached.

Gross national product minus depreciation = net national product

Gross national expenditure minus depreciation = net national expenditure

Gross national income minus depreciation = national income.

Depreciation is sometimes referred to as capital consumption, for obvious reasons. The maintaining of the capital of a country intact is of fundamental importance for ensuring a continued ability to achieve the prevailing standard of living. For measurements of capital consumption to be valid for this purpose it is necessary for them to be based on the current prices of the assets.

This is to say that depreciation must be calculated on the basis of the replacement costs, not the historical costs of relevant assets. If historical costs are used in a time of rising prices the figures for depreciation will underrate the using up of capital and thus project a falsely inflated picture of the results of current economic activity.

Another type of unmeasured production is work performed for cash and not reported as income to the government. Small jobs such as hair dressing and garbage removal are included in this category, as well as major productive activities of plumbers, painters and house-keepers.

Also, services are sometimes swapped, so that production is exchanged for production rather than cash. For example, a dentist might maintain the teeth of a lawyer in return for legal advice. Still another type of unmeasured production involves illegal goods or services, such as recreational drugs, and much under-world activities.

In recent years, the term underground economy has been used to refer to productive activities that are not reported for tax purposes and are not included in GDP. Although there is concern that these goods and services are not included in GDP, the primary concerns about the underground economy are lost tax revenue and the social harm resulting from some of these activities.

Several other important factors are related to the calculation of GDP: It fails to measure the impact of production and consumption on the environment; it does not account for future costs that may be incurred from current production; and it sometimes is not a sure indicator of changes in the quality of people's lives.

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Disposable and Personal Incomes

Disposable income (DI) figure tells us what actually gets into our hands, to dispose-off as we wish. To get the figure we have to subtract from the GNP figure depreciation, all taxes (both direct and indirect), retained earnings of the corporate sector, and then to add transfer payments as also or interest on national debt.

The disposable income figure is important because it is the sum that people divide between consumption spending and net personal saving. Of course, people also pay interest on loans out of this income. Business people keep a close watch on the trend of DI for obvious reasons.

Like DI, personal income (PI) removes depreciation and corporate saving from GNP and adds back all transfers incomes received by households.

The distinction between personal income and disposable income is that the former does not attempt to estimate personal income tax (which is basically a direct tax). If we exclude all direct taxes, PI would be identical with DI.

Money Income and Real Income

The most widely accepted measure of the standard of living of a country is per capita income or GNP per head. The figure is obtained by dividing the GNP by the total population. Changes in the standard of living can be assessed by comparing the figures for per capita income over periods of time.

In making comparisons between different years, it is important to use figures based on real terms rather than on money terms. The latter relates to prices but the real GNP measures physical quantities of goods and services. An increase in GNP due simply to a rise in prices leaves the community materially no better-off.

Thus, in order to compare GNP figures at different dates, allowance must be made for changes in prices. This is achieved by a method similar to the use for compiling index numbers. By this means, the output of a given year is valued at the prices of a chosen 'base' year—the year on which comparisons are being based. For example, if 1996 is the base year then the value of GNP or per capita income in succeeding years is estimated at constant (1996) prices.

In fact much of increase in national income figures between two years may be due merely to price increases. For example, in 1996 India's national income was 183,800 crores and in 1997 it was 201,073 crores. This shows a rise of about 9%. But during 1998 the rate of inflation was 4.6%; so this would account for much of the rise in national income. Therefore, the money income has to be deflated by the price index to arrive at real income.

The equation for determining real GDP is money GDP for a given year/price index number for that year x 100

= real GDP for the given year.

If exactly the same amount of goods and services were produced in India in 1998 as were produced in 1997, the national income figure on 1998 would still be greater because the prices of the goods and services have risen. The problem arises because the national income for each year is given in terms of current prices.

One way of overcoming this difficulty is to measure national income at constant prices. By this method, the national income figures for various years are

given in terms of the prices prevailing during one particular year. In the right hand column of Table, the national income figures for 1996, 1997 and 1998 are given at 1996 prices. We now clearly see the effect of eliminating price changes.

Even so, the comparison is not very accurate. It is because there are various problems connected with the construction and use of index numbers.

Secondly, there may be an increase in national income figures over time without any increase in output. This may occur because of non-monetary transactions becoming monetary ones. The national income statistics include only transactions involving money. Therefore, if a transaction, which was previously non-monetary, becomes a monetary one, the national income figure will increase, even though the same amount of work is done as before.

A simple example may make the point clear. Suppose in 1998 a housewife did all the clearing in the house herself, but in 1999 she decided to pay a cleaner ₹ 100 a month to do this. The national income for 1999 would be ₹ 1,200 greater than the 1998 figure for this reason alone yet there has been no change in the amount of work done. The same argument would apply to a man who previously serviced his own car but who then decided to take it to a garage to be serviced.

Advance Estimates of National Income

The Central Statistics Office (CSO), Ministry of Statistics and Programme Implementation has released the advance estimates of national income at constant (2004-05) and current prices, for the financial year 2012-13.

These advance estimates are based on anticipated level of agricultural and industrial production, analysis of budget estimates of government expenditure and performance of key sectors like, railways, transport other than railways, communication, banking and insurance, available so far. The advance estimates at current prices are derived by estimating the implicit price deflators (IPDs) at sectoral level from the relevant price indices. The salient features of these estimates are detailed below:

Estimates at Constant (2004-05) Prices

Gross Domestic Product

Gross Domestic Product (GDP) at factor cost at constant (2004-05) prices in the year 2012-13 is likely to attain a level of ₹ 55,03,476 crore, as against the First Revised Estimate of GDP for the year 2011-12 of ₹ 52,43,582 crore, released on 31st January 2013. The growth in GDP during 2012-13 is estimated at 5.0 per cent as compared to the growth rate of 6.2 per cent in 2011-12.

The sectors which registered growth rate of over 5 percent are 'Construction', 'trade, hotels, transport and communication', 'financing, insurance, real estate and business services', and 'community, social and personal services'. There may be slow growth in the sectors of 'agriculture, forestry and fishing' (1.8%), manufacturing (1.9%) and electricity, gas and water supply (4.9%). The growth in the mining and quarrying sector is estimated to be (0.4%).

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Agriculture

The 'agriculture, forestry and fishing' sector is likely to show a growth of 1.8 per cent in its GDP during 2012-13, as against the previous year's growth rate of 3.6 per cent. According to the information furnished by the Department of Agriculture and Cooperation (DAC), which has been used in compiling the estimate of GDP from agriculture in 2012-13, production of foodgrains is expected to decline by 2.8 per cent as compared to growth of 5.2 per cent in the previous agriculture year. The production of cotton and sugarcane is also expected to decline by 4.0 per cent and 6.5 per cent, respectively, in 2012-13. Among the horticultural crops, production of fruits and vegetables is expected to increase by 3.5 per cent during the year 2012-13 as against 5.1 percent in the previous year.

Industry

The manufacturing sector is likely to show a growth of 1.9 per cent in GDP during 2012-13. According to the latest estimates available on the Index of Industrial Production (IIP), the index of manufacturing and electricity registered growth rates of 1.0 per cent and 4.4 per cent, respectively during April-November, 2012-13, as compared to the growth rates of 4.2 per cent and 9.5 per cent in these sectors during April-November, 2011-12. The mining sector is likely to show a growth of 0.4 per cent in 2012-13 as against negative growth of 0.6 per cent during 2011-12. The construction sector is likely to show a growth rate of 5.9 per cent during 2012-13 as against growth of 5.6 per cent in the previous year. The key indicators of construction sector, namely, cement production and steel consumption have registered growth rates of 6.1 per cent and 3.9 per cent, respectively during April-December, 2012-13.

Services

The estimated growth in GDP for the trade, hotels, transport and communication sectors during 2012-13 is placed at 5.2 per cent as against growth of 7.0 percent in the previous year. This is mainly on account of decline of 3.4 per cent and 4.8 per cent respectively in passengers and cargo handled in civil aviation and decline of 3.1 per cent in cargo handled at major sea ports during April-November, 2012-13. There has been an increase of 4.3 per cent in stock of telephone connections as on November 2012. The sales of commercial vehicles witnessed an increase of 0.74 per cent per cent in April-December 2012. The sector, 'financing, insurance, real estate and business services', is expected to show a growth rate of 8.6 per cent during 2012-13, on account of 11.1 per cent growth in aggregate deposits and 15.2 per cent growth in bank credit as on December 2012 (against the respective growth rates of 17.2 per cent and 16.0 per cent in the corresponding period of previous year). The growth rate of 'community, social and personal services' during 2012-13 is estimated to be 6.8 per cent.

National Income

The net national income (NNI) at factor cost, also known as national income, at 2004-05 prices is likely to be ₹ 47,64,819 crore during 2012-13, as against the previous year's First Revised Estimate of ₹ 45,72,075 crore. In terms of growth

rates, the national income registered a growth rate of 4.2 per cent in 2012-13 as against the previous year's growth rate of 6.1 per cent.

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Per Capita Income

The per capita income in real terms (at 2004-05 prices) during 2012-13 is likely to attain a level of ₹ 39,143 as compared to the First Revised Estimate for the year 2011-12 of ₹ 38,037. The growth rate in per capita income is estimated at 2.9 per cent during 2012-13, as against the previous year's estimate of 4.7 per cent.

Estimates at Current Prices

Gross Domestic Product

GDP at factor cost at current prices in the year 2012-13 is likely to attain a level of ₹ 94,61,979 crore, showing a growth rate of 13.3 per cent over the First Revised Estimate of GDP for the year 2011-12 of ₹ 83,53,495 crore.

National Income

The NNI at factor cost at current prices is anticipated to be ₹ 83,68,571crore during 2012-13, as compared to ₹ 73,99,934 crore during 2011-12, showing a rise of 13.1 per cent.

Per Capita Income

The per capita income at current prices during 2012-13 is estimated to be ₹ 68,747 as compared to ₹ 61,564 during 2011-12, showing a rise of 11.7 per cent.

Estimates of expenditures on GDP, 2012-13

Along with the Advance Estimates of GDP by economic activity, the CSO is also releasing the Advance Estimates of expenditures of the GDP at current and constant (2004-05) prices. These estimates have been compiled using the data on indicators available from the same sources as those used for compiling GDP estimates by economic activity, detailed data available on merchandise trade in respect of imports and exports, balance of payments, and monthly accounts of central government. As various components of expenditure on gross domestic product, namely, consumption expenditure and capital formation, are normally measured at market prices, the discussion in the following paragraphs is in terms of market prices only.

Private Final Consumption Expenditure

Private Final Consumption Expenditure (PFCE) at current prices is estimated at ₹ 57,05,857 crore in 2012-13 as against ₹ 50,56,219 crore in 2011-12. At constant (2004-05) prices, the PFCE is estimated at ₹ 34, 72,980 crore in 2012-13 as against ₹ 33,34,900 crore in 2011-12. In terms of GDP at market prices, the rates of PFCE at current and constant (2004-05) prices during 2012-13 are estimated at 56.9 per cent and 59.7 per cent, respectively, as against the corresponding rates of 56.3 per cent and 59.2 per cent, respectively in 2011-12.

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Government Final Consumption Expenditure

Government Final Consumption Expenditure (GFCE) at current prices is estimated at ₹ 11,86,726 crore in 2012-13 as against ₹ 10,42,677 crore in 2011-12. At constant (2004-05) prices, the GFCE is estimated at ₹ 6,60,630 crore in 2012-13 as against ₹ 6,34,559 crore in 2011-12. In terms of GDP at market prices, the rates of GFCE at current and constant (2004-05) prices during 2012-13 are estimated at 11.8 per cent and 11.4 per cent, respectively, as against the corresponding rates of 11.6 per cent and 11.3 per cent, respectively in 2011-12.

Gross Fixed Capital Formation

Gross Fixed Capital Formation (GFCF) at current prices is estimated at ₹ 29,93,873 crore in 2012-13 as against ₹ 27,49,072 crore in 2011-12. At constant (2004-05) prices, the GFCF is estimated at ₹ 19,44,279 crore in 2012-13 as against ₹18,97,309 crore in 2011-12. In terms of GDP at market prices, the rates of GFCF at current and constant (2004-05) prices during 2012-13 are estimated at 29.9 per cent and 33.4 per cent, respectively, as against the corresponding rates of 30.6 per cent and 33.7 per cent, respectively in 2011-12. The rates of Change in Stocks and Valuables at current prices during 2012-13 are estimated at 3.0 per cent and 2.4 per cent, respectively.

Limitations of National Income Statistics

GNP is a measure of the overall flow of goods and services, as well as to show the general welfare of the people. It aims not only at the level of cost of living but also the standard of living. It is quite correct to show the cost of living but there are some limitations on the GNP statistics to indicate the standard of living of an economy.

1. Price Changes

A higher nominal GNP of a nation may not mean that the standard of living is better. If the prices increase at a high rate, the real GNP may even fall.

2. Omittion or Under-estimation

(i) ***Voluntary Services:*** GNP figures do not include the contribution of the voluntary agencies which raise the general welfare. In this respect, the GNP figures under-estimate the level of welfare. The voluntary work of housewives is also neglected by the GNP figures.

(ii) ***Leisure:*** It is also a source of welfare and raises our standard of living, e.g. the welfare enjoyed with a Chinese New Year Holiday. However, the monetary value is difficult to calculate.

(iii) ***Illegal Activities:*** Drug trafficking and illegal gambling are activities omitted in the value of GNP. It is difficult to determine its effect on the welfare of an economy.

(iv) ***Undesirable Effects of Production:*** GNP figures had not considered the effects of pollution, traffic congestion on the economy. They have lowered our standard of living.

3. Problems of Comparison

(i) ***Output Composition:*** Nations with the same GNP may have different living standard because their output composition may be different. In general, a higher level of consumer goods and services in the GNP indicates a higher current level of living standard.

(ii) ***Distribution of Income and Wealth:*** If income is obtained by a small rate of people in a nation, the general living standard is still low compared with a nation having a more evenly distributed income or GNP.

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4. Other Limitations

(i) ***Population Size:*** A large population has a lower living standard even if its GNP is the same as that of a small population. The per capita GNP is more useful to compare the 2 nations.

(ii) ***National Defense:*** If a nation has spent a lot of resources in the production of weapons and so on, its living standard may not be improved.

2.11 PROBLEMS OF MEASURING NATIONAL INCOME

The several problems of measuring of national income are as follows:

1. Exclusion of Real Transactions

In measuring national income from the output side only those items which are purchased and sold through the market are included. However, all direct sales of various goods and services are excluded. In other words, GDP includes the money value of those items which are sold through the market at current prices.

In developing countries like India a major portion of output is not sold through the market. Yet these are produced by using economic resources and satisfaction is derived from consuming various non-marketed goods and services. Examples are barter transactions and various free services rendered at personal levels.

Many useful services are produced by members of households for the benefit of themselves or their families. Husbands and wives perform useful services for themselves and their families when they prepare meals, make household repairs, and handle their own financial affairs.

The value of these services is not included in GDP because they do not represent services purchased through market transactions. The value of the work people do at home for themselves and their families has been estimated to be about one-third of India's GDP. If this estimate is correct, GDP significantly undervalues the total output of the nation by excluding non-market household production.

Perhaps you can see this more clearly if you imagine each husband paying his wife for her services and each wife paying her husband for his services. These services would now become market services and would be included in GDP.

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Similarly, if more people remain single and hire housekeepers to do work that spouses would normally do without monetary compensation, GDP will increase.

Some non-market transactions, however, are included in GDP. For example, homeowners who live in their own homes enjoy the housing services their homes provide. In the National Income and Product Accounts, these owner-occupiers are viewed as being in the business of renting their homes to themselves. An estimate of the value of housing services enjoyed in this way is included in GDP.

In addition, GDP accounts impute the value of farm products consumed on farms and food, clothing, and lodging furnished to employees. The imputed market values of these goods and services are also included in GDP. Of course, the goods and services made available by governments, such as national defence, are not sold in markets.

However, their value is reflected in GDP because government purchases of labour and products are a component of GDP.

Similarly, many workers in rural areas, engaged mainly in the agricultural sector, get their wages in kind in terms of food and accommodation. But any wages and salaries paid in kind is not included in national income. The reason is that it is not possible to find out the market value of such factor payments accurately.

For the same reason, incomes from illegal activities which are not reported to tax authorities are excluded. Examples of such incomes are incomes from smuggling, unauthorised gambling, black marketing and other illegal and immoral activities. So expenditure on the purchase of a smuggled camera is not final expenditure and is thus not a part of national income.

Transactions in second-hand goods are also excluded for avoiding double (multiple) counting but expenditure on repair of an old good such as TV set or car is part of final expenditure and is, therefore, included in national income. For all these reasons the official estimate of GDP does not give us the correct GDP figure.

2. The Value of Leisure

All of us place some value on our time. We sell some of our time to employers for labour income; however, we retain much of it for our own use of leisure. Some of this leisure is used to render household services that escape inclusion in GDP. The satisfaction we get from recreational activities and other uses of our leisure time are also not included in GDP.

3. Cost of Environmental Damage

The people of a country may be able to enjoy more and better goods and services each year, but they must also put up with more congestion, dirty air, polluted water and other environmental costs that decrease the quality of their lives. Costs are associated with pollution and other aspects of industrial activity that damage the environment.

The costs of environmental damage are not subtracted from the market value of final products when GDP is calculated. Some economists, therefore, believe that GDP overestimates the value of output by failing to take into account environmental costs of production.

4. The Underground Economy

India has a vast underground economy. This economy consists of transactions that are never reported to tax and other government authorities. It includes transactions involving illegal goods and services, such as trading in harmful drugs, gambling, smuggling and prostitution. These illegal goods and services are final products that are not included in GDP.

The transactions of the underground economy also include activities by people who do not comply with tax laws, immigration laws, or government regulations and who do not report their income to tax authorities. The underground (unofficial) economy is also called parallel economy.

5. Transfer Payments and Capital Gains

All domestic transfer payments (personal, private and government) are excluded from national income of a country. For example, if an individual receives a cash gift from his father who is also a resident of India, it will not be a part of India's national income. The same argument is valid if a student receives Tata Foundation Scholarship for higher studies. This is an example of business transfer payments.

Another example of transfer is the subsidy received by producers of milk from the government. Still another is retirement pension. A surprise omission from national income accounts is interest on government bonds. It is an example of government transfer. It is excluded from national income because the government pays interest on bonds not from profits of public sector enterprises but by imposing tax on people.

So there is transfer of income from taxpayers to bondholders. But there is no net increase in society's output of goods and services in the process. And it may be a happy coincidence if the same individual is both a taxpayer and a bondholder at the same time. So net interest paid by government (interest paid to individuals less interest received from state governments from loans and advances) is not a par: of national income.

However, the treatment of interest on private (corporate) bonds and debentures is different. It is not transfer income and is thus included in national income. The reason is that a company pays interest on its bonds and/or debentures from its current sales revenue for receiving a useful productive input, viz., financial service. However, any transfer payment from abroad will be a part of a country's national income. Capital gains are also a form of transfer payments and are, therefore, excluded from national income. Let us consider, for instance, the case of an individual who sells shares in the stock exchange and makes a capital gain of ₹ 50,000. This money just gets transferred from the buyer to the sellers of shares. But there is no change in society's output of goods and services nor is any income generated in the process.

6. Valuation of Inventories

We have already noted how inventories are to be treated in national income accounts. However, while estimating national income of a country, one problem has to be faced. This problem arises due to price level changes, i.e., inflation and deflation which lead to stock appreciation or depreciation. And the national income

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accountants have to face certain problems associated with the valuation of inventories.

Two methods are normally used for inventory valuation, viz., (i) the market price method and (ii) the factor cost method. According to the market price method, stock appreciation (increase in inventory) is valued at current market prices of goods held in inventories. It may be noted that market price of every item stocked includes imputed (notional) profit which may or may not be realised in the same year.

On the other hand, if the factor cost method of valuing inventories is used, imputed profit is excluded from cost calculation. This is the usual practice.

In fact, during inflation, the market value of inventories and reported profits will be higher than they actually are. So they have to be deflated by the price index (or the GDP deflator) to neutralise the effects of inflation. Otherwise, a company will be required to pay extra tax on inflated profits.

And it will not be able to retain a substantial amount of earnings, e.g., it will find it difficult to replace an old machine when it wears out completely. It may be noted that during inflation such reported profits are partly illusory (because they are the result of favourable market conditions and not increased volume of sales).

So if such profits are not deflated appropriately, nominal profits will be higher than-real profits. And, as a result, a company will have to pay more taxes than it is supposed to pay.

Therefore, its undistributed profit will also be less than what it should be. Therefore, it will not be possible to set aside adequate funds for depreciation. Old machines cannot be replaced when they wear out completely.

The economy's existing stock of capital cannot be maintained. And it will not be possible to produce even the economy's current level of output, not to speak of increasing the GDP through an act of net investment.

However, there is no guarantee that each individual item existing at the beginning of an accounting year will also exist at the end of the year.

Since inventories are both flow and stock variables, new items are stocked every year for future sales and old items stocked earlier are sold in the current period. In other words, some items disappear from the stock as they are sold and others are added to stock. Thus inventories involve a dual transaction. So they are always a troublesome item in the national income accounts of a country.

7. Self-Consumption

A special problem arises in agriculture which is the most dominant sector in less developed countries (LDCs) like India. Subsistence farmers who produce food for themselves and their family members consume a major portion of their own output every year. Since this portion is not sold through the market, it is excluded from GDP. The reason is that it is difficult to measure the market value of this output. A lot of arbitrariness is involved in the process of measuring it.

8. Lack of Official Records

Another problem arises due to lack of reliable data. The reason is that many people in LDCs like India sell their output through the market no doubt but they do not maintain any official accounts of their transactions.

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For example, most road-side small traders, (retailers) as also many business enterprises in the unorganised sectors (mainly sole proprietorship organisations or single-owner firms) and self-employed persons do not keep proper records of their incomes and expenses.

This is why it is difficult to include proprietor's income (which is essentially a mixed income) in the national income accounts of a country. However, in theory, such income is a part of national income. The reason is that it is earned through market transactions.

9. Imputed Income

Imputed income such as income from owner-occupied houses and flats is a part of a person's taxable income. Therefore, it is a part of national income. Such income is fixed on the basis on notional rent. Even if an individual keeps his house vacant he has to pay tax on notional rent.

In this case, the value of the service rendered by the house has to be imputed. The same thing is true of unintended inventories. For example, if a firm is not able to sell its entire output during the current year, the unsold stock will have to be valued at the current market price and included in national income.

10. Valuation of Government Service

Finally, government services provided to people free of cost are also to be included. However, it is very difficult to find the true values of such services, since these are not sold through the market. As Prof. Amit Bhaduri comments, the valuation of services of many public goods like a museum or a park becomes highly problematic.

This, in turn, raises the question of how to evaluate the economic contribution, i.e., value added of the government which is the provider of public goods like national defence, law and order, etc. for which no market prices exist. In the absence of market prices for many types of public services, the problem of their valuation must be somewhat arbitrarily settled by accounting conventions.

It may also be mentioned here that to avoid such arbitrariness, national income accounting procedure in centrally planned or socialist economies deliberately excludes value added by the entire 'service sector' including the government. This results in an estimate of material production in the economy excluding services, for which the product method of accounting is better suited.

Check Your Progress

3. Discuss the concepts of National Income.
4. Explain in details about problems of measuring National Income.

2.12 ANSWERS TO 'CHECK YOUR PROGRESS'

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1. National income means the value of goods and services produced by a country during a financial year. It is the net result of all economic activities of any country during a period of one year and is valued in terms of money. A variety of measures of national income and output are used in economics to estimate total economic activity in a country or region, including gross domestic product (GDP), gross national product (GNP), net national income (NNI), and adjusted national income NNI adjusted for natural resource depletion also called as NNI at factor cost. All are especially concerned with counting the total amount of goods and services produced within the economy and by various sectors.
2. Importance of National Income.

   (i) Economic Policy: National income figures are an important tool of macroeconomic analysis and policy. National income estimates are the most comprehensive measures of aggregate economic activity in an economy.

   (ii) Economic Planning: National income statistics are the most important tools for long-term and short-term economic planning. A country cannot possibly frame a plan without having a prior knowledge of the trends in national income.

   (iii) Economy's Structure: National income statistics enable us to have clear idea about the structure of the economy. It enables us to know the relative importance of the various sectors of the economy and their contribution towards national income. From these studies we learn how income is produced, how it is distributed, how much is spent, saved or taxed.
3. Gross Domestic Product (GDP)

   Gross Domestic Product (GDP) is the total market value of all final goods and services currently produced within the domestic territory of a country in a year.

   Gross National Product (GNP)

   Gross National Product is the total market value of all final goods and services produced annually in a country plus net factor income from abroad. Thus, 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 factor income from abroad.

   Net National Product (NNP)

   Net national product (NNP) is gross national product (GNP), the total value of finished goods and services produced by a country's citizens overseas and domestically, minus depreciation. NNP is often examined on an annual basis as a way to measure a nation's success in continuing minimum production standards.

Personal Income (PI)

Personal income refers to an individual's total earnings from wages, investment enterprises, and other ventures. It is the sum of all the incomes actually received by all the individuals or household during a given period.

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4. Problems of measuring National Income.

   (i) ***Exclusion of Real Transactions:*** In measuring national income from the output side only those items which are purchased and sold through the market are included. However, all direct sales of various goods and services are excluded.

   (ii) ***The Value of Leisure:*** All of us place some value on our time. We sell some of our time to employers for labour income; however, we retain much of it for our own use of leisure. Some of this leisure is used to render household services that escape inclusion in GDP.

   (iii) ***Cost of Environmental Damage:*** The people of a country may be able to enjoy more and better goods and services each year, but they must also put up with more congestion, dirty air, polluted water and other environmental costs that decrease the quality of their lives.

   (iv) ***The Underground Economy:*** India has a vast underground economy. This economy consists of transactions that are never reported to tax and other government authorities. It includes transactions involving illegal goods and services, such as trading in harmful drugs, gambling, smuggling and prostitution.

2.13 SUMMARY

- National income means the value of goods and services produced by a country during a financial year. It is the net result of all economic activities of any country during a period of one year and is valued in terms of money. National income figures are an important tool of macroeconomic analysis and policy. National income estimates are the most comprehensive measures of aggregate economic activity in an economy. It is through such estimates that we know the aggregate yield of the economy and can lay down future economic policy for development.
- Gross Domestic Product (GDP) is the total market value of all final goods and services currently produced within the domestic territory of a country in a year. Gross National Product is the total market value of all final goods and services produced annually in a country plus net factor income from abroad. Thus, 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 factor income from abroad. Net national product (NNP) is gross national product (GNP), the total value of finished goods and services produced by a country's citizens overseas and domestically, minus depreciation. NNP is often examined on an annual basis as a way to measure a nation's success in continuing minimum production standards. Personal income refers to an individual's total earnings from wages, investment

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enterprises, and other ventures. It is the sum of all the incomes actually received by all the individuals or household during a given period.

- The income left after the payment of direct taxes from personal income is called Disposable Income. Disposable income means actual income which can be spent on consumption by individuals and families. Per Capita Income refers to the measure of amount of money that is being earned per person in a certain area. Income per capita can apply to the average per-person income for a city, region or country and is used as a means of evaluating the living conditions and quality of life in different areas. It can be calculated for a country by dividing the country's national income by its population.
- The income method of calculating the national incomes is based on figures collected from the income tax departments. In advanced countries the majority of people have to submit returns about income for assessment. So a fairly accurate estimate of total incomes can be obtained in this way. Imputed income such as income from owner-occupied houses and flats is a part of a person's taxable income. Therefore, it is a part of national income. Such income is fixed on the basis on notional rent. Even if an individual keeps his house vacant he has to pay tax on notional rent.

2.14 KEY TERMS

- **National Income:** National income means the value of goods and services produced by a country during a financial year. It is the net result of all economic activities of any country during a period of one year and is valued in terms of money.
- **Economic Policy:** National income figures are an important tool of macroeconomic analysis and policy. National income estimates are the most comprehensive measures of aggregate economic activity in an economy. It is through such estimates that we know the aggregate yield of the economy and can lay down future economic policy for development.
- **Gross Domestic Product (GDP):** Gross Domestic Product (GDP) is the total market value of all final goods and services currently produced within the domestic territory of a country in a year.
- **Gross National Product (GNP):** Gross National Product is the total market value of all final goods and services produced annually in a country plus net factor income from abroad. Thus, 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 factor income from abroad
- **Net national product (NNP):** Net national product (NNP) is gross national product (GNP), the total value of finished goods and services produced by a country's citizens overseas and domestically, minus depreciation. NNP is often examined on an annual basis as a way to measure a nation's success in continuing minimum production standards.
- **Personal Income (PI):** Personal income refers to an individual's total earnings from wages, investment enterprises, and other ventures. It is the

sum of all the incomes actually received by all the individuals or household during a given period.

- **Disposable Income (DI):** The income left after the payment of direct taxes from personal income is called Disposable Income. Disposable income means actual income which can be spent on consumption by individuals and families.
- **Per Capita Income:** Per Capita Income refers to the measure of amount of money that is being earned per person in a certain area. Income per capita can apply to the average per-person income for a city, region or country and is used as a means of evaluating the living conditions and quality of life in different areas. It can be calculated for a country by dividing the country's national income by its population.
- **Output (Product) Method:** The product method is based on returns made by firms and public corporations concerning the annual value of their output. In most countries these returns are obtained through the census of production.
- **The Income Method:** The income method of calculating the national incomes is based on figures collected from the income tax departments. In advanced countries the majority of people have to submit returns about income for assessment. So a fairly accurate estimate of total incomes can be obtained in this way.
- **The Expenditure Method:** A third way of arriving at this same total is to add up the total national expenditure. We have to include private and government expenditure and the value of newly created capital. If everything we buy was produced at home and nothing were sold abroad, then the total national expenditure would be equal to the total income and to the total national product.
- **Imputed Income:** Imputed income such as income from owner-occupied houses and flats is a part of a person's taxable income. Therefore, it is a part of national income. Such income is fixed on the basis on notional rent. Even if an individual keeps his house vacant he has to pay tax on notional rent.

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2.15 SELF-ASSESSMENT QUESTIONS AND EXERCISES

Short Answer Questions

1. Give the meaning of National Income.
2. Define the term National Income.
3. What is Domestic Saving?
4. What is Investment?
5. What is Gross Domestic Product (GDP)?
6. Give the meaning of Gross National Product (GNP).

7. What is Net National Product (NNP)?
8. What is Per Capita Income?

Long Answer Questions

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1. Discuss about nature and characteristics of National Income.
2. Explain in brief about Importance of National Income.
3. Discuss about trends in National Income.
4. Explain in details concepts of National Income.
5. Discuss factors affecting National Income.
6. Explain uses of National Income Statistics.
7. Discuss about methods for measuring National Income in India.
8. Explain about problems of measuring National Income.

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UNIT 3 THEORIES OF WAGES, INTEREST AND EMPLOYMENT

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Structure

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3.0 INTRODUCTION

Wage is the distribution from an employer of a security expected returns or profits derived solely from others paid to an employee. Like interest is paid out to an investor on his investments, a wage is paid from company earnings to the employee on the employee's invested assets time, money, labor, resources, and thought. Wages are part of the expenses that are involved in running a business, and add value to the employee in honor of his principal protected note or net investment. Payment by wage contrasts with salaried work, in which the employer pays an arranged amount at steady intervals (such as a week or month) regardless of hours worked, with commission which conditions pay on individual performance, and with compensation based on the performance of the company as a whole. Waged employees may also receive tips or gratuity paid directly by clients and employee benefits which are non-monetary forms of compensation.

Interest is the monetary charge for borrowing money generally expressed as a percentage, such as an annual percentage rate (APR). Key factors affecting interest rates include inflation rate, length of time the money is borrowed, liquidity, and risk of default. Employment is a relationship between two parties, usually based on contract where work is paid for, where one party, which may be a corporation, for profit, not-for-profit organization, co-operative or other entity is the employer and the other is the employee.

3.1 OBJECTIVES

After reading this unit, you will understand about:

- Explain the theories of Wages
- Discuss the theories of Interest
- Analyze the Theories of Employment

3.2 THE CONCEPT OF WAGES

Wage is the distribution from an employer of a security expected returns or profits derived solely from others paid to an employee. Like interest is paid out to an investor on his investments, a wage is paid from company earnings to the employee on the employee's invested assets time, money, labor, resources, and thought. Some examples of wage distributions include compensatory payments such as minimum wage, prevailing wage, and yearly bonuses, and remunerative payments such as prizes and tip payouts. Wages are part of the expenses that are involved in running a business, and add value to the employee in honor of his principal protected note or net investment. Payment by wage contrasts with salaried work, in which the employer pays an arranged amount at steady intervals such as a week or month regardless of hours worked, with commission which conditions pay on individual performance, and with compensation based on the performance of the company as a whole. Waged employees may also receive tips or gratuity paid directly by clients and employee benefits which are non-monetary forms of

compensation. Since wage labour is the predominant form of work, the term "wage" sometimes refers to all forms or all monetary forms of employee compensation.

Payment may be calculated as a fixed amount for each task completed (a task wage or piece rate), or at an hourly or daily rate (wage labour), or based on an easily measured quantity of work done.

Payment by wage contrasts with salaried work, in which the employer pays an arranged amount at steady intervals (such as a week or month) regardless of hours worked, with commission which conditions pay on individual performance, and with compensation based on the performance of the company as a whole. Waged employees may also receive tips or gratuity paid directly by clients and employee benefits which are non-monetary forms of compensation. Since wage labour is the predominant form of work, the term "wage" sometimes refers to all forms (or all monetary forms) of employee compensation.

Wages are also a means of providing income for employees and as a cost of doing business to the employer. In a wider sense, wages mean any economic premium paid by the employer under some contract to his workers for the services delivered by them. In this way wages constitute of financial support, family allowance, relief pay and other benefits. Whereas in the narrow sense, wages are the price paid for the services of labour in the process of production and it count only the wages proper or performance wages.

3.2.1 Origin of Wages

Wage is a reward for the services rendered or remuneration for the work done and it is as old as the society itself. In the primitive days, wages were paid in kind, most common of them was grains and the food. But with the advent of industrialization wages form a complex problem and in almost all industrialised countries it became a sensitive area of public policy. Very soon the quantum of wages assumed a common cause of friction between the employers and the wage-earners.

Frequent disputes between employer and wage-earners resulted in strikes over the demand for wage-increase. The determination of adequate wages that should be justifiably payable to die workmen by the employer, was not merely an economic problem but a multidimensional phenomenon, necessarily involving relevant factors like place of industry, prices of the product, living standards, basic needs of die wage-earner and the governmental policy in a given society.

The natural instinct of the employer to keep the wage-bill to a minimum and workers struggle to secure a wage-increase to meet both ends, created a chaotic situation which demanded an immediate States intervention to protect the weaker section of the society, namely, workers, in view of its low bargaining capacity.

3.2.2 Meaning of Wages

Wages are a payment for the services of labour, whether mental or physical. Though in ordinary language an office executive, a minister or a teacher is said to receive a salary; a lawyer or a doctor a fee; and a skilled or unskilled worker a wage, yet in economics no such distinctions are made for different services and all of them are said to receive a wage.

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In other words, wages include fees, commissions and salaries. It is another thing that some may be receiving more in the form of real wages and less in terms of money wages and vice versa. We shall refer to this problem later on.

3.2.3 Types of Wages

Various types of Wages are as follows:

(i) Time and Piece Wages

Wages may be paid weekly, fortnightly, or monthly and partly at the end of the year in the form of bonus. These are time wages. But the bonus may be a task wage if a work is finished within a specified period or before that.

Sometimes, time wages are supplemented by wages earned by working extra time. They are over-time wages. Wages are also paid in accordance with the amount of work done, say in a shoe factory or a tailoring department as per one pair of shoes or pants manufactured.

If the rate per pair of shoes or for pants is 50, a worker will be paid according to the number of pairs of shoes or pants manufactured. These will be piece wages.

(ii) Money Wages and Real Wages

Money wages or nominal wages relate to the amount of money income received by workers for their services in production. Real wages include the various facilities, benefits and comforts which workers receive in terms of goods and services for their work. These are in addition to the money wages of workers.

3.2.4 Factors that Influence Real wages

Real wages depend upon the following factors:

(a) Price Level

The purchasing power of money depends upon the price level. When the price level rises, the purchasing power of money gets reduced, thus adversely affecting the real wages of workers. Every increase in the price level reduces the purchasing power of money. This leads to a fall in the real wages of workers.

(b) Money wages

The size of the pay packet received by the worker is an important determinant of his real wages. The greater the money wages, the greater will be the real wages, other things remaining the same.

(c) Regularity of Work

A permanent job, even though it carries a smaller money income, is considered to be better than a temporary job which may yield high reward in terms of money.

(d) Nature of Work

The nature of work also plays an important role in determining the level of real wages. Some jobs are pleasant, while others are not. Similarly, some occupations

are enjoyable while others are disagreeable. All these considerations have to be given weightage in determining real wages.

(e) Future Prospects

An occupation carrying the promise of better prospects of promotion in the future is considered to be better than the one which does not do so, even though the money wages offered by the latter may be high.

(f) Extra Benefits

In some occupations, employees receive in addition to their pay, some extra benefits.

For example, the manager of a firm gets in addition to his pay, a well-furnished bungalow, free medical help etc. Such benefits increase the real wage of a worker.

(g) Trade Expenses

This refers to the expenses one has to incur in the course of one's occupation. These expenses are high in some occupations while in others they may be moderate. These expenses should be deducted from the money income in order to arrive at the real wage.

(h) Social Prestige

The real wages of employees engaged in prestigious occupations are high as compared to the real wages of employees working in ordinary occupations.

(i) Form of Payment

Real wages are influenced by the form of payment. Generally, workers are paid money wages. But in certain occupations, in addition to money wages, workers receive subsidized ration or free lunch, and living quarters. All these facilities increase the real wages of workers.

(j) Conditions of Work

Conditions of work also affect real wages. In some cases, it is found that conditions of work are not congenial and they adversely affect their health. In such cases, the real wages of workers are low.

3.3 THEORIES OF WAGES

The most important theories of wages are as follows: 1. Wages Fund Theory 2. Subsistence Theory 3. The Surplus Value Theory of Wages 4. Residual Claimant Theory 5. Marginal Productivity Theory 6. The Bargaining Theory of Wages 7. Behavioural Theories of Wages.

3.3.1 Wage Fund Theory

This theory was developed by J.S.Mill. According to him, the employers set apart a certain amount of capital to pay wages for labourers. This is fixed and constant. This is called as wages fund. Wage is determined by the amount of wages fund and the total number of labourers.

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According to J.S.Mill, "wages depend upon the demand and supply of labour or as it is often expressed as proportion between population and capital. By population is here meant the number only of the laboring classes or rather of those who work for hire and by capital, only circulating capital".

Wage rate = Wage fund / Number of labourers

An increase in wage rate is possible only by an increase in wage fund or by a reduction in the number of labourers. Thus there exists a direct relation between wage rate and wages fund and inverse relation between wage rate and number of labourers. This theory also states that trade unions are powerless in rising the general wage rate.

Criticisms:

1. Wage fund theory states that the wage rate is found by dividing the wage fund by the number of workers. But it does not tell us about the sources of wages fund and the method of estimating it.
2. Wage fund theory is unscientific and illogical because it first decides the wages fund and then determines wages. But in reality, wages should be found first and from that wage fund should be calculated. This theory neglects the quality and efficiency of the workers in determining the wage rate. This is considered to be a basic weakness of the theory.
3. This theory neglects the quality and efficiency of the workers in determining the wage rate. This is considered to be a basic weakness of the theory.
4. This theory assumes that wages can increase only at the expense of profit. This is not correct. The operation of the law of increasing returns will lead to a great increase in total output which may be sufficient to raise both wages and profits.
5. The wages fund theory has been criticised by the trade unions for its assumption that wages cannot be increased through bargaining.
6. Wages fund theory has failed to explain the differences in wage rate.
7. This theory believes that wages are paid out of circulating capital. But when the process of production is short, wages are paid out of current production. When the process of production is long, wages are paid out of capital.

3.3.2 The Subsistence Theory of Wages

The theory was formulated by physiocrats. According to them wages would be equal to the amount just sufficient for subsistence. Lassale, a German economist developed this theory. According to this theory, wages are determined by the cost of production of labour or subsistence level. The wages so determined will remain fixed.

It actual wages are higher than the subsistence level, then population will increase leading to an increase in labour supply and lower wages. If on the other hand, the actual wages fall below the subsistence level, population will decrease

resulting in a decline in labour supply and rise in wages. Since there is a tendency for the wages to remain fixed at the subsistence level, it is called as Iron Law of Wages or Brazen Law of Wages.

This theory is based on two assumptions:

1. Food production is subject to the law of diminishing returns, i.e., there is a limit to expansion of food production.
2. Population increases at an increasing rate.

Criticisms:

1. The subsistence theory of wages explains wages from the supply side and ignores the demand side.
2. If all labourers must get the bare necessaries of life, all must get equal wages. But there are many differences in wages. Thus this theory ignores wage differences.
3. This theory asserts that wages are fixed at the subsistence level. Therefore, it assumes that the trade unions are powerless in increasing the wages. This is a wrong notion.
4. This theory is based on the Malthusian theory of population according to which a rise in wages above the subsistence level will lead to rapid increase in population. But experience shows that a rise in wages leads to higher standard of living and not increase in population.
5. This theory is pessimistic because it excludes all possibility of improvement in the conditions of labour either through increased efficiency or due to general economic progress.

3.3.3 The Surplus Value Theory of Wages

This theory was developed by Karl Marx (1849-1883). This theory is based on the basic assumption that like other article, labour is also an article which could be purchased on payment of its price i.e., wages. This payment, according to Karl Marx, is at subsistence level which is less than in proportion to time labour takes to produce items. The surplus, according to him, goes to the owner. Karl Marx is well known for his advocation in the favour of labour.

3.3.4 Residual Claimant Theory

This theory was propounded by Walker. According to this theory, rent and interest are contractual payments. After deducting rent and interest from total product, the employer will deduct his profits. What remains after deducting rent, interest and profits is wages. It is possible to increase wages by increasing the total product by improving the efficiency of the workers.

This theory has several defects:

1. This theory assumes that the share of landlords, capitalists and entrepreneurs are fixed and it is absolutely wrong.
2. It is not the worker who is the residual claimant but the entrepreneur.

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3. It does not explain the influence of trade union in wage determination.
4. The supply side of labour has been totally ignored by the theory.

3.3.5 Marginal Productivity Theory

Marginal productivity theory of wages is an extension of marginal productivity theory of distribution. According to this theory, wage for labour should be equal to the value of the marginal product under conditions of perfect competition. Marginal product is the addition made to total product by the employment of one unit of labour. The value of the marginal product of labour is equal to the price at which the marginal product can be sold.

Under conditions of perfect competition, an employer will continue to employ more and more of labourers till the value of the marginal product is equal to marginal factor cost (MFC). Marginal factor cost is the cost of employing an additional worker. In order to find out the marginal productivity of labour we have to keep the quantity of other factors constant while employing one more unit of labour.

The difference in total production is the marginal productivity. The employment of an additional unit of labour will result in increase in output and cost. As long as MPP is greater than MFC, the employer will employ additional units of labour. But he will stop employing additional units of labour when MPP=MC.

Assumptions:

This theory is based upon the following assumptions:

1. There is perfect competition in factor market and in product market.
2. Labour is homogeneous.
3. The law of diminishing returns operates in production.
4. There is free entry and exit of the firms.
5. There is perfect knowledge about the market conditions.
6. All factors of production can be substituted for each other.
7. There is free mobility of factors of production.
8. Factors of production are divisible.

Criticism:

The theory is found to be unsatisfactory and various criticisms have been leveled against this theory.

1. The theory deals with the demand side only. The supply side is totally ignored.
2. This theory is unjust because wages are determined by the marginal productivity. But justice demand that workers should be paid on the basis of average productivity.
3. Further, marginal productivity of the worker cannot be calculated as factors are not divisible into small units.
4. Factors of production are neither mobile nor perfect substitutes. Their Knowledge is also imperfect.

5. This theory assumes perfect competition in the product market. But the market for goods is characterised by imperfect competition.
6. Marginal product of labour depends not only on its support but also on the supply of other factors. If other factors are plentiful and labour is scarce, marginal product of labour will be high and vice versa.
7. This theory fails to explain the differences in wages. Rejecting the marginal productivity theory Marshall states, "This doctrine has been put forward as a theory of wages. But there is no valid ground for any such pretension. Demand and supply exert equally important influences on wages; neither has a claim to predominance; any more than has either blade of scissors, or either pier of an arch. The doctrine throws into clear light, one of the causes that govern wages".

3.3.6 The Bargaining Theory of Wages

John Davidson was the propounder of this theory. According to this theory, the fixation of wages depends on the bargaining power of workers/trade unions and of employers. If workers are stronger in bargaining process, then wages tends to be high. In case, employer plays a stronger role, then wages tends to be low.

3.3.7 Behavioural Theories of Wages

Based on research studies and action programmes conducted, some behavioural scientists have also developed theories of wages. Their theories are based on elements like employee's acceptance to a wage level, the prevalent internal wage structure, employee's consideration on money or' wages and salaries as motivators.

3.3.8 Discounted Marginal Productivity Theory

Taussig has given a modified version of the Marginal Productivity theory of wages. According to this theory, the wage for labour is determined not by its marginal product but by the discounted marginal product. Labourers cannot get the entire amount of the marginal product because production is a long drawn out process.

In the same way, sales also take time. As the labourers are poor and cannot wait till the product is sold, they have to be supported by the employers. The employer does not pay the full amount of the marginal product of labour. In order to compensate the risk involved in giving advance to the workers, the employer deducts a certain percentage from the final output. This deduction is made at the current rate of interest. It is the discounted marginal product that determines the wage of the labourers.

Criticisms:

1. This theory is abstract. It is "a dim and abstract one remote from the problem of real life".
2. It is very difficult to determine the discounted marginal product of labour.
3. This theory fails to take into account other factors which determine the wage rate.
4. This theory has failed to explain differences in wage rate.

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3.4 MINIMUM WAGES

Minimum wage is that wage which provides not only for the bare sustenance of life but also for the preservation of the efficiency of the worker. It is the minimum that must be paid to the worker to cover his and his family's bare necessities, including some measure of education, medical and other amenities.

3.4.1 Definition of Minimum Wages

Prof. Dobb defines a minimum wages as "the standard rate which a trade union attempts to establish by collective bargaining." The demand for the fixation of a minimum wage arose to forbid the payment of unduly low wages in 'sweated trades', i.e. trades in which work was done by hand for long hours and under unhealthy conditions.

Gradually, it has been extended to even non-sweated industries where labour is not properly organised and where wages are exceptionally low. These days a national minimum wage for all types of employments has been fixed by law.

3.4.2 Benefits of Minimum Wages

The following are the benefits from the fixation of minimum wages for workers:

(a) Increase in National Income

Fixing minimum wages are "unambiguously advantageous to the national dividend," according to Prof. Pigou. Minimum wages will so increase the incomes of workers that their consumption expenditures will increase which will, in turn, lead to an expansion of the consumers' goods industries and via acceleration principle to the capital goods industries. All this will tend to stimulate employment, output and national income.

(b) For Industry

Minimum wages prove beneficial both to the employers and the community by increasing the efficiency and productive capacity of the industry. Higher wages by raising the standard of living increase efficiency and even the bargaining power of the workers. Thus higher wages by raising productivity encourage employers to adopt better techniques of production and weed out the inefficient employees.

(c) Industrial Peace

Minimum wages, if related to the cost of living, as is the case in advanced countries, tend to reduce labour unrest and maintain industrial peace.

(d) Remove Exploitation

Minimum wages for sweated trades tend to remove exploitation of workers by employers. But there is the fear of unemployment if the workers do not have a strong trade union. The employers may recruit new workers and turn out the existing workers.

(e) Profit Squeeze

In industries where the demand for workers in inelastic, it is not possible for employers to turn out the workers when minimum wages are fixed. It will lead to profit-squeeze, i.e. reduction in profits. But the workers will receive higher wages.

(f) Price Rise

If, in the above situation, the employers are not prepared to cut down their profits, the burden of the minimum wage might be passed on to consumers by raising the prices of products.

(g) Equitable Distribution

In advanced countries where the unemployed are covered by unemployment relief, the workers will indirectly benefit from the imposition of minimum wages. When they become unemployed, they receive unemployment relief from the government. The money for this comes by taxing the relatively rich. This leads to more equitable income distribution.

3.4.3 Adverse Effects of Minimum Wages

There is no guarantee that the fixation of a minimum wage may be beneficial for workers and the economy. There are likely to be the following adverse effects of minimum wages:

(i) On Unemployment

The fixation of minimum wages is likely to lead to the unemployment of workers in many ways.

First, when minimum wages are fixed, the employers may dispense with the services of some workers who will become unemployed.

Second, if the employers are forced to pay minimum wages, they may install labour-saving machines and thus turn out some workers. This will depend on the elasticity of demand for the type of labour in question and for the product they manufacture.

Third, when the state fixes a minimum wage for all employments, it makes the supply curve of labour horizontal to an employer at that level. There is no possibility of paying the workers below that and exploiting them. The reduction in employment is also not possible, as all workers are to be paid the minimum rate.

Those employers who are not in a position to pay a minimum wage will not close down in the short-run. They will try to cover the increased costs by raising the price of the product and pass the burden on to the consumer.

(ii) On Industry

The fixation of minimum wages may lead to adverse effects on industry:

(a) An industry which cannot afford to pay minimum wages to its workers may close down.

(b) If minimum wages are also fixed for export industries above the competitive level, country's exports will suffer. For costs rise, profits

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shrink, output declines and the competitive strength of the industry falls in the face of world competition.

This will not only reduce employment but also the national income If the national minimum wage is fixed above the competitive level, similar results will follow on a much larger scale.

(c) The fixing of minimum wages often leads to the change in its personnel by a firm. If the minimum rate is the same for women and men, men may replace the former or the young may replace the old and the infirm workers.

If, however, special exemptions are granted from the minimum wage to sub-normal or slow workers as is the practice in Australia and England, the firm will employ more such workers and then turn them out when they have to be paid the minimum wage.

(d) It is commonly felt that with the fixation of a national minimum wage, the minimum will become the maximum. Employers already paying more will have the tendency to lower down the wages. They may thus profit from the fixation of minimum wages.

(iii) On Economy

When the fixation of minimum wages leads to unemployment, rise in costs and prices, and decline in profits and output, these adversely affect the economy.

Check Your Progress

1. Discuss the Concept of Wages.
2. Explain various types of Wages.

3.5 INTEREST

Interest is payment from a borrower or deposit-taking financial institution to a lender or depositor of an amount above repayment of the principal sum (that is, the amount borrowed), at a particular rate. It is distinct from a fee which the borrower may pay the lender or some third party. It is also distinct from dividend which is paid by a company to its shareholders (owners) from its profit or reserve, but not at a particular rate decided beforehand, rather on a pro rata basis as a share in the reward gained by risk taking entrepreneurs when the revenue earned exceeds the total costs.

For example, a customer would usually pay interest to borrow from a bank, so they pay the bank an amount which is more than the amount they borrowed; or a customer may earn interest on their savings, and so they may withdraw more than they originally deposited. In the case of savings, the customer is the lender, and the bank plays the role of the borrower.

Interest differs from profit, in that interest is received by a lender, whereas profit is received by the owner of an asset, investment or enterprise. (Interest may

be part or the whole of the profit on an investment, but the two concepts are distinct from each other from an accounting perspective.)

The rate of interest is equal to the interest amount paid or received over a particular period divided by the principal sum borrowed or lent (usually expressed as a percentage).

Compound interest means that interest is earned on prior interest in addition to the principal. Due to compounding, the total amount of debt grows exponentially, and its mathematical study led to the discovery of the number. In practice, interest is most often calculated on a daily, monthly, or yearly basis, and its impact is influenced greatly by its compounding rate.

3.5.1 Meaning of Interest

Interest is a payment made by a borrower to the lender for the money borrowed and is expressed as a rate percent per year. It is usually expressed as an annual rate in terms of money and is calculated on the principal of the loan. It is the price paid for the use of other's capital fund for a certain period of time.

In the real economic sense, however, interest implies the return to capital as a factor of production. But for all practical purposes, "interest is the price of capital." Capital as a factor of production, in real terms, refers to the stock of capital goods (machinery, raw-materials, factory plant etc.).

In the money economy, however for all practical purposes capital refers to finance or money capital i.e., the monetary fund's lent or borrowed for any purpose of expenditure from any source. In strict narrow sense, again, capital may refer to only funds borrowed for real investment in business by the business community from financial institutions.

3.5.2 Definition of Interest

In economics, Interest has been defined in a variety of ways. Commonly, Interest is regarded as the payment of the use of service of capital.

1. As Prof. Marshall has said – "The payment made by borrower for the use of a loan is called Interest."
2. According to Prof. J. S. Mill – "Interest is the remuneration for mere abstinences."
3. As Prof. Keynes has said – "Interest is the reward of parting with liquidity for a specified period."
4. According to Seligman – "Interest is the return from the fund of capital."
5. According to Carver – "Interest is the income which goes to the owner of capital."
6. According to Richard – "Interest is primarily a reward for waiting."
7. As per the opinion of Prof. Wicksell – "Interest may be defined as a payment made by the borrower of capital by virtue of its productivity as a reward for his capitalist's abstinence."

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3.5.3 Concept of Interest

Concept of Interest includes the gross interest and net interest. Gross interest refers to the entire payments made by the borrower to the lender on a certain amount of loan received for a period of time. It includes not only the payment for the use of money capital but also for risks, inconvenience and management. Net interest is the payment purely made for the use of money. Net interest rate is determined by the forces of demand and supply of funds or money. It generally relates to public and is comparatively low to gross interest.

3.5.4 Why Interest is Paid or Charged?

There are two views regarding Interest paid or is charged:

1. From Debtor's Point of View

Debtor's pay interest on capital because he is aware that capital has productivity and if it can be used in production there can be increase in income. Therefore, out of the earned income, a part of the income is paid to the creditor or a lender from whom money has been taken as loan is known as Interest.

Following are the important reasons for giving Interest:

Use of Capital: Whatever amount is paid to the owner of the capital for the use of the capital is known as Interest. Here, the capital is used in further production and whatever he earns, he pays a part of his earnings to the owner of the capital or the lender of the money.

Reward for Risk: Loan giving is a risk which lender takes at the time of giving loan or advancing money. Lender exposes himself to risk when he lends money and sometimes the loan become bad-debts. Therefore, it has been said that Interest is the reward for risk taking.

Interest is Reward for Inconvenience: When a lender gives loan of money he forgets its use for the duration of the loan, if he needs this amount for his personal use, he will have to undergo the inconvenience of arranging it from some other source. Thus, he feels inconvenience.

Expenses in Relation to Management of Business: For organising and running the business, businessman needs money. Money taken as loan for running and managing business, keeping accounts, maintaining standard of business etc. one has to arrange money and for that has to pay interest over the money.

2. From Creditor's Point of View

Creditors or lender of money demands Interest because he has taken pains in saving money, has suffered inconveniences in postponing his needs and has taken risk of bad debts. If he will not get Interest or some advantage of Interest he may lose interest in saving money or he may not be ready to bear inconveniences. Then, the formation of capital in the market will stop. Therefore, it can be said that the debtor's give Interest to creditors as capital has productivity and creditors demand interest as the lender of money has taken risk and has faced inconveniences, so he must get some reward for the pains of inconvenience and risk.

3.5.5 Types of Interest

There are two types or kinds of Interest:

1. Net Interest

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The payment made exclusively for the use of capital is regarded as net Interest or pure Interest. According to Prof. Chapman "Net Interest is the payment for the loan of capital when no risk, no inconveniences apart from that involved in saving and no work is entailed on the lender."

According to Prof. Marshall, "Net Interest is the earnings of capital simply or the reward of waiting simply."

Thus, Net Interest = Gross Interest – (payment for risk + payment for inconvenience + cost of administering credit)

i.e., Net Interest = Net Payment for the use of capital.

2. Gross Interest

Gross Interest according to Briggs and Jordan has said "Gross Interest is the payment made by the borrowers to the lenders is called Gross Interest or Composite Interest."

It includes payments for the loan of capital payment to cover risks for loss which may be:

(i) A personal risks or

(ii) Business risks, payment for inconveniences of the investment and payment for the work and worry involved in watching investments, calling them in and investing.

According to Prof. Marshall

Gross Interest is that "Interest of which we speak when we say that interest is the earning of capital simply or the reward of waiting simply, is net Interest but what commonly passes by the name of interest, includes other elements besides this and may be called gross interest."

By seeing the above definitions when we add elements of payment for risk, payment for inconvenience and the cost of administering credit to the net Interest, it becomes gross interest.

Thus, Gross Interest = Net Interest + payment of risk + payment for inconvenience + cost of administrating credit

Elements of Gross Interest

As we have seen earlier that the actual amount paid by the borrower to the capitalist as the price of capital fund borrowed is called gross interest.

Gross interest includes, besides net interest, the following elements:

1. Payment or Compensation for Risk

The lender has always to bear the risk—the risk that the loan may not be repaid. Besides this, borrower, takes the loan at the time when his requirement is urgent

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but when he returns it, it is quite possible that the time may not be suitable from lender's point of view. To cover this risk, the lender charges more, in addition to the net interest. Thus, when loans are made without adequate security, they involve a high elements of risk, so a high rate of Interest is charged.

2. Compensation for Inconvenience

When somebody lends the money, he has to bear inconveniences till the period when he gets back the sum, i.e., a lender lends only by saving that is by restricting consumption out of his income which obviously involved some inconveniences which is to be compensated.

A similar inconvenience is that the lender may be able to get his money back as and when he may need it for his own use. Hence, a payment to compensate this sort of inconvenience may be charged by the lender. Thus, the greater the degree of inconvenience caused to the lender, higher will be the rate of Interest charged.

3. Cost of Administering the Credit or Payment for Management Services

A lender of capital funds has to spend money and energy in the management of credit.

For example:

In the lending business, certain legal formalities have to be fulfilled, say fees for obtaining money-lender's licence, stamp duties etc. Proper accounts must be maintained. He has to maintain a staff as well. For all these sorts of management services, reward has to be paid by the borrower to the lender. Therefore, gross interest also includes payment for management expenses.

4. Compensation for the Changing Value of Money

Under this when prices are rising, the purchasing power of money declines over a period of time and the creditor loses. To avoid such loss and high rate of Interest may be demanded by the lender.

Therefore, Gross Interest = Net Interest + Payment for risk + Payment for management services + Compensation for the changing value of money.

In economic equilibrium, the demand and supply for capital determines the net rate of interest. But in practice, gross interest rate is charged. Gross interest rates are different in different cases at different places and different times and for different individuals.

3.5.6 Factors Influencing the Rate of Interest

Interest rates vary from person to person and from place to place.

There are many factors which causes variations in Interest rates which are as such:

1. Different Types of Borrowers

There are different types of borrowers in the market. They offer different types of securities. Their borrowing motives and urgency are different. Thus, the risk elements differ in different cases, which have to be compensated for.

2. Due to Differences in Gross Interest

Variations in the rate of Interest are due to differences in gross interest such as risk and inconveniences involved, cost of keeping records and accounts and collection of loans etc. The greater the risk and inconvenience and the cost of management of loans, the higher will be the rate of Interest and vice-versa.

3. The Money Market is not Homogeneous

There are different types of lenders and institutions, specialising in different types of loans and the loan-able funds are not freely mobile between them. The ideals of these institutions are also different. Again, there are moneylenders and indigenous bankers in the unorganised sector of the money market who follow their distinct lending policies and charge different interest rates.

4. Duration of Loan or Period of Loan

Rate of Interest also depends upon the duration or period of loan. Larger term loans carry higher rate of Interest than short-term loans. In a long-term loan, the money gets locked up for a longer duration. Naturally, the lender wants to be compensated by a higher rate of Interest.

5. Nature of Security

Interest rate varies with the type of security. Loans against the security of gold carry less interest rates than loans against the security of gold carry less interest rate than loans against the security of immovable property like land or house. The more liquid are the assets the lower is the interest rate and vice-versa.

6. Goodwill or Credit of the Borrower

Interest rate also depends upon the credit or goodwill of the borrower. Persons of better goodwill and known integrity and credibility can get loans on easy terms.

7. Amount of Loan

The greater the amount of loan, the lower is the rate of Interest and vice-versa.

8. Interest Policy of the Monetary Authorities

Monetary policy of the authorities may also lead to differences in Interest rates, e.g., the Reserve Bank of India has adopted differential interest rates policy for the deployment of credit to the priority sectors.

9. Difference Due to Distance

Distance between the lender and the borrower also causes differences between Interest rates. People are willing to lend at a lower rate of Interest nearer home than at a long distance.

10. Market Imperfections

Differences in Interest rates are also due to market imperfections that may be found in a loan market. Money-lenders indigenous banks, mutual funds, commercial banks etc. follow different lending policies and charges various Interest rates.

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11. Differences in Productivity

Productivity of capital differs from work to work or from venture to venture. People are willing to borrow at a higher rate of Interest for productive purposes or productive ventures and vice-versa.

3.5.7 Grounds in Which Payment of Interest is Justified

The following are the reasons for payment of Interest:

1. The Productivity of Capital

Interest is paid by the borrower to the lender, because borrowed money capital is productively used.

2. Compensation for Parting with Liquidity

As Keynes has said that interest is the reward for parting with liquidity when a lender lends money he undergoes a sacrifice of present time consumption is parting with its purchasing power to the borrower. This is to be compensated by the borrower to the lender by paying a rate of Interest as agreed upon.

3. To Induce Savings

Lending of money mostly comes out of savings. Savers are induced to save more by restricting consumption, when high rates of Interest are paid. When investment demand is in excess of savings, Interest rates will go up.

4. To Mobilize Loan-Able Funds

Banks and other financial institutions offer Interest rates to mobilise loanable funds from the household sector to the money and capital markets. People may opt for financial investment of their savings when attractive returns are offered by the financial institutions. Financial institutions serve as intermediaries and pass on these funds so mobilised to the firm sector for real investment.

Similarly, the demand for Interest on the lender's side is also justifiable for the reason for abstinence or sacrifice of immediate consumption undergone by them in parting with liquidity. They also claim a share in the income generated by capital in its productive use in terms of Interest rate. They also face the risk of losing money when the loan is not repaid by the borrower. To compensate for all these risk elements, they reasonably demand some Interest.

3.5.8 The Important Reasons for Charging High Rate of Interest

The important reasons for charging high rate of Interest are as follows:

1. Lack of proper security

Kabuliwala or village money lenders give loans to small farmers or small handloom weavers. They have not to give anything as security. Kabuliwala mostly give loans without having anything as security but banks or others financial institutions give loans without having adequate securities and that too they press for guarantee.

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2. Unproductive loan

Villagers need money for marriage purposes or they take loan on festivals or to perform Saradh ceremony i.e., villagers need loan for unproductive purposes, which Banks or Government institutions never allows loans for such purposes but Kabuliwala without any hesitation give loans at high rate of Interest.

3. Expenses on management, recovery of loans and keeping of accounts

Village money-lenders and Kabuliwalas have to spend a lot of money over keeping of accounts and recovery of loans. They do regular charging of loan taker to refund the money. That is why they charge high rate of Interest.

4. They take more risk

Village money lenders and Kabuliwalas have to take a great risk in giving loans because, there is always the danger of bad debts or the villagers mostly return money in small installments. Sometimes, the loan takers leave the village and silently go to somewhere else. This type of risk they have often to meet.

5. Money lenders and Kabuliwala have to face inconvenience

They have to meet villagers regularly for the payment of loan. They have to persuade them, chase them, sometimes when they go they return disappointed because the villager is not in the village. He has gone somewhere else. For all these inconveniences they charge higher rate of interest.

6. Lack of Financial Institutions

In village money-lending financial institutions have not developed much. Villagers have to go these people for money and have to pay high rate of Interest under pressure or compulsion or because of their inability to get money from other sources.

7. Kabuliwalas or Moneylenders give loan to such people even who have less credit or less goodwill in the market

For such type of people returns of loan becomes difficult and that is why they charge high rate of Interest.

8. Money lenders and Kabuliwala exploit villagers

Money lenders and Kabuliwala exploit villagers as they are illiterate, ignorant, poor and have not much knowledge of the market or society and because of these reasons they charge high rate of Interest. In the end it can be said that Kabuliwala and village money lenders take high risk, suffer a lot of inconveniences and meet more expenses and suffer bad debts in the recovery of loans given. The above written are the important reasons of charging high rate of Interest from villages.

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3.6 THEORIES OF INTEREST

3.6.1 Productivity Theory of Interest

This theory was propounded by Physiocrats and developed by German economists. According to this theory, interest is paid for the productivity of capital. According to Wicksell, "interest is the payment by the borrower of capital by virtue of its productivity".

Capital is productive in the sense that labour, assisted by capital produces more than labour without capital, for example, a fisherman with a net can catch more fish than without it. An agricultural labour with tractor can produce more than without a tractor. Thus capital is as productive as other factors of production.

Criticisms:

1. Economists criticize this theory for having ignored the scarcity, efficiency and supply of capital that determine the rate of interest.
2. If interest depends merely on productivity, interest rates should vary in proportion to the productiveness of capital. Actually pure rate of interest tends to be the same in the market.
3. Even if loans are taken for consumption purposes, interest has to be paid on them. But loans for consumption purposes are not productive.
4. Productivity theory explains interest from the side of demand only and ignores the supply side altogether.
5. Mere physical productivity of capital does not explain interest. If people are willing to lend unlimited amounts of loans (money) without interest, business would expand. Interest would not be a cost. But interest is a cost which every entrepreneur must bear with. Hence price in the long-run, must cover all costs including interest.

3.6.2 Abstinence or Waiting Theory

Senior, the classical economist is the exponent of the abstinence theory of interest. According to J. S. Mill, interest is the remuneration for mere abstinence. Abstinence theory explains interest from the side of supply whereas the productivity theory explains from the demand side. According to Senior saving involved a sacrifice which he calls it 'abstinence'. Senior explains that capital is the result of savings, which in turn are the result of abstinence.

People usually may consume their entire income. They save a part of their income only by abstaining from the present consumption. Thus saving was an act of abstaining from consumption. It was necessary to reward people to abstain from consumption since abstinence is regarded as painful. Interest is thus the reward paid for those who saved rather than consumed their incomes.

Criticism:

1. This theory has failed to explain the demand for capital, hence it is one-sided theory.

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2. This theory emphasises that all capital is the result of abstinence, but it is not true.
3. This theory is also criticised on the ground that rich people save without least inconvenience and they do not undergo discomfort on account of saving.
4. Marshall substituted the term waiting for 'abstinence'. Saving means waiting. When a person saves, he does not abstain from consumption forever. He just postpones present consumption to a future date. Generally people do not like to wait; an incentive is necessary to encourage this postponement of consumption. Interest is thus an incentive.

3.6.3 Agio or Austrian Theory of Interest

This theory was first advanced by John Rae and later developed by Bohm Bawerk of the Austrian School of Economics. According to this theory interest arises because people prefer present goods to future goods. If people prefer the present goods, there cannot be savings and capital. To induce people to save and accumulate capital an agio or premium or price must be given.

Thus agio is nothing but interest. People generally prefer the present goods to the future goods for three reasons. According to Bohm Bawerk the first reason is an under valuation of the future purchasing power as compared with the present purchasing power, moreover future is uncertain. In the second place present wants are felt more keenly than the future good.

Yet another reason is that a person expects improvement in economic position in future as a result of which the marginal utility of his income will decline. He therefore prefers to use his income at the present when the marginal utility of his income is high. A premium or agio must be given to the lender if he has a part with his income at the present. This premium is the so- called interest.

Criticism:

1. This theory failed to explain the forces of demand and supply for capital that determine the rate of interest.
2. The reasons given by Bohm Bawerk do not apply always.
3. The technical superiority of present goods of Bohm Bawerk has been criticised by Irving fisher.

3.6.4 Fisher's Time Preference Theory

This theory is associated with Irving Fisher who emphasises time preference as the central point in the theory. This theory is based on the subjective valuation of income and people's time preference. According to this theory "interest is the price of time". In the words of Fisher "interest is an index of community's preference for a dollar of present over a dollar of future income'.

People in general prefer the present to the future. This is what he calls the time preference. By time preference Fisher means individual's preference for the present to the future or people's discounting or under estimating the future.

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There is a tendency on the part of the people to vary the income meant for consumption from time to time by saving and borrowing. Interest is the price paid to the people for present income rather than for future income. According to Fisher the rate of interest varies according to the time preference.

The time preference depends upon the size of income, the distribution of income over the period of time, the composition of income, the certainty of enjoying income in the future, the temperament and the character of the individuals and expectation of the life of the people. If the income size is large, individual will satisfy present wants more and discount the future at a lower rate.

The distribution of income may take place in three different ways. It may be uniform throughout the life or increase with age or decrease with age. If it is uniform individuals will have their time preference according to the size of their income and temperament. But if the income increases with age, individuals will tend to discount the future at a higher rate because their future is well provided. If the income decreases with age, the future will be discounted at a lower rate.

Regarding the degree of enjoying the income in the future, greater the certainty of enjoying income in the future smaller is the degree of time preference. But if the enjoyment of income is not certain the degree of time preference will be greater. The character of individuals also influences time preference.

A person of forethought discounts the future at a low rate compared to a spend thrift. Similarly a person who expects to live long has less time preference than one who expects to live short. These factors determine individual's rate of time preference. When the rate of time preference is higher than the market rate of interest, the individuals will borrow; if it is lower he will lend to the market.

Criticism:

1. Fisher's theory fails to show the influence of the banking system on rate of interest.
2. This theory gives too much importance to willingness or preference; moreover this theory lays much emphasis on consumption expenditure out of income.
3. Fisher did not give importance to the impact of expectations on interest rate. The concept of productivity is free from the element of uncertainty. Both the factors namely expectation and uncertainty are crucial factors to Keynesian concept of marginal efficiency of capital.
4. The theory is based on the assumption of fixed purchasing power of money between the present and the future. In the real world, fluctuations in the value of money are the most common.

The time preference theory is superior to the other theories since it explains the rate of interest by reference to demand for and supply of capital. The demand for capital depends upon the marginal productivity of capital to investors while the supply of capital depends upon the time preference of individuals. The rate of interest will be determined at the point of equilibrium between demand for and supply of capital. The time preference theory is a complete theory and is the basis of the modern loanable funds theory of interest rate.

3.6.5 The Classical Theory of Interest

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The classical theory of interest was propounded by the old classical economists. Later it was developed by Marshall, Pigou, Walras, Taussig and Knight. According to this theory rate of interest is determined by the demand for and supply of capital. The rate of interest settles at the point where the demand for capital is equal to supply of capital.

The demand for capital arises from investment and supply of capital from savings. This means that the rate of interest is determined by the volume of savings and volume of investment. This theory explains the rate of interest in terms of saving and investment; this theory is called the saving investment theory of interest.

Classical theory is also known as real or non-monetary theory of interest. This theory refers to saving as real savings and investment as real investment. Real saving refers to those goods which are employed for investment purposes instead of consumption. Real investment refers to the production of capital goods like machinery, buildings, etc., rather than monetary investment, such as stocks and shares.

Thus money does not play an important role in the determination of rate of interest. According to classical economist the rate of interest is determined by the demand for savings to invest in capital goods and the supply of savings. The two sides of the interest determination, namely, the demand for capital and the supply of capital can be analyzed.

Demand for Capital

Demand for capital arises on account of its productivity. Firms desire to make new capital goods which are demanded to produce consumer goods. For any type of capital good it is possible to draw a marginal revenue productivity curve showing the addition made to the total revenue by an additional unit of a capital at various levels of the stock of that capital.

The more the capital assets an entrepreneur has, the less revenue or income he will earn by purchasing one more unit of capital. Under perfect competition, it is profitable for a firm to purchase any capital up to the point at which the price of that capital equals its marginal revenue productivity. The entrepreneur will demand capital goods up to the point at which the expected rate of return on the capital goods equals the rate of interest.

At a higher rate of interest the demand for capital is low and it is high at a lower rate of interest. Thus the demand for capital is inversely related to rate of interest and the demand schedule for capital slopes downward from left to right. However there are certain other factors which govern the demand for capital such as the growth of population, technical progress, the standard of living of the community, etc.

Supply of Capital

The supply of capital depends upon savings and hence the will to save and the power to save of the community. Some people save irrespective of the rate of interest. They would save even if the rate of interest is zero. Others save because

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the current rate of interest is just enough to induce them to save. There are potential savers who will save if the rate of interest increases.

In an economy, there may be three types of savers, viz., individual savers, institutional savers like banks, insurance companies, etc., and the government. Saving involves certain inconvenience like sacrifice, or waiting as they have to forgo present consumption which has to be compensated.

The higher the rate of interest, the larger will be the community savings and the more will be the supply of funds. The supply curve of capital thus slopes upward indicating that more funds will be saved and supplied at a higher rate of interest.

Determination of the Rate of Interest

Assuming the income level to be given, the rate of interest is determined by the intersection of the demand curve and the supply curve of capital.

The determination of equilibrium rate of interest of the following three conditions:

(i) The supply of capital or saving is an increasing function of the rate of interest:

$S = f(i); dS/di > 0$

(ii) The demand for capital or investment is a decreasing function of the rate of interest:

$I = f(i); dI/di < 0$

(iii) The supply of capital equals the demand for capital:

$S = I$

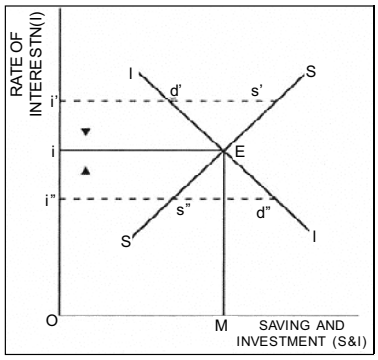

Fig. 3.1: Determination of the Rate of Interest

Where, S = saving, I = investment, and i = rate of interest.

The demand curve for capital intersects the SS curve (supply curve of capital) at point E. The equilibrium rate of interest is Oi and OM is the quantity of capital demanded and supplied at this rate. In other words, at the equilibrium rate of interest, i.e., Oi, saving = investment = OM.

Any deviation from the equilibrium rate of interest (Oi) will be unstable. If, at any time, the rate of interest rises to Oi, the supply of capital exceeds the demand for capital (is' > id'). As a result of this excess of capital supply, the rate of interest will fall to its equilibrium level (Oi). Similarly, if the rate of interest falls to Oi", the demand for capital exceeds the supply of capital (i"d" > i"s"). As a result of this excess of capital demand, the rate of interest rises to its equilibrium level (Oi).

Criticism:

The real theory of the classical economists as propounded by Marshall and Pigou has been criticized by Keynes.

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1. Keynes has condemned the classical theory as a useless and unrealistic theory. Keynes does not agree with the classical idea that saving is interest elastic. In fact the level of income has more important influence upon the amount saved than the rate of interest. For instance, the rich persons in a community will save automatically, even if the rate of interest is zero. Middle income group also save, because they would like to provide security for their families for the future, so they will save even if the rate of interest is zero. If the rate of interest is high, the low income groups may not be in a position to save.
2. Keynes did not agree with the classical relationship between investment and rate of interest. The classical theory assumes that investment demand will be larger at lower interest rate. Keynes shows that investment does not depend upon rate of interest alone but also upon marginal efficiency of capital.
3. Keynes does not agree with the classical theory that the rate of interest equates saving and investment. According to him, any difference between saving and investment will be removed by changes in the levels of income and expenditure rather than by changes in the rate of interest.
4. The classical theory believes that saving and investment are interest elastic, i.e., both are influenced by interest rates. But it is not true; investment, for instance is influenced by marginal efficiency of capital.
5. Another important defect of the theory is that it has not taken into account monetary factors and credit money that determine the rate of interest.
6. Keynes criticizes the basic assumption of the classical theory, namely that the resources in a society are fully employed. He believed, in less than full employment situation, where resources are unemployed interest is not essentially an inducement of saving.
7. The classical theory includes savings out of current income for supply of savings which makes it inadequate. Bank credit and past savings are other sources of supply of capital. The classical theory remains incomplete by neglecting these factors in the supply schedule of capital.
8. Classical theory is criticised as indeterminate. Since savings depend upon the level of income it is not possible to know the rate of interest unless the income level is known before-hand. The income level itself cannot be known without knowing the rate of interest. For each income level a separate saving curve will have to be drawn. These are circular reasons which offer no solution to the problem of interest.
9. This theory also neglects the influence of the demand for idle money balances on the determination of the rate of interest on the demand side.
10. This theory ignores consumption loans and takes into account only capital used for productive purposes.

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3.6.6 Loanable Funds Theory of Interest

The loanable funds theory known as the neo-classical theory explains the determination of interest in terms of demand and supply of loanable funds. This theory was developed by Swedish economists and first formulated by Knut Wicksell but contributions were made by other Swedish economists such as Bertil Ohlin, Gunnar Myrdal, Eric Lindahl and English economists like Pigou and Robertson.

The term loanable funds mean the total amount of money which is supplied and demanded in the market. According to loanable funds theory interest is the price paid for the use of loanable funds. There are several sources of both supply and demand of loanable funds.

Supply of Loanable Funds

The supply of loanable funds comes from four basic sources namely; savings disboarding, bank credit and disinvestment.

(a) Savings

Private savings, individual and corporate savings are the main source of saving. In the loanable hinds theory savings are classified as planned (exante) and unplanned (expost) savings of individuals and households. Exante savings are planned by individuals at the beginning of a period in the hope of expected incomes and anticipated expenditure on consumption. In the Robertsonian expost sense savings is the difference between the income of the preceding period and the consumption of the present period.

In both the cases the amount saved varies at different rates of interest. More savings will be coming at higher rates of interest. Just like individual, business sector will also save. A part of the earnings of the business is declared a dividend and the undistributed part constitutes business or corporate savings. Corporate savings also depends upon current rate of interest. A higher rate of interest encourages business savings.

(b) Dishoarding

Dishoarding also brings forth the supply of loanable funds. When people dishoard the previous hoardings, the supply of loanable funds increases. Cash balances remaining idle in the previous period, becomes active balances in the present period, are available as loanable funds. At higher rate of interest more will be dishoarded.

(c) Bank Credit

Money created by banks adds to the supply of loanable funds. By creating credit money banks advance loans to the businessmen. The supply of loanable funds varies with rate of interest. Generally the banks will lend more money at higher rates of interest.

(d) Disinvestment

Sometimes, due to disinvestment funds, flow into capital market adding to the supply of loanable funds. Due to structural changes, the existing stock of machines and other equipment's are not replaced.

They are allowed to wear out. Hence a part of the revenue from the sale of the commodities will not be needed to keep the machines in proper condition or to replace them. Instead this will increase the supply of loanable funds. Disinvestment increases when the rate of interest is high. These components of loanable funds are denoted by savings (s), dishoarding (DH), disinvestment (DI) and bank credit (BM).

Demand for Loanable Fund

The demand for loanable funds mainly comes from three sectors namely government, businessmen and consumers who need them for purposes of investment, hoarding and consumption. The government borrows funds for the provision of public goods, for development purposes or for war preparations. Major part of demand for loanable funds comes from business firms which borrow money for purchasing or producing new capital goods and for starting investment projects.

This is the most important constituent of demand for loanable funds. Rate of interest is the price of the loanable funds required to purchase the capital goods. Businessmen will find it profitable to purchase large amount of capital goods, when the rate of interest is low. Thus the demand curve for loanable funds for investment purposes is interest elastic and slopes downwards to the right.

The demand for loanable funds on the part of the consumers is for the purchase of durable consumer goods like scooter, houses, refrigerators, television sets, etc., Lower rates of interest will induce them to borrow more. Hence demand curve for loanable funds for consumption purposes is also downward sloping. Funds are also demanded for the purpose of hoarding them in liquid form as idle cash balances.

This is to satisfy their desire for liquidity preference. It is important to note that a person who supplies the loanable funds is the same person who demands loanable funds for hoarding purposes. A saver for instance who hoards his savings supplies loanable funds and also demands them to satisfy his liquidity preference. Hoarding is also interest elastic. The rate of interest is determined by the equilibrium between the total demand for loanable funds and the total supply of loanable funds.

The loanable funds theory is more realistic than the classical theory in several respects. The classical theory neglects monetary influences on interest. The loanable funds theory takes into account bank credit on the supply side. The theory recognises the role of hoarding as a factor influencing the demand for funds.

Criticism

1. This theory is unrealistic for combining monetary factors with real factors. It is not proper to combine non-monetary factors like saving and investment with monetary factors like bank credit and dishoarding without bringing changes in the level of income.
2. The theory exaggerates the effect of rate of interest on savings. In fact, the rate of interest does not influence the volume of savings as suggested by the theory. Generally speaking people save not to earn interest. People save more even without any increase in the rate of interest; they save even if the rate of interest falls to zero. Thus for some people savings are interest inelastic.

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3. Loanable funds theory like the classical theory is criticised on the ground that it is indeterminate. The supply of loanable funds consists of savings, bank credit and dishoarding.
4. Since savings varies with the level of income, the total supply of loanable funds will also vary with income. Thus loanable funds theory is indeterminate unless the income level is already known.
5. Another criticism against the loanable funds theory is that it is based upon the assumptions of full employment of resources, which does not exist in the real world. Loanable fund theory implies that it is not applicable to the situation of less than full employment. However the theory takes into account the increase in the level of income due to investment and its influence on savings. If full employment is assumed, income would not increase at all.

The theory states that the supply of loanable funds can be increased by releasing cash balances from savings and decreased by absorbing cash balances into savings. This means that the cash balances are elastic. This is not true because the total cash balances available are in fixed proportion to the supply of money at any time. Even if there are variations in the cash balances they are in fact, in the velocity of circulation of money rather than in the amount of cash balances in the community.

3.6.7 Liquidity Preference Theory

Keynes introduced a monetary theory of interest in his famous book, "The General Theory of Employment, Interest and Money". According to him interest is a reward for parting with liquidity. His theory is known as liquidity preference theory of interest. Liquidity preference means the demand for money to hold or the desire of the public to hold cash. According to Meyer, "liquidity preference is the preference to have an equal amount of cash rather than a claim against others".

To Keynes interest is purely a monetary phenomenon because the rate of interest is determined in terms of money. Money is the most liquid asset and people would like to keep their assets in cash. To make them surrender the liquidity, they must be paid a reward. This reward is paid in the form of liquidity. The more the desire for liquidity, higher shall be the rate of interest demanded to part with liquidity. This theory is characterised as the monetary theory of interest, as different from the real theory of classical economists.

Factors Determining Liquidity Preference

Liquidity preference depends upon many factors. According to Keynes the desire for liquidity or the desire of the people to hold liquid cash arises because of three motives, namely:

(i) Transaction Motive

The transaction motive refers to the demand for money or the 'need for cash for the current transactions of personal and business exchanges'. It is divided into income and business motives. The income motive is meant to bridge the interval between the receipt of income and its disbursement. The business motive refers to the interval between the time of incurring business costs and that of the receipt of the sale proceeds.

If the time between expenditure to be incurred and the receipt of income is small, less cash will be held by the people for current transactions and vice versa. Most of the people receive their income weekly or monthly, while the expenditure is to be incurred every-day. Therefore it becomes necessary to keep certain amount of ready money in hand to make current payments.

Similarly the businessmen and the entrepreneurs also require ready cash to meet their current expenses, especially, for payment for raw materials and transport, to pay wages and salaries and to meet other expenses. Money held for this business motive depends to a large extent on the volume of trade of the firm. Changes in the transaction demand for money depends upon the level of income.

(ii) The Precautionary Motive

Precautionary motive for holding money refers to the desire of the people to hold cash balances for unforeseen contingencies. Both individuals and businessmen keep cash in reserve to meet expected needs like sickness, accidents, travel, unemployment and other contingencies.

Money held under the precautionary motive is rather like water kept in reserve in a water tank. The precautionary demand for money depends upon the level of income, business activity, the nature of the individual, availability of cash, the cost of holding liquid assets, financial soundness and accessibility to the credit market.

(iii) Speculative Demand for Money

Money held under speculative motive is for "securing profit from knowing better than the market what the future will bring forth". In other words it reflects the desire to hold one's resources in liquid form in order to take advantage of market movements regarding the future changes in the rate of interest. Individuals and businessmen who have funds after keeping enough for transactions and precautionary purposes like to gain by investing in bonds.

Among the two determinants of the rate of interest the supply of money refers to the total quantity of money in circulation for all transactions at any time. It is exogenously determined by monetary authorities. Thus the quantity of money is fixed by the monetary authorities and hence the supply curve of money is assumed to be perfectly inelastic. Supply of money consists of coins, notes and bank deposits.

Determination of the Rate of Interest

According to Keynes the demand for money namely the liquidity preference and supply of money determine the rate of interest. The rate of interest like the price of a commodity is determined at a level where the demand for money equals the supply of money.

Criticism:

The Keynesian theory of interest has been severely criticised by Hansen, Robertson, Knight and others.

1. This theory explains the working of everything through the bond market and regards bonds as the only alternative to money. Thus the theory lacks realism.

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2. This theory points out the rate of interest as purely a monetary phenomenon; real forces like productivity of capital and thriftiness or saving by the people also play an important role in the determination of the rate of interest.
3. Keynes' concept of demand for money is not comprehensive. To him the demand for money means liquidity preference. But money is demanded also for consumption and investment purposes.
4. Keynes states that liquidity is essential for interest rate. But as Hazlitt says, even "if a man is holding his funds in the form of time deposits or short-term treasury bills, he is being paid interest on them.
5. Robertson dubbed this theory as 'at best an inadequate and at worst a misleading account'.

   This theory is an incomplete theory because it has not taken into account the factors like credit money and loanable funds for the determination of rate of interest.
6. This theory assumes the supply of money to be constant. Hence the rate of interest is influenced by the demand for money. This theory is thus one-sided.
7. Keynes' theory explains interest as a short-term phenomenon. So it cannot be applied to long period.
8. The greatest fallacy in Keynes' analysis is that it ignores the influence of real factors in determining the rate of interest. Knut Wicksell was the first economist to present a real-cum- monetary theory of interest which was further refined by Irving Fisher.
9. The concept of 'liquidity trap' is also wrong. In reality the liquidity preference schedule may not be perfectly elastic at low rate of interest. Especially during depression, general pessimism prevails in the economy. It is therefore not correct to argue that the rate of interest will go up in future.
10. The Keynesian theory is also indeterminate like the classical theory. The supply and demand for money schedules cannot give the rate of interest if the income level is not known. In the classical theory also the demand and supply schedules for savings offer no solution unless the income is known. Thus according to Prof. Hansen "Keynes' criticism of the classical theory applies equally to his own theory".
11. Hicks, Lemer, Hansen and others opine that the rate of interest, along with the level of income is determined by factors like investment demand function, the supply of savings function, the liquidity preference function and the quantity of money function. Keynes does not bring all these factors into his theory. Thus Keynes fails to provide an integrated and determinate theory of interest.

Check Your Progress

3. Discuss various types of Interest.
4. Explain Productivity Theory of Interest.

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3.7 EMPLOYMENT

Employment is a relationship between two parties, usually based on contract where work is paid for, where one party, which may be a corporation, for profit, not-for-profit organization, co-operative or other entity is the employer and the other is the employee. Employees work in return for payment, which may be in the form of an hourly wage, by piecework or an annual salary, depending on the type of work an employee does or which sector they are working in. Employees in some fields or sectors may receive gratuities, bonus payment or stock options. In some types of employment, employees may receive benefits in addition to payment. Benefits can include health insurance, housing, disability insurance or use of a gym. Employment is typically governed by employment laws, organization or legal contracts.

3.7.1 Meaning of Employment

Employment refers to form of an economic activity where one person is appointed by another person to perform a particular task or job. The person who appoints another person is called an employer, whereas the person who is appointed to do the job is called as an employee.

3.7.2 Features of Employment

Following are the features of employment:

1. **Motive:** Motive behind employment is to earn some income.
2. **Returns:** The amount that the employee gets is referred to as wages or salary. The amount of remuneration (wages/salaries) is fixed which is paid at regular intervals (monthly/fortnightly/weekly/daily).
3. **Qualification required:** Qualification required differs from job to job and employer to employer. Some jobs require you to have a specialized qualification like Chartered Accountant or MBBS etc. Some jobs may not require any formal qualification.
4. **Capital:** Employment does not require any capital.
5. **Nature of Work:** Nature of work differs from job to job. Nature of work to be done is decided by the employer.
6. **Non-Transferability:** This form of an economic activity has no transferability. For example, a person on his retirement cannot transfer his job to his son.
7. **Code of Conduct:** The rules and regulations to be followed by an employee are decided by the employer and is informed to employee well in advance before he starts his work

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3.8 THEORIES OF EMPLOYMENT

Keynes' Theory of Employment

According to classicists, there will always be full employment in a free enterprise capitalist economy because of the operation of Say's Law and wage-price flexibility. This classical theory came under severe attack during the Great Depression years of 1930s at the hands of J. M. Keynes.

He rejected the notion of full employment and instead suggested full employment as a special case and not a general case. Full employment is a temporary phenomenon, an astrological coincidence! He claimed his theory to be 'general', i.e., applicable at any point of time. That is why he christened his epoch-making book: The General Theory of Employment, Interest and Money (1936). Thus, Keynes' theory is "general".

In this book, he not only criticized the classical macroeconomics, but also presented a 'new' theory of income and employment. He is often described by economists as a revolutionary one in the sense that it was Keynes who salvaged the capitalist economy from destruction in the 1930s. Critics, however, label him as a 'conservative revolutionary'.

This means that Keynes visualized employment/unemployment from the demand side of the model. His theory is thus known as demand-oriented approach. According to Keynes, the volume of employment in a country depends on the level of effective demand of the people for goods and services. Unemployment is attributed to the deficiency of effective demand.

It is to be kept in mind that Keynes' theory is a short run theory when population, labour force, technology, etc., do not change. Once Keynes remarked that since "in the long run we are all dead", it is of no use to present a long run theory. In view of this, one can argue that the volume of employment depends on the level of national income/output.

Higher (lower) the level of national output, higher (lower) is the volume of employment. Thus, Keynesian theory of employment determination is also the theory of income determination. In this section, we intend to determine the level of employment in terms of the principle of 'effective demand'.

(a) Meaning of Effective Demand

Keynes' theory of employment is based on the principle of effective demand. In other words, level of employment in a capitalist economy depends on the level of effective demand. Thus, unemployment is attributed to the deficiency of effective demand and to cure it requires the increasing of the level of effective demand.

By 'effective' demand, Keynes meant the total demand for goods and services in an economy at various levels of employment. Total demand for goods and services by the people is the sum total of all demand meant for consumption and investment. In other words, the sum of consumption expenditures and investment expenditures constitute effective demand in a two-sector economy.

In order to meet such demand, people are employed to produce all kinds of goods, both consumption goods and investment goods. However, to complete our discussion on effective demand we need another component of effective demand—the component of government expenditure. Thus, effective demand may be defined as the total of all expenditures, i.e.,

$C + I + G$

Where, C, I and G stand for consumption, investment, and government expenditures.

Here we ignore government expenditure as a component of effective demand. According to Keynes, the level of employment is determined by effective demand which, in turn, is determined by aggregate demand function or aggregate demand price and aggregate supply function or aggregate supply price.

In Keynes' words

"The value of D (Aggregate Demand) at the point of Aggregate Demand function, where it is intersected by the Aggregate Supply function, will be called the effective demand."

(i) Aggregate Supply (AS)

Employers hire and purchase various inputs and raw materials to produce goods. Thus, production involves cost. If sales revenue from the sale of output produced exceed cost of production at a given level of employment and output, the entrepreneur would be induced to employ more labour and other inputs to produce more.

At any given level of employment of labour, aggregate supply price is the total amount of money that all entrepreneurs in an economy expect to receive from the sale of output produced by given number of labourers employed. For each particular level of employment, there is an aggregate supply price.

Here, by 'price' we mean the amount of money received from the sale of output, i.e., sales proceeds. Thus, aggregate supply prices refer to the proceeds from the sale of output at each level of employment and there are different aggregate supply prices for different levels of employment. If this information is expressed in a tabular form, we obtain "aggregate supply price schedule" or aggregate supply function.

The aggregate supply function is a schedule of the minimum amounts of proceeds required to induce varying quantities of employment. Simply, it shows various aggregate supply prices at different levels of employment. Plotting this information graphically, we obtain aggregate supply curve.

According to Keynes, aggregate supply function is an increasing function of the level of employment. Aggregate supply (AS) curve slopes upward from left to the right because volume of employment increases with the increase in sale proceeds.

But there is a limit to increase output level. This is called full employment level of output beyond which output cannot be increased. It is because of full employment that AS curve becomes vertical or perfectly inelastic. This means that the level of employment cannot exceed full employment (Nf) even by increasing aggregate supply price.

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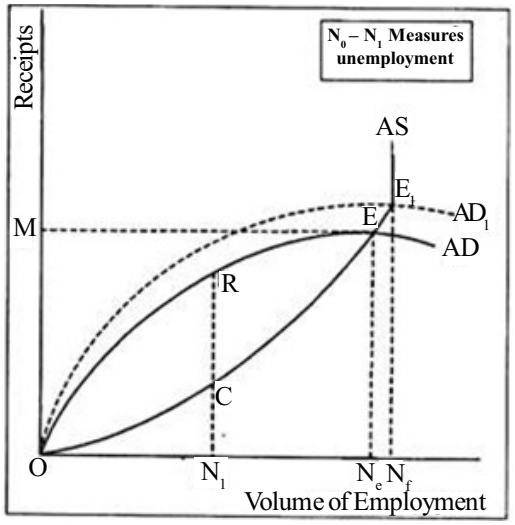

Fig. 3.2: Aggregate Supply (AS)

(ii) Aggregate Demand (AD)

Aggregate demand or aggregate demand price is the amount of money or price which all entrepreneurs expect to receive from the sale of output produced by a given number of men employed. Or it refers to the expected revenue from the sale of output at a particular level of employment.

Each level of employment is associated with a particular aggregate supply price and there are different aggregate demand prices for different levels of employment. Like the aggregate supply schedule, aggregate demand schedule shows the aggregate demand price for each possible level of employment.

Plotting the aggregate demand schedule we obtain aggregate demand curve as there is a positive relation between the level of employment and aggregate demand price i.e., expected sales receipts.

Equilibrium Level of Employment — the Point of Effective Demand:

We have studied separately aggregate demand and aggregate supply as the two determinants of effective demand. Now we will describe how equilibrium level of employment is determined in an economy by using the concept of effective demand.

The level of employment in an economy is determined at that point where the aggregate supply price equals the aggregate demand price. In other words, the intersection of the aggregate supply function with the aggregate demand function determines the volume of income and employment in an economy.

It is thus clear that so long as expected sales receipts of the entrepreneur (i.e., aggregate demand schedule) exceed costs (i.e., aggregate supply schedule), the level of employment should be increasing and the process will continue until expected receipts equal costs or aggregate demand curve intersects aggregate supply curve.

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Note that the AS curve starts from the origin. If aggregate receipts (i.e., GNP) are zero, entrepreneurs would not hire workers. Likewise, AD curve also starts from the origin. The equilibrium level of employment is determined by the intersection of the AS and AD curves.

This is the point of effective demand—point E in Fig. 3.2. Corresponding to this point, ONe workers are employed. At the ON_1 level of employment, expected receipts exceed necessary costs by the amount RC. Entrepreneurs will now go on hiring more labour till ON_e level of employment is reached.

At this level of employment, entrepreneurs' expectations of profits are maximized. Employment beyond ON_e is unprofitable because costs exceed revenue. Thus, actual employment (ON_e) falls short of full employment (ON_f). Keynesian system shows two kinds of equilibria—actual employment equilibrium determined by AD and AS curves and underemployment equilibrium.

Keynes made little emphasis to the aggregate supply function since its determinants (such as technology, supply or availability of raw materials, etc.,) do not change in the short run. Keynes was examining the possibility of unemployment in a capitalistic economy against the backdrop of the Great Depression of 1930s.

After diagnosing the problem, Keynes recommended policy prescription so as to create more employment in the economy. Indeed, for curing unemployment problem, he did not subscribe to the classical ideas the supply-oriented policies.

Keynes attached great importance to demand-stimulating policies to cure unemployment. In other words, Keynes paid emphasis on the aggregate demand function. That is why Keynes' theory is known as a 'theory of aggregate demand'.

Figure shows the situation of equilibrium at less than full employment level. Actual equilibrium, ON_e, is short of full employment equilibrium, ON_e. Thus, the distance ON_f ONe measures unemployment. This is called involuntary unemployment a situation at which people are willing to work but do not find jobs. This unemployment, according to Keynes, is due to deficiency of aggregate demand.

This unemployment can be removed by stimulating aggregate demand. Aggregate demand is the sum total of consumption and investment demand or expenditures in the economy. By raising consumption expenditure, level of employment can be raised. But there is a limit to consumption expenditure. So what is needed is the raising of (private) investment demand.

Anyway, increase in consumption demand and investment demand will raise the level of employment in the economy. The point of effective demand has been changed in Fig. 3.2 because of the shifting of AD curve from AD to AD_1. New effective demand is now given by E_1. Corresponding to this point, equilibrium level of employment is ON_f—the level of full employment.

Thus, in Keynes' theory, unemployment is due to the deficiency of effective demand. Only by stimulating effective demand can a higher level of employment be achieved. However, Keynes goes on arguing that equilibrium level of employment will not necessarily be at full employment.

A capitalist economy will always experience underemployment equilibrium—an equilibrium situation less than full employment. Full employment, according to

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Keynes, can never be achieved. In Keynes' scheme of things, both consumption and investment cannot be raised enough to employ more work force.

Therefore, he recommends government to come forward and take appropriate action to cure unemployment problem. This means that aggregate demand is now the sum total of all consumption, investment and government expenditures.

It is because of the multiplier effect of both private investment expenditure and government expenditure that there will be larger income, output and employment.

But, equilibrium in the economy will be established at less than full employment situation because of:

(i) Wage rigidity

(ii) Interest inelasticity of investment

(iii) Liquidity trap

Classical Theory of Employment

The classical economists believed in the existence of full employment in the economy. To them, full employment was a normal situation and any deviation from this regarded as something abnormal. According to Pigou, the tendency of the economic system is to automatically provide full employment in the labour market when the demand and supply of labour are equal.

Unemployment results from the rigidity in the wage structure and interference in the working of free market system in the form of trade union legislation, minimum wage legislation etc. Full employment exists "when everybody who at the running rate of wages wishes to be employed."

Those who are not prepared to work at the existing wage rate are not unemployed because they are voluntarily unemployed. Thus full employment is a situation where there is no possibility of involuntary unemployment in the sense that people are prepared to work at the current wage rate but they do not find work.

The basis of the classical theory is Say's Law of Markets which was carried forward by classical economists like Marshall and Pigou. They explained the determination of output and employment divided into individual markets for labour, goods and money. Each market involves a built-in equilibrium mechanism to ensure full employment in the economy.

It's Assumptions

The classical theory of output and employment is based on the following assumptions:

1. There is the existence of full employment without inflation.
2. There is a laissez-faire capitalist economy without government interference.
3. It is a closed economy without foreign trade.
4. There is perfect competition in labour and product markets.
5. Labour is homogeneous.

6. Total output of the economy is divided between consumption and investment expenditures.
7. The quantity of money is given and money is only the medium of exchange.
8. Wages and prices are perfectly flexible.
9. There is perfect information on the part of all market participants.
10. Money wages and real wages are directly related and proportional.
11. Savings are automatically invested and equality between the two is brought about by the rate of interest
12. Capital stock and technical knowledge are given.
13. The law of diminishing returns operates in production.
14. It assumes long run.

It's Explanation

The determination of output and employment in the classical theory occurs in labour, goods and money markets in the economy.

Say's Law of Markets

Say's law of markets is the core of the classical theory of employment. An early 19th century French Economist, J.B. Say, enunciated the proposition that "supply creates its own demand." Therefore, there cannot be general overproduction and the problem of unemployment in the economy.

If there is general overproduction in the economy, then some labourers may be asked to leave their jobs. The problem of unemployment arises in the economy in the short run. In the long run, the economy will automatically tend toward full employment when the demand and supply of goods become equal.

When a producer produces goods and pays wages to workers, the workers, in turn, buy those goods in the market. Thus the very act of supplying (producing) goods implies a demand for them. It is in this way that supply creates its own demand.

Determination of Output and Employment

In the classical theory, output and employment are determined by the production function and the demand for labour and the supply of labour in the economy. Given the capital stock, technical knowledge and other factors, a precise relation exists between total output and amount of employment, i.e., number of workers. This is shown in the form of the following production function: $Q = f(K, T, N)$ where total output (Q) is a function (f) of capital stock (K), technical knowledge (T), and the number of workers (N)

Given K and T, the production function becomes $Q = f($AO which shows that output is a function of the number of workers. Output is an increasing function of the number of workers, output increases as the employment of labour rises. But after a point when more workers are employed, diminishing marginal returns to labour start.

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This is shown in Fig. 3.3 where the curve Q = f (N) is the production function and the total output OQ_1 corresponds to the full employment level N_F. But when more workers N_1N_2 are employed beyond the full employment level of output OQ_1, the increase in output Q_1Q_2 is less than the increase in employment N_1N_2.

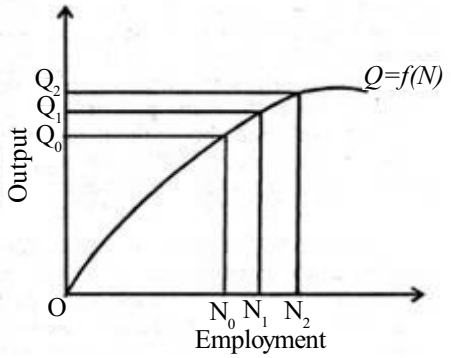

Fig. 3.3: Determination of Output and Employment

Labour Market Equilibrium

In the labour market, the demand for labour and the supply of labour determine the level of output and employment. The classical economists regard the demand for labour as the function of the real wage rate: DN =f (W/P)

Where DN = demand for labour, W = wage rate and P = price level. Dividing wage rate (W) by price level (P), we get the real wage rate (W/P).

The demand for labour is a decreasing function of the real wage rate, as shown by the downward sloping DN curve in Fig. 3.4. It is by reducing the real wage rate that more workers can be employed.

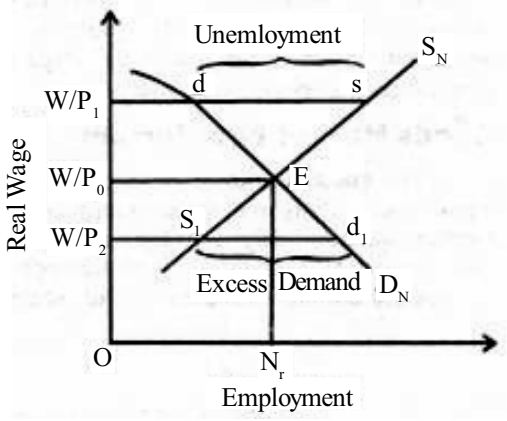

Fig. 3.4: Labour Market Equilibrium

The supply of labour also depends on the real wage rate: SN = f (W/P), where SN is the supply of labour. But it is an increasing function of the real wage rate, as shown by the upward sloping SN curve in Fig. 3.4. It is by increasing the real wage rate that more workers can be employed.

When the DN and SN curves intersect at point E, the full employment level NF is determined at the equilibrium real wage rate W/P_0. If the wage rate rises from WP_0 to WP_1 the supply of labour will be more than its demand by ds.

Now at W/P_1 wage rate, ds workers will be involuntary unemployed because the demand for labour (W/P_1-d) is less than their supply (W/P_1-s). With competition among workers for work, they will be willing to accept a lower wage rate. Consequently, the wage rate will fall from W/P_1 to W/P_0.

The supply of labour will fall and the demand for labour will rise and the equilibrium point E will be restored along with the full employment level Nr On the contrary, if the wage rate falls from W/P_0 to WP_2 the demand for labour (W/P_2-d_1) will be more than its supply (W/P_2-s_1). Competition by employers for workers will raise the wage rate from W/P_2 to W/P_0 and the equilibrium point E will be restored along with the full employment level NF.

Wage Price Flexibility

The classical economists believed that there was always full employment in the economy. In case of unemployment, a general cut in money wages would take the economy to the full employment level. This argument is based on the assumption that there is a direct and proportional relation between money wages and real wages.

When money wages are reduced, they lead to reduction in cost of production and consequently to the lower prices of products. When prices fall, demand for products will increase and sales will be pushed up. Increased sales will necessitate the employment of more labour and ultimately full employment will be attained.

Pigou explains the entire proposition in the equation: $N = qY/W$. In this equation, N is the number of workers employed, q is the fraction of income earned as wages, Y is the national income and W is the money wage rate. N can be increased by a reduction in W. Thus the key to full employment is a reduction in money wage. When prices fall with the reduction of money wage, real wage is also reduced in the same proportion.

As explained above, the demand for labour is a decreasing function of the real wage rate. If W is the money wage rate, P is the price of the product, and MPN is the marginal product of labour, we have W=P X MPN or W/P = MPN

Since MPN declines as employment increases, it follows that the level of employment increases as the real wage (W/P) declines. This is explained in Figure 3.5. In Panel (A), SN is the supply curve of labour and DN is the demand curve for labour. The intersection of the two curves at E shows the level of full employment NF and the real wage W/P_0.

If the real wage rises to W/P_1, supply exceeds the demand for labour by sd and N_1N_2 workers are unemployed. It is only when the wage is reduced to W/P_0 that unemployment disappears and the level of full employment is attained.

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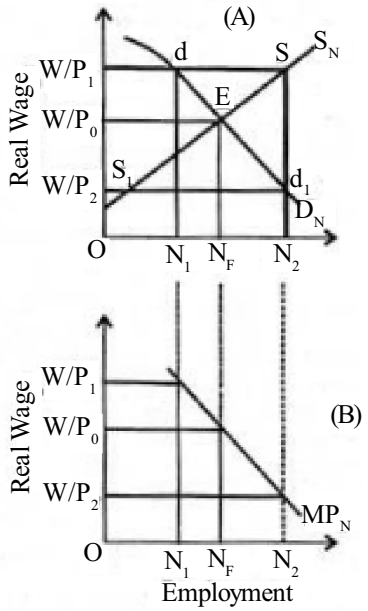

Fig. 3.5: Wage Price Flexibility

This is shown in Panel (B), where MPN is the marginal product of labour curve which slopes downward as more labour is employed. Since every worker is paid wages equal to his marginal product, therefore the full employment level NF is reached when the wage rate falls from W/P_1 to W/P_0.

Contrariwise, with the fall in the wage from W/P_0 to W/P_2, the demand for labour increases more than its supply by s_1d_1, the workers demand higher wage. This leads to the rise in the wage from W/P_2 to W/P_0 and the full employment level NF is attained.

Goods Market Equilibrium

The goods market is in equilibrium when saving equals investment. At that point of time, total demand equals total supply and the economy is in a state of full employment. According to the classicists, what is not spent is automatically invested.

Thus saving must equal investment. If there is any divergence between the two, the equality is maintained through the mechanism of the rate of interest. To them, both saving and investment are the functions of the interest rate.

$S = f(r)$ …(1)

$I = f(r)$ …(2)

$S = I$

Where S = saving, I = investment, and r = interest rate.

To the classicists, interest is a reward for saving. The higher the rate of interest, the higher the saving, and lower the investment. On the contrary, the lower the rate of interest, the higher the demand for investment funds, and lowers the saving. If at any given period, investment exceeds saving, (I > S) the rate of interest will rise.

Saving will increase and investment will decline till the two are equal at the full employment level. This is because saving is regarded as an increasing function of the interest rate and investment as a decreasing function of the rate of interest.

Assuming interest rates are perfectly elastic, the mechanism of the equality between saving and investment is shown in Figure 3.6 where S is the saving curve and I is the investment curve. Both intersect at E which is the full employment level where at Or interest rate S = I. If the interest rate rises to Or_1 saving is more than investment by ab which will lead to unemployment in the economy.

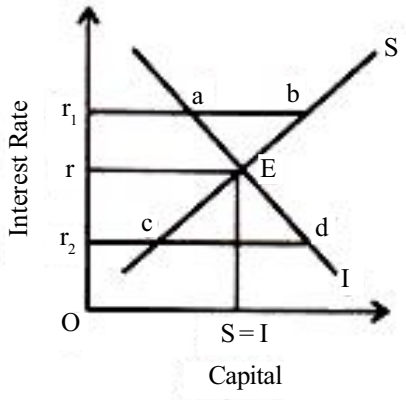

Fig. 3.6: Goods Market Equilibrium

Since S > I, the investment demand for capital being less than its supply, the interest rate will fall to Or, investment will increase and saving will decline. Consequently, S = I equilibrium will be re-established at point E.

On the contrary, with a fall in the interest rate from Or to Or_2 investment will be more than saving (I > S) by cd, the demand for capital will be more than its supply. The interest rate will rise, saving will increase and investment will decline. Ultimately, S = I equilibrium will be restored at the full employment level E.

Money Market Equilibrium

The money market equilibrium in the classical theory is based on the Quantity Theory of Money which states that the general price level (P) in the economy depends on the supply of money (M). The equation is MV= PT, where M = supply of money, V= velocity of circulation of M, P = Price level, and T = volume of transaction or total output.

The equation tells that the total money supply MV equals the total value of output PT in the economy. Assuming V and T to be constant, a change in the supply of money (M) causes a proportional change in the price level (P). Thus the price level is a function of the money supply: P = f(M).

The relation between quantity of money, total output and price level is depicted in Figure 3.7 where the price level is taken on the horizontal axis and the total output on the vertical axis. MV is the/money supply curve which is a rectangular hyperbola.

This is because the equation MV = PT holds on all points of this curve. Given the output level OQ, there would be only one price level OP consistent with the quantity of money, as shown by point M on the MV curve. If the quantity of money increases, the MV curve will shift to the right as M_1V curve.

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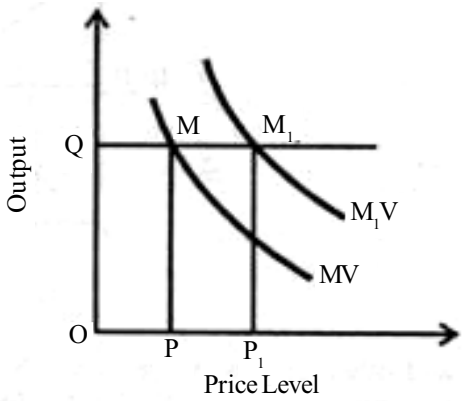

Fig. 3.7: Money Market Equilibrium

As a result, the price level would rise from OP to OP_1 given the same level of output OQ. This rise in the price level is exactly proportional to the rise in the quantity of money, i.e., $PP_1 = MM_1$ when the full employment level of output remains OQ.

3.9 IMPORTANCE OF EMPLOYMENT IN ECONOMICS

As economies develop, employment moves from the primary to the secondary and then the tertiary sector. In the Netherlands, for instance, most workers (74%) are employed in the tertiary sector whereas in Vietnam, the majority of workers (60%) are employed in the primary sector.

Within any country at any particular time, some industries will be expanding and some will be contracting. For instance, in India, employment in textiles is declining whilst it is increasing in ICT and software. This change requires workers to be occupationally and geographically mobile.

1. Full and Part Time Work

Most workers work full time. Some, however, work part time. Some opt to work part time, as it may fit in with their children's school hours, enable them to look after elderly relatives or pursue other interests. Other people are forced to work part time because they are not able to find full time jobs.

2. Employed and Self-employed

In some countries, including the UK, USA and most of Europe, most people work for someone else – i.e. they are employees. The number of self-employed workers is, however, rising. In other countries, including India and Pakistan, a high proportion of people are already self-employed and many of them work in the unorganised sector.

3. Organised and Unorganised Sectors

The unorganised sector covers workers who do not have the same access to the social security benefits, employment protection and rights as organised labour. For instance, whilst a country may operate a minimum wage, unorganised labour may be paid below it.

The unorganised sector does not include unions and so the workers cannot bargain collectively, to improve their conditions. Some of those working in the unorganised sector are self-employed, some are migratory workers and some are casual workers. Most of them do not pay income tax.

Workers in the unorganised sector tend to have lower productivity, lower levels of training and lower wages than workers of organised sector. A growth in the organised sector tends to raise the quality of employment and labour productivity.

In India, for instance, in 2005 more than 90% of the country's labour forces (423m out of 470m workers) were employed in the unorganised sector. In rural areas, mobile casual workers constitute most of the unorganised labour whereas in urban areas, it is contract and subcontract migratory workers, maids, mechanics in small-scale garages and street stall holders. The average productivity of workers in the private organised sector in the country is six times higher than that of those working in the unorganised sector.

4. High and Low Quality Employment

High quality employment is skilled work which is interesting and which provides workers with the opportunity to progress, access to training, good working conditions and a relatively high degree of job security. In contrast, low quality employment is unskilled work which often does not require or provides training and does not provide good working conditions.

Check Your Progress

5. Explain the features of Employment.
6. Discuss importance of Employment in Economics

3.10 ANSWERS TO 'CHECK YOUR PROGRESS'

1. Wage is the distribution from an employer of a security expected returns or profits derived solely from others paid to an employee. Like interest is paid out to an investor on his investments, a wage is paid from company earnings to the employee on the employee's invested assets time, money, labor, resources, and thought. Wages are part of the expenses that are involved in running a business, and add value to the employee in honor of his principal protected note or net investment. Payment by wage contrasts with salaried work, in which the employer pays an arranged amount at steady intervals such as a week or month regardless of hours worked, with commission which conditions pay on individual performance, and with compensation based on the performance of the company as a whole.
2. **Various types of Wages are as follows:**
   (i) **Time and Piece Wages:** Wages may be paid weekly, fortnightly, or monthly and partly at the end of the year in the form of bonus. These are time wages. But the bonus may be a task wage if a work is finished within a specified period or before that.

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(ii) Money Wages and Real Wages: Money wages or nominal wages relate to the amount of money income received by workers for their services in production. Real wages include the various facilities, benefits and comforts which workers receive in terms of goods and services for their work. These are in addition to the money wages of workers.

3. ***There are two concepts of interest as:***

   1. **Gross Interest:** Gross interest refers to the entire payments made by the borrower to the lender on a certain amount of loan received for a period of time. It includes not only the payment for the use of money capital but also for risks, inconvenience and management.
   2. **Net Interest:** Net interest is the payment purely made for the use of money. Net interest rate is determined by the forces of demand and supply of funds or money. It generally relates to public and is comparatively low to gross interest.

4. Productivity Theory of Interest was propounded by Physiocrats and developed by German economists. According to this theory, interest is paid for the productivity of capital. According to Wicksell, "interest is the payment by the borrower of capital by virtue of its productivity".

   Capital is productive in the sense that labour, assisted by capital produces more than labour without capital, for example, a fisherman with a net can catch more fish than without it. An agricultural labour with tractor can produce more than without a tractor. Thus capital is as productive as other factors of production.

5. The following are the features of employment:

   1. **Motive:** Motive behind employment is to earn some income.
   2. **Capital:** Employment does not require any capital.
   3. **Nature of Work:** Nature of work differs from job to job. Nature of work to be done is decided by the employer.
   4. **Non-Transferability:** This form of an economic activity has no transferability. For example, a person on his retirement cannot transfer his job to his son.

6. The importance of employment in economics are as follows:

   1. **Full and Part Time Work:** Most workers work full time. Some, however, work part time. Some opt to work part time, as it may fit in with their children's school hours, enable them to look after elderly relatives or pursue other interests.
   2. **Employed and Self-employed:** The number of self-employed workers is, however, rising. In other countries, including India and Pakistan, a high proportion of people are already self-employed and many of them work in the unorganised sector.
   3. **Organised and Unorganised Sectors:** The unorganised sector covers workers who do not have the same access to the social security benefits, employment protection and rights as organised labour.

3.11 SUMMARY

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- Wage is the distribution from an employer of a security expected returns or profits derived solely from others paid to an employee. Like interest is paid out to an investor on his investments, a wage is paid from company earnings to the employee on the employee's invested assets time, money, labor, resources, and thought. Wages are part of the expenses that are involved in running a business, and add value to the employee in honor of his principal protected note or net investment. Payment by wage contrasts with salaried work, in which the employer pays an arranged amount at steady intervals such as a week or month regardless of hours worked, with commission which conditions pay on individual performance, and with compensation based on the performance of the company as a whole.
- Wages may be paid weekly, fortnightly, or monthly and partly at the end of the year in the form of bonus. These are time wages. But the bonus may be a task wage if a work is finished within a specified period or before that.
- Money wages or nominal wages relate to the amount of money income received by workers for their services in production. Real wages include the various facilities, benefits and comforts which workers receive in terms of goods and services for their work.
- Minimum wage is that wage which provides not only for the bare sustenance of life but also for the preservation of the efficiency of the worker. It is the minimum that must be paid to the worker to cover his and his family's bare necessities, including some measure of education, medical and other amenities. Interest is a payment made by a borrower to the lender for the money borrowed and is expressed as a rate percent per year. It is usually expressed as an annual rate in terms of money and is calculated on the principal of the loan. It is the price paid for the use of other's capital fund for a certain period of time.
- Gross interest refers to the entire payments made by the borrower to the lender on a certain amount of loan received for a period of time. It includes not only the payment for the use of money capital but also for risks, inconvenience and management.
- Net interest is the payment purely made for the use of money. Net interest rate is determined by the forces of demand and supply of funds or money. It generally relates to public and is comparatively low to gross interest.
- Employment refers to form of an economic activity where one person is appointed by another person to perform a particular task or job. The person who appoints another person is called an employer, whereas the person who is appointed to do the job is called as an employee.
- Productivity Theory of Interest was propounded by Physiocrats and developed by German economists. According to this theory, interest is paid for the productivity of capital. According to Wicksell, "interest is the payment by the borrower of capital by virtue of its productivity".

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- Capital is productive in the sense that labour, assisted by capital produces more than labour without capital, for example, a fisherman with a net can catch more fish than without it. An agricultural labour with tractor can produce more than without a tractor. Thus capital is as productive as other factors of production.

3.12 KEY TERMS

- **Wages:** Wages are a payment for the services of labour, whether mental or physical. Though in ordinary language an office executive, a minister or a teacher is said to receive a salary; a lawyer or a doctor a fee; and a skilled or unskilled worker a wage, yet in economics no such distinctions are made for different services and all of them are said to receive a wage.
- **Time and Piece Wages:** Wages may be paid weekly, fortnightly, or monthly and partly at the end of the year in the form of bonus. These are time wages. But the bonus may be a task wage if a work is finished within a specified period or before that.
- **Money Wages and Real Wages:** Money wages or nominal wages relate to the amount of money income received by workers for their services in production. Real wages include the various facilities, benefits and comforts which workers receive in terms of goods and services for their work.
- **Minimum Wages:** Minimum wage is that wage which provides not only for the bare sustenance of life but also for the preservation of the efficiency of the worker. It is the minimum that must be paid to the worker to cover his and his family's bare necessities, including some measure of education, medical and other amenities.
- **Interest:** Interest is a payment made by a borrower to the lender for the money borrowed and is expressed as a rate percent per year. It is usually expressed as an annual rate in terms of money and is calculated on the principal of the loan. It is the price paid for the use of other's capital fund for a certain period of time.
- **Gross Interest:** Gross interest refers to the entire payments made by the borrower to the lender on a certain amount of loan received for a period of time. It includes not only the payment for the use of money capital but also for risks, inconvenience and management.
- **Net Interest:** Net interest is the payment purely made for the use of money. Net interest rate is determined by the forces of demand and supply of funds or money. It generally relates to public and is comparatively low to gross interest.
- **Employment:** Employment refers to form of an economic activity where one person is appointed by another person to perform a particular task or job. The person who appoints another person is called an employer, whereas the person who is appointed to do the job is called as an employee.

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3.13 SELF-ASSESSMENT QUESTIONS AND EXERCISES

Short Answer Questions

1. Give the meaning of Wages.
2. State any four factors that influence Real wages.
3. What is Wage Fund Theory?
4. What is Residual Claimant Theory?
5. Give the meaning of Minimum Wages.
6. Define the term Interest.
7. Give the meaning of Interest.
8. What is Employment?

Long Answer Questions

1. Discus the Concept of Wages.
2. Explain various types of Wages.
3. Discuss various factors that influence Real wages.
4. Explain various Theories of Wages.
5. Discuss the benefits of Minimum Wages.
6. Explain the adverse effects of Minimum Wages.
7. Discuss the concept of Interest.
8. Why Interest is Paid or Charged?
9. Discuss various types of Interest.
10. Explain various theories of Interest.
11. Discuss the features of Employment.
12. Explain the Theories of Employment.

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UNIT 4 MONETARY THEORIES

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Structure

4.0 INTRODUCTION

Monetary theory is based on the idea that a change in money supply is the main driver of economic activity. It argues that central banks, which control the levers of monetary policy, can exert much power over economic growth rates by tinkering with the amount of currency and other liquid instruments circulating in a country's economy. According to monetary theory, if a nation's supply of money increases, economic activity will rise, too, and vice versa. A simple formula governs monetary theory, MV = PQ. M represents the money supply, V is the velocity (number of times per year the average dollar is spent), P is the price of goods and services, and Q is the number of goods and services. Assuming constant V, when M is increased, either P, Q, or both P and Q rise. General Price levels tend to rise more than the production of goods and services when the economy is closer to full employment. When there is slack in the economy, Q will increase at a faster rate than P under monetary theory.

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4.1 OBJECTIVES

After reading this unit, you will understand about:

- Describe the concept of monetary theories
- Explain in details about Quantity theory of money
- Discuss about Modern theory of money
- Analyze the Keynes's theory of money and price

4.2 MONETARY THEORIES

Monetary Theory is a set of ideas about how monetary policy should be conducted within an economy. Monetary theory suggests that different monetary policies can benefit nations depending on their unique set of resources and limitations. It is based on core ideas about how factors like the size of the money supply, price levels and benchmark interest rates affect the economy. Economists and central banking authorities are typically those most involved with creating and executing monetary policy.

4.2.1 Ricardo's Monetary Theory

Ricardo has also contributed to the understanding of monetary economies. He was concerned with the monetary problems of his time. His ea on currency can be appreciated from his two writings: (i) Proposal for Economical and Secure Currency and (ii) High Price of Bullion. Gustav Cassel drew inspiration for his purchasing power parity from the writings Ricardo.

Ricardo in his book, High Price of Bullion, explained clearly the theory of exchange rate under two conditions. The first condition was with respect to the gold bullion standard and the second was regarding inconvertible paper currency standard. Ricardo said that in the case of gold standard, the exchange rate can be determined by the Mint Par, i.e., the gold content of domestic and foreign currency, subject to some upper and lower species points. In the case of inconvertible paper currency, exchange rate can be determined by the purchasing power of the two currencies. He pointed out in this connection that 'while the circulating medium consists, therefore, of coins undebased or of paper money immediately exchanged for undebased coins, the exchange can never be more above or below the par than the expenses attaining the transportation of precious metals. But when it consists of depreciated paper money, it necessarily will fall according to the degree of depreciation."

Ricardo also had the understanding about the value theory of money. According to him, the value or purchasing power of money depends on velocity, confidence and quantity of money supply and credit policy of the bank. Although Ricardo did not explain the pure quantity theory of money, still he had the understanding of the relation between money supply and price level. Ricardo was writing at a time when the price level went up so much in England. Ricardo anticipated Wicksell in finding out certain suitable remedies for controlling the

fluctuations in the price level. Ricardo, like Wicksell, conceived of the effect of the divergence between money rate of interest and natural rate of interest. He observed that such a divergence leads to fluctuating price level.

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However, Ricardo could not explain how the divergence between the natural rate of interest and the money rate of interest could be the cause of economic fluctuations. But, nonetheless, Ricardo could suggest some very practical measures. Ricardo's High Price of Bullion was concerned with the contemporary inflationary problem of England. During the Napoleonic Wars, there was a hot controversy known as the Bullionist Controversy. Ricardo contributed notably to the understanding of this Notes controversy and to its solution. During the period of Napoleonic Wars, the U.K.'s price level went up very high.

The paper currency was also not convertible into good at a fixed price on demand. The gold reserve of the Bank of England fell down considerably and the Bank notes depreciated in value. Ricardo blamed the Bank of England for over-issuing currency notes, which was the cause of hyper-inflation. He observed that the price level in England went up because of an increase in the quantity of money in circulation. Ricardo advised that the remedy proposed for all the evils in the currency is that banks should gradually decrease the amount of their notes in circulation until they shall have rendered the remainder of equal value with coins which they represent. In other words, this should be done till the prices of silver and gold bullion are brought to their Mint Par point. In this way, Ricardo contributed to the understanding of the genesis of inflation and to anti inflationary measures. He was of the opinion that it was the drastic depreciation n the value of currency which was necessarily responsible for the outflow If gold from England.

In his book, Proposal of Economical and Secure Currency, Ricardo analyzed the factors which were responsible for the determination of value f money. He observed that under competitive conditions of money supply, the value of money will depend on its cost of production. He was of the pinion that a proper control over money supply can maintain the value of money at a level which will neither cause inflation nor cause depression. He was in favour of a paper currency standard but he suggested for the proper regulation and control of the paper money. Ricardo was fully convinced of the superiority of bank notes (paper currency). But he suggested that the cir superiority of bank notes must be based on 100 per cent gold reserves. Ricardo prescribed state regulation over banking policy. Ricardo strongly recommended the introduction of paper currency because he thought that a system could lead to convenience. Stability and automaticity Ricardo's plan to nationalize the bank was a clear recognition of the necessity for a well-defined monetary policy by the central bank.

4.2.2 Wicksell's Monetary Theory

Wicksell was enamored with the theory of Léon Walras (the Lausanne school), Eugen von Böhm-Bawerk (the Austrian school) and David Ricardo and sought a synthesis of the three theoretical visions of the economy. Wicksell's work on creating a synthetic economic theory earned him a reputation as an "economist's economist." For instance, although the marginal productivity theory the idea that payments to factors of production equilibrate to their marginal productivity had been laid out

by others such as John Bates Clark, Wicksell presented a far simpler and more robust demonstration of the principle and much of the present conception of that theory stems from Wicksell's model.

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Extending from Ricardo's investigation of income distribution, Wicksell concluded that even a totally unfettered economy was not destined to equalize wealth as a number of Wicksell's predecessors had predicted. Instead, Wicksell posited, wealth created by growth would be distributed to those who had wealth in the first place. From this and from theories of marginalize, Wicksell defended a place for government intervention to improve national welfare. Wicksell influenced the field of constitutional political economy. His 1896 work on fiscal theory Finanztheoretische Untersuchungen called attention to the significance of the rules within choices are made by political agents and he recognized that efforts at reform must be directed toward changes in the rules for making decisions rather than trying to influence the behaviour of the actors.

Wicksell's most influential contribution was his theory of interest, published in his 1898 work, Interest and Prices. He made a key distinction between the natural rate of interest and the money rate of interest. The money rate of interest, to Wicksell, was merely the interest rate seen in the capital market; the natural rate of interest was the interest rate that was neutral to prices in the real market, or rather, the interest rate at which supply and demand in the real market was at equilibrium – as though there were no need for capital markets. This connected to the theory of the Austrian School, which theorized that an economic boom happened when the natural rate of interest was higher than the market rate.

This contribution, called the "cumulative process," implied that if the natural rate of interest was not equal to the market rate, demand for investment and quantity of savings would not be equal. If the market rate is beneath the natural rate, an economic expansion occurs and prices, ceteris paribus, will rise. This gave an early theory of endogenous money – money created by the internal workings of the economy, rather than external factors and various theories of endogenous money have since developed.

This idea would be expanded upon by the Austrian school, which used it to form a theory of the business cycle based on central bank policy changes in the level of money in the economy would shift the market rate of exchange in some way relative to the natural rate and thus trigger a change in the relative proportion of the production of consumer goods to investment, which would ultimately result in an economic correction, or recession, in which the proportion of production of consumption goods to investment in the economy is pushed back towards the level that the natural rate of interest would result in. The cumulative process was the leading theory of the business cycle until John Maynard Keynes' The General Theory of Employment, Interest and Money. Wicksell's theory would be a strong influence in Keynes's ideas of growth and recession and also in Joseph Schumpeter's "creative destruction" theory of the business cycle.

Wicksell's main intellectual rival was the American economist Irving Fisher, who espoused a more succinct explanation of the quantity theory of money, resting it almost exclusively on long run prices. Wicksell's theory was considerably more

complicated, beginning with interest rates in a system of changes in the real economy. Although both economists concluded from their theories that at the heart of the business cycle and economic crisis was government monetary policy, their disagreement would not be solved in their lifetimes and indeed, it was inherited by the policy debates between the Keynesians and monetarists beginning a half-century later.

Wicksell also expressed his views on many social issues and was often a critic of the status quo. He questioned the institutions of rank, marriage, the church, the monarchy and the military.[4] While Wicksell fought for a more equal distribution of wealth and income, he saw himself primarily as an educator of the public. He desired to influence more than just the field of monetary economics.

4.2.3 Fisher's Monetary Theory

Fisher's theory of the price level was the following variant of the quantity theory of money. Let M = stock of money, P = price level, T = amount of transactions carried out using money and V = the velocity of circulation of money. Fisher then proposed that these variables are interrelated by the Equation of exchange:

$$MV = PT$$

Later economists replaced the amorphous T with real output Y or "Q", usually quantified by real GDP.

Fisher was also the first economist to distinguish clearly between real and nominal interest rates:

Where r is the real interest rate, i is the nominal interest rate and the inflation p is a measure of the increase in the price level. When inflation is sufficiently low, the real interest rate can be approximated as the nominal interest rate minus the expected inflation rate. The resulting equation is known as the Fisher equation in his honor.

For more than forty years, Fisher elaborated his vision of the damaging "dance of the dollar" and devised schemes to "stabilize" money, i.e. to stabilize the price level. He was one of the first to subject macroeconomic data, including the money stock, interest rates and the price level, to statistical analysis. In the 1920s, he introduced the technique later called distributed lags. In 1973, the Journal of Political Economy reprinted his 1926 paper on the statistical relation between unemployment and inflation, retiling it as "I discovered the Phillips curve". Index numbers played an important role in his monetary theory and his book The Making of Index Numbers has remained influential down to the present day. Here is a different way of approaching this monetary thing which focuses on interest rates and inflation. This requires a discussion of what money is and how it comes about in a natural economy. This is kind of complicated so be warned.

Money comes about in a natural economy to serve two purposes: to act as a medium of exchange and as a store of value. The first of these is well-recognized but the second is often overlooked and it is the second which is primary and makes the first possible. Since a barter economy requires the coincidence of wants for trade to take place it is much more efficient if there is some good which people

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can keep on hand for the purpose of trading. But this is only possible if there is a good which everyone expects to be able to trade freely for the things that they want in the future. In other words it is only possible if the medium of exchange is expected to hold its value.

At any point in time a typical person may own a house, a car, some quantity of food, furniture, clothes, stocks, bonds, cash etc. These things all represent wealth in a different form. Now to simplify the model consider a person who can hold wealth in one of two forms: chickens or gold. Each of these has two possible uses. Each can be consumed directly or traded for other consumption goods and each has different characteristics which affect their value in each use. A person of sufficient wealth would likely choose to consume some quantity of each directly along with some other goods. For our purposes we will focus on their value in exchange.

If one were to hold their wealth entirely in the form of chickens, they would be faced with some difficulties. For one thing, chickens eventually die. This has a couple of important implications. One is that if you hold them to long they will become worthless. Another is that if the person with whom you want to trade does not want to consume the chicken immediately but rather to hold it and potentially exchange it with someone else for another good later, you cannot divide it up.

On the other hand, gold takes up very little space for its value. It doesn't eat or poop, it just sits there. It can be infinitely divided with no loss of value. And finally, it doesn't degrade over time. All these characteristics make it more convenient to hold as a store of value. But this is only the case because it is possible to rely on it being valuable in the future and it is possible to rely on this because it has value in consumption to somebody somewhere. Because of this people will know that they can take it in exchange for whatever they have to sell and be able to trade it for whatever they want to buy in the future. What all of this adds up to is that people would rather hold some goods as a store of wealth than others. There is another difference between chickens and gold that must be accounted for. Unlike gold, chickens produce more chickens. This means that by foregoing the consumption of a chicken today (and attending to the costs mentioned above) you can potentially have more chickens in the future. Let's assume that the stock of chickens grows at 10% per year. So if you have 10 chickens now and you refrain from eating them for a year you will have 11. Meanwhile, if you hold 10 oz. of gold for one year you will still have 10 oz. In this case the real interest rate will be 10%. This represents the additional amount of real goods (chickens) you can get for giving up some consumption of real goods today. If all markets are in equilibrium it must be true that the benefit to holding each asset is the same. How can this be when chickens multiply and gold doesn't? To see the answer first assume there is no liquidity preference so chickens are just as easy to keep and exchange as gold. In this case the amount of goods that you can get in the future by holding gold must be the same as the amount of goods you can get by holding chickens. This means that prices in terms of gold must fall. Or to put it another way, the same amount of gold must get 10% more valuable. And this is a phenomenon which is not just left up to chance, competition will make this happen.

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As an illustration of this process, assume for the sake of simplicity that you know the price of chickens in terms of gold 1 year from now will be 10. If the price of chickens now was 10 (and there were no liquidity preference) then nobody would want to hold gold. This would mean anyone who had gold would try to buy chickens because they have a higher rate of return. This would bid the price of chickens today up. People would keep bidding the price up until the fall in prices was just enough to make it worth it to hold the gold (about 11). In this way the market would equate the rate of return on all assets. Alright, now we must turn to a slightly more realistic world where some people raise chickens and finance this activity by borrowing money. Assume that 10% is the real return from this activity net of any expenses involved. The chicken farmers will borrow money and offer IOUs for some amount of money 1 period in the future. The price of this borrowing is the real interest rate and they will bid it up to 10%. That is to say that for lending 1 unit of gold you would receive an IOU for the amount of gold expected to purchase 1.1 chickens in the next period. Again, if there is no preference for one of these securities (gold vs. IOUs) then they will have to generate the same rate of return in equilibrium. This will mean that 1 unit of gold will buy an IOU for 1 unit of gold in the future. In other words the nominal rate of interest will be 0% and again, prices will have to fall by about 10% to equate the return on gold and IOUs with the return on chickens. Notice that the Fisher equation holds.

Nominal interest rate (0) = real interest rate (.10) + inflation rate (-.10)

The situation gets a little more complicated if you add liquidity preference back in. Liquidity preference in this case is any reason people may prefer holding gold over holding IOUs. This is likely to be the case because an IOU will not be as easy to trade to meet some need that may come up between now and 1 year from now (such as a broken button) as gold. Alternatively, there may be some risk of the IOU not being paid back. But even in the absence of this risk, there is still some benefit to holding gold due to its being more useful for satisfying any consumption desires which might come up in the meantime. This means that if gold and IOUs have the same rate of return, people would prefer to just hold gold. Because of this, competition will drive a wedge between the rate of return on IOUs and gold. Let's say that because of liquidity preference, people are only willing to trade 96 units of gold today for an IOU worth 1 unit a year from now. This return of about 4% will be the nominal interest rate or the price paid to have money (gold) now rather than money later. The real rate the price of having goods (chickens) now rather than goods later will remain unchanged since this has nothing to do with the rate at which chickens reproduce. So the change in prices required to bring the economy to equilibrium will now be smaller (only about 6%). The Fisher equation in this case will be:

Nominal rate (.04) = real rate (.10) + inflation rate (-.06)

In this natural economy, markets will efficiently allocate all resources across time. This is possible only because of the relative stability of the money supply (by

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stability I don't mean that it has to be constant just that it has to be exogenously determined). If the money supply is growing at a slower rate than the real interest rate, then there will be deflation. There would be nothing wrong with this. More importantly, the real rate would be determined by real factors (production possibilities and time preference) and the nominal rate and inflation rate would be determined by liquidity preference.

The system we now have is one where the Federal Reserve's sets the nominal rate (sort of) and lets the money supply expand or contract to bring the market into equilibrium. This alone wouldn't actually be that disruptive. If you imposed a lower nominal rate on the economy, it would not change the real rate, it would cause people to borrow and drive up prices today, causing inflation in the short run. But the system would be brought into equilibrium by the inflation rate falling (even more deflation). In other words, the dollars drawn into the economy would be sucked back out with interest in the next period and prices would be even lower than otherwise.

Again assume that in a natural economy, everyone knew the price of a chicken in 1 year would be 10 units of gold. Also assume, as above, that the nominal rate would be 4%, the real rate 10% and the inflation rate 6%. So people would bid the price of a chicken today up to about 9.4. Now imagine a central bank that can print and lend as much"gold" as they want. And imagine that they offer to lend it at an interest rate of 2%. At this rate people will want to borrow "gold" and use it to buy chickens. This will inflate the money supply and drive the price of chickens up today. But in a year all that money will have to be paid back to the central bank with interest which will make the money supply contract. The inflation and contraction of the money supply and resulting increase in price of chickens today and decrease in price of chickens tomorrow will be just enough to make the rate of deflation equal to 8% or in other words to fill the gap between the real interest rate and the (now artificial) nominal interest rate in the Fisher equation.

Nominal rate (.02)=real rate (.10) + inflation rate (-.08)

But even this is not what happens today. Today, the Fed has convinced us that they can keep nominal rates low and also keep inflation rates high. By doing this they are degrading one of the most important characteristics of money: it's ability to hold value. When people believe this, they will be willing to borrow much more and leverage most of their property since they will expect the value of it to be increasing. For instance, if the nominal interest rate were 1% and you expected 2% inflation (because that is what the Fed told you their target was), you would want to borrow as much money as you could and use it to buy real goods just to hold until next period. Then you could sell them at the new high prices, pay back your loans and have money left over. But obviously everyone cannot do this (it is not consistent with the Fisher equation). If everyone rushes out to get a loan and buy some real good, let's say housing. They will drive the prices of housing up today and when they all try to sell them in the future to pay their loans the price will plummet and they will all end up defaulting on their loans.

4.3 MONETARY ECONOMICS

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Monetary economics is a branch of economics that historically prefigured and remains integrally linked to macroeconomics. Monetary economics provides a framework for analyzing money in its functions as a medium of exchange, store of value and unit of account. It considers how money, for example fiat currency, can gain acceptance purely because of its convenience as a public good. It examines the effects of monetary systems, including regulation of money and associated monetary institutions and international aspects.

Modern analysis has attempted to provide a micro-based formulation of the demand for money and to distinguish valid nominal and real monetary relationships for micro or macro uses, including their influence on the aggregate demand for output. Its methods include deriving and testing the implications of money as a substitute for other assets and as based on explicit frictions.

Research area of monetary economics consists of the following activities:

1. Empirical determinants and measurement of the money supply, whether narrowly-, broadly, or index-aggregated, in relation to economic activity.
2. Debt-deflation and balance-sheet theories, which hypothesize that over-extension of credit associated with a subsequent asset-price fall amplifies business fluctuations through the wealth effect on net worth.
3. Monetary implications of the asset-price/macroeconomic relation.
4. The importance and stability of the relation between the money supply and interest rates, the price level and nominal and real output of an economy.
5. Monetary impacts on interest rates and the term structure of interest rates.
6. Lessons of monetary/monetary history.
7. Transmission mechanisms of monetary policy as to the macro economy.
8. The monetary/fiscal policy relationship to macroeconomic stability.
9. Neutrality of money vs. money illusion as to a change in the money supply, price level, or inflation on output.
10. Tests and testability of rational-expectations theory as to changes in output or inflation from monetary policy.
11. Monetary implications of imperfect and asymmetric information and fraudulent finance.
12. The political economy of monetary regulation and monetary policy.

Current State of Monetary Economics

Since 1990, the classical form of monetarism has been questioned. This is because of events which many economists interpret as inexplicable in monetarist terms, especially the unhinging of the money supply growth from inflation in the 1990s and the failure of pure monetary policy to stimulate the economy in the 2001-

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2003 periods. Alan Greenspan, former chairman of the Federal Reserve, argued that the 1990s decoupling may be explained by a virtuous cycle of productivity and investment on one hand and a certain degree of "irrational exuberance" in the investment sector.

Economist Robert Solow of MIT suggested that the 2001-2003 failure of the expected economic recovery should be attributed not to monetary policy failure, but rather to the breakdown in productivity growth in crucial sectors of the economy, most particularly retail trade. He noted that five sectors produced all of the productivity gains of the 1990s and that while the growth of retail and wholesale trade produced the smallest growth, they were by far the largest sectors of the economy experiencing net increase of productivity. "2% may be peanuts, but being the single largest sector of the economy, that's an awful lot of peanuts."

Role of Credit

Credit means by which goods or services are obtained without immediate payment, usually by agreeing to pay interest. The three main forms are consumer credit usually given to individuals by retailers, bank credit such as overdrafts or personal loans and trade credit common in the commercial world both within countries and internationally.

There is no question that credit can provide a smoother flow of money through an economy to ensure that periodic starts and stops aren't affected by variations in the cash flow. This is particularly important to ensure smooth operation in many companies as well as for individuals.

Equally there is no question regarding the usefulness of credit for large capital expenditures that would otherwise be impossible to obtain, typically housing, cars, etc.

However, when it comes to unsecured debt we have a different situation that bears some scrutiny. In particular, it should be recognized that credit is simply spending "future" money or unearned money to acquire goods and services. Therefore it is absolutely essential that credit not extend out much beyond the predictability of such future revenue being generated. When coupled with high interest rates, this creates a tremendous drain on the "demand" side of the economic arrangement.

Another way to view this is to consider that there is a certain demand (X) that is available based on the amount of money that an individual earns; their disposable income. Therefore for equilibrium to be attained there is a requirement that money flow between the demand and supply segments of the two environments. As the amount of credit increases, it behaves like a subsidized salary, creating an artificial rise in the demand. Unfortunately this can't be sustained because the increase in available disposable income isn't real. Eventually coupled with interest rates, the money available for demand is focused on servicing debt and the accelerated availability of funds has caused a spike in supply that can't be maintained either. In response to this artificial rise in demand, suppliers have created a glut of products for the market, resulting in a decline in economic equilibrium when credit availability freezes. At this point, the flow of money is detoured from the supply/demand side of the equation and, once again, the economy stops.

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It makes little difference about the initial benefit of acquiring the good and services early, because over time, the effect is diluted by the long-term costs of servicing the debt. What exacerbates this problem is that interest rates as high as 30% may occur for such unsecured debts, which effectively reduces the amount of money available for "demand" by one-third. While it may be beneficial to the finance companies, such a cost will decimate an economy since there are neither good nor services provided by an interest rate.

In general when credit repayment extends out over several years, there is a permanent loss of revenue to the economy for goods and services. In effect the spending was compressed into a smaller window, which results in stagnation until equilibrium funds become available returns. In the same way, it doesn't do a company any good to sell its products for six months and then have six months off, if that isn't how their production schedule is setup. This will result in lay-offs and other effects which, once again, reduce the "demand" side of the equation.

There is a myth in some of the economic concepts that the excess revenue will be invested back into business and thereby stimulate continued economic growth. This is patently false, since supply-side production is not a cash-flow problem. There has never been a single job created solely based on the availability of excess cash. It is a problem that can only be cured by demand for products. Therefore, there must be product demand which will stimulate the supply which will garner investments. Supply does not create demand. In effect, the economy depends on a continuous flow of money through the system and not simply sporadic spurts of activity. Anything that disrupts that flow will disrupt the economy. While the economy will certainly stabilize given enough time, the chaos of the intervening time period is an unnecessary aberration caused by attempts to over-stimulate the growth of "demand" by the use of virtual money; credit.

Role of credit (Reserve Bank of India)

In India, though rural financial institutions have played a leading role in the condition of rural credit. The rural sector is still in need of more credit through the following ways:

1. ***The National Bank for Agriculture and Rural Development (NABARD):*** which is the apex organization in the field of rural credit, has taken several initiatives in this regard. Notable developments in recent years are the introduction of Kisan Credit Card (KCC) and the linkage of Self Help Groups (SHGs) with banks. In order to enable NABARD to leverage its capital funds for raising more resources, its capital base has been progressively increased from ₹ 500crore in 1996-97 and ₹ 400 crore by RBI every year to ₹ 2000 crore as on March 31, 1999. Besides share capital contribution, Reserve Bank has been providing to NABARD a General Line of Credit (GLC) under Section 17(4E) of the RBI Act to enable it to meet the short-term credit requirements of co-operatives and Regional.
2. ***Rural Banks (RRBs):*** An important development in the area of rural infrastructure has been the creation of the Rural Infrastructure Development Fund (RIDF) in 1995-96 in NABRAD with a corpus of

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₹ 2000crore to provide funds to State Governments and State owned corporations to enable them to complete various types of rural infrastructure projects. The fund for RIDF are mobilized from domestic commercial banks on the basis of shortfall in their priority sector advances vis-à-vis the stipulate targets. There have, however, been inter-state variations in this regard. In some States, the utilization has been poor mainly due to inadequacy of own funds to supplement the provisions under RIDF. In other cases, there have been a wide range of factors which contributed to the relatively poor utilisation of funds. In order to enable the States to enhance utilisation, the Union Budget has widened the scope of RIDF to include lending to Gram Panchayats, Self Help Groups and other eligible institutions for implementing rural infrastructure projects.

4.4 MONETARY INTERMEDIARIES

Monetary intermediation consists of channeling funds between surplus and deficit agents. A monetary intermediary is a monetary institution that connects surplus and deficit agents. The classic example of a monetary intermediary is a bank that transforms bank deposits into bank loans.

Through the process of monetary intermediation, certain assets or liabilities are transformed into different assets or liabilities. As such, monetary intermediaries channel funds from people who have extra money (savers) to those who do not have enough money to carry out a desired activity (borrowers).

Functions performed by Monetary Intermediaries

Monetary intermediaries provide 3 major functions:

1. **Maturity transformation:** Converting short-term liabilities to long term assets banks deal with large number of lenders and borrowers and reconcile their conflicting needs.
2. **Risk transformation:** Converting risky investments into relatively risk-free ones.
3. **Convenience denomination:** Matching small deposits with large loans and large deposits with small loans.

The Role of Monetary Intermediaries

The several important roles of monetary intermediaries are as follows:

1. While some investors make their own investment decisions and invest directly in various units, many others seek monetary and investment advice from an investment professional or monetary intermediary.
2. Monetary intermediaries may include banks, broker-dealers, investment advisers and monetary planners. Because of the important role these parties play in the process of investment decision making by investors, regulatory authorities may regulate these monetary intermediaries in a number of ways. Regulation may encompass requirements that monetary

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intermediaries meet certain competency standards such as qualification and training criteria. These criteria may include a specified level of education, monetary or investment experience, professional examinations, membership of professional or other organizations and continuing education requirements.

3. Alternatively, a regulatory authority may not impose specific qualifications on a class of monetary intermediary, but rather may require that the qualifications of the person be disclosed to potential clients.
4. In addition, regulatory authorities may impose specific standards of conduct requirements on monetary intermediaries when providing services to investors. For instance, a requirement that the monetary intermediary make a determination that a particular CIS is a "suitable" investment based on the investment objectives and monetary circumstances of the investor to whom the recommendation is made.
5. Some of the standards of conduct requirements imposed on monetary intermediaries may be expressly incorporated in rules or legislation or may arise from a general duty of care owed to investors due to the fiduciary relationship that exists between the intermediary and investor. These standards of conduct may be enforceable by a regulatory authority, by a self¬ regulatory organization of which the monetary intermediary is a member, or through private litigation against the intermediary for breach of the standard of conduct requirement.
6. Where there is a "suitability requirement" imposed on a monetary intermediary, the regulatory regime may require that the monetary intermediary obtain information from a client sufficient to make a suitability determination before providing any investment advisory services and as appropriate thereafter. Relevant information may include the investor's investment objectives, risk tolerance, investment time horizon and the relationship of the proposed CIS investment to the investor's individual portfolio.
7. Again, the monetary intermediary's obligations may vary depending on the sophistication of the customer and the specific transaction. For example, monetary intermediaries selling CIS units to elderly, retired or first ¬time investors may have heightened obligations with respect to ensuring that a particular CIS product is appropriate for the investor. On the other hand, the processes that needs to be followed when dealing with institutional clients that have a high degree of monetary sophistication may be different.

4.5 TYPES OF MONETARY INTERMEDIARIES IN INDIA

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1. Reserve Bank of India
2. Commercial Banks
3. Savings Banks
4. Life Insurance
5. General Insurance
6. Trusts
7. Investment companies.
8. Mortgage Banks
9. Government lending institutions

1. Reserve Bank of India

The Reserve Bank of India is the central banking institution of India and controls the monetary policy of the rupee as well as ₹ 14500.21 billion (2010) of currency reserves. The institution was established on 1 April 1935 during the British Raj in accordance with the provisions of the Reserve Bank of India Act, 1934 and plays an important part in the development strategy of the government. It is a member bank of the Asian Clearing Union.

Main functions of RBI

The main functions of Reserve Bank of India are as follows:

(i) Monetary Authority

The Reserve Bank of India is the main monetary authority of the country and beside that the central bank acts as the bank of the national and state governments. It formulates implements and monitors the monetary policy as well as it has to ensure an adequate flow of credit to productive sectors. Objectives are maintaining price stability and ensuring adequate flow of credit to productive sectors. The national economy depends on the public sector and the central bank promotes an expansive monetary policy to push the private sector since the monetary market reforms of the 1990s.

The institution is also the regulator and supervisor of the monetary system and prescribes broad parameters of banking operations within which the country's banking and monetary system functions. Objectives are to maintain public confidence in the system, protect depositors' interest and provide cost-effective banking services to the public. The Banking Ombudsman Scheme has been formulated by the Reserve Bank of India (RBI) for effective addressing of complaints by bank customers. The RBI controls the monetary supply, monitors economic indicators like the gross domestic product and has to decide the design of the rupee banknotes as well as coins.

(ii) Manager of Exchange Control

The central bank manages to reach the goals of the Foreign Exchange Management Act, 1999. Objective: to facilitate external trade and payment and promote orderly development and maintenance of foreign exchange market in India.

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(iii) Issuer of Currency

The bank issues and exchanges or destroys currency and coins not fit for circulation. The objectives are giving the public adequate supply of currency of good quality and to provide loans to commercial banks to maintain or improve the GDP. The basic objectives of RBI are to issue bank notes, to maintain the currency and credit system of the country to utilize it in its best advantage and to maintain the reserves. RBI maintains the economic structure of the country so that it can achieve the objective of price stability as well as economic development, because both objectives are diverse in themselves.

(iv) Developmental Role

The central bank has to perform a wide range of promotional functions to support national objectives and industries. The RBI faces a lot of inter-sectoral and local inflation-related problems. Some of these problems are results of the dominant part of the public sector.

(v) Related Functions

The RBI is also a banker to the government and performs merchant banking function for the central and the state governments. It also acts as their banker. The National Housing Bank (NHB) was established in 1988 to promote private real estate acquisition. The institution maintains banking accounts of all scheduled banks, too.

2. Commercial Banks

Commercial Banks as institutions whose debts usually referred to as bank deposits are commonly accepted in final settlement of other people's debt.

The role of Commercial Banks

Commercial banks engage in the following activities:

(i) Processing of payments by way of telegraphic transfer, EFTPOS, internet banking, or other means.

(ii) Issuing bank drafts and bank cheques.

(iii) Accepting money on term deposit.

(iv) Lending money by overdraft, installment loan, or other means.

(v) Providing documentary and standby letter of credit, guarantees, performance bonds, securities underwriting commitments and other forms of off balance sheet exposures.

(vi) Safekeeping of documents and other items in safe deposit boxes.

(vii) Sale, distribution or brokerage, with or without advice, of insurance, unit trusts and similar monetary products as a monetary supermarket.

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(viii) Cash management and treasury services.

(ix) Merchant banking and private equity financing.

(x) Large commercial banks also underwrite bonds and make markets in currency, interest rates and credit-related securities, but today large commercial banks usually have an investment bank arm that is involved in the mentioned activities.

Functions of Commercial Bank

A Commercial Bank is an institution that operates for profit. It accepts deposits from the general public and extends loans to the households, businessmen and to others. Commercial Banks perform a variety of functions, which are as follows:

1. Primary Functions
   (a) Acceptance of Deposits
   (b) Lending of Funds
2. Subsidiary Functions
   (a) Agency Services
   (b) General Utility Services

1. Primary Functions

There are two primary functions, which are performed by every Commercial Bank. They are as follows:

(a) Acceptance of Deposits

The most important function of a Commercial Bank is to accept deposits from the public i.e., individuals, firms and other institutions. The deposits are accepted through Current account, Savings account and Fixed deposit account. Businessmen generally maintain current accounts. Banks don't give any interest on the deposits in the current account. Households generally maintain savings accounts who wish to save a part of their income to meet their future needs and who intend to earn any income from their savings. Deposits in this account earn interests at nominal rates. Fixed deposit accounts are maintained for a fixed period of time. Deposits in these accounts carry high rates of interest and generally they cannot be withdrawn before the maturity of period for which they have been contracted.

(b) Lending of Funds

Commercial Banks advance loans to individuals and firms. They can take different forms like overdraft facility, discounting of bills and advancing outright loans and advances. Under overdraft facility, the banks allow its depositor to withdraw cash in excess of his deposits with the bank. Under discounting facility, the customers are put in possession of money before the bills in their possession mature. Bank charges certain fees for the above facilities. In addition, the Commercial Bank gives loans to customers for short, medium and long-term period charging different rates of interest.

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2. Subsidiary Functions

Subsidiary functions are incidental to primary functions and have arised owing to competition among Commercial Banks. Subsidiary functions are classified into two types, viz., (a) Agency services and (b) General utility services.

(a) Agency Services

The services, which are rendered by Commercial Bank for and on behalf of its customers, are termed as agency services. These are as follows:

(i) They collect and pay cheques, bills of exchange etc., on behalf of their customers.

(ii) They collect dividend and interest warrants on behalf of their customers.

(iii) They carry out standing instructions of their customers.

(iv) They purchase and sell shares and other securities on behalf of their customers.

(v) They act as trustees and executors of their customers.

(b) General Utility Services

General utility services are those services, which are rendered by Commercial Banks for the public at large. These services are as follows:

(i) They render remittance facilities.

(ii) They provide safe deposit locker facility to enable people the safe custody of jewellery, securities and documents.

(iii) They issue letter of credit to facilitate foreign trade.

(iv) They furnish valuable credit information about merchants and business concerns.

(v) They buy and sale foreign currencies and facilitate foreign trade.

(vi) They undertake remittance of insurance premium, electricity bills etc.,

3. Savings Banks

A savings bank is a monetary institution whose primary purpose is accepting savings deposits. It may also perform some other functions.

Functions of Savings Banks

The essential economic and social functions of savings banks are three in number, as follows:

(i) They assemble the capital of the community, conserve the idle wealth and having aggregated it into sizable funds, loan it to business enterprisers.

(ii) They add to the peace and comfort and available consumption of society by providing a safe outlet for the funds of those who have the will and capacity to save but do not have the ability either to use the funds industrially themselves or to invest them with safety and profit.

(iii) They promote thrift more than any other Monetary Institution.

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(iv) The prudent investment of interest and accumulated principal, which together constitute savings, lessens profligacy, provides against the adversities of old age and sickness, helps the thrifty to buy a home and to enjoy better living conditions, builds up independence and stability of character and improves the social and political life of the community.

4. Life Insurance

The Oriental Life Insurance Company, the first corporate entity in India offering life insurance coverage, was established in Calcutta in 1818 by Bipin Behari Dasgupta and others. Europeans in India were its primary target market and it charged Indians heftier premiums. The Bombay Mutual Life Assurance Society, formed in 1870, was the first native insurance provider. Other insurance companies established in the pre-independence era included:

(i) Bharat Insurance Company (1896)

(ii) United India (1906)

(iii) National Indian (1906)

(iv) National Insurance (1906)

(v) Co-operative Assurance (1906)

(vi) Hindustan Co-operatives (1907)

(vii) Indian Mercantile

(viii) Swadeshi Life (later Bombay Life)

The first 150 years were marked mostly by turbulent economic conditions. It witnessed, India's First War of Independence, adverse effects of the World War I and World War II on the economy of India and in between them the period of worldwide economic crises triggered by the Great depression. The first half of the 20th century also saw a heightened struggle for India's independence. The aggregate effect of these events led to a high rate of bankruptcies and liquidation of life insurance companies in India. This had adversely affected the faith of the general public in the utility of obtaining life cover.

The Life Insurance Act and the Provident Fund Act were passed in 1912, providing the first regulatory mechanisms in the Life Insurance industry. The Indian Insurance Companies Act of 1928 authorized the government to obtain statistical information from companies operating in both life and non-life insurance areas. The subsequent Insurance Act of 1938 brought stricter state control over an industry that had seen several monetaryly unsound ventures fail. A bill was also introduced in the Legislative Assembly in 1944 to nationalize the insurance industry.

Objectives of LIC of India

The various objectives of LIC of India are as follows:

(i) To Spread and provide life insurance to the masses at a reasonable cost.

(ii) To Spread Life Insurance widely and in particular to the rural areas and to the socially and economically backward classes with a view to reaching

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all insurable persons in the country and providing them adequate monetary cover against death at a reasonable cost.

(iii) To maximize mobilization of people's savings by making insurance-linked savings adequately attractive.

(iv) To Bear in mind, in the investment of funds, the primary obligation to its policyholders, whose money it holds in trust, without losing sight of the interest of the community as a whole; the funds to be deployed to the best advantage of the investors as well as the community as a whole, keeping in view national priorities and obligations of attractive return.

(v) To Conduct business with utmost economy and with the full realization that the moneys belong to the policyholders.

(vi) To act as trustees of the insured public in their individual and collective capacities.

(vii) To meet the various life insurance needs of the community that would arise in the changing social and economic environment.

(viii) To involve all people working in the Corporation to the best of their capability in furthering the interests of the insured public by providing efficient service with courtesy.

(ix) To promote amongst all agents and employees of the Corporation a sense of participation, pride and job satisfaction through discharge of their duties with dedication towards achievement of Corporate Objective.

4 I's of Insurance Service

The 4 I's refers to the different dimensions/characteristics of any service. Unlike pure product, services have its own characteristics and its related problems. So the service provider needs to deal with these problems accordingly. The service provider has to design different strategies according the varying feature of the service. These 4 I's not only represent the characteristics of different services but also the problems and advantages attached to it.

These 4 I's can be broadly classified as:

- Intangibility
- Inconsistency
- Inseparability
- Inventory

(i) Intangibility: Insurance is a guarantee against risk and neither the risk nor the guarantee is tangible. Hence, insurance rightly come under services, which are intangible. Efforts have been made by the insurance companies to make insurance tangible to some extent by including letters and forms

(ii) Inconsistency: Service quality is often inconsistent. This is because service personnel have different capabilities, which vary in performance from day to day. This problem of inconsistency in service quality can be reduced through standardization, training and mechanization.

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(iii) ***Inseparability:*** Services are produced and consumed simultaneously. Consumers cannot and do not separate the deliverer of the service from the service itself. Interaction between consumer and the service provider varies based on whether consumer must be physically present to receive the service.

(iv) ***Inventory:*** No inventory can be maintained for services. Inventory carrying costs are more subjective and lead to idle production capacity. When the service is available but there is no demand, cost rises as, cost of paying the people and overhead remains constant even though the people are not required to provide services due to lack of demand. In the insurance sector however, commission is paid to the agents on each policy that they sell. Hence, not much inventory cost is wasted on idle inventory. As the cost of agents is directly proportionate to the policy sold.

5. General Insurance

(i) Motor Insurance

Motor insurance is insurance purchased for cars, trucks and other road vehicles. Its primary use is to provide protection against physical damage and/or bodily injury resulting from traffic collisions and against liability that could also arise there from.

(ii) Fire Insurance

Fire Insurance is governed by All India Fire Tariff effective from 31.3.2001 issued by Tariff Advisory Committee, a Statutory Body. It is a commercial policy covering building, offices, machinery, contents and personal belongings of the office. It mitigates the risk of loss of customers arising from fire breakout. The insured should take all possible steps to minimize the loss.

(iii) Health Insurance

Health insurance is insurance against the risk of incurring medical expenses. By estimating the overall risk of health care expenses, an insurer can develop a routine finance structure, such as a monthly premium or payroll tax, to ensure that money is available to pay for the health care benefits specified in the insurance agreement. The benefit is administered by a central organization such as a government agency, private business, or not-for-profit entity.

(iv) Marine Insurance

Marine insurance covers the loss or damage of ships, cargo, terminals and any transport or cargo by which property is transferred, acquired, or held between the points of origin and final destination.

6. Trusts

A trust involves the administration of assets on behalf of another: an institution or one or more individuals, living or dead. A living trust appoints a trustee to manage assets during the lifetime of the original settler; this private arrangement allows for distribution of wealth even if the client becomes incapacitated or unable to act

personally. Upon death, the trust controls how and when assets are used and distributed; this can be a substitute for appointment of a legal guardian or conservator to handle assets inherited by young children or others unable to act on their own behalf.

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Types of Trust

1. Revocable trusts

A revocable trust is one in which assets are owned by the trustee, but the settler reserves a power of revocation. Because the settler can revoke the trust and therefore maintains control over the property, there is normally no tax advantages involved in this arrangement.

2. Irrevocable trusts

An irrevocable trust is often used for charitable purposes by organizations or millionaires "high net worth individuals" as well as for the management of inheritances. As the benefactor relinquishes control of the assets upon creating the trust, any charitable activities incur tax benefits even while the assets are invested to provide a monetary endowment for later use by the charitable foundation.

A trust may also be an integral part of an institution founded by such an individual or group, created to ensure its long-term monetary viability.

3. Investment Companies

India is being ranked as fifth biggest economy in the world and is considered as one of the preferred hubs for investment prospects among foreign investors, due to its diversity of industries and increasingly expanding monetary system.

Top 10 Investment Companies in India attract foreign direct investment through tie ups with monetary firms, investment markets, technical partnerships and favored allocations. The Indian investment market is renowned for its massive workforce and diverse sectors that generates better opportunities for both expansion and earning competence.

List of Top 10 Investment Companies in India

1. ***Bajaj Allianz:*** Collaboration between Bajaj Finserv and Allianz SE, Bajaj Allianz Life Insurance Co. Ltd. is India's internationally renowned asset management company, administering wealth worth over a trillion. Offering life, general and travel insurance in more than 70 nations, the firm is recognized as the fastest expanding insurance consultants in the world. The various customized services offered by Bajaj Allianz are insurance and investment solutions assisted by advanced technology and management. Some of the investment policies and products proffered by the firm are: Unit Linked Plans, Pension Plans, Traditional Plans, Women Insurance Plans, Health Plans, Group Plans, Micro Insurance, etc.
2. ***HSBC Asset Management India Pvt Ltd:*** Outstanding investment solutions along with an excellent track record have made HSBC Global Asset Management Pvt ltd one of the leading fund management institutions

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in the world. The company has assets worth USD381.4 billion under its supervision across the globe and offices in around 20 nations. It offers an all inclusive range of investment management services such as Mutual Fund and Portfolio Management to its varied patrons and is dedicated to executing steady endowment performance along with world class products for all kinds of investors.

3. ***SMC Investment Solution and Services:*** India's recognized fiscal service provider, SMC Investment Solution and Services is an incorporated firm offering investment solutions across India. In the recent past, the group has been successful in expanding its business operation in international location. At present it has more than 1500 branches spread across 350 Indian cities.
4. ***Shah Monetary Group:*** Shah Monetary Group was initiated in the year 2004 and is currently involved in distribution trade of individual business, finance and home finance through several monetary institutions, banks, FOREX, SENSEX, Debentures buying and selling, Exim, NRI investment, external business loans, etc. The group also offers fiscal, tax relief and finance enhancement facilities to its corporate and non-corporate clients.
5. ***Stanrose Mafatlal Investment and Finance Ltd:*** The chief activity of Stanrose Mafatlal Investments & Finance Limited is to offer investment supervision facilities to its varied clients. It functions through its subordinate Stanrose Mafatlal Lubechem Limited in the capital market and is involved in inter-corporate endowments, fund market operations and financing.
6. ***Tata Investment Corporation Ltd.:*** Endorsed by Tata Sons, Tata Investment Corporation Limited (TICL) was established to help the sponsorship of new firms and schemes besides indulging in investment activities. In collaboration with Tata Sons, TICL endorsed Tata Mutual Fund and became the chief shareholder of Tata Securities. The firm is now involved in the allocation of mutual funds and other endowment linked securities. A non-banking monetary company (NBFC), TICL is certified with the RBI under the category of 'Investment Firm'.
7. ***Toss Monetary Services Pvt. Ltd.:*** A certified associate of National Stock Exchange, Toss Monetary Services Pvt Ltd is the recognized Stock broking and Investment Management consultation firm in India. The firm offer consultation services in the monetary sector with prominence on Indian Stock Market that entails the registered reserves, equities, mutual funds, securities and private equity allocations.
8. ***Veronica Monetary Services Ltd:*** Veronica Monetary Services Ltd. is an integrated investment firm that has emerged as an active player with considerable endowments in the equity capital markets. The firm is involved in locating and investing in firms facing fiscal crunch, assisting the firm in growing monetaryly strong and eventually making it money spinning. Assisted by professionals, the firm manages the sick company

and keeps a strict vigilance on its day to day functions until it attains profitability stage.

9. ***Indian Investment Centre:*** Indian Investment Centre is a certified group operating under the managerial control of Ministry of Finance. The firm endorses NRI investment as well as foreign private investment and is a nodal society for endowments by non-residents and PIOs (Persons of Indian Origin). IIC offers assistance and data on Indian Government's investment schemes, methods, accessibility of infrastructural services, inducements, investment prospects and extends associated with consultation services.
10. ***J.M. Capital Management Private Ltd:*** J.M. Capital Management Private Ltd (JMCM) manages capital for both organizational and individual investors present in India as well as abroad. The firm has one of the biggest distribution channels with each symbolizing a large segment of retail customers with endowment excess and concentrates on quality survey of the market with prominence investment alternatives.

4. Mortgage Banks

A Mortgage bank specializes in originating and/or servicing mortgage loans. A mortgage bank is a state-licensed banking entity that makes mortgage loans directly to consumers. The difference between a mortgage banker and a mortgage broker is that the mortgage banker funds loans with its own capital.

5. Government lending institutions in India

The Monetary Institutions in India mainly comprises of the Central Bank which is better known as the Reserve Bank of India, the commercial banks, the credit rating agencies, the securities and exchange board of India, insurance companies and the specialized monetary institutions in India.

4.6 LEVEL AND STRUCTURE OF INTEREST RATES

1. ***Pure Expectation Theory:*** Pure expectation is the simplest and most direct of the three theories. The theory explains the yield curve in terms of expected short-term rates. It is based on the idea that the two-year yield is equal to a one-year bond today plus the expected return on a one-year bond purchased one year from today. The one weakness of this theory is that it assumes that investors have no preference when it comes to different maturities and the risks associated with them.
2. ***Liquidity Preference Theory:*** This theory states that investors want to be compensated for interest rate risk that is associated with long-term issues. Because of the longer maturity, there is a greater price volatility associated with these securities. The structure is determined by the future expectations of rates and the yield premium for interest-rate risk. Because interest-rate risk increases with maturity, the yield premium will also increase with maturity. Also known as the Biased Expectations Theory.

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3. ***Market Segmentation Theory:*** This theory deals with the supply and demand in a certain maturity sector, which determines the interest rates for that sector. It can be used to explain just about every type of yield curve an investor can came across in the market. An offshoot to this theory is that if an investor wants to go out of his sector, he'll want to be compensated for taking on that additional risk. This is known as the Preferred Habitat Theory.

Check Your Progress

1. Discus about Monetary Theories.
2. Explain about Ricardo's Monetary Theory.

4.7 INTRODUCTION TO MONEY

Money is any object or record that is generally accepted as payment for goods and services for repayment of debts in a given country or socio-economic context. The main functions of money are distinguished as: a medium of exchange; a unit of account; a store of value; and, occasionally in the past, a standard of deferred payment. Any kind of object or secure verifiable record that fulfills these functions can serve as money.

Money originated as commodity money, but nearly all contemporary money systems are based on fiat money. Fiat money is without intrinsic use value as a physical commodity, and derives its value by being declared by a government to be legal tender; that is, it must be accepted as a form of payment within the boundaries of the country, for "all debts, public and private". The money supply of a country consists of currency (banknotes and coins) and bank money (the balance held in check accounts and savings accounts). Bank money usually forms by far the largest part of the money supply.

Money actually refers to two concepts: the abstract unit of account in terms of which the value of goods, services, and obligations can be compared; and anything that is widely established as a means of payment. Money is any object or record that is generally accepted as payment for goods and services and repayment of debts in a given socio-economic context or country. The main functions of money are distinguished as: a medium of exchange; a unit of account; a store of value; and, occasionally in the past, a standard of deferred payment. Any kind of object or secure verifiable record that fulfils these functions can serve as money. Money is historically an emergent market phenomenon establishing commodity money, but nearly all contemporary money systems are based on fiat money. Fiat money is without intrinsic use value as a physical commodity, and derives its value by being declared by a government to be legal tender; that is, it must be accepted as a form of payment within the boundaries of the country, for "all debts, public and private". The money supply of a country consists of currency (banknotes and coins) and bank money the balance held in checking accounts and savings accounts. Bank money usually forms by far the largest part of the money supply. Frequently the standard of value also serves as a medium of exchange, but that is not always the case.

4.8 HISTORY OF MONEY

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The word "money" is derived from the Latin word "MONETA" which was the surname of the Roman Goddess of Juno in whose temple at Rome, money was coined. The word "money" is believed to originate from a temple of Hera, located on Capitoline, one of Rome's seven hills. In the ancient world Hera was often associated with money. The temple of Juno Moneta at Rome was the place where the mint of Ancient Rome was located.

Indirect exchange is distinguished from direct exchange according as a medium is involved or not. Suppose that A and B exchange with each other a number of units of the commodities m and n. A acquires the commodity n because of the use-value that it has for him. He intends to consume it. The same is true of B, who acquires the commodity m for his immediate use. This is a case of direct exchange. If there are more than two individuals and more than two kinds of commodity in the market, indirect exchange also is possible. A may then acquire a commodity p, not because he desires to consume it, but in order to exchange it for a second commodity q which he does desire to consume. Let us suppose that A brings to the market two units of the commodity m, B two units of the commodity n, and C two units of the commodity o, and that A wishes to acquire one unit of each of the commodities n and o, B one unit of each of the commodities o and m, and C one unit of each of the commodities m and n. Even in this case a direct exchange is possible if the subjective valuations of the three commodities permit the exchange of each unit of m, n, and o for a unit of one of the others. But if this or a similar hypothesis does not hold good, and in by far the greater number of all exchange transactions it does not hold good, then indirect exchange becomes necessary, and the demand for goods for immediate wants is supplemented by a demand for goods.

Indirect exchange becomes more necessary as division of labour increases and wants become more refined. In the present stage of economic development, the occasions when direct exchange is both possible and actually effected have already become very exceptional. Never the less, even nowadays, they sometimes arise. Take, for instance, the payment of wages in kind, which is a case of direct exchange so long on the one hand as the employer uses the labor for the immediate satisfaction of his own needs and does not have to procure through exchange the goods in which the wages are paid, and so long on the other hand as the employee consumes the goods he receives and does not sell them. Such payment of wages in kind is still widely prevalent in agriculture, although even in this sphere its importance is being continually diminished by the extension of capitalistic methods of management and the development of division of labour.

The history of money spans thousands of years. Numismatics is the scientific study of money and its history in all its varied forms. Many items have been used as commodity money such as naturally scarce precious metals, cowry shells, barley, beads etc., as well as many other things that are thought of as having value.

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Modern money and most ancient money is essentially a token in other words, an abstraction. Paper currency is perhaps the most common type of physical money today. However, objects of gold or silver present many of money's essential properties.

Meaning of Money

Money is a token or item which acts as a medium of exchange that has both legal and social acceptance with regards to making payment for buying commodities or receiving services, as well as repayment of loans.

Money is a commodity which is used to denote anything which is widely accepted in payment for goods or in discharge of other business obligation. It consists of A Medium of Exchange, A Unit of value, A Transfer of value, A store of value, A standard of deferred payment. To most people, money is a collective term for the notes and coins in their immediate possession or in their bank accounts. Clearly, this is a correct interpretation of what is meant by the term 'money', but it is not a comprehensive definition, as we shall see.

In principle, anything can be classified as 'money'. For example, at various times throughout history, rare beads, precious metals and even livestock have been used as 'money'. The main precious metals employed for transactions purposes have been gold and silver but, with the passage of time, 'paper' money has developed starting as receipts for gold and silver deposited with institutions (e.g. goldsmiths) which were essentially the precursors of modern banks.

The most general Meaning of money is any asset that is widely accepted for purposes of exchange, i.e. as payment for goods and services.

Definition of Money

According to Mishkin, Frederic S., "Money is any item or verifiable record that is generally accepted as payment for goods and services and repayment of debts in a particular country or socio-economic context".

According to Mike Moffatt, "Money is a good that acts as a medium of exchange in transactions. Classically it is said that money acts as a unit of account, a store of value, and a medium of exchange".

According to Walker, Money is one of the greatest inventions of mankind. In a wider sense, Money includes all mediums of exchanges like Gold, Silver, Copper, Paper, Cheques, and Bills of exchange.

According to Crowther's defines money as "Anything that is generally acceptable as a means of exchange and that at the same time act as a measure of value and store of value".

4.9 FEATURES OF MONEY

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The features of money can be summarized as follows:

(a) General Acceptability: For anything the following characteristics or qualities for a thing to be money: a thing as money which is used by everybody as a medium of exchange. Gold and silver are considered good money materials because they have alternative uses and are generally accepted. Paper notes are accepted as money when they are issued by the central bank and/or the government and are legal tender. Cheques and bills of Exchange are not accepted generally, hence they are not money.

(b) Durability: For a thing to be money, it must posse's durability. It should be storable and last long without losing its value over a period-of time. Animals and perishable commodities are not good money materials because they do not posses durability. In this sense, gold, silver, alloy, brass etc, are the best materials which are used as money. Paper notes are less durable than these metals. But they are money because they are legal tender.

(c) Portability: The material used as money should be easily carried and transferred from one place to another. It should contain large value in small bulk. Gold and silver posses this quality. Hence they are good money materials. But they involve risk in carrying or transferring them from one place to another. Therefore, paper is considered as a better material and is used in the form of notes.

(d) Cognisability: The material with which money is made should be easily recognized by sight or touch. Coins and currency notes of different denominations in different designs and sizes meet this quality of good money.

(e) Homogeneity: The material with which money is made should be of the same quality. All coins of one denomination's must be of the same metal, weight, shape and size. Similarly, paper notes of one denomination must have the same quality of paper, design and size.

(f) Divisibility: The money material should be capable of being divided into smaller parts without losing value. Gold, silver and other such materials posses this quality. Gold has the same value in whatever number of parts it may be divided. The same is the case with paper when notes of small and large denominations are issued which facilitate the operation of small and large transactions.

(g) Stability: Money should be stable in value because it has to serve as a measure of value. Gold and silver posses this quality because they are not available in abundance. They are neither very scarce because being durable, they can be easily stocked. Their supplies can thus be increased or decreased when required. So they act as a store of value because, their value is stable. But Government prefer paper money to gold and

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silver because it is cheap and easily available. Its value is kept stable by keeping control over its issue. It is another thing that the central bank of a country is seldom able to exercise complete control over its issue which makes paper money unstable in value.

4.10 TYPES OF MONEY

Money can be categorized into the following types:

1. Commodity Money

This is a type of money which can be utilized both as an exchangeable commodity and a general purpose exchange medium in its own capacity. Whenever any commodity is used for the exchange purpose, the commodity becomes equivalent to the money and is called commodity money. There are certain types of commodity, which are used as the commodity money. Among these, there are several precious metals like gold, silver, copper and many more. Again, in many parts of the world, seashells, tobacco and many other items were in use as a type of money and medium of exchange.

2. Fiat Money

Fiat money is that type of money the value of which is ascertained with the help of legal methods instead of the associated availableness of commodities and services. Fiat money can symbolize government promises or a commodity. The word fiat means the "command of the sovereign. It is the type of money that is issued by the command of the sovereign. The paper money is generally called as the fiat money. This type of money forms a monetary standard. It has been made mandatory by law to accept the fiat money, as an exchange medium, whenever it is offered to anyone.

3. Credit Money

Credit money refers to the claim placed to a legal individual, which can be implemented to buy goods and services.

4. Soft Money

Soft money refers to the paper currency rather than gold, silver, or any other types of coined metal.

5. Hard Money

Hard money refers to the value of different gold, silver, or platinum coins (bullion) in circulation in the field of international trade.

6. Fiduciary Money

Today's monetary system is highly fiduciary. Whenever, any bank assures the customers to pay in different types of money and when the customer can sell the promise or transfer it to somebody else, it is called the fiduciary money. Fiduciary money is generally paid in gold, silver or paper money. There are cheques and

bank notes, which are the examples of fiduciary money because both are some kind of token which are used as money and carry the same value.

7. Commercial Bank Money

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Commercial Bank money or demand deposits are claims against financial institutions that can be used for the purchase of goods and services. A demand deposit account is an account from which funds can be withdrawn at any time by cheque or cash withdrawal without giving the bank or financial institution any prior notice. Banks have the legal obligation to return funds held in demand deposits immediately upon demand (or 'at call'). Demand deposit withdrawals can be performed in person, via cheques or bank drafts, using automatic teller machines (ATMs), or through online banking.

4.11 SIGNIFICANCE OR ROLE OF MONEY

Money is of vital importance to an economy due to its static and dynamic role. Its static role emerges from its dynamic role; money plays an important part in the life of every citizen and in the economic system as a whole.

A. STATIC ROLE OF MONEY

By Serving as a medium of exchange, money removes the need for double coincidence of want s and the inconveniences and difficulties associated with barter. The introduction of money as a medium of exchange breaks up the single transactions of sales and purchases, thereby eliminating the double coincidence of wants. The following some of the importance of static role of money.

1. By Serving as a Medium of Exchange, money removes the need for double coincident of wants and the inconveniences and difficulties associated with barter. The introduction of money as a medium of exchange breaks up the single transaction of barter into separate transaction of sales and purchases, thereby eliminating the double coincidence of wants.
2. By Acting as a Unit of account, money becomes a common measure of value. The use of money as a standard of value eliminates the necessity of quoting the price of apples in terms of organs, the price of organs in terms of nuts, and so on. Money is the standard of measuring value and value expressed in money is price. The prices of different commodities are expressed in terms of so many units of dollars, rupees, pounds, etc., depending on the nature of monetary unit in a country. The measurement of the values of goods and services in the monetary unit facilitates the problem of measuring the exchange values of goods in the market.
3. Money act as a standard of deferred payment, under barter, it was easy to take loans in goats or grains but difficult to make repayments in such perishable articles in the future. Money has simplified both taking and repayment of loans because the unit of account is durable. It also overcomes the difficulty of indivisibility of commodities.

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4. By Acting as a store of Value, money removes the problem of storing of commodities under barter money being the most liquid asset can be kept for long periods without deterioration or wastage.
5. By Transfer of value: money removes the difficulty of barter by facilitating the transfer of value from one place to another. A person can transfer his money through draft, bill of exchange, etc., and his assets by selling them for cash at one place and buying them at another place.

B. DYNAMIC ROLE OF MONEY

Money plays an important part in the daily life of a person whether he is a consumer, a producer, a businessman, an academician, a politician or an administrator. Besides, it influences the economy in a number of ways.

1. ***To the Customer:*** Money posses much significance for the consumer. The consumer receives his income in the form of money rather than in goods and services. With money in hands, he can get any commodity and services he likes, in whatever equalizer of marginal utilities for the consumer. The main aim of a consumer is to maximize his satisfaction by spending his limited income on different goods which he wants to purchase.
2. ***To the Producer:*** Money is of equal importance to the producer. He keeps account of the values of inputs and outputs in money. The raw materials purchased, the wages paid to workers, the capital borrowed, the rent paid, the expenses on advertisements, etc. are all expenses of production which are entered in his account books. The sale of products in money terms are his sale proceeds.
3. ***In Specialization and Division of Labour:*** Money plays an important role in large scale specialization and division of labour in modern production. Money helps the capitalist today wages to a large number of workers engaged in specialized jobs on the basis of division of labour. Each worker is paid money wages in accordance with the nature of work done by him. Thus money facilitates specialization and division of labour in modern production.
4. ***As the Basis of Credit:*** The entire modern business is based on credit is based on money. All monetary transactions consist of cheques, drafts, bills of exchange etc. These are credit instruments which are not money. It is the bank deposits that are money. Bank issue such credit instruments and create credit. Credit creation, in turn, plays a major role in transferring funds for depositors to investors.
5. ***As a Means of Capital Formation:*** By transforming savings into investment, money acts as a means to capital formation. Money is a liquid asset which can be stored and storing of money implies savings and savings are kept in bank deposits to earn interest on them. Banks, in turn, lend these savings to businessmen for investment in capital equipment, buying of raw materials, labour etc. from different sources and places.

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6. ***As an Index of Economic Growth:*** Money is also an index of economic growth. The various indicators of growth are national income, per capita income and economic welfare. These are calculated and measured in money terms. Changes in the value of money or prices also reflect the growth of an economy. Fall in the value of money(or rise in prices) means that the economy is not progressing in real terms. On he other hand, a continuous rise in the value of money(or fall in prices) reflects retardation of the economy. Somewhat stable prices imply a growing economy. Thus money is an index of economic growth.

7. ***In the Distribution and Calculation of Income:*** The rewards to the various factors of production in a modern economy are paid in money. A worker gets his wages, capitalist his interest, a landlord his rent, and an entrepreneur his profit. But all are paid their rewards in money. A organizer is able to calculate the marginal productivity of each factor in terms of money and pay it accordingly. For this, he equalizes the marginal productivity of each factor with its price. Its price is, in fact, its marginal productivity expressed in terms of money. As payments are made to various factors of production in money the calculation of national factors become easy.

8. ***In National and International Trade:*** Money facilitates both national and international trade. The use of money as a medium of exchange, as a store of value and as a transfer of value has made it possible to sell commodities not only within a country but also internationally. To facilitate trade, money has helped in establishing money and capital markets. There are banks, financial institutions, stock exchanges, produce exchanges, international financial institutions, etc. which operate on the basis of the money economy and they help in both national and international trade.

9. ***In solving the central problems of an Economy:*** Money helps in solving the central problems of an economy what to produce, for whom to produce, how to produce and in what quantities. This is because on the basis of its functions money facilitates the flow of goods and services among consumers, producers and the government.

10. ***To the Government:*** Money is of immense importance to the government money facilitates the buying and collection of taxes, fees and prices rendered by the government to the people. It simplifies the floating and management of public debt and government expenditure on development and non developmental activities. It would be impossible for modern government to carry on their functions without the use of money. Not only this, modern governments are welfare states which aim at improving the standard of living of the people by removing poverty, inequalities and unemployment, and achieving growth with stability. Money helps in achieving these goals of economic policy through its various instruments.

11. ***To the Society:*** Money confers many social advantages. It is on the basis of money that the superstructure of credit is built in the society which simplifies consumption, production, exchange and distribution. It

promotes national unity when people use the same currency in every nook and corner of the country. It acts as a lubricant for the social life of the people and oils the wheels of material progress. Money is at the back of social prestige and political power.

NOTES

4.12 FUNCTIONS OF MONEY

Money performs a number of primary, secondary, contingent and other functions which not only remove the difficulties of barter but also oils the wheels of trade and industry in the present day world. "We discuss these functions one by one.

A. PRIMARY FUNCTION

(i) ***Medium of Exchange:*** this is the primary function of money because it is out of this function developed. By serving as a medium of exchange, money removes the need for double coincidence of wants and the inconveniences and difficulties associated with barter. The introduction of money as a medium of exchange decomposes the single transaction of barter into separate transactions of sale and purchase, thereby eliminating the double coincidence of wants. This function of money also separates the transaction in time and place because the sellers and buyers of a commodity are not required to perform the transactions at the same time and place. This is because the seller of a commodity buys some money and money in turn, buys the commodity over time and place.

When money acts as a medium of exchange it means that it is generally acceptable. It therefore, affords the freedom of choice. With money, we can buy an assorted bundle of goods and services. As a medium of exchange, money acts as an intermediary. It facilitates exchange. It helps production indirectly through specialization and division of labour which, in turn, increase efficiency and output. Money facilitates trade. When acting as the intermediary, it helps one good or service to be traded indirectly for others.

(ii) ***Measure of Value:*** The second primary function of money is to act as a unit of value. Under barter one would have to resort to some standard of measurement, such as a length of string or a piece of wood. Since one would have to use a standard to measure the length or height of any object, it is only sensible that one particular standard should be the standard. Money is the standard for measuring value just as the yard or meter is the standard for measuring length. The monetary unit measures and expresses the values of all goods and services. Money is the common denominator which determines the rate of exchange between goods and services which are priced in terms of the monetary unit. There can be no pricing process without a measure of value. Money as a unit of value also facilitates accounting. "Assets of all kinds, liabilities of all kinds, income of all kinds, and expenses of all kinds can be stated in terms of common monetary units to be added or subtracted."

B. SECONDARY FUNCTION

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(i) ***Store of value:*** Another important function of money over time which harms or benefits the creditors and debtors. If the value of money increases over time, the creditors gain and debtors lose. On the other hand, a fall in the value of money over time brings losses to creditors and windfalls to debtors. To overcome this difficulty, some of the countries have fixed debt contracts in terms of a price index which measures changes in the value of money.

(ii) ***Standard or Deferred payment:*** It act as a standard of deferred or postponed payments. All debts are taken in money. It was easy under barter to take loans in goats or grains but difficult to make repayments in such perishable articles in the future. Money has simplified both the taking and repayment or loans because the unit of account is durable. Money links the present values with those of the future. It simplifies credit transactions. It makes possible contracts for the supply of goods in future for an agreed payment of money. It simplifies borrowing by consumers on hire-purchase and from house building and co-operative societies. Money facilitates borrowing by firms and businessmen from banks and other non bank financial institutions. The buying and selling of shares, debentures and securities is made possible by money. By acting as a standard of deferred payments, money helps in capital formation both by the government and business enterprises. In fine, this function of money develops financial and capital market and helps in the growth of the economy.

(iii) ***Transfer of value:*** Since money is a generally acceptable means of payment and acts as a store of value, it keeps on transferring values from person to person and place to place. A person who holds money in cash or assets can transfer that to any other person. Moreover, he can sell his assets at Delhi and purchase fresh assets at Bangalore. Thus money facilitates transfer of value between persons and places.

C. CONTINGENT FUNCTIONS

(i) ***Money is Basis of credit:*** Money is the basis of credit system. Business transactions are either in cash or on credit economies the use of money. But money is at the back of all credit. A commercial bank cannot create credit without having sufficient money in reserve. The credit instruments drawn by businessmen have always a cash guarantee supported by their bankers.

(ii) ***Money as the Most Liquid of all Liquid Assets:*** Money is the most liquid of all liquid assets in which wealth is held. Individuals and firms may hold wealth in infinitely varied forms. They may, for example, choose between holding wealth in currency, demand deposits, time deposits, savings, bonds, Treasury Bills, short-term government securities, long-term government securities, debentures, preference shares, ordinary shares, stocks of consumer's goods and productive equipment. All these are liquid forms of wealth which can be convened into money and vice-versa.

NOTES

(iii) ***Measurement of National Income:*** It was not possible to measure the national income under the barter system. Money helps in measuring national income. This is done when the various goods and services produced in a country are assessed in money terms.

(iv) ***Money facilitates distribution of National Income:*** Money also helps in the distribution of national income. Rewards of factors of production in the form of wages, rent, interest and profit are determined and paid in terms of money.

D. OTHER FUNCTIONS

(i) Money helps in maintain repayment capacity.

(ii) Money gives General Purchasing Power.

(iii) Money helps in Decision making.

(iv) Money encouragement of division of labour.

(v) Smoothens transformation of saving into investment.

4.13 ROLE AND SIGNIFICANCE OF MONEY IN A MODERN ECONOMY

The main role and significance of money in a modern economy are:

1. Money enables a consumer to maximize his satisfaction.
2. Money measure the intensity of desire of consummates.
3. Money facilities production by stimulating saving and investment.
4. Money gives mobility to capital and helps in capital formation.
5. It enables the harnessing various factors of production, so that the entrepreneurs is able to maximize profit.
6. Money facilitates exchange and helps in both trade and commerce both national and international.
7. Money helps price mechanism to allocate resources.
8. Money accelerated the process of industrialization.
9. Money is an extremely valuable social instrument which has largely contributed to the growth of national wealth and social welfare.

4.14 THE EMERGENCE OF MONEY

In the absence of a medium of exchange, non-monetary societies operated largely along the principles of gift economics.

The Mesopotamian civilization developed a large scale economy based on commodity money. The Babylonians and their neighboring city states later developed the earliest system of economics as we think of it today, in terms of rules on debt, legal contracts and law codes relating to business practices and private property. Money was not only an emergence, it was a necessity.

NOTES

The Shekel referred to an ancient unit of weight and currency. The first usage of the term came from Mesopotamia circa 3000 BC and referred to a specific mass of barley which related other values in a metric such as silver, bronze, copper etc. A barley/shekel was originally both a unit of currency and a unit of weight, just as the British Pound was originally a unit denominating a one pound mass of silver.

Commodity Money

Bartering has several problems; most notably that it requires a 'coincidence of wants'. For example, if a wheat farmer needs what a fruit farmer produces, a direct swap is impossible as seasonal fruit would spoil before the grain harvest. A solution is to trade fruit for wheat indirectly through a third, "intermediate", and commodity: the fruit is exchanged for the intermediate commodity when the fruit ripens. If this intermediate commodity doesn't perish and is reliably in demand throughout the year (e.g. copper, gold, or wine) then it can be exchanged for wheat after the harvest. The function of the intermediate commodity as a store-of-value can be standardized into a widespread commodity money, reducing the coincidence of wants problem. By overcoming the limitations of simple barter, commodity money makes the market in all other commodities more liquid. Many cultures around the world eventually developed the use of commodity money. Ancient China, Africa, and India used cowry shells. Trade in Japan's feudal system was based on the koku a unit of rice. The shekel was an ancient unit of weight and currency. The first usage of the term came from Mesopotamia circa 3000 BC and referred to a specific weight of barley, which related other values in a metric such as silver, bronze, copper etc. A barley/shekel was originally both a unit of currency and a unit of weight.

Where ever trade is common, barter systems usually lead quite rapidly to several key goods being imbued with monetary properties. In the early British colony of New South Wales, rum emerged quite soon after settlement as the most monetary of goods. When a nation is without a currency it commonly adopts a foreign currency. In prisons where conventional money is prohibited, it is quite common for cigarettes to take on a monetary quality, and throughout history, gold has taken on this unofficial monetary function.

Standardized Coinage

From early times, metals, where available, have usually been favored for use as proto-money over such commodities as cattle, cowry shells, or salt, because they are at once durable, portable, and easily divisible. The use of gold as proto-money has been traced back to the fourth millennium BC when the Egyptians used gold bars of a set weight as a medium of exchange, as had been done earlier in Mesopotamia with silver bars. The first known ruler who officially set standards of weight and money was Pheidon. The first stamped money (having the mark of some authority in the form of a picture or words) can be seen in the Bibliothèque Nationale of Paris. It is an electrum stater of a turtle coin, coined at Aegina Island. This remarkable coin dates about 700 BC. Electrum coins were also introduced about 650 BC in Lydia.

NOTES

Coinage was widely adopted across Ionia and mainland Greece during the 6th century BC, eventually leading to the Athenian Empire's 5th century BC, dominance of the region through their export of silver coinage, mined in southern Attica at Laurium and Thorikos. A major silver vein discovery at Laurium in 483 BC led to the huge expansion of the Athenian military fleet. Competing coinage standards at the time were maintained by Mytilene and Phokaia using coins of Electrum; Aegina used silver.

It was the discovery of the touchstone which led the way for metal-based commodity money and coinage. Any soft metal can be tested for purity on a touchstone, allowing one to quickly calculate the total content of a particular metal in a lump. Gold is a soft metal, which is also hard to come by, dense, and storable. As a result, monetary gold spread very quickly from Asia Minor, where it first gained wide usage, to the entire world.

Using such a system still required several steps and mathematical calculation. The touchstone allows one to estimate the amount of gold in an alloy, which is then multiplied by the weight to find the amount of gold alone in a lump. To make this process easier, the concept of standard coinage was introduced. Coins were pre-weighed and pre-alloyed, so as long as the manufacturer was aware of the origin of the coin, no use of the touchstone was required. Coins were typically minted by governments in a carefully protected process, and then stamped with an emblem that guaranteed the weight and value of the metal. It was, however, extremely common for governments to assert that the value of such money lay in its emblem and thus to subsequently reduce the value of the currency by lowering the content of valuable metal.

Although gold and silver were commonly used to mint coins, other metals could be used. For instance, Ancient Sparta minted coins from iron to discourage its citizens from engaging in foreign trade. In the early seventeenth century Sweden lacked more precious metal and so produced "plate money", which were large slabs of copper approximately 50 cm or more in length and width, appropriately stamped with indications of their value.

Metal based coins had the advantage of carrying their value within the coins themselves on the other hand, they induced manipulations: the clipping of coins in the attempt to get and recycle the precious metal. A greater problem was the simultaneous co-existence of gold, silver and copper coins in Europe. English and Spanish traders valued gold coins more than silver coins, as many of their neighbors did, with the effect that the English gold-based guinea coin began to rise against the English silver based crown in the 1670s and 1680s. Consequently, silver was ultimately pulled out of England for dubious amounts of gold coming into the country at a rate no other European nation would share. The effect was worsened with Asian traders not sharing the European appreciation of gold altogether gold left Asia and silver left Europe in quantities European observers like Isaac Newton, Master of the Royal Mint observed with unease.

Stability came into the system with national Banks guaranteeing to change money into gold at a promised rate; it did, however, not come easily. The Bank of England risked a national monetary catastrophe in the 1730s when customers

demanded their money be changed into gold in a moment of crisis. Eventually London's merchants saved the bank and the nation with monetary guarantees.

Another step in the evolution of money was the change from a coin being a unit of weight to being a unit of value. a distinction could be made between its commodity value and its specie value. The difference is these values are seignior age.

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Trade Bills of Exchange

Bills of exchange became prevalent with the expansion of European trade toward the end of the middle Ages. A flourishing Italian wholesale trade in cloth, woolen clothing, and wine, tin and other commodities was heavily dependent on credit for its rapid expansion. Goods were supplied to a buyer against a bill of exchange, which constituted the buyer's promise to make payment at some specified future date. Provided that the buyer was reputable or the bill was endorsed by a credible guarantor, the seller could then present the bill to a merchant banker and redeem it in money at a discounted value before it actually became due.

These bills could also be used as a form of payment by the seller to make additional purchases from his own suppliers. Thus, the bills an early form of credit – became both a medium of exchange and a medium for storage of value. Like the loans made by the Egyptian grain banks, this trade credit became a significant source for the creation of new money. In England, bills of exchange became an important form of credit and money during last quarter of the 18th century and the first quarter of the 19th century before banknotes, checks and cash credit lines were widely available.

Tallies

The acceptance of symbolic forms of money opened up vast new realms for human creativity. A symbol could be used to represent something of value that was available in physical storage somewhere else in space, such as grain in the warehouse. It could also be used to represent something of value that would be available later in time, such as a promissory note or bill of exchange, a document ordering someone to pay a certain sum of money to another on a specific date or when certain conditions have been fulfilled.

In the 12th Century, the English monarchy introduced an early version of the bill of exchange in the form of a notched piece of wood known as a tally stick. Tallies originally came into use at a time when paper was rare and costly, but their use persisted until the early 19th Century, even after paper forms of money had become prevalent. The notches were used to denote various amounts of taxes payable to the crown. Initially tallies were simply used as a form of receipt to the tax payer at the time of rendering his dues. As the revenue department became more efficient, they began issuing tallies to denote a promise of the tax assessee to make future tax payments at specified times during the year. Each tally consisted of a matching pair one stick was given to the assessee at the time of assessment representing the amount of taxes to be paid later and the other held by the Treasury representing the amount of taxes be collected at a future date.

NOTES

The Treasury discovered that these tallies could also be used to create money. When the crown had exhausted its current resources, it could use the tally receipts representing future tax payments due to the crown as a form of payment to its own creditors, who in turn could either collect the tax revenue directly from those assessed or use the same tally to pay their own taxes to the government. The tallies could also be sold to other parties in exchange for gold or silver coin at a discount reflecting the length of time remaining until the taxes was due for payment. Thus, the tallies became an accepted medium of exchange for some types of transactions and an accepted medium for store of value. Like the girobanks before it, the Treasury soon realized that it could also issue tallies that were not backed by any specific assessment of taxes. By doing so, the Treasury created new money that was backed by public trust and confidence in the monarchy rather than by specific revenue receipts.

Goldsmith Bankers

Goldsmiths in England had been craftsmen, bullion merchants, money changers and money lenders since the 16th century. But they were not the first to act as financial intermediates; in the early 17th century, the scriveners were the first to keep deposits for the express purpose of relending them. Merchants and traders had amassed huge hoards of gold and entrusted their wealth to the Royal Mint for storage. In 1640 King Charles I seized the private gold stored in the mint as a forced loan (which was to be paid back over time). Thereafter merchants preferred to store their gold with the goldsmiths of London, who possessed private vaults, and charged a fee for that service. In exchange for each deposit of precious metal, the goldsmiths issued receipts certifying the quantity and purity of the metal they held as a bailee (i.e. in trust). These receipts could not be assigned (only the original depositor could collect the stored goods). Gradually the goldsmiths took over the function of the scriveners of relending on behalf of a depositor and also developed modern banking practices; promissory notes were issued for money deposited which by custom and/or law was a loan to the goldsmith i.e. the depositor expressly allowed the goldsmith to use the money for any purpose including advances to his customers. The goldsmith charged no fee, or even paid interest on these deposits. Since the promissory notes were payable on demand, and the advances (loans) to the goldsmith's customers were repayable over a longer time period, this was an early from of fractional reserve banking. The promissory notes developed into an assignable instrument, which could circulate as a safe and convenient form of money backed by the goldsmith's promise to pay. Hence goldsmiths could advance loans in the form of gold money, or in the form of promissory notes, or in the form of checking accounts. Gold deposits were relatively stable, often remaining with the goldsmith for years on end, so there was little risk of default so long as public trust in the goldsmith's integrity and financial soundness was maintained. Thus, the goldsmiths of London became the forerunners of British banking and prominent creators of new money based on credit.

NOTES

Demand Deposits

The primary business of the early merchant banks was promotion of trade. The new class of commercial banks made accepting deposits and issuing loans their principal activity. They lend the money they received on deposit. They created additional money in the form of new bank notes. The money they created was partially backed by gold, silver or other assets and partially backed only by public trust in the institutions that created it.

Demand deposits are funds that are deposited in bank accounts and are available for withdrawal at the discretion of the depositor. The withdrawal of funds from the account does not require contacting or making any type of prior arrangements with the bank or credit union. As long as the account balance is sufficient to cover the amount of the withdrawal, and the withdrawal takes place in accordance with procedures set in place by the financial institution, the funds may be withdrawn on demand

Banknotes

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The history of money and banking are inseparably interlinked. The issuance of paper money was initiated by commercial banks. Inspired by the success of the London goldsmiths, some of which became the forerunners of great English banks, banks began issuing paper notes quite properly termed 'banknotes' which circulated in the same way that government issued currency circulates today. In England this practice continued up to 1694. Scottish banks continued issuing notes until 1850. In USA, this practice continued through the 19th Century, where at one time there were more than 5000 different types of bank notes issued by various commercial banks in America. Only the notes issued by the largest, most creditworthy banks were widely accepted. The script of smaller, lesser known institutions circulated locally. Farther from home it was only accepted at a discounted rate, if it was accepted at all. The proliferation of types of money went hand in hand with a multiplication in the number of financial institutions.

These banknotes were a form of representative money which could be converted into gold or silver by application at the bank. Since banks issued notes far in excess of the gold and silver they kept on deposit, sudden loss of public confidence in a bank could precipitate mass redemption of banknotes and result in bankruptcy. The use of bank notes issued by private commercial banks as legal tender has gradually been replaced by the issuance of bank notes authorized and controlled by national governments. The Bank of England was granted sole rights to issue banknotes in England after 1694. In the USA, the Federal Reserve Bank was granted similar rights after its establishment in 1913. Until recently, these government-authorized currencies were forms of representative money, since they were partially backed by gold or silver and were theoretically convertible into gold or silver.

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Gold-backed Banknotes

The term gold standard is often erroneously thought to refer to a currency where notes were fully backed by and redeemable in an equivalent amount of gold. The British pound was the strongest, most stable currency of the 19th Century and often considered the closest equivalent to pure gold, yet at the height of the gold standard there was only sufficient gold in the British treasury to redeem a small fraction of the currency then in circulation. In 1880, US government gold stock was equivalent in value to only 16% of currency and demand deposits in commercial banks. By 1970, it was about 0.5%. The gold standard was only a system for exchange of value between national currencies, never an agreement to redeem all paper notes for gold. The classic gold standard prevailed during the period 1880 and 1913 when a core of leading trading nations agreed to adhere to a fixed gold price and continuous convertibility for their currencies. Gold was used to settle accounts between these nations. With the outbreak of World War I, Britain was forced to abandon the gold standard even for their international transactions. Other nations quickly followed suit. After a brief attempt to revive the gold standard during the 1920s, it was finally abandoned by Britain and other leading nations during the Great Depression.

Prior to the abolition of the gold standard, the following words were printed on the face of every US dollar: "I promise to pay the bearer on demand, the sum of one dollar" followed by the signature of the US Secretary of the Treasury. Other denominations carried similar pledges proportionate to the face value of each note. The currencies of other nations bore similar promises too. In earlier times this promise signified that a bearer could redeem currency notes for their equivalent value in gold or silver. The US adopted a silver standard in 1785, meaning that the value of the US dollar represented a certain equivalent weight in silver and could be redeemed in silver coins. But even at its inception, the US Government was not required to maintain silver reserves sufficient to redeem all the notes that it issued. Through much of the 20th Century until 1971, the US dollar was 'backed' by gold, but from 1934 only foreign holders of the notes could exchange them for metal.

Representative Money

An example of representative money, this 1896 note could be exchanged for five US Dollars worth of silver. Representative money refers to money that consists of a token or certificate made of paper. The use of the various types of money including representative money, tracks the course of money from the past to the present. Token money may be called "representative money" in the sense that, say, a piece of paper might 'represent' or be a claim on a commodity also. Gold certificates or Silver certificates are a type of representative money which was used in the United States as currency until 1933.

The term 'representative money' has been used in the past "to signify that a certain amount of bullion was stored in a Treasury while the equivalent paper in circulation" represented the bullion. Representative money differs from commodity money which is actually made of some physical commodity. In his Treatise on Money,(1930:7) Keynes distinguished between commodity money and representative money, dividing the latter into "fiat money" and "managed money."

Fiat Money

Fiat money refers to money that is not backed by reserves of another commodity. The money itself is given value by government fiat or decree, enforcing legal tender laws, previously known as "forced tender", whereby debtors are legally relieved of the debt if they pay it in the government's money. By law, the refusal of a legal tender (offering) extinguishes the debt in the same way acceptance does. At times in history (e.g. Rome under Diocletian, and post-revolutionary France during the collapse of the assignats) the refusal of legal tender money in favor of some other form of payment was punished with the death penalty.

NOTES

Governments through history have often switched to forms of fiat money in times of need such as war, sometimes by suspending the service they provided of exchanging their money for gold, and other times by simply printing the money that they needed. When governments produce money more rapidly than economic growth, the money supply overtakes economic value. Therefore, the excess money eventually dilutes the market value of all money issued. This is called inflation. See open market operations.

In 1971 the United States finally switched to fiat money indefinitely. At this point in time many of the economically developed countries' currencies were fixed to the US dollar and so this single step meant that much of the western world's currencies became fiat money based. Following the Gulf War the president of Iraq, Saddam Hussein, repealed the existing Iraqi fiat currency and replaced it with a new currency. Despite having no backing by a commodity and with no central authority mandating its use or defending its value, the old currency continued to circulate within the politically isolated Kurdish regions of Iraq. It became known as the "Swiss dinar". This currency remained relatively strong and stable for over a decade. It was formally replaced following the Iraq War.

4.15 HISTORY OF MONEY IN INDIA

Ancient India, presently modern states of Pakistan and north-western India, was one of the earliest issuers of coins in the world (circa 6th century BC), along with the Chinese wen and Lydian staters. The origin of the word "rupee" is found in the word rup or rupa, which means "silver" in many Indo-Aryan languages such as Hindi. The Sanskrit word rupyakam means coin of silver. The derivative word Rupaya was used to denote the coin introduced by Sher Shah Suri during his reign from 1540 to 1545 CE. The original Rupaya was a silver coin weighing 175 grains troy (about 11.34 grams). The coin has been used since then, even during the times of British India. Formerly the rupee was divided into 16 annas, 64 paise, or 192 pies. In Arabia and East Africa the British India rupee was current at various times, including the paisa and was used as far south as Natal. In Mozambique the British India rupees were over stamped, and in Kenya the British East Africa Company minted the rupee and its fractions as well as piece. It was maintained as the florin, using the same standard, until 1920. In Somalia the Italian colonial authority minted 'Rupia' to exactly the same standard, and called the paisa 'besa'. Early 19th century E.I.C. rupees were used in Australia for a limited period. Decimalisation occurred in Ceylon (Sri Lanka) in 1872, India in 1957 and in Pakistan in 1961.

NOTES

Among the earliest issues of paper rupees were those by the Bank of Hindustan (1770–1832), the General Bank of Bengal and Bihar (1773–75, established by Warren Hastings), the Bengal Bank (1784–91), amongst others.

Historically, the rupee was a silver based currency. This had severe consequences in the 19th century, when the strongest economies in the world were on the gold standard. The discovery of vast quantities of silver in the U.S. and various European colonies resulted in a decline in the relative value of silver to gold. Suddenly the standard currency of India could not buy as much from the outside world. This event was known as "the fall of the Rupee."

During British rule, and the first decade of independence, the rupee was subdivided into 16 annas. Each anna was subdivided into either 4 pieces, or 12 pies.

In 1957, decimalisation occurred and the rupee was now divided into 100 Naye Paise (Hindi for new praises). After a few years, the initial "Naye" was dropped. However many still refer to 25, 50 and 75 paise as 4, 8 and 12 annas respectively, not unlike the now largely defunct usage of "bit" in American English for 1/8 dollar. However the usage is in decline.

Early Paper Issues

Notes issued by the Bank of Bengal can be categorized in the following three series.

(i) ***Unifaced series:*** The early notes of the Bank of Bengal were printed only on one side and were issued as one gold mohur and in denominations of ₹ 100, ₹ 250, ₹ 500, etc.

(ii) ***Commerce series:*** Later notes had a vignette representing an allegorical female figure personifying 'commerce'. The notes were printed on both sides. On the obverse the name of the bank and the denominations were printed in three scripts, viz., {Urdu, Bengali and Devanagari}. On the reverse of such notes was printed a cartouche with ornamentation carrying the name of the Bank.

(iii) ***Brittania series:*** By late 19th century, the motif 'commerce' was replaced by 'Britannia'. The new banknotes had more features to prevent forgery.

British India Issues

The Paper Currency Act of 1861 gave the Government the monopoly of note issue throughout the vast expanse of India, which was a considerable task. Eventually, the management of paper currency was entrusted to the Mint Masters, the Accountant Generals and the Controller of Currency.

(i) ***Victoria portrait series:*** The first set of British India notes were the 'Victoria Portrait' series issued in denominations of 10, 20, 50, 100 and 1000. These were unifaced, carried two language panels. The security features incorporated the watermark, the printed signature and the registration of the notes.

(ii) ***Under print series:*** The unifaced under print series was introduced in 1867 as the Victoria Portrait series was withdrawn in the wake of a spate of forgeries. These notes were issued in denominations of ₹ 5, 10, 20, 50, 100, 500, 1000 and 10000.

(iii) ***George V series:*** A series carrying the portrait of George V were introduced in 1923, and was continued as an integral feature of all paper money issues of British India. These notes were issued in denominations of ₹ 1, 2½, 5, 10, 50, 100, 1000, 10,000.

Reserve Bank issues during British India

The Reserve Bank of India was formally inaugurated on Monday, April 1, 1935 with its Central Office at Calcutta. Section 22 of the RBI Act, 1934, empowered it to continue issuing Government of India notes until its own notes were ready for issue. The bank issued the first five rupee note bearing the portrait of George VI in 1938. This was followed by ₹ 10 in February, ₹ 100 in March and ₹ 1,000 and ₹10,000 in June 1938. The first Reserve Bank issues were signed by the second Governor, Sir James Taylor. In August 1940, the one-rupee note was reintroduced as a wartime measure, as a Government note with the status of a rupee coin. During the war, the Japanese produced high-quality forgeries of the Indian currency. This necessitated a change in the watermark. The profile portrait of George VI was changed to his full frontal portrait. The security thread was introduced for the first time in India. The George VI series continued till 1947 and thereafter as a frozen series till 1950 when post-independence notes were issued.

Republic of India Issues

After Independence of India, the government brought out the new design Re. 1 note in 1949. Initially it was felt that the King's portrait be replaced by a portrait of Mahatma Gandhi. Finally however, the Lion Capital of Asoka was chosen. The new design of notes was largely along earlier lines. In 1953, Hindi was displayed prominently on the new notes. The economic crisis in late 1960s led to a reduction in the size of notes in 1967. High denomination notes, like ₹ 10,000 notes were demonetized in 1978. The "Mahatma Gandhi Series" was introduced in 1996. Prominent new features included a changed watermark, windowed security thread, latent image and intaglio features for the visually handicapped.

Other issues

(i) ***Jammu and Kashmir issues:*** Maharaja Rambir Singh introduced paper money on watermarked paper in 1877. The notes were not very popular and were in circulation for a very short period. The notes carried the 'Sun' motif of the Dogra family.

(ii) ***Hyderabad issues:*** The Government of Hyderabad had made several efforts to organize private bankers to set up a banking company which could issue paper money. The British however resisted the attempts of Indian princely states to issue paper currency. The acute shortage of silver during the First World War and the contributions of Hyderabad State to the British war effort led them to accept, in 1918, paper currency in denominations of ₹10/- and ₹100/- issued under the Hyderabad

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Currency Act. The currency was designated the Osmania Sicca (OS). Rupee One and Rupees Five notes were issued subsequently in 1919 and Rupees One Thousand notes were issued in 1926. After the setting up of the India Currency Notes Press at Nasik, Hyderabad notes came to be printed there.

(iii) ***Burma issues:*** Burma separated from India in 1938; however, the Reserve Bank of India acted as Banker to the Government of Burma and was responsible for note issue in terms of the Burma Monetary Arrangements Order, 1937. In May 1938 the Bank issued Burma notes which were not legal tender in India.

(iv) ***Indo-French issues:*** The French Indian rupee (FIR) was introduced by France's Bank of Indochina in French colonies of India.

(v) ***Indo-Portuguese issues:*** The Portuguese Indian Rupia was the currency of Portuguese India until 1959. It was divisible into 16 Tangas or 960 Reis. In 1959, the currency was changed to the Portuguese Indian Escudo, at the rate of 1 Rupia for 6 Escudos.

(vi) ***Persian Gulf issues:*** For many years in the early and mid-20th century, the Indian rupee was the official currency in several areas that were controlled by the British and governed from India; areas such as East Africa, Southern Arabia and the Persian Gulf. The rupees used in the Persian Gulf had been bought by the Gulf states from the Reserve Bank of India, who held the sterling reserves by which the rupees had originally been purchased. However, Indian rupees were being smuggled from India to the states of the Persian Gulf in exchange for gold. It was estimated in 1959 that the total amount of gold in private hands in India was about $US1.75 to 2 billion-roughly two thirds of the value of paper money in circulation. While it was legal to own and to trade in gold within India, it was illegal to import or export gold. The Gulf Rupee, also known as the Persian Gulf Rupee (XPGR), was introduced by the Indian government as a replacement for the Indian Rupee for circulation exclusively outside the country with the Reserve Bank of India Amendment Act, 1 May 1959. After India devalued the rupee on 6 June 1966, those countries still using it - Oman, Qatar and what is now the United Arab Emirates (known as the Trucial States until 1971) - replaced the Gulf Rupee with their own currencies. Kuwait and Bahrain had already done so in 1961 and 1965 respectively.

(vii) ***Emergency issues, Princely states:*** During the 1940s, when mints were occupied for use in the war, an acute scarcity of small coins was felt throughout India. Princely states in Western India like Balvan, Bikaner, Bundi, Gondal, Indergadh, Junagadh, Jasdan, Kutch Mengni, Muli, Morvi, Mangrol, Nawanagar, Nawalgarh Palitana, Rajkot, Sailana, Sayla, Vithalgadh, issued "Cash Coupons" to meet the shortage.

The coins of Bengal were developed in the Mughal style and those of Madras mostly in a South Indian style. The English coins of Western India developed along Mughal as well as English patterns. It was only in 1717 AD that the English

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obtained permission from the Emperor Farrukh Siyar to coin Mughal money at the Bombay mint. The British gold coins were termed Carolina, the silver coins Anglina, the copper coins Cupperoon and tin coins Tinny. By the early 1830, the English had become the dominant power in India. The Coinage Act of 1835 provided for uniform coinage throughout India. The new coins had the effigy of William IV on the obverse and the value on the reverse in English and Persian. The coins issued after 1840 bore the portrait of Queen Victoria. The first coinage under the crown was issued in 1862 and in 1877 Queen Victoria assumed the title the Empress of India. The 1911 accession to the throne of the King-Emperor George V led to the famous "pig rupee". On the coin the King appeared wearing the chain of the Order of the Indian Elephant. Through poor engraving the elephant looked very much like a pig. The Muslim population was incensed and the image had to be quickly redesigned.

Over a period of time, cost benefit considerations led to the gradual discontinuance of 1, 2 and 3 paise coins in the seventies; Stainless steel coinage of 10, 25 and 50 paise, was introduced in 1988 and of one rupee in 1992. The very considerable costs of managing note issues of Re 1, ₹ 2, and ₹ 5 led to the gradual coinisation of these denominations in the 1990s.

1966 Economic Crisis

Since 1950, India ran continued trade deficits that increased in magnitude in the 1960s. Furthermore, the Government of India had a budget deficit problem and could not borrow money from abroad or from the private corporate sector, due to that sector's negative savings rate. As a result, the government issued bonds to the RBI, which increased the money supply, leading to inflation. In 1966, foreign aid, which was hitherto a key factor in preventing devaluation of the rupee, was finally cut off and India was told it had to liberalize its restrictions on trade before foreign aid would again materialize. The response was the politically unpopular step of devaluation accompanied by liberalization. Furthermore, The Indo-Pakistani War of 1965 led the US and other countries friendly towards Pakistan to withdraw foreign aid to India, which further necessitated devaluation. Defense spending in 1965/1966 was 24.06% of total expenditure, the highest it has been in the period from 1965 to 1989 (Foundations, pp 195). The second factor is the drought of 1965/1966. The sharp rise in prices in this period, which led to devaluation, was often blamed on the drought by government.

At the end of 1969, the Indian Rupee was trading at around 13 British Pence. A decade later, by 1979, it was trading at around 6 British Pence. Finally by the end of 1989, the Indian Rupee had plunged to an all-time low of 3 British Pence. This triggered the onset of a wave of irreversible liberalization reforms away from populist measures.

1991 Economic Crisis

In 1991, India still had a fixed exchange rate system, where the rupee was pegged to the value of a basket of currencies of major trading partners. India started having balance of payments problems since 1985, and by the end of 1990, it found itself in serious economic trouble. The government was close to default and its foreign exchange reserves had dried up to the point that India could barely

finance three weeks' worth of imports. As in 1966, India faced high inflation and large government budget deficits. This led the government to devalue the rupee. At the end of 1999, the Indian Rupee was devalued considerably.

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Rupees in Popular Culture

Rupees are the currency in the fictional kingdom of Hyrule in The Legend of Zelda video game series. They have the appearance of large gems and their value is determined by color. Green rupees are worth 1, blue rupees are worth 5, yellow is worth 10, red is worth 20, purple is worth 50, orange is worth 100, and silver is worth 200.

18th August 2011: The National Assembly standing committee on Finance approved the coinage Amendment bill 2010 which replaces the paisa denominated coins with one rupee coin as the smallest unit. The approval brings to an end of 105 years old system of calculating currency on paisa.

4.16 QUANTITY THEORY OF MONEY

In its modern form, the quantity theory builds upon the following definitional relationship.

$$M.V_T = \sum_i (p_i.q_i) = p^T q$$

where,

M is the total amount of money in circulation on average in an economy during the period, say a year.

V_T is the transactions velocity of money, that is the average frequency across all transactions with which a unit of money is spent. This reflects availability of financial institutions, economic variables, and choices made as to how fast people turn over their money.

p_i and q_i are the price and quantity of the i-th transaction.

P is a column vector of the, p_i and the superscript T is the transpose operator.

q is a column vector of the q_i .

Mainstream economics accepts a simplification, the equation of exchange:

$$M.V_T = P_T.T$$

where,

P_T is the price level associated with transactions for the economy during the period

T is an index of the real value of aggregate transactions.

$$M.V = P.Q$$

The previous equation presents the difficulty that the associated data are not available for all transactions. With the development of national income and product accounts, emphasis shifted to national-income or final-product transactions, rather than gross transactions. Economists may therefore work with the form

where,

V is the velocity of money in final expenditures.

Q is an index of the real value of final expenditures.

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As an example, M might represent currency plus deposits in checking and savings accounts held by the public, Q real output (which equals real expenditure in macroeconomic equilibrium) with P the corresponding price level, and P.Q the nominal (money) value of output. In one empirical formulation, velocity was taken to be "the ratio of net national product in current prices to the money stock".

Thus far, the theory is not particularly controversial, as the equation of exchange is an identity. A theory requires that assumptions be made about the causal relationships among the four variables in this one equation. There are debates about the extent to which each of these variables is dependent upon the others. Without further restrictions, the equation does not require that a change in the money supply would change the value of any or all of P, Q, or P.Q. For example, a 10% increase in M could be accompanied by a 10% decrease in V, P.Q leaving unchanged. The quantity theory postulates that the primary causal effect is an effect of M on P.

A Rudimentary Version of the Quantity Theory

The equation of exchange can be used to form a rudimentary version of the quantity theory of the effect of monetary growth on inflation.

$$P = \frac{M.V}{Q}.$$

If V and Q were constant, then: $\frac{dP}{P} = \frac{dM}{M}$

and thus, $\frac{dP/P}{dt} = \frac{dM/M}{dt}$

where, t is time.

That is to say that, if V and Q were constant, then the inflation rate (the rate of growth $\frac{dP/P}{dt}$ of the price level) would exactly equal the growth rate $\frac{dM/M}{dt}$ of the money supply. In short, the inflation rate is a function of the monetary growth rate.

Less restrictively, with time-varying V and Q, we have the identity

$$\frac{dP/P}{dt} = \frac{dM/M}{dt} + \frac{dV/V}{dt} - \frac{dQ/Q}{dt}$$

which says that the inflation rate equals the monetary growth rate plus the growth rate of the velocity of money minus the growth rate of real expenditure. If one makes the quantity theory assumptions that, at least in the long run, (i) the monetary growth rate is controlled by the central bank, (ii) the growth rate of velocity is purely determined by the evolution of payments mechanisms, and (iii) the growth rate of real expenditure is determined by the rate of technological

progress plus the rate of labor force growth, then while the inflation rate need not equal the monetary growth rate, an x percentage point rise in the monetary growth rate will result in an x percentage point rise in the inflation rate.

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Cambridge Approach

Economists Alfred Marshall, A.C. Pigou, and John Maynard Keynes (before he developed his own, eponymous school of thought) associated with Cambridge University, took a slightly different approach to the quantity theory, focusing on money demand instead of money supply. They argued that a certain portion of the money supply will not be used for transactions; instead, it will be held for the convenience and security of having cash on hand. This portion of cash is commonly represented as k, a portion of nominal income (P.Y). The Cambridge economists also thought wealth would play a role, but wealth is often omitted for simplicity. The Cambridge equation is thus:

$$M^d = k.P.Y$$

Assuming that the economy is at equilibrium ($M^d = M$), Y is exogenous, and k is fixed in the short run, the Cambridge equation is equivalent to the equation of exchange with velocity equal to the inverse of k:

$$M.\frac{1}{k} = P.Y$$

The Cambridge version of the quantity theory led to both Keynes's attack on the quantity theory and the Monetarist revival of the theory.

Quantity theory and evidence

As restated by Milton Friedman, the quantity theory emphasizes the following relationship of the nominal value of expenditures PQ and the price level P to the quantity of money M:

$$(1)\ PQ = f(\overset{+}{M})\quad (2)\ P = g(\overset{+}{M})$$

The plus signs indicate that a change in the money supply is hypothesized to change nominal expenditures and the price level in the same direction (for other variables held constant).

Friedman described the empirical regularity of substantial changes in the quantity of money and in the level of prices as perhaps the most-evidenced economic phenomenon on record. Empirical studies have found relations consistent with the models above and with causation running from money to prices. The short-run relation of a change in the money supply in the past has been relatively more associated with a change in real output Q than the price level P in (1) but with much variation in the precision, timing, and size of the relation. For the long-run, there has been stronger support for (1) and (2) and no systematic association of Q and M.

Principles of QTM

The theory above is based on the following hypotheses:

1. The source of inflation is fundamentally derived from the growth rate of the money supply.
2. The supply of money is exogenous.
3. The demand for money, as reflected in its velocity, is a stable function of nominal income, interest rates, and so forth.
4. The mechanism for injecting money into the economy is not that important in the long run.
5. The real interest rate is determined by non-monetary factors: (productivity of capital, time preference).

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Assumptions of QTM

QTM adds assumptions to the logic of the equation of exchange. In its most basic form, the theory assumes that V (velocity of circulation) and T (volume of transactions) are constant in the short term. These assumptions, however, have been criticized, particularly the assumption that V is constant. The arguments point out that the velocity of circulation depends on consumer and business spending impulses, which cannot be constant.

The theory also assumes that the quantity of money, which is determined by outside forces, is the main influence of economic activity in a society. A change in money supply results in changes in price levels and/or a change in supply of goods and services. It is primarily these changes in money stock that cause a change in spending. And the velocity of circulation depends not on the amount of money available or on the current price level but on changes in price levels.

Finally, the number of transactions (T) is determined by labor, capital, natural resources (i.e. the factors of production), knowledge and organization. The theory assumes an economy in equilibrium and at full employment.

Essentially, the theory's assumptions imply that the value of money is determined by the amount of money available in an economy. An increase in money supply results in a decrease in the value of money because an increase in money supply causes a rise in inflation. As inflation rises, the purchasing power, or the value of money, decreases. It therefore will cost more to buy the same quantity of goods or services.

Money Supply, Inflation and Monetarism

1. As QTM says that quantity of money determines the value of money, it forms the cornerstone of monetarism.
2. Monetarists say that a rapid increase in money supply leads to a rapid increase in inflation. Money growth that surpasses the growth of economic output results in inflation as there is too much money behind too little production of goods and services. In order to curb inflation, money growth must fall below growth in economic output.

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3. This premise leads to how monetary policy is administered. Monetarists believe that money supply should be kept within an acceptable bandwidth so that levels of inflation can be controlled. Thus, for the near term, most monetarists agree that an increase in money supply can offer a quick-fix boost to a staggering economy in need of increased production. In the long term, however, the effects of monetary policy are still blurry.
4. Less orthodox monetarists, on the other hand, hold that an expanded money supply will not have any effect on real economic activity (production, employment levels, spending and so forth). But for most monetarists any anti-inflationary policy will stem from the basic concept that there should be a gradual reduction in the money supply.
5. Monetarists believe that instead of governments continually adjusting economic policies (i.e. government spending and taxes), it is better to let non-inflationary policies (i.e. gradual reduction of money supply) lead an economy to full employment.

QTM Re-Experienced

John Maynard Keynes challenged the theory in the 1930s, saying that increases in money supply lead to a decrease in the velocity of circulation and that real income, the flow of money to the factors of production, increased. Therefore, velocity could change in response to changes in money supply. It was conceded by many economists after him that Keynes' idea was accurate. QTM, as it is rooted in monetarism, was very popular in the 1980s among some major economies such as the United States and Great Britain under Ronald Reagan and Margaret Thatcher respectively. At the time, leaders tried to apply the principles of the theory to economies where money growth targets were set. However, as time went on, many accepted that strict adherence to a controlled money supply was not necessarily the cure-all for economic malaise.

Decline of Money-supply Targeting

An application of the quantity-theory approach aimed at removing monetary policy as a source of macroeconomic instability was to target a constant, low growth rate of the money supply. Still, practical identification of the relevant money supply, including measurement, was always somewhat controversial and difficult. As financial intermediation grew in complexity and sophistication in the 1980s and 1990s, it became more so. As a result, some central banks, including the Federal Reserve, which had targeted the money supply, reverted to targeting interest rates. But monetary aggregates remain a leading economic indicator with "some evidence that the linkages between money and economic activity are robust even at relatively short-run frequencies."

4.17 MODERN THEORY OF MONEY

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Modern Monetary Theory (MMT) is a heterodox macroeconomic framework that says monetarily sovereign countries like the U.S., U.K., Japan, and Canada, which spend, tax, and borrow in a fiat currency they fully control, are not operationally constrained by revenues when it comes to federal government spending.

Put simply, such governments do not rely on taxes or borrowing for spending since they can print as much as they need and are the monopoly issuers of the currency. Since their budgets aren't like a regular household's, their policies should not be shaped by fears of rising national debt.

MMT challenges conventional beliefs about the way the government interacts with the economy, the nature of money, the use of taxes, and the significance of budget deficits. These beliefs, critics say, are a hangover from the gold standard era and are no longer accurate, useful, or necessary.

MMT is used in policy debates to argue for such progressive legislation as universal healthcare and other public programs for which governments claim to not have enough money to fund.

Core Principles

The central idea of MMT is that governments with a fiat currency system under their control can and should print (or create with a few keystrokes in today's digital age) as much money as they need to spend because they cannot go broke or be insolvent unless a political decision to do so is taken.

Some say such spending would be fiscally irresponsible as the debt would balloon and inflation would skyrocket. But according to MMT, large government debt isn't the precursor to collapse we have been led to believe it is, countries like the U.S. can sustain much greater deficits without cause for concern, and a small deficit or surplus can be extremely harmful and cause a recession since deficit spending is what builds people's savings.

MMT theorists explain that debt is simply money the government put into the economy and didn't tax back. They also argue that comparing a government's budgets to that of an average household is a mistake.

While supporters of the theory acknowledge that inflation is theoretically a possible outcome from such spending, they say it is highly unlikely and can be fought with policy decisions in the future if required. They often cite the example of Japan, which has much higher public debt than the U.S.

According to MMT, the only limit the government has when it comes to spending is the availability of real resources, like workers, construction supplies, etc. When government spending is too great with respect to the resources available, inflation can surge if decision-makers are not careful.

Taxes create an ongoing demand for currency and are a tool to take money out of an economy that is getting overheated, says MMT. This goes against the conventional idea that taxes are primarily meant to provide the government with money to spend to build infrastructure, fund social welfare programs, etc.

4.18 KEYNES'S THEORY OF MONEY AND PRICE

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The Keynesian reformulated quantity theory of money is based on the following:

Assumptions:

1. All factors of production are in perfectly elastic supply so long as there is any unemployment.
2. All unemployed factors are homogeneous, perfectly divisible and interchangeable.
3. There are constant returns to scale so that prices do not rise or fall as output increases.
4. Effective demand and quantity of money change in the same proportion so long as there are any unemployed resources.

Given these assumptions, the Keynesian chain of causation between changes in the quantity of money and in prices is an indirect one through the rate of interest. So when the quantity of money is increased, its first impact is on the rate of interest which tends to fall. Given the marginal efficiency of capital a fall in the rate of interest will increase the volume of investment.

The increased investment will raise effective demand through the multiplier effect thereby increasing income, output and employment. Since the supply curve of factors of production is perfectly elastic in a situation of unemployment, wage and non-wage factors are available at constant rate of remuneration. There being constant returns to scale, prices do not rise with the increase in output so long as there is any unemployment.

Under the circumstances, output and employment will increase in the same proportion as effective demand, and the effective demand will increase in the same proportion as the quantity of money. But "once full employment is reached, output ceases to respond at all to changes in the supply of money and so in effective demand. The elasticity of supply of output in response to changes in the supply, which was infinite as long as there was unemployment falls to zero. The entire effect of changes in the supply of money is exerted on prices, which rise in exact proportion with the increase in effective demand."

Thus so long as there is unemployment, output will change in the same proportion as the quantity of money, and there will be no change in prices; and when there is full employment, prices will change in the same proportion as the quantity of money. Therefore, the reformulated quantity theory of money stresses the point that with increase in the quantity of money prices rise only when the level of full employment is reached, and not before this.

This reformulated quantity theory of money is illustrated in Figure (A) and (B) where OTC is the output curve relating to the quantity of money and PRC is the price curve relating to the quantity of money. Panel A of the figure shows that as the quantity of money increases from O to M, the level of output also rises along the OT portion of the OTC curve.

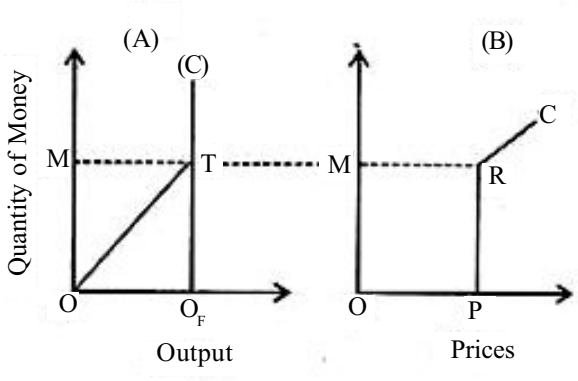

Fig. 4.1: Keynes's theory of Money and Price

As the quantity of money reaches OM level, full employment output OQF is being produced. But after point T the output curve becomes vertical because any further increase in the quantity of money cannot raise output beyond the full employment level OQF.

Panel of the figure shows the relationship between quantity of money and prices. So long as there is unemployment, prices remain constant whatever the increase in the quantity of money. Prices start rising only after the full employment level is reached.

In the figure, the price level OP remains constant at the OM quantity of money corresponding to the full employment level of output OQ1. But an increase in the quantity of money above OM raises prices in the same proportion as the quantity of money. This is shown by the RC portion of the price curve PRC.

Keynes himself pointed out that the real world is so complicated that the simplifying assumptions, upon which the reformulated quantity theory of money is based, will not hold. According to him, the following possible complications would qualify the statement that so long as there is unemployment, employment will change in the same proportion as the quantity of money, and when there is full employment, prices will change in the same proportion as the quantity of money."

1. "Effective demand will not change in exact proportion to the quantity of money.
2. Since resources are homogenous, there will be diminishing, and not constant returns as employment gradually increases.
3. Since resources are not interchangeable, some commodities will reach a condition of inelastic supply while there are still unemployed resources available for the production of other commodities.
4. The wage-unit will tend to rise, before full employment has been reached.
5. The remunerations of factors entering into marginal cost will not all change in the same proportion."

Taking into account these complications, it is clear that the reformulated quantity theory of money does not hold. An increase in effective demand will not change in exact proportion to the quantity of money, but it will partly spend itself in increasing output and partly in increasing the price level. So long as there are

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unemployed resources, the general price level will not rise much as output increases. But a sudden large increase in aggregate demand will encounter bottlenecks when resources are still unemployed.

It may be that the supply of some factors becomes inelastic or others may be in short supply and are not interchangeable. This may lead to increase in marginal cost and price. Price would accordingly rise above average unit cost and profits would increase rapidly which, in turn, tend to raise money wages owing to trade union pressures. Diminishing returns may also set in. As full employment is reached, the elasticity of supply of output falls to zero and prices rise in proportion to the increase in the quantity of money.

The complicated model of the Keynesian theory of money and prices is shown diagrammatically in Figure in terms of aggregate supply (S) and aggregate demand (D) curves. The price level is measured on the vertical axis and output on the horizontal axis.

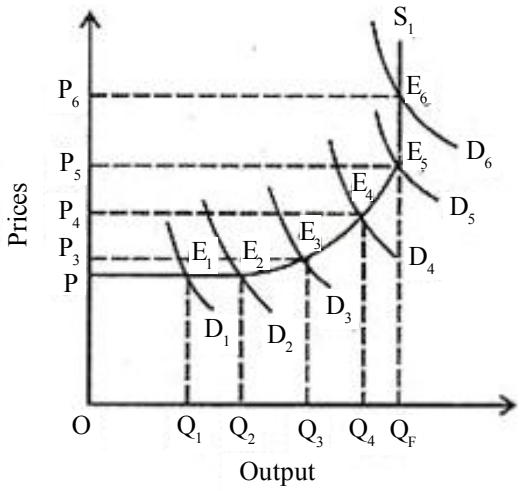

Fig. 4.2: Horizontal Axis

According to Keynes, an increase in the quantity of money increases aggregate money demand on investment as a result of the fall in the rate of interest. This increases output and employment in the beginning but not the price level. In the figure, the increase in the aggregate money demand from D_1 to D_2 raises output from OQ_1 to OQ_2 but the price level remains constant at OP. As aggregate money demand increases further from D_2 to D_3 output increases from OQ_2 to OQ_3 and the price level also rises to OP_3.

This is because costs rise as bottlenecks develop through the immobility of resources. Diminishing returns set in and less efficient labour and capital are employed. Output increases at a slower rate than a given increase in aggregate money demand, and this leads to higher prices. As full employment is approached, bottlenecks increase. Further-more, rising prices lead to increased demand, especially for stocks. Thus prices rise at an increasing rate. This is shown over the range in the figure.

But when the economy reaches the full employment level of output, any further increase in aggregate money demand brings about a proportionate increase

in the price level but output remains unchanged at that level. This is shown in the figure when the demand curve D_5 shifts upward to D_6 and the price level increases from OP_5 to OP_6 while the level of output remains constant at OQF.

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Superiority of the Keynesian Theory over the Traditional Quantity Theory of Money:

The Keynesian theory of money and prices is superior to the traditional quantity theory of money for the following reasons.

Keynes's reformulated quantity theory of money is superior to the traditional approach in that he discards the old view that the relationship between the quantity of money and prices is direct and proportional. Instead, he establishes an indirect and non-proportional relationship between quantity of money and prices.

In establishing such a relationship, Keynes brought about a transition from a pure monetary theory of prices to a monetary theory of output and employment. In so doing, he integrates monetary theory with value theory. He integrates monetary theory with value theory and also with the theory of output and employment through the rate of interest.

In fact, the integration between monetary theory and value theory is done through the theory of output in which the rate of interest plays the crucial role. When the quantity of money increases the rate of interest falls which increases the volume of investment and aggregate demand thereby raising output and employment. In this way, monetary theory is integrated with the theory of output and employment.

As output and employment increase they further raise the demand for factors of production. Consequently, certain bottlenecks appear which raise the marginal cost including money wage rates. Thus prices start rising.

Monetary theory is integrated with value theory in this way. The Keynesian theory is, therefore, superior to the traditional quantity theory of money because it does not keep the real and monetary sectors of the economy into two separate compartments with 'no doors or windows between the theory of value and the theory of money and prices.'

Again, the traditional quantity theory is based on the unrealistic assumption of full employment of resources. Under this assumption, a given increase in the quantity of money always leads to a proportionate increase in the price level. Keynes, on the other hand, believes that full employment is an exception.

Therefore, so long as there is unemployment, output and employment will change in the same proportion as the quantity of money, but there will be no change in prices; and when there is full employment, prices will change in the same proportion as the quantity of money. Thus the Keynesian analysis is superior to the traditional analysis because it studies the relationship between the quantity of money and prices both under unemployment and full employment situations.

Further, the Keynesian theory is superior to the traditional quantity theory of money in that it emphasises important policy implications. The traditional theory believes that every increase in the quantity of money leads to inflation.

Keynes, on the other hand, establishes that so long as there is unemployment, the rise in prices is gradual and there is no danger of inflation. It is only when the

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economy reaches the level of full employment that the rise in prices is inflationary with every increase in the quantity of money. Thus "this approach has the virtue of emphasising that the objectives of full employment and price stability may be inherently irreconcilable."

Criticisms of Keynes Theory of Money and Prices

Keynes' views on money and prices have been criticised by the monetarists on the following grounds.

1. Direct Relation

Keynes mistakenly took prices as fixed so that the effect of money appears in his analysis in terms of quantity of goods traded rather than their average prices. That is why Keynes adopted an indirect mechanism through bond prices, interest rates and investment of the effects of monetary changes on economic activity. But the actual effects of monetary changes are direct rather than indirect.

2. Stable Demand for Money

Keynes assumed that monetary changes were largely absorbed by changes in the demand for money. But Friedman has shown on the basis of his empirical studies that the demand for money is highly stable.

3. Nature of Money

Keynes failed to understand the true nature of money. He believed that money could be exchanged for bonds only. In fact, money can be exchanged for many different types of assets like bonds, securities, physical assets, human wealth, etc.

4. Effect of Money

Since Keynes wrote for a depression period, this led him to conclude that money had little effect on income. According to Friedman, it was the contraction of money that precipitated the depression. It was, therefore, wrong on the part of Keynes to argue that money had little effect on income. Money does affect national income.

Check Your Progress

3. Explain the history of Money in India.
4. Discuss Quantity Theory of Money.

4.19 ANSWERS TO 'CHECK YOUR PROGRESS'

1. Monetary theory is based on the idea that a change in money supply is the main driver of economic activity. It argues that central banks, which control the levers of monetary policy, can exert much power over economic growth rates by tinkering with the amount of currency and other liquid instruments circulating in a country's economy. According to monetary theory, if a nation's supply of money increases, economic activity will rise, too, and vice versa. A simple formula governs monetary theory, MV = PQ. M represents the

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money supply, V is the velocity (number of times per year the average dollar is spent), P is the price of goods and services, and Q is the number of goods and services. Assuming constant V, when M is increased, either P, Q, or both P and Q rise. General Price levels tend to rise more than the production of goods and services when the economy is closer to full employment. When there is slack in the economy, Q will increase at a faster rate than P under monetary theory.

2. David Ricardo assumes that the amount of money follows the increase of the national income. It is the other way round. Given a certain price level, the national income follows the amount of money. First the amount of money is increased by the bank system and then the national income increases. Comparative advantage, economic theory, first developed by 19th-century British economist David Ricardo, that attributed the cause and benefits of international trade to the differences in the relative opportunity costs (costs in terms of other goods given up) of producing the same commodities among countries.
3. The word "money" is derived from the Latin word "Moneta" which was the surname of the Roman Goddess of Juno in whose temple at Rome, money was coined. The word "money" is believed to originate from a temple of Hera, located on Capitoline, one of Rome's seven hills. In the ancient world Hera was often associated with money. The temple of Juno Moneta at Rome was the place where the mint of Ancient Rome was located. Indirect exchange is distinguished from direct exchange according as a medium is involved or not. Suppose that A and B exchange with each other a number of units of the commodities m and n. A acquires the commodity n because of the use-value that it has for him. He intends to consume it. The same is true of B, who acquires the commodity m for his immediate use.
4. The quantity theory of money (QTM) states that the general price level of goods and services is directly proportional to the amount of money in circulation, or money supply. For example, if the amount of money in an economy doubles, QTM predicts that price levels will also double. The theory was originally formulated by Polish mathematician Nicolaus Copernicus in 1517, and was influentially restated by philosophers John Locke, David Hume, Jean Bodin, and by economists Milton Friedman and Anna Schwartz in A Monetary History of the United States published in 1963. The theory was challenged by Keynesian economics, but updated and reinvigorated by the monetarist school of economics. Critics of the theory argue that money velocity is not stable and, in the short-run, prices are sticky, so the direct relationship between money supply and price level does not hold. In mainstream macroeconomic theory, changes in the money supply play no role in determining the inflation rate as it is measured by the CPI, although some outspoken critics such as Peter Schiff believe that an expansion of the money supply necessarily begets an increase in prices in a non-zero number of asset classes. In models where the expansion of the money supply does not impact inflation, inflation is determined by the monetary policy reaction function.

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4.20 SUMMARY

- Monetary theory is based on the idea that a change in money supply is the main driver of economic activity. It argues that central banks, which control the levers of monetary policy, can exert much power over economic growth rates by tinkering with the amount of currency and other liquid instruments circulating in a country's economy.
- Monetary Theory is a set of ideas about how monetary policy should be conducted within an economy. Monetary theory suggests that different monetary policies can benefit nations depending on their unique set of resources and limitations. It is based on core ideas about how factors like the size of the money supply, price levels and benchmark interest rates affect the economy. Economists and central banking authorities are typically those most involved with creating and executing monetary policy.
- Ricardo has also contributed to the understanding of monetary economies. He was concerned with the monetary problems of his time. His ea on currency can be appreciated from his two writings: (i) Proposal for Economical and Secure Currency and (ii) High Price of Bullion. Gustav Cassel drew inspiration for his purchasing power parity from the writings Ricardo.
- Ricardo in his book, High Price of Bullion, explained clearly the theory of exchange rate under two conditions. The first condition was with respect to the gold bullion standard and the second was regarding inconvertible paper currency standard. Ricardo said that in the case of gold standard, the exchange rate can be determined by the Mint Par, i.e., the gold content of domestic and foreign currency, subject to some upper and lower species points. In the case of inconvertible paper currency, exchange rate can be determined by the purchasing power of the two currencies. He pointed out in this connection that ''while the circulating medium consists, therefore, of coins undebased or of paper money immediately exchanged for undebased coins, the exchange can never be more above or below the par than the expenses attaining the transportation of precious metals. But when it consists of depreciated paper money, it necessarily will fall according to the degree of depreciation."
- Monetary intermediation consists of channeling funds between surplus and deficit agents. A monetary intermediary is a monetary institution that connects surplus and deficit agents. The classic example of a monetary intermediary is a bank that transforms bank deposits into bank loans.
- Money is a token or item which acts as a medium of exchange that has both legal and social acceptance with regards to making payment for buying commodities or receiving services, as well as repayment of loans.

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- Money is a commodity which is used to denote anything which is widely accepted in payment for goods or in discharge of other business obligation. It consists of A Medium of Exchange, A Unit of value, A Transfer of value, A store of value, A standard of deferred payment. To most people, money is a collective term for the notes and coins in their immediate possession or in their bank accounts. Clearly, this is a correct interpretation of what is meant by the term 'money', but it is not a comprehensive definition, as we shall see.
- Bartering has several problems; most notably that it requires a 'coincidence of wants'. For example, if a wheat farmer needs what a fruit farmer produces, a direct swap is impossible as seasonal fruit would spoil before the grain harvest.
- Bills of exchange became prevalent with the expansion of European trade toward the end of the middle Ages. A flourishing Italian wholesale trade in cloth, woolen clothing, and wine, tin and other commodities was heavily dependent on credit for its rapid expansion. Goods were supplied to a buyer against a bill of exchange, which constituted the buyer's promise to make payment at some specified future date.
- Fiat money refers to money that is not backed by reserves of another commodity. The money itself is given value by government fiat or decree, enforcing legal tender laws, previously known as "forced tender", whereby debtors are legally relieved of the debt if they pay it in the government's money.
- Modern Monetary Theory (MMT) is a heterodox macroeconomic framework that says monetarily sovereign countries like the U.S., U.K., Japan, and Canada, which spend, tax, and borrow in a fiat currency they fully control, are not operationally constrained by revenues when it comes to federal government spending.

4.21 KEY TERMS

- **Monetary theory:** Monetary Theory is a set of ideas about how monetary policy should be conducted within an economy. Monetary theory suggests that different monetary policies can benefit nations depending on their unique set of resources and limitations.
- **Monetary intermediation:** Monetary intermediation consists of channeling funds between surplus and deficit agents. A monetary intermediary is a monetary institution that connects surplus and deficit agents. The classic example of a monetary intermediary is a bank that transforms bank deposits into bank loans.
- **Money:** Money is a token or item which acts as a medium of exchange that has both legal and social acceptance with regards to making payment for buying commodities or receiving services, as well as repayment of loans.

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Money is a commodity which is used to denote anything which is widely accepted in payment for goods or in discharge of other business obligation. It consists of A Medium of Exchange, A Unit of value, A Transfer of value, A store of value, A standard of deferred payment. To most people, money is a collective term for the notes and coins in their immediate possession or in their bank accounts. Clearly, this is a correct interpretation of what is meant by the term 'money', but it is not a comprehensive definition, as we shall see.

- **Commodity Money:** Bartering has several problems; most notably that it requires a 'coincidence of wants'. For example, if a wheat farmer needs what a fruit farmer produces, a direct swap is impossible as seasonal fruit would spoil before the grain harvest.
- **Trade bills of exchange:** Bills of exchange became prevalent with the expansion of European trade toward the end of the middle Ages. A flourishing Italian wholesale trade in cloth, woolen clothing, and wine, tin and other commodities was heavily dependent on credit for its rapid expansion. Goods were supplied to a buyer against a bill of exchange, which constituted the buyer's promise to make payment at some specified future date.
- **Fiat Money:** Fiat money refers to money that is not backed by reserves of another commodity. The money itself is given value by government fiat or decree, enforcing legal tender laws, previously known as "forced tender", whereby debtors are legally relieved of the debt if they pay it in the government's money.
- **Modern Theory of Money:** Modern Monetary Theory (MMT) is a heterodox macroeconomic framework that says monetarily sovereign countries like the U.S., U.K., Japan, and Canada, which spend, tax, and borrow in a fiat currency they fully control, are not operationally constrained by revenues when it comes to federal government spending.

4.22 SELF-ASSESSMENT QUESTIONS AND EXERCISES

Short Answer Questions

1. Give the meaning of Money.
2. Define the term Money.
3. State any three features of Money.
4. When first introduced money in India.
5. What is commodity money?
6. Who is goldsmith banker?
7. What is fiat money?
8. State any three functions of Money.

9. What is Quantity Theory of Money?
10. State any three principles of QTM.
11. State any three assumptions of QTM.
12. What is Money Supply?

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Short Answer Questions

1. Give an introduction to Money.
2. Discuss the importance of money.
3. Explain the concept of demand for money.
4. Explain Keynes's Motives for holding money.
5. Discuss important features of Money.
6. Explain the emergence of money.
7. Discuss the Keynesian Approach for demand for money.
8. Explain rupees in popular culture.
9. Discuss assumptions of QTM.
10. Explain QTM Re-Experienced.
11. Explain brief history of money.
12. Discuss history of Money in India.
13. Explain various functions of Money.
14. Discuss the Quantity Theory of Money (QTM).
15. Explain various principles of QTM.
16. Explain money Supply, Inflation and Monetarism.

4.23 FURTHER READING

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UNIT 5 RECENT INDUSTRIAL POLICY

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Structure

5.0 INTRODUCTION

Industrial Policy is back after 25 years. It had become a bad word amongst economists and policy-wonks from the early 1990s with the dominance of the Washington Consensus over global economic policies. In 2009, Prime Minister

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Manmohan Singh asked the Planning Commission to suggest changes in policies required for India to accelerate the growth of its manufacturing industry. Whereas China's manufacturing sector was over 34% of its economy and had contributed greatly to the rise of incomes in China, India's manufacturing sector had been languishing at 16% of GDP since the 'big bang' reforms of 1991. India's capacity to produce capital goods the machines and tools that are the muscles of industrial capability was as strong as China's in 1991, because of compulsions until then to produce capital goods in India, on account of shortages of foreign exchange as well as government policies of building self-sufficiency for strategic and ideological reasons. The process of a country's industrialization is a process of enterprises in that country acquiring capabilities to produce more complex products that they could not do produce before. Workers learn skills they did not have before. Managers of enterprises learn to apply technologies manage processes that they could not before. And government policy makers and implementers learn how to create conditions for industrialization, which they could not earlier.

5.1 OBJECTIVES

After reading this unit, you will understand about:

- Discuss about the Recent Industrial policy
- Analyze the Industrial Growth in Phase II and III
- Describe the concept about Foreign Direct Investment

5.2 RECENT INDUSTRIAL POLICY

The Indian government is feeling the need for a new industrial policy, principally because the present pattern of economic growth is not producing sufficient numbers of jobs and livelihoods in the country. Industrial policy until the 1980s was driven by the theory that government must closely manage the flow of investments into selected industrial sectors to nurture their development. Dissatisfaction with this approach, primarily because it stifled entrepreneurship, made the government change its approach from the 1990s towards a free market approach with the expectation that market forces would cause industrial growth to accelerate. However, that did not happen. India's manufacturing sector, which should have been a principal driver of industrial growth and creator of jobs languished at 16% of the economy since the 1990s. While the services sectors grew, overall job growth did not keep pace with the growth of the population.

5.3 INDUSTRIAL POLICY

Industrial policy is defined as the strategic effort by the state to encourage the development and growth of a sector of the economy. It refers to any type of selective intervention or government policy that attempts to alter the structure of production toward sectors that are expected to offer better prospects for economic growth than would occur in the absence of such intervention. Industrial policy,

inter-alia, covers the procedures, principles, rules and regulations, which impact the industrial establishments of a country and shape the pattern of industrialization. The first industrial policy of the Government of India was announced in April 1948. Subsequently Industrial Policy resolutions were announced in 1956, 1980, 1990 and 1991.

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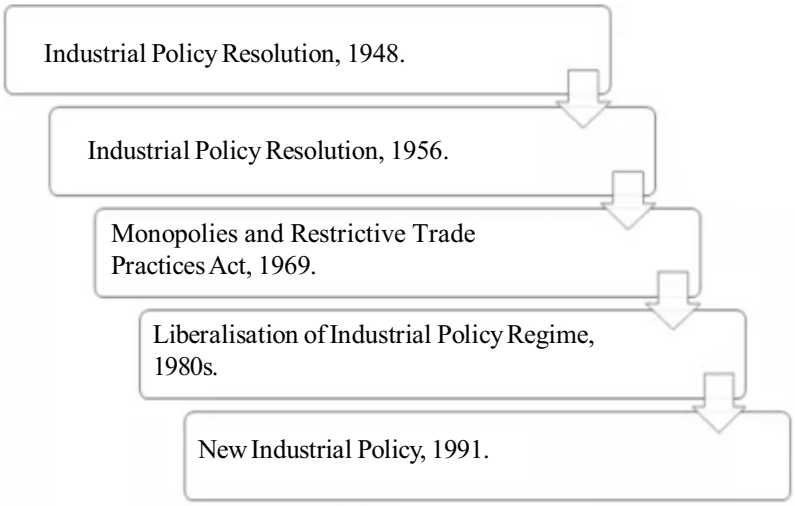

Fig. 5.1: Industrial Policy

The progress in industrial policy reforms enabled the country to pass through a long but successful journey. The policy changes brought out after 1991 have been announced in the form of Press Notes by the Department of Industrial Policy and Promotion.

5.3.1 Meaning of Industrial Policy

Industrial policy refers to such formal declaration by the government through which general policies for industries adopted by the govt. are made public. This is a comprehensive concept which provides guidance and out-lines of the policy for establishment and working of industries.

5.3.2 Objectives of Industrial Policy

The major objectives of industrial policy are:

(i) Rapid Industrial Development

The industrial policy of the Government of India is aimed at increasing the tempo of industrial development. It seeks to create a favourable investment climate for the private sector as well as mobilise resources for the investment in public sector. In its way the government seeks to promote rapid industrial development in the country.

(ii) Balanced Industrial Structure

The industrial policy is designed to correct the prevailing lopsided industrial structure. Thus, for example, before independence, India had some fairly developed consumer goods industries. But the capital goods sector was not developed at all and basic and heavy industries were by and large absent. So the industrial policy had to be framed in such a manner that these imbalances in the industrial structure are

corrected. Thus by laying emphasis on heavy industries and development of capital goods sector, industrial policy seeks to bring a balance in industrial structure.

(iii) Prevention of Concentration of Economic Power

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The industrial policy seeks to provide a framework of rules, regulations and reservation of spheres of activity for the public and the private sectors. This is aimed at reducing the monopolistic tendencies and preventing concentration of economic power in the hands of a few big industrial houses.

(iv) Balanced Regional Growth

Industrial policy also aims at correcting regional imbalances in industrial development. It is quite well-known that some regions in the country are industrially quite advanced e.g., Maharashtra and Gujarat while others are industrially backward, like Bihar, Orissa. It is the task of industrial policy to work out programmes and policies which lead to industrial development or industrial growth. The Industrial policy of 1948, which was the first industrial policy statement of the Government of India, was changed in 1956 in a public sector dominated industrial development policy that remained in force till 1991 with some minor modifications and amendments in 1977 and 1980. In 1991, far reaching changes were made in the 1956 industrial policy. The new Industrial Policy of July 1991 heralded the framework for industrial development at present.

5.3.3 Importance of Industrial Policy

The importance of an industrial policy can be explained through following points :

1. Deployment of Natural Resources

The industrial policy helps in full deployment of natural resources of the country. It helps in identifying, collecting and using resources properly. It facilitates increase in national income of the country.

2. Helps to Augment Industrial Production

The main objective of the industrial policy is to augment industrial production of the country. It provides an impetus to rapid development of industries and industrial growth.

3. Modernization

The industrial policy encourages modernization for increasing industrial output and productivity. It envisages the use of modem and latest production techniques m industrial sector. It facilitates maximum output at minimum cost of production.

4. Balanced Industrial Development

The industrial policy envisages balanced industrial development of the country. It also facilitates balanced development of various sectors of the economy.

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5. Balanced Regional Development

The industrial policy helps in balanced regional development of the country. The industrial policy may contain provisions regarding providing facilities or concessions for rapid development of industrially backward areas/regions of the country.

6. Coordination between Basic and Consumer Industries

The balanced development of basic and consumer industries is essential for economic growth. The industrial policy encourages development of basic and key industries on the one hand, while attention is paid to the development of consumer industries also on the other. Thus, by balanced and coordinated development of both type of industries it provides a pace to economic growth.

7. Coordination between Small Scale and Large Scale Industries

The industrial policy plays a vital role in coordinated development of small scale or cottage industries and large scale industries. These industries can be made mutually helpful to each other through the provisions of industrial policy.

8. Area Determination

The industrial policy determines the area of operation under public and private sector. Proper direction can be shown to private sector through the country's industrial policy.

9. Cordial Industrial Relations

A comprehensive industrial policy is needed to establish cordial relations between workers and management. Cordial industrial relations are essential for rapid and sustainable industrialization.

10. Proper Utilization of Foreign Assistance/investment

An appropriate industrial policy envisages attracting foreign capital and entrepreneurs. It helps rapid industrial development of the country; a well thought of industrial policy checks the demerits of "foreign assistance. The foreign aid can be used in the national interest if an appropriate industrial policy is pursued by the country.

5.3.4 Trends in Industrial Growth in India

Growth in Pre-Reform Period (1947-1990)

In the post-independence period, India embarked upon economic development under the Five Year Plans. It was accepted, that rapid development of the nation would only be possible through the establishment of a strong and diversified industrial base. The major changes in the industrial growth & structure during the planning period (pre-period) can be analyzed by dividing the planning period into three phases.

(i) Phase I (1951-65): Building up of Strong Industrial Structure

The First Plan did not envisage any large-scale programmes of industrialization. Only ₹55 crore out of the total expenditure of ₹ 1,9602 Crore (2.8 per cent) was spent on Industry & Minerals 'in the First Plan. The Second Plan (1956-1961)

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accorded top priority to programmes of industrialization as would be clear from the fact that the expenditure on industry and minerals was liked to ₹ 938 crore under this plan which was 20.1 per cent of the total expenditure of ₹4,627 crore. Based on Mahalnobis Model, the Second Plan set out the task of establishing basic and capital goods industries on a large scale so that a strong base for industrial development in the future could be built. Three steel Plants of one million tonnes capacity each were set up in the public sector at Bhillai, Rourkela & Durgapur besides the expansions and modernization programmes undertaken in the private sector.

The Third Plan (1961-1966) also pressed forward with the establishment of basic capital and producer goods industries – with special emphasis on machine buildings programmes – so that the growth of the economy in the subsequent plans could become self-sustaining Expenditure on industry in the Third Plan was ₹1, 726 crore which was 20.1 per cent of the total expenditure of ₹8577 crore under the plan. On an average growth rate of Industrial output during this phase was about 7% per annum.

(ii) Phase II (1965-1980): Industrial Deceleration

This phase was marked by industrial deceleration and structural retrogression. The industrial growth rate declined to less than an annual average of 5%. The slow growth was attributed to inadequate investment in infrastructure sectors such as power transportation, etc. Slow growth in agricultural sector caused a decline in demand from this sector to industrial products. Restrictive policy through licensing policy, MRTP & FERA Acts had an adverse effect on private investment. Besides, the 1965 & 1971 wars, oil shock (oil price rise) in 1973, drought in 1965-66 had their effect on the growth rate. (iii) Phase III (1980-1991): Industrial Recovery: The period of 1980s can be broadly termed as a period of industrial recovery. The rate of industrial growth was 6.4% per annum during 1981-85, 8.5% per annum during the Seventh plan (1985-90) and 8.3% per annum in 1990-91. This growth was impressive. As noted by Vijay Kelkar and Rajiv Kumar, this is a marked upturn from growth rates of around 4% achieved during the latter half of sixties and the seventies. This performance is also an improvement upon the growth rates achieved during the First and Second Plan periods. Increase in investment, especially in the public sector, that too in infrastructure, helped the industrial sector to get into a recovery phase. Measures like increase in license capacity scheme, fiscal incentives extension of broad banding, liberalization of import of foreign technology and many more liberal measures resulted into more investment and increased demand.

Growth in Post Reform Period (1991 Onwards)

The year 1991 ushered in a new era of economic liberalization. The Government of India announced the New Industrial Policy in 1991. A number of liberalization measures such as scrapping of the licensing system, dilution of the role of public sector, encouraging private investment in various fields, allowing foreign direct investment (FDI) liberally in various sectors etc. led to marked acceleration registered by the capital goods sector.

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The average annual growth rate of industrial production was 5.7% annum during 1990-2000. The industrial growth rate was only 2.3% in 1992-93. It rose to 6.0% in 1993-94. The rate of growth shot up to as much as 13.0% in 1995-96 but fell to 6% in the next year 1996-97. Some of the causes of unsatisfactory industrial performance are: (a) exposure to external competition (b) the infrastructural constraint (c) sluggish growth in export (d) slowdown in investment especially to agriculture etc. After 2002-03, the industrial sector was on the path of the revival.

The growth rate of industrial production was 5.7% in 2002-03, and picked up considerably to 7.0% in 2003-04, 804% in 2004-05, 8.2% in 2005-06 & to as high as 1.5% in 2006-07. For the 8th plan as a whole it comes out to 8.2% per annum. This revival in the industrial growth rate can be attributed to; (a) growth of infrastructure industries (b) building up of heavy & capital goods industries (c) rapid growth of consumer durables (d) heavy foreign direct investment & portfolio investment etc. However with the onset of global financial crisis (2008-09 onwards) the industrial growth in India has also fallen and this trend may continue for sometimes.

5.3.5 Major Issues in Industrial Sector

Industrial sector along with its growth & progress gave rise to many problems. The nature and degree of the issues of this sector have changed to a certain extent during the reform period. The major issues or problems are as follows:

1. Infrastructural Constraint

Industrial development is impossible unless sufficiently supported by infrastructure. Infrastructure includes transportation, communication, power supply and wide network of developed financial institutions. Growth of infrastructure not only improves the supply side constraints in industrial production but also stimulates additional demand required for additional growth. Unfortunately despite of massive progress, bottlenecks in infrastructure still exists & are posing challenges to increase industrial growth rate & maintain the achieved growth rate.

2. Industrial Productivity

Industrial productivity is measured in terms of labour, capital and total factor productivity (TFP). According to the various studies conducted, the TFP in India is low & was declining during the reform period. Judged from any standard, industrial productivity in India is much lower than other industrial countries. Qualitatively poor material inputs and the poor work culture of Indian labour force are responsible factors for the TFP in Indian industries.

3. Employment

Under the reforms, as a part of rationalization, industries were allowed to adopt Voluntary Retirement Scheme (VRS). Many public and private sector undertakings have offered this scheme to their employees. The public sector which had provided employment opportunities to a large number of people is no more a source of employment. No doubt the scheme has helped the overstaffed unit to reduce the avoidable burden.

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The situation is alarming since unemployment has become a serious problem in India. The Eleventh Five Year Plan however has projected an increase in employment by 58 million as against an increase in labour force by 45 million. This is expected to reduce the unemployment rate below 5%. This seems to be a dream since the global economy is contracting & Indian economy is experiencing the heat of the slowdown as well.

4. Burden of Public Sector: Since 1956

Government of India and also the State Governments have made a massive investment in the public sector undertaking. The Central Government through its public sector enterprises provided the industrial base, and the required impetus for the industrialization of the economy. Unfortunately over a period of time the public sector enterprises acquired many of the negative elements such as corruption, nepotism, favoritism, red tapism, poor work culture, political interference and so on. As a result a majority of them have been running into huge loss. It is hoped the reforms under liberalization would eliminate the negative aspects and make the public sector undertakings function efficiently. As on March 31, 2007, there were 244 Central Public Sector Enterprises (CPSEs) with the cumulative investment of ₹ 4,21,089 crore. During 2007, 156 CPSEs declared profits and 59 enterprises incurred loss.

5. Industrial Sickness

It is defined as an industrial company which has at the end of any financial year accumulated losses equal to or exceeding it's not worth and has also suffered cash losses in that financial year and in the financial year immediately preceeding it. Industrial sickness is the result of internal and external factors. Internal factors are:

(a) poor quality of top management,
(b) excessive centralization,
(c) poor financial control,
(d) project appraisal deficiencies,
(e) project management deficiencies,
(f) poor industrial relations,
(g) diversion of funds,
(h) excessive overheads and
(i) inaccurate estimation of cost & market demand.

External factors include

(a) economic downturns (recession),
(b) competition,
(c) Operating with excess capacity,
(d) changes in monetary and fiscal policy,
(e) availability of finance at reasonable cost,

(f) availability of inputs including skilled labour

(g) infrastructural constraints, etc.

6. Regional Imbalances

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Despite of Sixty years of Independence, the industrial development is confined to only a few states like Maharashtra, Gujarat and Tamilnadu. Some other states like Punjab, Karnataka, Kerala, and Andhra Pradesh are making good progress. Yet the disparities between the states or regions continue and in some cases are even widened. This has led to continuation of migration and overcrowding in the industrially advanced cities.

7. New Challenges

India now is part and parcel of the New World order of globalisation through liberalization. As such its industries are open to more competition at home as well as abroad. Till recently Indian industries were functioning under protectionist policy of the Government. Industries could avoid competition from foreign Industries and at home enjoy almost a monopoly. Under WTO, India has brought down its peak tariff rate to 10 percent. Now tough competition is faced by our industries not only from the industries of developed countries but even from developing counties especially from China. Indian industries are required to accept the challenge and provide cost effective quality product. At the same time there is also a risk of industries acquiring monopoly power through merger & amalgamation. It is, therefore, essential that the Regulatory Authorities should protect the interest of consumers by preventing the industries from indulging in any unfair practices.

5.4 IMPORTANT ELEMENTS RELATED TO INDUSTRIAL POLICY

Important elements related to Industrial Policy are:

1. Industrial Licensing

(i) Industrial licensing policy and procedures have also been liberalized from time to time. A full realization of the industrial potential of the country calls for a continuation of this process of change.

(ii) Major policy initiatives and procedural reforms are called for in order to actively encourage and assist Indian entrepreneurs to exploit and meet the emerging domestic and global opportunities and challenges.

(iii) The bedrock of any such package of measures must be taken to the attainment of technological dynamism and international competitiveness requires that enterprises to be enabled to respond swiftly to fast-changing external conditions that have become characteristic of today's industrial world.

(iv) Government policy and procedures must be geared to assist entrepreneurs in their efforts.

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(v) The system of reservation for public sector undertakings has been evolved towards the ethos of greater flexibility and private sector enterprise has been gradually allowed to enter into many of these areas on a case by case basis.

(vi) This calls for bold and imaginative decisions designed to remove restraints on capacity creation, which at the same time, ensure that overriding national interests are not jeopardized.

(vii) Thus industrial licensing will henceforth be abolished for all industries, except those specified, irrespective of the levels of investment.

2. Foreign Technology and Investment

Foreign investment in India is regulated by the Government from the very beginning. Therefore, for any foreign investment or technology, prior approval of the Government is necessary which leads to unnecessary delays.

Thus, the new industrial policy prepares a list of high invest priority and high technology in which automatic approval will be given for direct foreign investment up to 51 percent equity.

Such clearance will be available if foreign equity covers the foreign exchange requirement for imported capital goods. Moreover, in order to provide access to international markets, majority foreign equity holding up to 51 per cent equity will be allowed for trading companies primarily engaged in export activities.

Apart from this, a special Empowered Board would be constituted to negotiate with various large international firms and approve direct foreign investment in selected areas.

Regarding the foreign technology agreements automatic approval will be given in identified high priority industries up to a lump sum payment of ₹ 1 crore, 5 per cent royalty for domestic sales and 8 per cent for exports, subject to total payments of 8 per cent of sales over a period of ten years from the date of agreement or seven years from commencement of production.

3. Public Sector

The public sector has been the centre to the philosophy of our development. But in spite of its huge investment, public sector enterprises could yield a very low rate of return on capital investment. Numerous, public sector undertakings are incurring losses regularly. Thus, in a bid to face the situation, the Government should restructure the potentially viable units. This priority area is for future growth of PSEs included-essential infrastructure, technology development, exploration and exploitation of minerals and oil, products with strategic consideration etc.

Moreover, the new policy has now reduced the list of industries under public sector to 8 as against 17 industries reserved in 1956 policy. The new industrial policy also states that the government will raise the strength of those public sector units included in the list of reserved industries.

The Government also reviews the existing public sector undertakings. Industries earning higher profits will be provided with much higher degree of

management autonomy through MoU. Apart from all this, the government has also taken a decision to disinvest the equity shares of selected public units.

4. MRTP Limit

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Under the MRTP Act, firms having assets over a certain size of ₹ 100 crores since 1985 were classified as MRTP firms. These firms were allowed to start only selected industries on a case by case approval. But now the Government has realized that the MRTP limit has become deleterious in its effect on industrial growth.

Therefore, new policy states that the pre-enter scrutiny of investment decisions by the MRTP companies will no longer be required.

Emphasis should be on controlling and regulating-the monopolistic, restrictive and unfair trade practices. Moreover, provisions of the MRTP Act will be strengthened to enable the MRTP commission to take appropriate action in respect of these practices.

5. Location Policy Liberalized

Regarding the location of industries in cities of less than 1 million populations, no industrial approval is required from the centre. In cities, with more than 1 million populations, industries other than those of non-polluting in nature will be located outside 25 km. of its periphery.

6. Abolition of Phased Manufacturing Programme

To increase the pace of indigenization, phased manufacturing programme was enforced. The new policy has totally abolished such programmes as the Government, feels, due to substantial reforms of trade policy and devaluation of rupee, there is no need to enforce such programmes.

7. Removal of Mandatory Convertibility Clause

Banks and financial institutions have financed a large part of industrial investment that has followed a mandatory convertibility clause. This has provided no option to convert loans into equity this was an un-warranted threat to private firm. The new industrial policy has removed this system.

5.5 INDUSTRIAL POLICY 1991

In order to accelerate Industrial Development in India, and in accordance with the changing circumstances, various industrial policies were declared in the years 1948, 1956, 1977, 1980 and 1985, but in spite of all efforts, the pace and as well as the level of Industrial Development in India, could not reached according to its need. Therefore, in order to lift unnecessary restrictions on Industries, under the licensing policy, and to increase their efficiency, development and technological level, in order to make Indian goods usable in the competitive global market, on 24th July, 1991, in Lok-Sabha the Minister of States for industries, Mr. P. J. Kurian declared the Industrial Policy, 1991. The basic impartial of the New Industrial Policy is to make the industrial economy free from the unnecessary bureaucratic control, to introduce liberalization in order to integrate the Indian economy to the rest of the

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world, to remove restriction on direct foreign investment and also to free the domestic industrialists from the restriction of M.R.T.P Act. Further the Policy aims to shed the load of public enterprises which have shown a very low rate of return or are incurring losses over the years.

Objectives of New Industrial Policy, 1991

Main Objectives of New Industrial Policy, 1991 are:

1. To liberalize the economy
2. To increase employment opportunities
3. To encourage foreign assistance and co-partnership
4. To make the Public Sector more competitive
5. To increase the production and productivity, give encouragement to industries
6. To liberate the economy from various government restrictions
7. Industrial development of backward areas
8. To give liberty to private sector to work independently
9. To make development for modem competitive economy
10. To give encouragement for expansion of production capacity
11. To increase exports and liberalize (facilitate) imports.

Features of Industrial Policy 1991

Key features of the New Industrial Policy of India are:

1. Liberalized Industrial Licensing Policy

The licensing policy was introduced by the Government through the Industrial (Development and Regulation) Act 1951, with the objective of regulating the industrial sector and bringing about proper economic development. In reality however, it had resulted in delays in decision-making, corruption, red-tapism, efficiency etc. The NIP, 1991 abolished all industrial licensing, irrespective of the level of investment, except for 18 industries related to security and strategic concerns, social reasons, over riding environment reasons, hazardous chemical items of elitist consumption. Delicensed industries do not need government approval any more, but entrepreneurs are required to submit an Industrial Entrepreneur Memorandum (IFM) to the Secretariat of Industrial Approval. The 18 industries for which licensing was kept necessary were as under coal and lignite; petroleum (other than rude) and its distillation products; distillation, and brewing of alcoholic drinks; sugar; animal fats and oils; cigars and cigarettes; asbestos and asbestos-based products; plywood and other wood based products; raw hides, skins and leather; tanned or dressed fur skins; motor cars; paper and newsprint; electronic aerospace and defense equipments; industrial explosives; hazardous chemicals; drugs and pharmaceuticals; entertainment electronics; and white goods (domestic refrigerators, washing machines, air conditioners, etc). With the passage of time, most of these industries have also been delicensed. Now, only five industries require licensing. These are alcohol, cigarettes, hazardous, chemicals, electronics aerospace and defense equipment and industrial explosives. Under this policy, with the

exception of 18 industries, licensing system has been removed for all other industries. Some of those 18 industries, where the licensing system is still mandatory are; Army and Defence, Forest Conservation, Industries engaged in manufacturing goods which are harmful to the Environment and industries, which are manufacturing luxury goods, for the affluent (very rich) class, etc.

2. Localization Policy

Those industries which are situated in cities, where the population is less than 1 million, industrial permission from the government; to start any industry is not required. In cities having population of more than 1 million, with the exception of electronics and other pollution free industries, all industrial units may be 25 kilo meters away from the city's boundary.

3. Foreign Investment

Provision has been made to invest up to 51 percent by foreign investors in the equity shares of Indian Companies. Earlier, this limit was limited up to 40% only. This will increase the flow of foreign capital into India and make possible technical exchange from developed countries.

4. Workers' Participation in Management

Under this industrial policy, emphasis has been laid on safeguarding the workers' interest. Provision has been made for workers' participation in management, in order to manage sick units, provision has been made to form co-operative societies of workers, to run them.

5. Role of Public Sector

The 1956 Policy Resolution had reserved 17 industries for the public sector. The 1991 (NEP), reduced this number to 8 (a) arms and ammunition. (b) atomic energy, (c) coal and lignite, (d) mineral oils, (e) mining of iron are, manganese are, chrome are, gypsum, sulphur, gold and diamond, (f) mining of copper, lead, zinc, fin, molybdenum and wolfram, (g) mineral specified in the schedule to the atomic energy and (h) rail transport. The NIP, 1991 also announced a greater degree of autonomy to PSUs through the system of Memorandum of Understanding (MOUs). The sick public sector units had to be rehabilitated and reconstructed after getting the advice from the Board for Industrial and Financial Reconstruction (BIFR). The intention of the government to offer a part of its equity in PSUs to the public, financial institutions, and workers etc. also announced in this policy. A beginning in this direction was made in 1991-92 themselves by divesting part of equities of selected PSUs. The public sector undertakings are not doing well at present, but in which there are enough chances of improvement, shall be re-constituted. Public sector undertakings, which are facing constant financial crisis, shall be kept under observation by 'Board of Industrial and Financial Reconstruction' or by any other institution, which is fixed by the government.

6. Change in the MRTP Act

In the industrial policy 1991, major changes have been made in the Monopolistic and Restrictive Trade Practice Act. Companies having investment of ₹ 100 crores, will not be required to take prior Government permission, for opening new

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subdivisions, or to expand the present industry or for amalgamation of companies. This industrial policy has also eliminated the investment limit, which was fixed by MRTP Act. The government enacted the Monopolies and Restrictive Trade Practices (MRTP) Bill in 1969 w.e.f. from 1970. The MRTP firms were originally defined as enterprises or interconnected firms that had assets of ₹ 20 crore or more or a dominant market share (33% or more). In 1984, the dominant share was reduced to 25% and in 1985, the asset limit was raised to ₹ 100 crores such firms were not allowed to expand their activities or appoint director without the Government's permission. There were several restrictions on mergers and amalgamation and takeovers in case of such firms. All this restricted the growth, productive expansion and efficiency of firms. Thus the NIP, 1991 scrapped the threshold limit of assets in respect would now be on par with other firms. They would also not require prior approved from the Government for investments in delicensed industries. The new Act aims at protecting the welfare of consumers by preventing and restricting unfair trade practices.

7. Creation of Productive Capacity

In order to increase the productive capacity of new industries, all administrative controls have been removed. Industrialists will only have to inform the government of opening of new units or increasing their production capacity.

8. Promotion of Industries in Rural Areas

In order to remove the regional imbalances, under this industrial policy, various provisions have been made to encourage industries in rural areas.

9. Foreign Technology

The NIP, 1991, widened the scope of foreign capital in Indian Industries. This was done with the objective of improving the balance of payments position, making advanced technology available to domestic industries, modernizing industries and improving their competitiveness. The policy specified a list of high technology, high investment priorities industries wherein automatic approval was to be given for direct foreign investment up to 51% of foreign equity. It consisted of industries like capital goods, entertainment electronics, food processing etc. The foreign Investment Promotion Board has been constituted with the primary objective of speeding up the approval process for in India. Similarly, the use of foreign brand name or trademark for sale of goods in India permitted. Foreign equity up to 100% is particularly encouraged in export oriented units (EOUs), power sector, electronics and software technology parks. Moreover, foreign equity up to 24 % permitted in small scale enterprises. Foreign capital invested in India is allowed to be repatriated with capital appreciation after payment of taxes. No permission would be required for hiring foreign technicians and foreign testing of indigenously developed technologies. Remittances for technical services fees, subject to RBI approval can be made by companies. No prior permission from government will be required in importing foreign technology, up to the limit of One Crore rupees. Indian companies, will be free to negotiate their terms and conditions, with their foreign collaborators, in matters of technology transfers (exchange of 'technical know-how).

10. Reservation of Small Scale Industries

This policy has stated that the government shall keep giving assistance to small scale industries. The limit for small scale industries has been reduced from ₹ 3 Crores to ₹ 1 Crore, since 24 December, 1999.

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Evaluation of New Industrial Policy 1991

The new industrial policy (NIP), 1991, has given a new direction to the development of the industrial sector. Industrial growth has picked up in recent years, after initial periods of adjustment. Domestic and foreign investment in almost every industrial sector has increased manifold. The economy is growing at healthy rate after reforms were introduced. However, the industrial growth has been erratic and fluctuating and has not resulted in corresponding rise in employment.

Positive Impacts of the New Industrial Policy

1. ***Reduction in project cost and time:*** The Policy changes related to licensing foreign investment and foreign technology agreements have freed industries from excessive government control. Thus time and money spent to acquire licenses and approvals have been reduced resulting in low project cost as well as less time required to complete the project. In other words the gestation period has been shortened and efficiency has increased.
2. ***Availability of foreign capital and technology:*** Policies in the area of foreign investment and foreign technology agreements would bring in more capital, technology and managerial and technical performed from abroad. This would increase the availability of such resources. The inflow of foreign direct investment in 1991-92 was US $129 million which increased to $43.29 billion in 2006. Telecommunications, electrical equipments and services are the sectors that are attracting foreign investment.
3. ***Performance of Public Sector:*** Changed in the public sector policy would bring about better allocation of public funds and improve efficiency of the public funds and improve efficiency of the public sector. Closures, liquidation or rehabilitation of sick public sector units will free resources for more productive use. Greater efficiency and accountability of units in the public sector should be ensured through implementations of Memorandum of Understanding (MOUs). The performance of public sector enterprises has improved considerably in recent years. The reliance of this sector on budgetary resources declined while their gross internal resources increased. The accumulated losses of Control Public Sector Enterprises have also been declining.
4. ***Restrictive Trade Practices:*** Amendments in the MRTP Act would curb anti competitive behavior and thus promote competition. Indian firms are now able to expand and grow with greater ease after the amendment.
5. ***Benefits to Consumers:*** The NIP and subsequently policy changes have made the Indian market more competitive. This has benefited Indian

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Consumers, who can now choose from a wide variety of good quality products at competitive prices. Companies are now able to change their product mixes to match changing consumer demand. Easier capacity expansion has reduced shortages of essential industrial items to large extent.

6. ***Internationalization of Indian Industries:*** As Indian industries have become internationally competitive; they are increasing their export orientation as well as making their global presence felt through mergers and acquisitions.
7. ***The NIP has given greater autonomy to the Public Sector Undertakings (PSUs):*** This will lead to better performance, as there will be less interference from the government and bureaucrats. Moreover, this dilution of the public sector will help the government to divert its attention to other essential sectors.

Limitations of New Industrial Policy

While the NIP 200 can promote growth and efficiency, it has certain limitations also. Some of the adverse impacts of the policy are:

1. ***Dominance of Multinational Firms:*** According to H.K. Paranjape, certain sectors of the economy, which have been opened to direct foreigner investments, include areas where Indian firms have been well established for years. Besides, these industries are in a position to develop indigenous technology through R and D efforts. Inviting foreign investment in these industries would make it possible for transnational and multinational firms to dominate these sectors of the Economy. The multinational firms would emerge as the most dominant one and will destroy indigenous research and development.
2. ***Unsuitable and Inferior Foreign Technology:*** Use of foreign technology and managerial inputs may not be suitable for Indian business conditions. MNCs are often reluctant to use their state-of-the-art technology in their subsidiaries in developing countries.
3. ***Unemployment:*** The issue of employment generation has been overlooked by this policy. Most of the industries encouraged by the NIP are capital intensive, energy and import intensive. Moreover use of foreign technology and excessive competition has increased capital intensity in production process. This has had an adverse effect on employment generation in the industrial sector. The MNCs have very low absorption capacity of labour. The employment generation capacity in the organized manufacturing sector has also reduced since 1991.
4. ***Dilution of the Public Sector:*** The dilution of the public sector from certain key areas like infrastructure development has resulted in increased user charges for many services like, power and roads, adversely affecting the poor. Besides employment generation and job security provided by the public sector has become a thing of the past.

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5. ***MRTP Act:*** The amendment of the MRTP Act and the relaxation of regulations related to mergers, amalgamations and acquisitions have resulted in emergence of large monopolies. This has increased concentration of economic power and has adversely affected small business.
6. ***Social Problems:*** The policy has brought with social problems that are a direct result of increasing unemployment and reduced job security. The interests of workers who have been rendered jobless have not been successfully dealt with by the government. 7. Industrial Sickness: The NIP has not been able to tackle the growing industrial sickness which continues to remain a major problem especially in the small scale sector.

Check Your Progress

1. Discuss the objectives of Industrial Policy.
2. Explain about Industrial Policy 1991.

5.6 LIBERALISATION, PRIVATISATION AND GLOBALISATION (LPG)

After Independence in 1947 Indian government faced a significant problem to develop the economy and to solve the issues. Considering the difficulties pertaining at that time government decided to follow LPG Model. The Growth Economics conditions of India at that time were not very good. This was because it did not have proper resources for the development, not regarding natural resources but financial and industrial development. At that time India needed the path of economic planning and for that used 'Five Year Plan' concept of which was taken from Russia and feet that it will provide a fast development like that of Russia, under the view of the socialistic pattern society.

July 1991, India has taken a series of measures to structure the economy and improve the BOP position. The new economic policy introduced changes in several areas. The policy have salient feature which are:

1. Liberalization (internal and external)
2. Extending Privatisation
3. Globalisation of the economy which are known as "LPG". (Liberalization privatisation globalisation)

Reasons for implementing LPG

The following are the reasons for economic reforms:

(i) Rise in Prices

Price rise continuously in India. The inflation rate increased from 6.7% to 16.7%. Due to inflation country's economic position became worse. Main reason for inflation was rapid increase in money supply. It was due to deficit financing Deficit financing means borrowing from Reserve Bank of India by Government to meet its deficit.

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RBI provides this loan by printing new currency notes. Cost of production increases due to inflation. This affects demand for products.

(ii) Rise in Fiscal Deficit

Due to increase in non- development expenditure fiscal deficit of the Govt. had been increasing. Fiscal deficit means difference between total expenditure and total receipts minus loans. To cover the fiscal deficit, the Govt. has to raise loans and pay interest on it. Due to rise in fiscal deficit there was rise in public debt and interest. In 1991 interest liability became 36.4% of total govt. expenditure. The Govt. caught in debt trap. So Govt. has to resort to economic reforms.

(iii) Increase in Adverse Balance of Payments

The difference between total exports and imports of a country in called Balance of Payments. When total imports obtained from two sources.

(a) By exports

(b) Remittances by NRI's (Nonresident Indians).

When foreign exchange falls short for payment otherwise total imports exceed total exports, problem of adverse balance of payments arise. Though incentives are given for export promotion yet the desired results cannot be achieved. It is due to the fact that our export goods could not compete in price and quality.

So deficit of balance of payments had been rising continuously. In 1980-81 it was ₹ 2214 crore and rose in 1990- 91 to ₹ 17,367 crores. To cover this deficit large amount of foreign loans had to be obtained. So liability of loan and its interest payment goes as increasing. It made balance of payments adverse.

(iv) Iraq War

In 1990-91, war in Iraq broke, and this led to rise in petrol prices. The flow of foreign currency from Gulf countries stopped and this further aggravated the problem.

(v) Dismal Performance of PSU's (Public Sector Undertakings)

PSU's are enterprises wholly owned by Govt. have invested crores of ₹ in these enterprises. These are no performing well due to political interference and became big liability for Govt.

(vi) Fall in Foreign Exchange Reserves

Indians foreign exchange reserve fell to low ebb in 1990-91 and it was insufficient to pay for an import bill for 2 weeks. In 1986-87 foreign exchange reserves were ₹ 8151 crores ad in 1989-90, it declined to ₹ 6252 crores. Then Chandershekhar Govt. had to sell Gold to meet the import liability. So Govt. had to think about policy of liberalisation.

Meaning of Liberalization

Liberalization refers to the relaxation of the previous government restriction usually in area of social and economic policies. When government liberalized trade, it means it has removed the tariff, subsidies and other restriction on the flow of goods and services between the countries.

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Features of Liberalization

(i) Independent determination of interest rate

Under the policy of liberalisation interest rate of the banking system will not be determined by RBI rather all Banks are independent to determine the rate of interest.

(ii) Increase in the investment limit of the Small Scale Industries

Investment limit of the small scale industries has been raised to ₹ 1 crore. So that they can modernize their industry.

(iii) Freedom to import capital goods

Indian industries will be free to buy machines and raw materials from foreign countries to expand their business.

(iv) Freedom to import Technical know-how

Under new economic policy the entrepreneurs are free to import technical know-how and develop modernisations. The main aim of the policy is to develop computers and electronies.

(v) Freedom for expansion and production to Industries

Industries are free to expand and produce under the policy of liberalisation. Previously, the govt. used to fix the maximum limit of production capacity. No industry could produce beyond that limit. Now the industry can produce freely. Also they can produce anything depending on the demand.

(vi) Freedom from Monopolies Act

According to Monopolies and Restrictive Trade Practices (MRTP) Act, all those companies having assets worth ₹ 100 crore or more were called MRTP firms and were subjected to several restrictions. Now these firms have not to obtain prior approval of the Govt. for taking investment decision.

(vii) Removal of Industrial Licensing and Registration

Previously private sector had to obtain license from Govt. for starting a new venture. In this policy private sector has been freed from licensing and other restrictions.

Economics Liberalization in India

The economic liberalisation in India refers to the economic liberalisation, initiated in 1991, of the country's economic policies, with the goal of making the economy more market and service-oriented and expanding the role of private and foreign investment. Specific changes include a reduction in import tariffs, deregulation of markets, reduction of taxes, and greater foreign investment. Liberalisation has been credited by its proponents for the high economic growth recorded by the country in the 1990s and 2000s. Its opponents have blamed it for increased poverty, inequality and economic degradation. The overall direction of liberalisation has since remained the same, irrespective of the ruling party, although no party has yet

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solve a variety of politically difficult issues, such as liberalising labour laws and reducing agricultural subsidies. There exists a lively debate in India as to what made the economic reforms sustainable.

Indian government coalitions have been advised to continue liberalisation. Before 2015 India grew at slower pace than China which has been liberalising its economy since 1978. But in year 2015 India outpaced China in terms of GDP growth rate. The McKinsey Quarterly states that removing main obstacles "would free India's economy to grow as fast as China's, at 10% a year".

There has been significant debate, however, around liberalisation as an inclusive economic growth strategy. Since 1992, income inequality has deepened in India with consumption among the poorest staying stable while the wealthiest generate consumption growth. As India's gross domestic product (GDP) growth rate became lowest in 2012–13 over a decade, growing merely at 5.1%, more criticism of India's economic reforms surfaced, as it apparently failed to address employment growth, nutritional values in terms of food intake in calories, and also exports growth – and thereby leading to a worsening level of current account deficit compared to the prior to the reform period. But then in FY 2013–14 the growth rebounded to 6.9% and then in 2014–15 it rose to 7.3%. Growth reached 7.5% in the Jan–Mar quarter of 2015 before slowing to 7.0% in the Apr–Jun quarter.

Pre-liberalization Policies

Indian economic policy after independence was influenced by the colonial experience (which was seen by Indian leaders as exploitative in nature) and by those leaders' exposure to Fabian socialism. Policy tended towards protectionism, with a strong emphasis on import substitution industrialization under state monitoring, state intervention at the micro level in all businesses especially in labour and financial markets, a large public sector, business regulation, and central planning. Five-Year Plans of India resembled central planning in the Soviet Union. Steel, mining, machine tools, water, telecommunications, insurance, and electrical plants, among other industries, were effectively nationalised in the mid-1950s. Elaborate licences, regulations and the accompanying red tape, commonly referred to as Licence Raj, were required to set up business in India between 1947 and 1990.

Before the process of reform began in 1991, the government attempted to close the Indian economy to the outside world. The Indian currency, the rupee, was inconvertible and high tariffs and import licensing prevented foreign goods reaching the market. India also operated a system of central planning for the economy, in which firms required licences to invest and develop. The labyrinthine bureaucracy often led to absurd restrictions up to 80 agencies had to be satisfied before a firm could be granted a licence to produce and the state would decide what was produced, how much, at what price and what sources of capital were used. The government also prevented firms from laying off workers or closing factories. The central pillar of the policy was import substitution, the belief that India needed to rely on internal markets for development, not international trade a belief generated by a mixture of socialism and the experience of colonial exploitation. Planning and the state, rather than markets, would determine how much investment was needed in which sectors.

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Pre-1991 Liberalization Attempts

Attempts were made to liberalise the economy in 1966 and 1985. The first attempt was reversed in 1967. Thereafter, a stronger version of socialism was adopted. The second major attempt was in 1985 by Prime Minister Rajiv Gandhi. The process came to a halt in 1987, though a 1967 style reversal did not take place.

In the 80s, the government led by Rajiv Gandhi started light reforms. The government slightly reduced Licence Raj and also promoted the growth of the telecommunications and software industries.

The Chandra Shekhar Singh government (1990–1991) took several significant steps towards the much needed reforms and laid its foundation.

Prevailing Situation During 1980s

The low annual growth rate of the economy of India before 1980, which stagnated around 3.5% from 1950s to 1980s, while per capita income averaged 1.3%. At the same time, Pakistan grew by 5%, Indonesia by 9%, Thailand by 9%, South Korea by 10% and Taiwan by 12%.

Only four or five licences would be given for steel, electrical power and communications. Licence owners built up huge powerful empires.

A huge private sector emerged. State-owned enterprises made large losses.

Income Tax Department and Customs Department became inefficient in checking tax evasion.

Infrastructure investment was poor because of the public sector monopoly.

Licence Raj established the "irresponsible, self-perpetuating bureaucracy that still exists throughout much of the country" and corruption flourished under this system.

The fruits of liberalisation reached their peak in 2006, when India recorded its highest GDP growth rate of 9.6%. With this, India became the second fastest growing major economy in the world, next only to China. The growth rate has slowed significantly in the first half of 2012. An Organisation for Economic Co-operation and Development (OECD) report states that the average growth rate 7.5% will double the average income in a decade, and more reforms would speed up the pace. The economy then rebounded to 7.3% growth in 2014–15.

First Reforms of Liberalization (1991–96)

Economic liberalisation in India was initiated in 1991 by Prime Minister P.V. Narasimha Rao and his then-Finance Minister Dr. Manmohan Singh. Rao was often referred to as Chanakya for his ability to steer tough economic and political legislation through the parliament at a time when he headed a minority government.

By 1991, India still had a fixed exchange rate system, where the rupee was pegged to the value of a basket of currencies of major trading partners. India started having balance of payments problems since 1985, and by the end of 1990, the state of India was in a serious economic crisis. The government was close to default, its central bank had refused new credit and foreign exchange reserves had

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reduced to the point that India could barely finance three weeks' worth of imports. It had to pledge 20 tonnes of gold to Union Bank of Switzerland and 47 tonnes to Bank of England as part of a bailout deal with the International Monetary Fund (IMF). Most of the economic reforms were forced upon India as a part of the IMF bailout.

A Balance of Payments crisis in 1991 pushed the country to near bankruptcy. In return for an IMF bailout, gold was transferred to London as collateral, the rupee devalued and economic reforms were forced upon India. That low point was the catalyst required to transform the economy through badly needed reforms to unshackle the economy. Controls started to be dismantled, tariffs, duties and taxes progressively lowered, state monopolies broken, the economy was opened to trade and investment, private sector enterprise and competition were encouraged and globalisation was slowly embraced. The reforms process continues today and is accepted by all political parties, but the speed is often held hostage by coalition politics and vested interests.

Liberalization of 1991

In response, Prime Minister Narasimha Rao, along with his finance minister Manmohan Singh, initiated the economic liberalisation of 1991. The reforms did away with the Licence Raj, reduced tariffs and interest rates and ended many public monopolies, allowing automatic approval of foreign direct investment in many sectors. Since then, the overall thrust of liberalisation has remained the same, although no government has tried to take on powerful lobbies such as trade unions and farmers, on contentious issues such as reforming labour laws and reducing agricultural subsidies. By the turn of the 21st century, India had progressed towards a free-market economy, with a substantial reduction in state control of the economy and increased financial liberalisation. This has been accompanied by increases in life expectancy, literacy rates and food security, although urban residents have benefited more than rural residents.

New Reforms of Liberalization

The Bharatiya Janata Party (BJP)–Atal Bihari Vajpayee administration surprised many by continuing reforms, when it was at the helm of affairs of India for six years, from 1998–99 and from 1999–2004.

The BJP-led National Democratic Alliance Coalition began privatising under-performing government owned business including hotels, VSNL, Maruti Suzuki, and airports, and began reduction of taxes, an overall fiscal policy aimed at reducing deficits and debts and increased initiatives for public works.

The United Front government attempted a progressive budget that encouraged reforms, but the 1997 Asian financial crisis and political instability created economic stagnation.

Towards the end of 2011, the Congress-led UPA-2 Coalition Government initiated the introduction of 51% Foreign Direct Investment in retail sector. But due to pressure from fellow coalition parties and the opposition, the decision was rolled back. However, it was approved in December 2012.

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In the early months of 2015, the second BJP-led NDA Government under Narendra Modi further opened up the insurance sector by allowing up to 49% FDI. This came seven years after the previous government attempted and failed to push through the same reforms and 16 years after the sector was first opened to foreign investors up to 26% under the first BJP-led NDA Government under Atal Bihari Vajpayee's administration.

The second BJP-led NDA Government also opened up the coal industry through the passing of the Coal Mines (Special Provisions) Bill of 2015. It effectively ended the Indian central government's monopoly over the mining of coal, which existed since nationalization in 1973 through socialist controls. It has opened up the path for private, foreign investments in the sector, since Indian arms of foreign companies are entitled to bid for coal blocks and licences, as well as for commercial mining of coal. This could result in billions of dollars investments by domestic and foreign miners. The move is also beneficial to the state-owned Coal India Limited, which may now get the elbow room to bring in some much needed technology and best practices, while opening up prospects of a better future for millions of mine workers.

In the 2016 budget session of Parliament, the Narendra Modi led BJP Government pushed through the Insolvency and Bankruptcy Code. The Code creates time-bound processes for insolvency resolution of companies and individuals. These processes will be completed within 180 days. If insolvency cannot be resolved, the assets of the borrowers may be sold to repay creditors. This law drastically eases the process of doing business, according to experts and is considered by many to be the second most important reform in India since 1991 next to the proposed GST.

On July 1st 2017, the BJP-led NDA Government under Narendra Modi launched the Goods and Services Tax (India). This came years after the previous government attempted and failed to push through the same reform and 17 years after the legislation was proposed under the first BJP-led NDA Government under Atal Bihari Vajpayee's administration in 2000. Touted to be India's biggest tax reform in 70 years of independence and the most important overall reform in terms of ease of doing business since 1991. GST replaces a slew of indirect taxes with a unified tax structure and is therefore set to dramatically reshape the country's 2.5 trillion dollar economy.

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The impact of these reforms may be gauged from the fact that total foreign investment (including foreign direct investment, portfolio investment, and investment raised on international capital markets) in India grew from a minuscule US$132 million in 1991–92 to $5.3 billion in 1995–96. Poverty was 46.1% in 1991 has come down to 21.3% in 2016.

Annual growth in GDP per capita has accelerated from just 1¼ per cent in the three decades after Independence to 7½ per cent currently, a rate of growth that will double average income in a decade. In service sectors where government

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regulation has been eased significantly or is less burdensome such as communications, insurance, asset management and information technology output has grown rapidly, with exports of information technology enabled services particularly strong. In those infrastructure sectors which have been opened to competition, such as telecoms and civil aviation, the private sector has proven to be extremely effective and growth has been phenomenal.

Election of AB Vajpayee as Prime Minister of India in 1998 and his agenda was a welcome change. His prescription to speed up economic progress included solution of all outstanding problems with the West (Cold War related) and then opening gates for FDI investment. In three years, the West was developing a bit of a fascination to India's brainpower, powered by IT and BPO. By 2004, the West would consider investment in India, should the conditions permit. By the end of Vajpayee's term as prime minister, a framework for the foreign investment had been established. The new incoming government of Dr. Manmohan Singh in 2004 further strengthened the required infrastructure to welcome the FDI.

Today, fascination with India is translating into active consideration of India as a destination for FDI. The A T Kearney study put India second most likely destination for FDI in 2005 behind China. It has displaced US to the third position. This is a great leap forward. India was at the 15th position, only a few years back. To quote the A T Kearney Study, "India's strong performance among manufacturing and telecom & utility firms was driven largely by their desire to make productivity-enhancing investments in IT, business process outsourcing, research and development, and knowledge management activities".

Challenges to Further Reforms of Liberalization

For 2010, India was ranked 124th among 179 countries in Index of Economic Freedom World Rankings, which is an improvement from the preceding year.

1. Highly Restrictive and Complex Labour Laws

Indian labour law is closely connected to the Indian independence movement, and the campaigns of passive resistance leading up to independence. While India was under colonial rule by the British Raj, labour rights, trade unions, and freedom of association were all suppressed. Workers who sought better conditions, and trade unions who campaigned through strike action were frequently, and violently suppressed. After independence was won in 1947, the Constitution of India of 1950 embedded a series of fundamental labour rights in the constitution, particularly the right to join and take action in a trade union, the principle of equality at work, and the aspiration of creating a living wage with decent working conditions. In labour markets, employment growth has been concentrated in firms that operate in sectors not covered by India's highly restrictive labour laws. In the formal sector, where these labour laws apply, employment has been falling and firms are becoming more capital intensive despite abundant low-cost labour. Labour market reform is essential to achieve a broader-based development and provide sufficient and higher productivity jobs for the growing labour force. In product markets, inefficient government procedures, particularly in some of the states, acts as a barrier to entrepreneurship and need to be improved. Public companies are generally less productive than private firms and the privatisation programme should be revitalised.

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A number of barriers to competition in financial markets and some of the infrastructure sectors, which are other constraints on growth, also need to be addressed. The indirect tax system needs to be simplified to create a true national market, while for direct taxes, the taxable base should be broadened and rates lowered. Public expenditure should be re-oriented towards infrastructure investment by reducing subsidies. Furthermore, social policies should be improved to better reach the poor and given the importance of human capital the education system also needs to be made more efficient.

2. High Inflation

The annualised inflation rate in India was 3.78% as of August 2015, as per the Indian Ministry of Statistics and Programme Implementation. This represents a modest reduction from the previous annual figure of 9.6% for June 2011. Inflation rates in India are usually quoted as changes in the Wholesale Price Index (WPI), for all commodities.

Many developing countries use changes in the consumer price index (CPI) as their central measure of inflation.In India CPI (combined) is declared as the new standard for measuring inflation (April 2014) CPI numbers are typically measured monthly, and with a significant lag, making them unsuitable for policy use. India uses changes in the CPI to measure its rate of inflation.

Provisional annual inflation rate based on all India general CPI (Combined) for November 2013 on point to point basis (November 2013 over November 2012) is 11.24% as compared to 10.17% (final) for the previous month of October 2013. The corresponding provisional inflation rates for rural and urban areas for November 2013 are 11.74% and 10.53% respectively. Inflation rates (final) for rural and urban areas for October 2013 are 10.19% and 10.20%, respectively.

The WPI measures the price of a representative basket of wholesale goods. In India, this basket is composed of three groups: Primary Articles (22.62% of total weight), Fuel and Power (13.15%) and Manufactured Products (64.23%). Food Articles from the Primary Articles Group account for 15.26% of the total weight. The most important components of the Manufactured Products(Food products 19.12%) Group are Chemicals and Chemical products (12%); Basic Metals, Alloys and Metal Products (10.8%); Machinery and Machine Tools (8.9%); Textiles (7.3%) and Transport, Equipment and Parts (5.2%).

3. High Poverty

Poverty is a significant issue in India, despite being one of the fastest-growing economies in the world, clocked at a growth rate of 7.11% in 2015, and a sizable consumer economy. The World Bank reviewed and proposed revisions on May 2014, to its poverty calculation methodology and purchasing power parity basis for measuring poverty worldwide. According to this revised methodology, the world had 872.3 million people below the new poverty line, of which 179.6 million people lived in India. In other words, India with 17.5% of total world's population, had 20.6% share of world's poorest in 2011. As of 2014, 58% of the total population were living on less than $3.10 per day. According to the Modified Mixed Reference Period (MMRP) concept proposed by World Bank in 2015,

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India's poverty rate for period 2011-12 stood at 12.4% of the total population, or about 172 million people; taking the revised poverty line as $1.90.

The World Bank has been revising its definition and benchmarks to measure up poverty since 1990, with a $2 per day income on purchasing power parity basis as the definition in use from 2005 to 2013. Some semi-economic and non-economic indices have also been proposed to measure poverty in India; for example, the Multi-dimensional Poverty Index placed 33% weight on number of years spent in school and education and 6.25% weight on financial condition of a person, in order to determine if that a person is poor.

The different definitions and different underlying small sample surveys used to determine poverty in India, have resulted in widely different estimates of poverty from 1950s to 2010s. In 2012, the Indian government stated 22% of its population is below its official poverty limit. The World Bank, in 2011 based on 2005's PPPs International Comparison Program, estimated 23.6% of Indian population, or about 276 million people, lived below $1.25 per day on purchasing power parity. According to United Nation's Millennium Development Goals (MDG) programme 270 million or 21.9% people out of 1.2 billion of Indians lived below poverty line of $1.25 in 2011-2012.

From late 19th century through early 20th century, under British colonial rule, poverty in India intensified, peaking in the 1920s. Famines and diseases killed millions each time. After India gained its independence in 1947, mass deaths from famines were prevented. Rapid economic growth since 1991, has led to sharp reductions in extreme poverties in India. However, those above poverty line live a fragile economic life.

As per the methodology of the Suresh Tendulkar Committee report, the population below the poverty line in India in 2009-2010 was 354 million (29.6% of the population) and that in 2011-2012 was 269 million (21.9% of the population). The Rangarajan Committee said in 2014 that the population below the poverty line in 2009-2010 was 454 million (38.2% of the population) and that in 2011-2012 was 363 million (29.5% of the population). Deutsche Bank Research estimated that there are nearly 300 million people who are middle class. If former trends continue, India's share of world GDP will significantly increase from 7.3% in 2016 to 8.5% by 2020. In 2015, around 170 million people, or 12.4%, lived in poverty (defined as $1.90 (₹ 123.5)), a reduction from 29.8% in 2009.

Advantages of Liberalization

The several advantages of Liberalization are:

(i) In the medium and long term lower cost services provided to users.

(ii) The overall the quality of service is improved due to competition.

(iii) It avoids drawbacks of natural monopolies.

(iv) Helps for freeing up government funds for other social expenditures / investments.

(v) The creation of new revenue streams for governments through PPP in investments commonly undertaken with private sector.

(vi) Transfer of risk to private operators through PPP or BOT.

(vii) It increases entrepreneurship in country.

(viii) Attract foreign capital by potential investors, better suited to carry out investment.

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(ix) Helps to increase the foreign investment.

(x) Increase the foreign exchange reserve.

(xi) Increase in consumption and Control over price.

(xii) Reduction in dependence on external commercial borrowings.

Disadvantages of Liberalization

The several disadvantages of Liberalization are:

(i) Increase in unemployment.

(ii) Loss to domestic units.

(iii) Increase dependence on foreign nations.

(iv) Unbalanced development.

(v) Risk to create new types of private or other state controlled monopolies (players with dominant position in the market) or oligopolies.

(vi) Short term impacts can be negative.

(vii) Government has rushed to get rid of operation or investment in anticipation of high fee offered by bidder and soon discovers the incapacity-inability of bidder to respect contract terms.

(viii) Transfer of risk not sufficiently covered in contract, therefore reverting the operation or investment to state.

(ix) Renegotiation of contract required due to insufficient financial feasibility study or due to rushed government decision.

(x) Just before the transfer of investment or operation to state, its proper maintenance is "forgotten".

Privatisation

Privatisation means transfer of ownership and/or management of an enterprise from the public sector to the private sector. Privatisation is opening up of an industry that has been reserved for public sector to the private sector. It is replacing government monopolies with the competitive pressures of the marketplace to encourage efficiency, quality and innovation in the delivery of goods and services.

Features of Privatisation

Privatisation has the following features:

(a) The new set of economic reforms aimed at giving greater role to the private sector in the nation building process and a reduced role to the public sector.

(b) To achieve this, the government redefined the role of the public sector in the New Industrial Policy of 1991.

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(c) The purpose of the same, according to the government, was mainly to improve financial discipline and facilitate modernization.

(d) It was also observed that private capital and managerial capabilities could be effectively utilized to improve the performance of the PSUs.

(e) The government has also made attempts to improve the efficiency of PSUs by giving them autonomy in taking managerial decisions.

Need for Privatisation

Need for privatisation is as follows:

- A sizable number of PSUs have been incurring and reporting losses on a continual basis. Consequently, a large number of PSUs have already been referred of loss giving units;
- Multiplicity of authorities to whom the PSUs are accountable;
- Delay in implementation of projects leading to cost escalation and other consequences;
- Ineffective and widespread inefficiency on management;
- With a view to provide opportunities for more and more unemployed youths, more number of people, than required, were recruited and therefore, many PSUs are over-staffed resulting in lower labour productivity, bad industrial relations, etc.;
- A number of sick companies (40 companies) which were in the private sector were taken over by public sector mainly to protect the employees. These sick units are causing a big drain on the resources of the state; etc.

Impact of Privatisation on Indian Economy

Major impact of Privatisation on Indian Economy is as under:

1. Private concerns tend to be profit oriented and transparent in their functioning as private owners are always oriented towards making profits and get rid of sacred cows and hitches in conventional bureaucratic management.
2. Since the system becomes more transparent all fundamental corruption are minimised and owners have a free reign and incentive for profit maximisation so they tend to get rid of all free loaders and vices that are inherent in government functions.
3. Gets rid of employment inconsistencies like free loaders or over employed departments reducing the strain on resources.
4. Lessen the government's financial and administrative load.
5. Effectively minimises corruption and optimises output and functions.
6. Private firms are less tolerant towards capitulation and appendages in government departments and hence tend to right size the human resource potential befitting the organisations needs and may cause resistance and disgruntled employees who are accustomed to the benefits as government functionaries.

7. Permit the private sector to contribute to economic development.
8. Development of the general budget resources and diversifying sources of income.

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Privatisation with Reference to the Indian Economy

Privatisation, described as the transfer of state owned enterprises (SOEs) to the private owners, has become a common economic policy tool around the globe. The trend toward privatisation is debatable issue. Indeed, the debate between the superiority of the private and public sectors has been going on for the past four to five decades. The discussion initially focused on how the size of public sector measured by the size of government consumption affected economic growth.

Findings of many studies demonstrated that privatisation did not contribute to growth but helped to reduce income inequality, inflation contributed negatively to both economic growth and income equalization. On the other hand, several economists stated that Privatisation, a method of reallocating assets and functions from the public sector to the private sector play vital role for economic growth. Recently, privatisation has been adopted by many different political systems and has spread to every region of the world. The process of privatisation can be successful way to bring about fundamental structural change by formalizing and establishing property rights, which directly creates strong individual incentives. A free market economy mainly depends on well-defined property rights in which people make individual decisions in their own interests. According to experts, privatisation may improve efficiency, provide financial relief, boost wider ownership, and increase the availability of credit for the private sector.

Government of India chose for a mixed economy in which both public and private sectors were permitted to operate. The private sector had to operate within the provisions of the Industries (Development and Regulation) Act. 1951 and other relevant legislations. In this framework, the Industrial Policy Resolution 1956 stated, Industrial undertakings in the private sector have necessarily to fit into the framework of the social and economic policy of the State and will subject to control and guideline in terms of the Industries (Development and Regulation) Act and other relevant legislation. The Government of India recognizes that it would be desirable to allow such undertakings to develop with as much freedom as possible, consistent with the targets and objectives of the national plan.

Reports indicated that in spite of speedy progress of the public sector in the period of planning, private sector is the principal sector in the Indian economy. Since many decades, numerous modern industries have been established in the private sector. Important consumer goods industries were set up in the pre-Independence period itself. Examples include cotton textile industry, sugar industry, paper industry and edible oil industry. These industries were set up in response to the opportunities offered by the market forces. They were highly suitable for private sector since they ensured good returns and required less capital for establishment. Though the engineering industries were not established in the pre-Independence period, yet Tata had initiated in the field of iron and steel industry at Jamshedpur. After Independence, a number of consumer goods industries were set up in the private sector. Presently, India is practically self-reliant in its requirements for

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consumer goods. According to the 1956 resolution, "industries producing intermediate goods and machines can be set up in the private sector." As a result, chemical industries like paints, varnishes, plastics etc. and industries manufacturing machine tools, machinery and plants, ferrous and non-ferrous metals, rubber, paper, etc. have been set up in the private sector.

In India, there is a need of privatisation of companies to enhance economic status. Though the PSUs have contributed a lot to develop the industrial base of the country, they continue to suffer from a number of inadequacies such as many PSUs have been incurring and reporting losses on a continual basis. Consequently, a large number of PSUs have already been referred of loss giving units.

Advantages of Privatisation

1. State owned enterprises generally are outdone by the private enterprises competitively. When compared the latter, it shows better results in terms of profits and efficiency and productivity. Therefore, privatisation can provide the necessary push to the underperforming PSUs.
2. Privatisation brings about fundamental structural changes providing momentum in the competitive sectors.
3. Privatisation leads to implementation of the global best practices along with management and motivation of the best human talent to foster sustainable competitive advantage and improvised management of resources.
4. Privatisation has a positive impact on the financial growth of the sector which was previously state dominated by way of decreasing the deficits and debts.
5. The net transfer to the State owned Enterprises is lowered through privatisation.
6. It helps in escalating the performance benchmarks of the industry in general.
7. It can initially have an undesirable impact on the employees but progressively in the long term, shall prove advantageous for the growth and prosperity of the employees.
8. Privatized enterprises provide better and quick services to the clients and help in improving the overall infrastructure of the country.

Disadvantages of Privatisation

Though privatisation offers numerous advantages, it has many disadvantages:

1. Private sector mainly focuses more on profit maximization and less on social objectives dissimilar to public sector that initiates socially viable adjustments in case of emergencies and criticalities.
2. There is lack of clearness in private sector and stakeholders do not get the complete information about the functionality of the enterprise.

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3. Privatisation has provided the unnecessary support to the corruption and unlawful ways of accomplishments of licenses and business deals amongst the government and private bidders.
4. Lobbying and bribery are the common issues corrupting the practical applicability of privatisation.
5. Privatisation loses the mission with which the enterprise was established and profit maximization programme encourages malpractices like production of lower quality products, elevating the hidden indirect costs, price escalation etc.
6. Privatisation results in high employee turnover and a lot of investment is required to train staff and even making the existing manpower of PSU abreast with the latest business practices.
7. There can be a conflict of interest amongst stakeholders and the management of the buyer private company and initial resistance to change can impede the performance of the enterprise.
8. Privatisation intensifies price inflation in general as privatized enterprises do not get government subsidies after the deal and the burden of this inflation affects the common man.

Introduction to Globalisation

Globalisation is the process of extending social relations across world-space. Globalisation describes the interplay across cultures of macro-social forces. These forces include religion, politics and economics. Globalisation can erode and universalize the characteristics of a local group. Advances in transportation and telecommunications infrastructure, including the rise of the Internet, are major factors in globalisation, generating further interdependence of economic and cultural activities.

Globalisation in India has allowed companies to increase their base of operations, expand their workforce with minimal investments, and provide new services to a broad range of consumers.

The process of globalisation has been an integral part of the recent economic progress made by India. Globalisation has played a major role in export-led growth, leading to the enlargement of the job market in India.

One of the major forces of globalisation in India has been in the growth of outsourced IT and business process outsourcing (BPO) services. The last few years have seen an increase in the number of skilled professionals in India employed by both local and foreign companies to service customers in the US and Europe in particular. Taking advantage of India's lower cost but educated and English-speaking work force, and utilizing global communications technologies such as voice-over IP (VOIP), email and the internet, international enterprises have been able to lower their cost base by establishing outsourced knowledge-worker operations in India. Globalisation is characterized as a totally interconnected marketplace, unhampered by time zones or national boundaries.

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Meaning of Globalisation

Globalisation refers to the integration of economics and societies all over the world. It involves technological, economic, political, and cultural exchanges made possible largely by advances in communication, transportation, and infrastructure.

Features of Globalisation

The concept of Globalisation involves within its ambit the following features:

1. Liberalization

It stands for the freedom of the entrepreneurs to establish any industry or trade or business venture, within their own countries or abroad.

2. Free trade

It stands for free flow of trade relations among all the nations. Each state grants MFN (most favoured nation) status to other states and keeps its business and trade away from excessive and hard regulatory and protective regimes.

3. Globalisation of Economic Activity

Economic activities are be governed both by the domestic market and also the world market. It stands for the process of integrating the domestic economies with world economy.

4. Liberalization of Import-Export System

It stands for liberating the import-export activity and securing a free flow of goods and services across borders.

5. Privatisation

Keeping the state away from ownership of means of production and distribution and letting the free flow of industrial, trade and economic activity across borders.

6. Increased Collaborations

Encouraging the process of collaborations among the entrepreneurs with a view to secure rapid modernisation, development and technological advancement.

7. Economic Reforms

Encouraging fiscal and financial reforms with a view to give strength to free world trade, free enterprise, and market forces.

8. Several dimensions of Globalisation

Increased and Active Social, Economic and Cultural Linkages among the people. Globalisation has social, economic, political cultural and technological dimensions. It involves all round inter-linkages among all the people of the world. Free flow of knowledge, technology goods services and people across all societies is it key feature. It attempts at making geographical borders soft permitting all the people to develop their relations and links.

Factors contributing to Globalisation

The important factors that contribute to Globalisation are:

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(a) Technological Advances in communication: Technological advances in communication have made it possible to know in an instant what is happening in different parts of the world. The flow of information and ideas, boosted greatly by the Internet, can enable developing countries to learn more rapidly from each other and from industrial countries.

(b) Improvements in Transportation and Technology: Improvements in transportation networks and technology are reducing the costs of shipping goods by water, ground and air. This can facilitate the movements of goods. Technological improvements can enable developing countries to leap stages in the development process that rely on inefficient uses of national resources.

(c) Other Factors: Rising educational levels, technological innovations that allow ideas to circulate, and the economic failures of most centrally planned economies have also contributed to Globalisation.

Trends in Globalisation

The important trends in Globalisation are the following:

(a) International Trade: Trade in goods and services have grown twice as fast as global GDP in the 1990's and the share attributable to developing countries has risen from 23 to 29 percent. There is a compositional shift in trade, which has created a new pattern in the international exchange of goods, services, and ideas. Trade in components is one part of that new pattern. Advances in information technology helps to link firms from developing countries into global production networks. The tremendous growth of trade in services and, more recently, of electronic commerce is also a part of the new trade pattern.

(b) International Financial Flows: There has been increase in international capital flows of developing countries. However, the financial crisis of 1977-99 have put the growing interdependencies among countries in the spotlight and led to intense scrutiny. Such flows are started to rise again. The financial performance of emerging markets in the 1990s made capital account liberalization an attractive option for developing countries. Many developing countries have begun to loosen controls on inflows and outflows of capital.

The East Asian meltdown has enhanced the attractiveness of long-term capital investment. Countries have started to recognize that foreign direct investment brings with it not only capital but also technology market access and organizational skills. An analysis of the period 1996-97 shows that foreign direct investment was less volatile than the commercial bank loans and foreign portfolio flows.

(c) International Migration: Along with goods, services, and investment, people are crossing borders in large numbers. According to World

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Development Report 1999-2000, each tear between 2 million and 3 million people emigrate, with majority of them going to just 4 countries: the United States, Germany, Canada and Australia. The market for highly skilled workers will become even more globally integrated in the coming decades.

At the end of the 20th century Globalisation has already demonstrated that economic decisions, wherever they are made in the world, must take international factors into account. There is acceleration of goods, services, ideas and capital across nation borders.

Impact of Globalisation in India

India opened up the economy in the early nineties following a major crisis that led by a foreign exchange crunch that dragged the economy close to defaulting on loans. The response was a slew of Domestic and external sector policy measures partly prompted by the immediate needs and partly by the demand of the multilateral organizations. The new policy regime radically pushed forward in favour of a more open and market oriented economy.

1. ***Technology:*** has reduced the speed of communication manifolds. The phenomenon of social media in the recent world has made distance insignificant. The integration of technology in India has transformed jobs which required specialized skills and lacked decision-making skills to extensively-defined jobs with higher accountability that require new skills, such as numerical, analytical, communication and interactive skills. As a result of this, more job opportunities are created for people.
2. ***LPG Reforms:*** The 1991 reforms in India have led to greater economic liberalisation which has in turn increased India's interaction with the rest of the world.
3. ***Faster Transportation:*** Improved transport, making global travel easier. For example, there has been a rapid growth in air-travel, enabling greater movement of people and goods across the globe.
4. ***Rise of WTO:*** The formation of WTO in 1994 led to reduction in tariffs and non-tariff barriers across the world. It also led to the increase in the free trade agreements among various countries.
5. ***Improved mobility of capital:*** In the past few decades there has been a general reduction in capital barriers, making it easier for capital to flow between different economies. This has increased the ability for firms to receive finance. It has also increased the global interconnectedness of global financial markets.
6. ***Rise of MNCs:*** Multinational corporations operating in different geographies have led to a diffusion of best practices. MNCs source resources from around the globe and sell their products in global markets leading to greater local interaction. These factors have helped in economic liberalization and globalisation and have facilitated the world in becoming a "global village". Increasing interaction between people of different countries has led to internationalization of food habits, dress habits, lifestyle and views.

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7. ***Indian tariff rates reduced:*** The Indian tariff rates reduced sharply over the decade from a weighted average of 72.5% in 1991-92 to 24.6 in 1996-97.Though tariff rates went up slowly in the late nineties it touched 35.1% in 2001-02. India is committed to reduced tariff rates. Peak tariff rates are to be reduced to be reduced to the minimum with a peak rate of 20%, in another 2 years most non-tariff barriers have been dismantled by March 2002, including almost all quantitative restrictions.

Impact of Globalisation on Indian Business and Industry

(i) The impact of globalisation has been highly positive in almost all spheres of economic and social life and virtually no negative effect.

(ii) India's economic growth has been high, exports have boomed, incidence of poverty has been reduced, employment has surged, begging by India for economic aid has stopped, long-term inflation rate has gone down, scarcity of goods have disappeared, the quality of products available have improved substantially and overall India has become progressively vibrant and internationally competitive.

(iii) Service sector is the lifeline for the social economic growth of a country.

(iv) The real reason for the growth of the service sector is due to the increase in urbanization, privatisation and more demand for intermediate and final consumer services.

(v) In advanced economies the growth in the primary and secondary sectors are directly dependent on the growth of services like banking, insurance, trade, commerce, entertainment, etc.

(vi) The rate of growth of the Gross Domestic Product of India has been on the increase from 5.6 per cent during 1980-90 to 7% in the 1993-2001 periods.

(vii) The foreign exchange reserves (as at the end of the financial year) were $ 39 billion (2000-01), $ 107 billion (2003-04), $ 145 billion (2005-06) and $ 180 billion (in February 2007).

(viii) In respect of market capitalization India is in the fourth position with $ 894 billion.

(ix) As per the Forbes list for 2007, the number of billionaires of India has risen to 40 (from 36 last year) more than those of Japan (24), China (17), France (14) and Italy (14) this year.

(x) There is a long list of the worst of the times, the foremost casualty being the agriculture sector.

(xi) Globalisation has lowered the per capita income of the farmers and increased the rural indebtedness.

(xii) The agricultural growth of 3.2 per cent observed from 1980 to 1997 decelerated to two per cent subsequently.

(xiii) With more than half the population directly depending on this sector, low agricultural growth has serious implications for the inclusiveness of growth.

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GDP Growth Rate

The Indian economy is passing through a difficult phase caused by several unfavourable domestic and external developments. Domestic output and Demand conditions were adversely affected by poor performance in agriculture in the past two years. The global economy experienced an overall deceleration and recorded an output growth of 2.4% during the past year growth in real GDP in 2001-02 was 5.4% as per the Economic Survey in 2000-01. The performance in the first quarter of the financial year is5.8% and second quarter is 6.1%.

India's Export and Import in the year 2001-02 was to the extent of 32,572 and 38,362 million respectively. Many Indian companies have started becoming respectable players in the International scene. Agriculture exports account for about 13 to 18% of total annual of annual export of the country. In 2000-01 Agricultural products valued at more than US $ 6million were exported from the country 23% of which was contributed by the marine products alone. Marine products in recent years have emerged as the single largest contributor to the total agricultural export from the country accounting for over one fifth of the total agricultural exports. Cereals (mostly basmati rice and non-basmati rice), oil seeds, tea and coffee are the other prominent products each of which accounts for nearly 5 to 10% of the country's total agricultural exports.

Implications of Globalisation

The implications of globalisation for a national economy are many. Globalisations have intensified interdependence and competition between economies in the world market. This is reflected in Interdependence in regard to trading in goods and services and in movement of capital. As a result domestic economic developments are not determined entirely by domestic policies and market conditions. Rather, they are influenced by both domestic and international policies and economic conditions. It is thus clear that a globalizing economy, while formulating and evaluating its domestic policy cannot afford to ignore the possible actions and reactions of policies and developments in the rest of the world. This constrained the policy option available to the government which implies loss of policy autonomy to some extent, in decision-making at the national level.

Globalisation in India had a favorable impact on the overall growth rate of the economy. This is major improvement give that India's growth rate in the 1970 s was very low at 3% and GDP growth in countries like Brazil, Indonesia, Korea, and Mexico was more than twice that of India. Though India average annual growth rate almost doubled in the eighties to 5.9%, it was still lower than the growth rate in china, Korea and Indonesia. The pickup in GDP growth has helped improve India's global position. Consequently India`s position in the global economy has improved from the 8th position in 1991 to 4th place in 2001; when GDP is calculated on a purchasing power parity basis. During 1991-92 the first year of Rao1s reforms program, The Indian economy grew by 0.9% only. However the gross Domestic product (GDP) growth accelerated to 5.3% in 1992-93 and 6.2% 1993-94. A growth rate of above 8% was an achievement by the Indian during the year 2003-2004 India's GDP growth rate can be seen from the following graph since independence.

Advantages of Globalisation

The advantages of globalisation can be summarized as follows:

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(a) Promise of Increase Productivity and Higher Living Standards: Globalisation brings in new opportunities such as access to markets and technology transfer. These opportunities hold out the promise of increased productivity and higher living standards.

(b) Increase in Trade in Goods and Services: There is tremendous growth in trade in goods and services. "Trade in goods and services has grown twice as fast as global GDP in the 1990s and the share attributable to developing countries has climbed from 230to 29 percent". Increased international competition in services will lead to reduction in prices and improvements in quality. This will increase the competitiveness of downstream industries. Both industrial and development economics will gain by opening their markets.

(c) Provide New Opportunities for Growth: For developing countries, trade is the primary vehicle for realizing the benefits of Globalisation. Imports bring additional competition and variety to domestic markets, which benefit consumers. Exports, on the other hand, enlarge foreign markets and benefit business. Further trade exposes domestic firms to the best practices of foreign firms and encourages greater efficiency. Trade gives forms access to improved capital inputs such as machine tools, which boosts productivity. Trade encourages the redistribution of labour and capital too relatively to more productive sectors. It has contributed to the ongoing shift of some manufacturing and services activities from industrial to developing countries, providing new opportunities for growth.

(d) Globalisation of Financial Markets: Globalisation of finance markets affects development because finance plays an important role in economic growth and industrialization. Financial Globalisation affects growth in two ways. First, it increases the global supply of capital. Second, it promotes domestic financial development and hence, improves allocative efficiency, creates new financial instruments, and raises the quality of baking services.

(e) Increased Flow Of foreign Market Capital: Globalisation leads to increased flows of capital across countries. Flows of foreign capital offer substantial economic gains to all parties. Foreign investors diversify their risks outside their home market and gain access to profitable opportunities throughout the world. Economies receiving inflows raise the level of investment. When there is foreign investment it is generally accompanied by management expertise, training programs and important linkages to suppliers and international markets.

(f) Impact on Poverty: The fast growth and overall development resulting from liberalization, increased flow of trade ad capital could have a major impact on poverty. It is likely to reduce the number of people living in absolute poverty.

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(g) ***Increase the Level of Interdependence and Competitiveness:*** Globalisation is supposed to accelerate and increase the level of interdependence and competitiveness among nation. It is a change from plan to market.

As a consequence, markets for merchandise trade are expanding, more and more service are being traded internationally, and capital is flowing in quicker and increasingly diverse ways across countries and regions. There is increasing integration of countries into World markets for goods, services and capital. In short, Globalisation widens and intensifies international linkages in trade and finance.

(h) ***Induce Domestic Firms to Improve Technology:*** The better technology brought in by the MNCs may induce or provoke the domestic firms to absorb similar technology. This may improve their competitiveness and expansion.

Disadvantages of Globalisation

The universal acceptance of the market economy and the Globalisation led by private enterprises tend to have some harmful effects on the economy of developing countries. They are discussed below:

(a) ***Takeover of National Firms:*** There are a large numbers of cases of takeover of national firms by foreign firms. In some cases, the domestic firms had to handover the majority of equity to foreign partners of joint ventures due to their inability to bring in additional capital.

(b) ***Ruin of Traditional Crafts and Industries:*** Globalisation has lead to replacement of traditional and indigenous products by modern products. This has resulted in the ruin of traditional crafts and industries and the livelihood of the people depended on these sectors.

(c) ***Brings Instability:*** Globalisation sometimes brings instability and unwelcome change in the economy. It exposes workers to competition from imports, which can threaten their jobs. The inflow of foreign capital into the country through Globalisation may undermine banks.

(d) ***Widens the Disparity:*** Globalisation will widen the disparity between one who are associated with market and one who are not. With the expansion of trade and foreign investment, the gaps among the developing countries will widen .it has brought in increased income inequality in many industrial countries .it is argued that the developing countries and the poor people are not in a position of achieving benefits from Globalisation. The only beneficiaries of it are the developed countries and the MNCs.

5.7 LPG MODEL OF DEVELOPMENT AND LPG REFORMS

(a) This has a very narrow focus since it mostly concentrates on the corporate sector which accounts for only 10 percent of GDP.

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(b) The model bypasses agriculture and agro-based industries which are a significant source of generation of employment for the masses. It did not delineate a concrete policy to develop infrastructure. Financial and technological support, particularly the infrastructural needs of agro-exports.

(c) By permitting free entry of the multinational corporations in the consumer goods sector. LPG model hit the interests of the small and medium sector engaged in the production of consumer goods. There is a danger of labor displacement in the small industry if the unbridled entry of MNCs is continued.

(d) By facilitating imports, the Government has opened the import window too wide. Consequently, the benefits of rising exports are more than offset by the much higher rise in imports leading to a more significant trade gap.

(e) Finally, the model emphasizes a capital-intensive pattern of development, and there are severe apprehensions about its employment-potential. It is being made out that it may cause unemployment in the short run but will take care

5.8 CONSEQUENCES OF LPG

Consequences of LPG are as follows:

1. Inequalities within countries

Globalisation has increased inequalities among the countries. Some of the policies of Globalisation (liberalisation, WTO policies etc.) are more beneficial to developed countries. The countries which have adopted the free trade agenda have become highly successful. E.g.: China is a classic example of success of globalisation. But a country like India is not able to overcome the problem.

2. Financial Instability

As a consequence of globalisation there is free flow of foreign capital poured into developing countries. But the economy is subject to constant fluctuations. On account of variations in the flow of foreign capital.

3. Impact on workers

Globalisation has opened up employment opportunities. But there is no job security for employees. The nature of work has created new pressures on workers. Workers are not permitted to organise trade unions.

4. Impact on farmers

Indian farmers are facing a lot of threat from global markets. They are facing a serious competition from powerful agricultural industries quite often cheaply produced agro products in developed countries are being dumped into India.

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5. Impact on Environment

Globalisation has led to 50% rise in the volume of world trade. Mass movement of goods across the world has resulted in gas emission. Some of the projects financed by World Bank are potentially devastating to ecological balance. E.g.: Extensive import or export of meat.

6. Domination by MNCs

MNCs are the driving force behind globalisation. They are in a position to dictate powers. Multinational companies are emerging as growing corporate power. They are exploiting the cheap labour and natural resources of the host countries.

7. Threat to national sovereignty

Globalisations results in shift of economic power from independent countries to international organisations, like WTO United Nations etc. The sovereignty of the elected governments are naturally undermined, as the policies are formulated in favour of globalisation. Thus globalisation has its own positive and negative consequences. According to Peter F Drucker Globalisation for better or worse has changed the way the world does business. It is unstoppable. Thus Globalisation is inevitable, but India should acquire global competitiveness in all fields.

5.9 CHALLENGES OF LPG

1. Increased economic competition as a result of the dismantling of trade.
2. Preferences of some of the Region's major export commodities and the general lowering of trade barriers.
3. Additional trade liberalization initiatives in the not too distant future (WTO, FTAA, EPA).
4. Pressure on external sector performance as a result of contributing to increased external borrowing, higher external debt.
5. As a result of stagnation, decline and significant economic adjustment in some industries – bananas, sugar, manufacturing.
6. Reduced real income growth as a result of the inability to compete.
7. Reduced employment, increasing poverty and income inequality against a background of substantial poverty in some countries.
8. Increased pace of economic change forced by the acceleration of technological development.
9. Reduced policy flexibility as a result of the new international norms of good governance.
10. The foregoing list is by no means exhaustive but purpose to capture the major challenges presented to the Region by the processes of trade liberalization, Privatisation and Globalisation.

Potential Benefits of Privatisation

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1. Improved Efficiency

The main argument for privatisation is that private companies have a profit incentive to cut costs and be more efficient. If you work for a government run industry, managers do not usually share in any profits. However, a private firm is interested in making a profit, and so it is more likely to cut costs and be efficient. Since privatisation, companies such as BT, and British Airways have shown degrees of improved efficiency and higher profitability.

2. Lack of Political Interference

It is argued governments make poor economic managers. They are motivated by political pressures rather than sound economic and business sense. For example, a state enterprise may employ surplus workers which are inefficient. The government may be reluctant to get rid of the workers because of the negative publicity involved in job losses. Therefore, state-owned enterprises often employ too many workers increasing inefficiency.

3. Short Term View

A government many think only in terms of the next election. Therefore, they may be unwilling to invest in infrastructure improvements which will benefit the firm in the long term because they are more concerned about projects that give a benefit before the election.

4. Shareholders

It is argued that a private firm has pressure from shareholders to perform efficiently. If the firm is inefficient then the firm could be subject to a takeover. A state-owned firm doesn't have this pressure and so it is easier for them to be inefficient.

5. Increased Competition

Often privatisation of state-owned monopolies occurs alongside deregulation – i.e. policies to allow more firms to enter the industry and increase the competitiveness of the market. It is this increase in competition that can be the greatest spur to improvements in efficiency. For example, there is now more competition in telecoms and distribution of gas and electricity.

However, privatisation doesn't necessarily increase competition; it depends on the nature of the market. E.g. there is no competition in tap water because it is a natural monopoly. There is also very little competition within the rail industry.

6. Government will Raise Revenue from the Sale

Selling state-owned assets to the private sector raised significant sums for the UK government in the 1980s. However, this is a one-off benefit. It also means we lose out on future dividends from the profits of public companies.

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Issues of Privatisation

Various Issues of Privatisation are:

1. Natural Monopoly

A natural monopoly occurs when the most efficient number of firms in an industry is one. For example, tap water has very significant fixed costs. Therefore there is no scope for having competition amongst several firms. Therefore, in this case, privatisation would just create a private monopoly which might seek to set higher prices which exploit consumers. Therefore it is better to have a public monopoly rather than a private monopoly which can exploit the consumer.

2. Public Interest

There are many industries which perform an important public service, e.g., health care, education and public transport. In these industries, the profit motive shouldn't be the primary objective of firms and the industry. For example, in the case of health care, it is feared privatising health care would mean a greater priority is given to profit rather than patient care. Also, in an industry like health care, arguably we don't need a profit motive to improve standards. When doctors treat patients, they are unlikely to try harder if they get a bonus.

3. Government Loses Out on Potential Dividends

Many of the privatised companies in the UK are quite profitable. This means the government misses out on their dividends, instead going to wealthy shareholders.

4. Problem of Regulating Private Monopolies

Privatisation creates private monopolies, such as the water companies and rail companies. These need regulating to prevent abuse of monopoly power. Therefore, there is still need for government regulation, similar to under state ownership.

5. Fragmentation of Industries

In the UK, rail privatisation led to breaking up the rail network into infrastructure and train operating companies. This led to areas where it was unclear who had responsibility. For example, the Hatfield rail crash was blamed on no one taking responsibility for safety. Different rail companies have increased the complexity of rail tickets.

6. Short-termism of Firms

As well as the government being motivated by short term pressures, this is something private firms may do as well. To please shareholders they may seek to increase short term profits and avoid investing in long term projects. For example, the UK is suffering from a lack of investment in new energy sources; the privatised companies are trying to make use of existing plants rather than invest in new ones.

5.10 INFORMATION TECHNOLOGY (IT)

Information Technology refers to the branch of engineering that deals with the use of computers and telecommunications to retrieve and store and transmit information.

It is the combination of systems, procedures, software, and hardware involved in establishing an effective and leading-edge methodology for enabling a total supply chain network of response - from incoming materials through delivery and satisfaction with finished goods and services.

Role of IT in various sectors like Business, Medicine, Education, Science, etc

Education

Getting the right kind of information is a major challenge as is getting information to make sense. College students spend an average of 5-6 hours a week on the internet. Research shows that computers can significantly enhance performance in learning. Students exposed to the internet say they think the web has helped them improve the quality of their academic research and of their written work. One revolution in education is the advent of distance learning. This offers a variety of internet and video-based online courses.

Health and Medicine

Computer technology is radically changing the tools of medicine. All medical information can now be digitized. Software is now able to computer the risk of a disease. Mental health researchers are using computers to screen troubled teenagers in need of psychotherapy. A patient paralyzed by a stroke has received an implant that allows communication between his brain and a computer; as a result, he can move a cursor across a screen by brainpower and convey simple messages.

Science

Scientists have long been users of it. A new adventure among scientists is the idea of a "collaboratory", an internet based collaborative laboratory, in which researchers all over the world can work easily together even at a distance. An example is space physics where space physicists are allowed to band together to measure the earth's ionosphere from instruments on four parts of the world.

Business

Business clearly sees the interest as a way to enhance productivity and competitiveness. Some areas of business that are undergoing rapid changes are sales and marketing, retailing, banking, stock trading, etc. Sales representatives not only need to be better educated and more knowledgeable about their customer's businesses, but also must be comfortable with computer technology. The internet has become a popular marketing tool. The world of cyber cash has come to banking – not only smart cards but internet banking, electronic deposit, bill paying, online stock and bond trading, etc.

Personal, Social and Ethical Issues in IT

Personal Issues

An increase in work load and / or responsibilities can trigger job stress. Many employees feel information anxiety because other people are better than they in using computers, because they are slow in learning new technology and because of the need to continuously learn new things. Exposure to terminals can cause

radiation exposure which is associated with cancer and other health related problems. It can also affect eyesight. Other hazards are backaches and muscle tension in the wrist and fingers.

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Social Issues

They are mainly positive issues. There is now flexibility in jobs that can greatly improve the quality of leisure time. There are also great opportunities for people with disabilities. Those who cannot type are able to use voice-operated typewriters or work from home. It has brought about major improvement in health care delivery, ranging from better diagnosis to research of new drugs, to more accurate monitoring of critically ill patients.

Ethical Issues

Many companies and professional organizations develop their own code of ethics. A code of ethics is a collection of principles intended as a guide for the members of a company or an organization. There are four kinds of ethical issues - privacy, accuracy, property and accessibility. Information privacy is the right to determine when and to what extent information about oneself can be communicated to others. The issues to be considered here are electronic surveillance and personal information in databases. Millions of computer users are being monitored without their knowledge. Information about individuals is being kept in many databases. Intellectual property is the intangible property created by individuals who are protected by trade secrets, patent and copyright laws.

Advantages of Information Technology

The advantages of Information Technology can be summarized as follows:

1. Globalisation

True globalisation has come about only via this automated system. The creation of one interdependent system helps us to share information and end linguistic barriers across the continents. The collapse of geographic boundaries has made the world a 'global village'. The technology has not only made communication cheaper, but also possible much quicker and round the clock. The wonders of text messages email and auto-response, backed by computer security applications, have opened up scope for direct communication.

2. Cost-effective

Computerized, internet business processes have made many businesses turn to the Internet for increased productivity, greater profitability, clutter free working conditions and global client. It is mainly due to the IT industry that business has been able to make their processes more streamlined, thereby becoming more cost-effective and consequently more profitable. People are able to operate their businesses 24x7, even from remote locations only due to the advent of information technology.

3. Communication

Quick and effective communication is vital to any business anywhere in the world. Information technology gives an entrepreneur or business the tools, like email,

video conferencing, SMS, etc., essential to communicate efficiently and effectively. To the business world, and information technology gives your company the resources it needs to communicate quickly and effectively. Not only do people connect faster with the help of information technology, but they are also able to identify like-minded individuals and extend help, while strengthening ties.

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4. Storing and Protecting Information

IT provides a low-cost business options to store and maintain information that may be important from a business or service point of view. Virtual vaults and other such security systems not only store vital data but also allow control over the access to such information. IT security systems will also protect virtual data from being hacked or wiped out in case of any technical failure.

5. Creation of New Jobs

One of the biggest advantages of IT has been the creation of a whole new field of opportunity for skilled personnel leading to new and interesting jobs. Hardware and software developers, computer programmers, web designers, system analyst, the list of new jobs created could go on. IT has also been attributed to be the major cause of surge in the economies of certain Third World nations too. Things that were once done manually or by hand have now become easier and faster due to the advent of a computing technology. Our world today has changed a great deal with the aid of IT which has penetrated almost every aspect of our daily lives and society, from leisure to business. IT has become a part of our day-to-day lives through the evident use of PC's, Internet, cell phones, faxes, the list would seem endless. Let us hope that newer development in the field of IT can provide benefits to our future generations, just as it has greatly benefited ours.

Disadvantages of Information Technology

The disadvantages of Information Technology can be summarized as follows:

1. **Over reliance on technology:** a lot of people believe that because computers and the Internet has become such a regular part of modern life, some people particularly children who grow up with it, will not be able to function without it. Some people think that the Internet is making people lazy, particularly when it comes to essay or project research as instead of reading books in a library, one can just perform a Google search.
2. **Loss of communication skills:** with the ever increasing variety of social networking sites such as Face book and Twitter, a lot of people are worried that traditional communication skills will be lost. This worry is particularly about children who often engage in these websites because communication and interactive skills are not important with computers.
3. **Job losses:** technology in an organization, company or business, the number of hours that a human works at that company are reduced. This may even result in some people losing their jobs because technology is

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doing it for them. However this is beneficial for the organization as their profit is increased because they don't need to pay their workers as much because they aren't required as much.

4. **Loss of personal touch:** emails and instant messaging have replaced the old tradition of handwriting letters. And although this is advantageous because of time constraints, a personal touch and sense of feeling is lost compared to taking the time to sit down and hand write a letter.
5. **Health problems:** research has shown that technology can cause a number of problems with a person's health. Many scientists, doctors and researchers are concerned about possible links between technology and heart problems, eye strain, obesity, muscle problems and deafness. Waste emitted from technology can pollute the environment which not only makes people ill, it also damages the environment.

5.11 INFORMATION TECHNOLOGY REVOLUTION

The Information technology (IT) revolution has brought about a sarcastic change in India. Huge malls, Funky eating joints, sophisticated commercial complexes, villas, etc. are some of the visible and wonderful attributes of IT revolution. Nowadays, IT has created social problems so deep that it has completely shaken our social structure. In this way, IT revolution is creating a social imbalance now. We can say that foreign trips and the western ways of living have actually divided our society into many different folds.

Importance of IT Revolution

1. People who are intelligent and self-motivated are either frustrate or utilize their energy and put their all effort and time to find the new software links and appraisals. Today, if someone aspires to be an artist, musician, or a teacher then he or she has to overcome with peer and social pressure to pursue their career of interest. Because of the big money and wide range of knowledge, IT career has become as much an aspiration of the society. IT does a remarkable job by taking away the best talent available for other industries.
2. At present, student community and mostly the fresh graduates are obsessed with IT jobs, particularly the engineering students. Irrespective of their streams, every engineering student wants to land in an IT job. In-fact, the big salary and fast growth is the pull-factor. Every industry is unique and has its own paying capacity. Because of the IT, all other industries are suffering and are finding it difficult to attract and retain the best talent.
3. It is a fact, that small company cannot afford to pay as much as IT companies pay to a fresher. Some of the big names like Infosys, Wipro, and Tata Consultancy Services [TCS]. Companies need the best talent only during the formative years. But, on the other side youth of today

are obsessed with the quick money and luxurious life. Well, the big starting salaries offered at IT companies are so attractive that everyone gets attract so easily and conveniently towards it.

4. Well, it is observed that IT revolution has certainly killed the reading habit among the youth of today and on other side, Libraries wear a deserted look nowadays. Reading books doesn't bring out any interest in IT students. The pressure to perform and to get the desired IT job has created a panic among the graduate students that they hardly turn their attention towards reading for pleasure and for writing.
5. Information Technology (IT) revolution takes places everywhere. Organizations implementing IT are able to provide better services and therefore able to improve their businesses manifold. In earlier days IT has enormously been used in manufacturing sector regarding product designing and development, product modification etc.

Sector Wise Impact of IT Revolution

1. IT in Educational Places

The Government of India has come out with a statement stating that Information Technology (IT) is India's Tomorrow. Hence the educational institutions have to use IT for teaching the children so that they should be trained in this field also. Well, the latest hardware and software can be used and the latest computer languages and packages have to be taught to the students. It is not enough if a student of computer science alone has been taught about IT, but also the students of other disciplines have to be taught about IT.

2. IT in Hospitals

The hospital management is taking place with the application of IT. Starting from the reception by recording a patient's name, the IT has been used everywhere in a hospital. A patient's record comprising his name, age, sex, the disease found, blood group, height, weight, blood pressure level, etc. have been maintained as a database in a computer in the hospital. So whenever the patient arrives his previous record can be verified easily. For billing purposes also the computers have been used widely in hospitals.

3. IT in Banking

Consistent and tremendous improvement has taken place in the Indian banking sector because of the IT revolution. All the private and foreign banks have gone for 100 per cent computerization. With the help of computerization, the transaction takes place at a faster rate and the waiting time of a customer in a queue is getting minimized. The banks provide the facility of internet banking, phone and mobile banking with the help of IT. All the branches of a bank are networked. The cost incurred on infrastructure, furniture and employees has got decreased because of the application of IT.

4. IT in Railways

Well, the application of IT has provided various benefits for the Indian Railways and its passengers. With the issue of computerized railway tickets, the errors have

been minimized and misusers can be found easily. A passenger can book the train ticket from any part of the country. A passenger can also book the train ticket at his convenient place, because the system of online reservation has been introduced.

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5. IT in Medical Shops

Due to an increase in competition, IT has also been applied in pharmaceutical shops. Whenever any medicine enters the shop, all the information related to the medicine like- its name, quantity, manufacturing date, expiry date, its content, price and other information can be entered into a computer system. Whenever the sales take place, computerized billing would be provided to the customers. Whenever any medicine has been sold the software created would also give indications to the manager/supervisor of a pharmaceutical shop related to the number of quantities sold, the number of quantities available in the shop and the computer also warn them regarding the date of expiry.

6. IT in Research

Marketing Research (MR) agencies involve in a lot of research activities starting from research survey on product development till distribution and measurement of customer response. Manual analysis of data is not used now days. The MR agencies use sophisticated statistical software packages for data analysis and interpretation. Some of the statistical software packages are created by their own for customized problems. Therefore, the application of IT tools take place in full swing at MR agencies.

7. IT in Share Market

It is assumed that gone are those days when stock brokers use to shout at the trading hall of a stock exchange for quoting their price. Now days with the help of computer terminal and internet connection, purchasing and selling of share takes place everywhere. A client can look at the transactions taking place through the computers. The volume of the shares traded and the turnover has got consistently improved because of the availability of online share trading.

8. IT in Advertisement Agency

Creativity and modernity is the slogan which is sought in Ad Agencies. Creativity involves doing things differently. Things can be done differently with the help of IT. The Ad Agencies use a lot of software for creating advertisements. Lot of animations and graphics can be done using IT tools.

9. Web Learning

As the Internet technology is introduced it makes a new revolution in information technology. The wide use of the Internet also affected the methods of education. It is a global network and gives the concept of the global classroom where any number of students can interact with each other at any time.

10. Delivery System

In most of the business schools knowledge and information are delivered with teaching aids like a slide projector, overhead projector and LCD projector. However, in distance mode of learning various other tools like audio-visual tapes,

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broadcast on radio and telecast through T.V. With access to the internet, the learners have a reach to an unrestricted pool of knowledge. In this manner, internet communication is a very useful medium of imparting knowledge. Computer plays a useful role in creating learning material. Through multimedia, symbiotic advantage may be gathered by the integration of various types of information such as clip art, animation graphics, music, voice and live interaction that makes the delivery effective. Multimedia computer can be used for training on management education in a one-to-one situation with the student. Multimedia system is treated to be more learner friendly as compared to T.V.

11. Networking & Library

The impact of IT on libraries is showing wonderful results. The libraries of the future will be called electronic libraries. Instead of books, these will have optical disks which could be used at home or anywhere through a small portable electronic reader. Computer applications to library and information field increase the efficiency of the day to day library work. An electronic computer network connecting millions of computers all over the world is the Internet. Today most of the university department libraries usually access to online information service and have CD ROMs and have used them on networks with wider access. Many applications can be administered on the business educational Intranet such as sharing of library resources, projects and research work, faculty interaction and collaboration, student placement information and video conferencing.

12. E-Learning

IT can be used as a mass literary in various forms and education delivery system for millions of children living in far. The Internet can provide access to an unlimited storehouse of knowledge on any subject and IT is just an enabling technology for everyone. Another aspect to the IT driven and Net learning technology was school Net. School Net has trained over 2000 teachers across the country and in the process of expanding their network. Karnataka was the first state in India to announce its IT policy.

Challenges for IT Revolution

1. Training to Teachers

Training should be given in order to create a learning environment that will itself train and encourage students to turn the learning experience into useful, practical and personal knowledge.

2. Workshops

In backward areas, parents are not much knowing about WBL. So the demonstration, seminars & workshops should be conducted for society in order to understand the importance of it in the easiest ways

3. Effect on Teachers

WBL will lead to the reduction in manpower as per as teachers are concerned. This will lead to agitations by the teacher's organization. This problem is also faced by students when teachers are suffered.

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4. Effect on Students

On the other hand, the students will be benefited by WBL there will some section of students opposing this introduction of technology in education.

5. Power of Accessibility

Every school and college don't have equal opportunity to gain this information because of access issues. The schools with fewer budgets will always face this problem. And, in this manner, this problem is mostly face in India because there is a big gap between poor & rich communities in India.

5.12 INDUSTRIAL GROWTH IN PHASE II AND III

Phase-wise Developmental Performance of Indian Industries is as follows

Indian industry has experienced major change both in its structure and growth since independence. The Indian industry growth experience can be divided into four different phases each of which is associated with different policy orientation.

The First Phase of Rapid Growth (1950-1951 to 1965-66)

There were several factors that influenced the industrial growth during this period. The anti-industry attitude of the British Government before 1947 was replaced by the strongly pro-industry aims of the Indian Government.

Planning came to be the medium of development. Beginning with the Second Five-Year Plan, the government gave a very high priority to the development of industries with a particular emphasis on basic and capital goods industries.

Government's Key Role

During this phase, the government played the most important role in which a number of industries were set up in the public sector. Most of these were basic and capital goods industries like electricity, steel, machinery, etc.

The government simultaneously undertook measures to ensure that these (and other) industries in the private sector also developed. Although little was provided in the First Plan (1951-56) for industries, the second. (1956-61) and the third plans (1961-66) laid a firm foundation for industrial development.

The amount of resources was stepped up from a small 3 per cent of total outlay in the First Plan to as much as 30 per cent in the Second Plan and 35 per cent in the Third Plan. Apart from setting up industries, the government provided resources and facilities for the private sector to start industries on its own or jointly with the government, in the areas ear-marked for the private sector.

Expansion of the Private Sector

The private sector also contributed considerably to industrial growth.

Expansion of private sector took place principally on three counts:

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(i) The entrepreneurial class, found further opportunities to investment as they had already gained experience in the running of many consumer goods industries. Private industries were also set up in the basic sectors like steels, machinery, etc. This enabled them to expand in the existing industries and also set up new ones.

(ii) Profitability of the investment in industries increased due to measures like restriction on imports, which enabled private entrepreneurs to tap domestic market without fear of foreign competition. Large funds were also made available to this sector by the new financial institutions set up by government.

(iii) Owing to the industrial policy of India, which permitted the entry of foreign capital under reasonable conditions, the inflow of private foreign capital increased. Most of the aid (in the form of loan on concessional terms) received from foreign countries was for industrial development. The twin benefits that India got from such aids were funds in the form of foreign exchange and technical know-how.

It is thus evident that the state not only acted as the catalyst for the industrial growth by undertaking the task of developing industries itself, but also created an environment conducive for the private sector to contribute to the industrial development of the country. It was thus a state engineered growth.

The Second Phase of Deceleration (1965-66 to 1979-80)

The industrial growth experienced during the Second and the Third Five Year Plan periods could not be sustained. There are several reasons put forward for this downturn, which can be broadly classified into two broad categories, namely, the supply side constraints and the demand side constraints.

Supply Side Constraints

In the first place there were some major disturbances caused by wars (with China in. 1962 and with Pakistan in 1965 and 1971), the draughts in 1965 and 1966 and the steep rise in oil prices in 1973 (first 'oil' shock). Second was the reduced availability of critical inputs for production like power, infrastructure and raw material. Imports became costlier and fluctuations in agricultural production adversely affected the agro-based industries.

Third was the organisational weakness due to which many industries fell sick. Many industries were functioning at sub-optimal capacity owing to poor inventory control and financial management. There were losses due to work stoppage, which adversely affected the production.

A fourth factor was the controls and regulatory measures. With improvement in the saving investment ratio the controls and regulatory measures had become restrictive in character acting as impediments to industrial growth.

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Demand Side Constraints

Among the demand side factor inhibiting industrial growth, the principle ones are the following. One was the declining demand due to policies of import substitution. For instance, till about the mid-196bs, industries were setup to replace imported goods. With time, the policies on this front resulted in the slowdown of industrial production. This affected the capital goods industries, as it was the import of these goods, which were replaced under the policy of import substitution initiated in the Second Plan.

Two, there was a decline in the growth of public sector investment resulting in a corresponding decline in the private sector investment. The gross fixed investment which grew at the rate of 12.2 per cent during the period 1951-66, came down steeply registering negative growth (-0.47 per cent) during the period 1966-72. Associated with this trend, there was a rise in the incremental capital-output radio for the industrial output. What it actually amounted to was that the relative share of material and depreciation cost per unit of output went up.

Three, the weak performance of agriculture adversely affected the demand for industrial goods. The slow growth in agricultural output, for many years since mid-1960s, resulted in a decline in the demand for the products of the industrial sector. To an extent, the terms of trade, favourable to agriculture, acted adversely for the industry.

Four, the small rise in the per capita income and the worsening of inequalities in income distribution also caused a slow-down in the demand for industrial goods. On the hand, there was a trend in the stabilisation of demand for consumer goods, particularly durable goods, owing to the small proportion of rich people in the country. On the other hand, large proportion of population with low buying power for industrial goods, were increasingly finding it difficult to keep up the pressure for industrial demand.

The Third Phase of Recovery and Revival (1980-81 to 1989-90)

The factors behind the resurgence of growth in the 1980s were exactly similar to those that contributed for its deceleration in the mid-sixties.

Empirical Evidence, which Pointed out to Favourable Trends included:

(i) Improvement in the rate of growth (and pattern) of gross domestic capital formation in general and public investment in particular;

(ii) Step-up in infrastructure investment and efficient management of the infrastructural facilities;

(iii) Trends in the inter-sectoral terms of trade favouring the agricultural sector;

(iv) Increase in the use of manufactured inputs in crop production;

(v) Reforms in industrial and trade policies contributing to revival of growth in industrial output.

As a result of the above factors, there was an improvement in Total Factor Productivity which contributed significantly to growth in value added.

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Two other factors, which contributed to the revival process are:

(i) Role of technology and increased R and D activity and better access to imported technology under technical collaboration projects; and

(ii) Massive flow of remittances from the middle east during 1974- 1980 resulting in large foreign exchange reserves which led to further liberalisation of imports.

Thus, from 1980 onwards, due to the above factors coupled with improvement in domestic political environment, industrial policy witnessed greater pragmatism.

This process was further assisted by factors like:

(i) a gradual loosening of controls,

(ii) greater freedom to import technology,

(iii) flow of foreign private capital facilitating modernisation of the manufacturing sector, etc.

Greater realism in policy-making also included;

(i) stepping up of public investment in infrastructure and energy production and

(ii) investment in rural development for diffusion of green revolution technology and for a 'direct' attack on poverty.

The 'second oil shock' was successfully met by increasing domestic oil production and import substitution in fertilisers in a short time. The second half of the 1980s also witnessed considerable de-licensing and relaxation of import controls facilitating up-graduation of industrial technology.

This was achieved by a greater reliance on the private corporate sector with fiscal incentives extended for stock market-based financing of industrial investment. Also, in the 1980s, many branches of manufacturing like automotive industry, cement, cotton spinning, food processing, and polyester filament yam, witnessed modernisation and expansion of scale of production.

As a result, industrial export growth also improved in the second half of the 1980s. Thus, the turnaround in the industrial output growth in the decade of 1980s is variedly attributed to liberalisation, improvement in public investment and private sector performance.

The Fourth Phase of Industrial Growth under New Economic Policy (1991-2013):

During this phase, industry and trade policy reforms were accelerated. Public investment contracted sharply to reign in the fiscal imbalance. Financing of industrial development changed considerably as part of the financial sector reform, which cut into directed lending.

Industrial growth in the country has, in terms of long run trend, remained aligned with the growth rate of gross domestic product (GDP). The long-term average annual growth of industries comprising mining, manufacturing, and electricity, during the post-reform period between 1991-2 and 2011-12, averaged 6.7 per cent as against GDP growth of 6.9 per cent.

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Inclusion of consumption in industry raises this growth to 7.0 per cent. The share of industry, including consumption, in GDP remained generally stable at around 28 per cent in the post-reform period. The share of manufacturing, which is the most dominant sector within industry, also remained in the 14-16 per cent range during this period.

Employment in the industrial sector increased from 64.6 million persons in 1999-2000 to 100.7 million persons in 2009-10. The share of industry in total employment increased from 16.2 per cent in 1999-2000 to 21.9 per cent in 2009-10.

However, the increase was largely on account of expansion of employment opportunities in the construction sector, from 17.5 million in 1999-2000 to 44.2 million in 2009-10.The industrial output had grown by 6 per cent in November, 2011. Meanwhile, in July, 2012 it showed a contraction of 0.1 per cent.

5.13 DISINVESTMENT

Disinvestment in Public sector undertakings in India, is a process of public asset sales done by the President of India on behalf of the Government of India. It can be directly offered for sale to the public or indirectly done through a bidding process. The Public Enterprises Survey (2015–16), brought out by the Department of Public Enterprises, Ministry of Heavy Industries, & Government of India on the performance of Central Public Sector Enterprises was placed in both the Houses of Parliament on 21 March 2017. There were 331 CPSEs in 2017-18, out of which 257 were in operation. The remaining 74 of the CPSEs were being established. Following the theories of Economic Liberalism and Infrastructure-based development as referenced in the Union Budget of India, the total expenditure of the Government of India increased from ₹ 1,13,422 crore in 1991–92 to ₹ 21,46,735 Crore in 2017–18. To help raise the necessary capital for these expenditures and also to minimize the nation's fiscal deficit, the Government of India started divesting its stake in the country's Public sector undertakings. Conceding to the demands of privatisation, the Government of India slowly began the divesting itself from PSU's despite stiff resistance from labour unions. The below table provides data regarding the disinvestment process which started in 1991. Major disinvestment steps were taken in the past by the BJP-led NDA government between 1999 and 2004. BJP made strategic disinvestments in Bharat Aluminium Company (BALCO), Hindustan Zinc (both to Sterlite Industries), Indian Petrochemicals Corporation Limited (to Reliance Industries) and VSNL (to the Tata group). While track record and future of these companies were good, they have all flourished under the private sector companies that they were sold to.

5.13.1 What is Disinvestment?

In simple terms, Disinvestment is taking your money out of the companies you invested in.

For example,

Ram invested ₹ 1,00,000 in ABC Ltd. for the last few years for 500 shares in the company. Today, he plans to sell his shares to Shyam.

Here Ram is disinvesting in ABC Ltd.

The word, disinvestment is generally used in the context of Public Sector Undertakings (PSUs).

When the government sells its shares in PSUs (Companies where the government has more than 51% ownership) to Private Entities, it is called disinvestment.

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5.13.2 Objectives of Disinvestment in India

(a) Disinvestments are primarily motivated by the optimization of resources to deliver maximum returns.

(b) Disinvestment in India is aimed at reducing the financial burden on the government due to the inefficient and poorly functioning PSUs (called sick units) and to improve public finance.

(c) It introduces competition and market discipline and helps to depoliticize non-essential services.

(d) Sometimes, disinvestments can also be called upon for political or legal reasons.

5.13.3 Importance of Disinvestment in India

(a) Currently, the government of India has around ₹ 2 lakh crores locked up in PSUs.

(b) Disinvestment of the government stakes in these companies, thus, it far too significant in the Indian economy. The disinvested money can be used for:

(c) Financing India's increasing fiscal deficit

(d) Financing large-scale infrastructure projects across the country

(e) Increasing consumption and demand

(f) Minimizing government debt – Almost 40-45% of the Centre's revenue receipts go towards repaying public debt or interest in the same

(g) Implementing social programs in health and education sectors

(h) On the other hand, private entities or companies buy these disinvested stakes in PSUs for a cheap price and the skills, discipline, and talent brought in by such private entities helps in improving the overall performance of such Sick Units.

5.13.4 Types of Disinvestment Methods in India

The method of disinvestment in India changes from time to time, mostly depending on the party at the center.

But there are primarily 3 different approaches to disinvestments (Government's perspective).

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1. Minority Disinvestment

Minority disinvestment in PSUs is such that, at the end of it, if the government of India retains a majority stake (typically more than 51%) in the company, it ensures management control.

Historically, minority stakes have been either auctioned off to financial institutions or offloaded to the public by way of an offer for sale.

The present government has made a policy statement for FY 2018-19 that all disinvestments would only be minority disinvestments through public offerings.

Minority disinvestments via auctioning to institutions go back into the early and mid-90s and are no longer the preferred method in India.

Some examples of minority disinvestment via Offer for Sale include recent issues of Power Grid Corporation of India Ltd., Rural Electrification Corporation Ltd., NTPC Ltd., NHPC Ltd., etc.

2. Majority Disinvestment

Majority disinvestment in PSUs is such that, at the end of it, the government of India retains a minority stake in the company i.e. it sells off a majority stake. It is also called Strategic Disinvestment.

If we look into the disinvestment history, majority disinvestments have been typically made to strategic partners of the government of India.

These strategic partners could be other Central Public Sector Enterprises (CPSEs) themselves, a few examples being BRPL/MRL to Indian Oil Corporation Ltd. (IOC) and KRL to BPCL.

Alternatively, these strategic partners can be private entities, like the sale of Modern Foods to Hindustan Lever Ltd., CMC to Tata Consultancy Services Ltd. (TCS).

Also, same as in the case of minority disinvestment, in majority disinvestment case the stake can also be offloaded by way of an Offer for Sale, separately or in conjunction with a sale to a strategic partner.

3. Complete Disinvestment

Complete disinvestment or privatisation is a form of majority disinvestment wherein 100% control of the company is passed on to a buyer i.e government of India completely disinvests from that PSU.

Example of this includes 18 hotel properties of India Tourism Development Corporation (ITDC).

5.13.5 Impact of Disinvestment

In the context of macroeconomics, time has shown us how countries like Chile, UK, China, New Zealand, Poland successfully used disinvestment to achieve new economic heights. Many countries used disinvestment as a sure means of restoring budgetary balance & to revive growth on a sustainable basis after facing economic crisis in 80s. Analysis of these countries before & after disinvestment shows that market-driven economies are more efficient than the state-planned economies.

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Disinvestment is extremely positive for the Indian equity markets and the economy. It will draw lot of foreign and domestic money into the markets. It will allow PSU to raise capital to fund their expansion plans and improve resource allocation in the economy. It will allow the government to stimulate the economy while resorting to less debt market borrowing. Private borrowers won't be crowded out of the markets by the government and will have to pay less to borrow from the open market. Disinvestment will allow government to have much better control over the market economy without upsetting norms of market behavior.

In future disinvestment will assume the role of a major instrument of policy intervention by government as 48 PSUs listed on BSE as of February 8, 2010, account for close to the 30% of the total market cap of the exchange. This is significant as a total of 4,880 odd companies were listed on the exchange. As of February 8, 2010, the BSE PSU index had a total market cap of ₹ 17,14,466.96 crore.

As certain number of shares are reserved for retail investors & splitting the stocks of some big PSUs, will attract more retail investors. Market capital of PSUs can go higher in future & can provide extra money in the kitty of govt. 5% Reservation for employees will work as an incentive & will keep momentum going. This will be true democratization of capital. Disinvestment would encourage citizens' participation in management of public enterprises and improve the capitalization of stock markets. Listing of enterprises on the bourse adds certain economic and financial benefits to the economy. This is known as financial deepening, a term used by development economists. Financial deepening improves the efficiency of the financial system as well as contributes to GDP growth.

The loan bribery case (in LIC, PNB etc.) has shown the wrongdoing, loopholes & drawbacks in the working of PSUs. If India has to become an economic super power, working way of PSUs has to be changed. PSUs contribute about more than 1/4th in the GDP of India & a large chunk of working population is employed in PSUs .Economic super power dream is not possible without PSUs coming at par with private sector.

5.14 FOREIGN DIRECT INVESTMENT

Foreign direct investment (FDI) is direct investment into production in a country by a company located in another country, either by buying a company in the target country or by expanding operations of an existing business in that country.

Foreign direct investment is done for many reasons including to take advantage of cheaper wages in the country, special investment privileges such as tax exemptions offered by the country as an incentive to gain tariff-free access to the markets of the country or the region. Foreign direct investment is in contrast to portfolio investment which is a passive investment in the securities of another country such as stocks and bonds.

India Inc witnessed a year-on-year (y-o-y) upsurge of 24.2 per cent in FDI to touch US$ 3.95 billion in April-May 2013 as against US$ 3.18 billion during the same period in 2012, according to statistics released by the Department of Industrial Policy and Promotion (DIPP).

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During 2012-13, India attracted FDI worth US$ 22.42 billion. Hotels and tourism, pharmaceuticals, services, chemicals and construction received the highest amount of FDI. The major contributors to the Indian FDI were Singapore, Mauritius, the Netherlands and the US.

The Government of India has liberalized the FDI regime in about a dozen sectors, including telecom, power etc. and have also relaxed investment norms in multi-brand retailing.

Private equity (PE) and venture capital (VC) firms remained bullish about India's consumer goods and services sector. PE and VC investments increased by more than 46 per cent in the first half of FY14, with consumer companies in retail, e-commerce, consumer packaged goods and quick service restaurants raising US$ 609.39 million through 51 deals.

Meanwhile, Indian merger and acquisition (M&A) space witnessed substantial levels of deal activity in the first nine months of 2013. There happened 377 deals amounting to US$ 23.9 billion, according to a survey by tax advisory firm Grant Thornton.

India's foreign exchange (forex) reserves increased by US$ 1.51 billion to touch US$ 279.24 billion for the week ended October 11, 2013, showed the data from the Reserve Bank of India (RBI)'s Weekly Statistical Supplement. India's foreign currency assets (FCA), the biggest component of the forex reserves, increased by US$ 1.52 billion to US$ 250.85 billion for the week under review.

5.14.1 Meaning of Foreign Direct Investment

Foreign Direct Investment refers to the process whereby residents of one country (the home country) acquire ownership of assets for the purpose of controlling the production, distribution and other activities of a firm in another country (the host country).

5.14.2 Definitions of Foreign Direct Investment

According to the IMF, "FDI is the category of international investment that reflects the objective of obtaining a lasting interest by a resident entity in one economy in an enterprise resident in another economy. The lasting interest implies the existence of a long-term relationship between the direct investor and the enterprise and a significant degree of influence by the investor on the management of the enterprise".

According to UNCTAD, "FDI as 'an investment involving a long-term relationship and reflecting a lasting interest and control by a resident entity in one economy (foreign direct investor or parent enterprise) in an enterprise resident in an economy other than that of the FDI enterprise, affiliate enterprise or foreign affiliate. FDI implies that the investor exerts a significant degree of influence on the management of the enterprise resident in the other economy. Such investment involves both the initial transaction between the two entities and all subsequent transaction between them among foreign affiliates, both incorporated and unincorporated. Individuals as well as business entities may undertake FDI".

5.14.3 Nature of FDI

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FDI is carried out by corporations rather than individuals. Somewhat like portfolio investment, the flows of FDI have historically been highly concentrated, both in terms of geography and by industry and at both the investor and receptor poles. Geographically, the ownership of global stocks of FDI is highly skewed towards only a few large, high income countries. Each investing country has, whether by accident or design , tended to direct the major part of its FDI to only a very few receiving countries; in fact the pattern of global distribution of FDI have been highly similar to historical relationships based on colonial ties or other forms of political hegemony.

Viewed industrially, for any given country, FDI generally comes from less than four or five out of twenty or so major industry groups and inflows into those same industries in the receptor country.

General attribute of FDI is that it has evoked by type over time. Prior to First World War, a crude but valid generalization would that a large part of FDI was in service sector of the host economy (particularly transportation, power, communication and trading) while most of the rest was of the "backward vertical integration" type. During the inter-war period, most of the currently largest manufacturing multinational corporations (MNCs) made their initial foreign investments, but these horizontal or market extension types of investments have now become major category.

The fourth recognized characteristic of manufacturing FDI is that it originates in industries that are technologically intensive, "skill oriented" or progressive. In addition, the FDI prone industries are typically more concentrated, have higher advertising outlays per unit of sales and exhibit above average export propensities. Industries from which FDI tends to originate display many characteristics associated with oligopoly. Another universal property of FDI is that it is really a package of complementary inputs a collective flow of both tangible and intangible assets & services.

5.14.4 Importance of Foreign Direct Investment

The Importance of Foreign Direct Investment can be summarized as follows:

1. Foreign Direct Investment (FDI) in economic term is own and investments made by foreign parties in a country.
2. Foreign expertise can be an important factor in improving the existing technical processes in the country.
3. Advances in technology and process it improves the competitiveness of countries in the domestic economy.
4. FDI can improve the quality of products and processes in a particular sector, increased attempts to better human resource.
5. FDI can create jobs, in an effort to increase productivity, skilled and semi-skilled workers needed.
6. Further reduce unemployment and thus reduce social problems.

7. Expertise transfer, research and development require the fees to the high cost of developing the technology.

5.14.5 FDI in Developing Countries

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FDI is now increasingly recognized as an important contributor to a developing country's economic performance and international competitiveness.

After the debt-crisis that hit the developing world in early 1980s, the conventional wisdom quickly became that it had been unwise for countries to borrow so heavily from international banks or international bond markets. Rather countries should try to attract non-debt-creating private inflows (DFI). The financial advantage is that such capital inflows need not be repaid and that outflow of funds (remittance of profits) would fluctuate with the cycle of the economy. It has also been widely observed that the structural adjustment efforts of the 1980s failed to lead to new patterns of sustained growth in developing countries. In particular, structural adjustment programs failed to restore private investment to desirable levels. Again it is hoped that FDI could play an important role; the World Bank observes that FDI can be an important complement to the adjustment effort, especially in countries having difficulty in increasing domestic savings.

Against this background of balance of payments problems and low level of private investment, it is probably not surprising that attitudes in developing countries towards FDI have shifted. In the 1960s and 1970s many countries maintained a rather cautious, and sometimes an outright negative position with respect to FDI. In the 1980s, however the attitudes shifted radically towards a more welcoming policy stance. This change was not so much due to new research finding on the impact of FDI but to the economic problems facing the developing world.

Developing countries are liberalizing their foreign investment regimes and are seeking FDI not only as a source of capital funds and foreign exchange but also as a dynamic and efficient vehicle to secure the much needed industrial technology, managerial expertise and marketing know-how and networks to improve on growth, employment, productivity and export performance.

At the global level the flows of FDI and PFI to developing countries have indeed increased. The average net inflow of FDI in developing countries had been US$ 11 billion in 1980-86, but in 1987 it started to increase, by 1991 the annual net inflow had risen to US$ 35 billion and by 2004 to US$ 233 billion. The share of developing economies in total inflow of Foreign Direct Investment in the world has been rising continuously since 1989.

5.14.6 Determinants of Foreign Direct Investment

To understand the scale and direction of FDI flows, it is necessary to identify their major determinants. The relative importance of FDI determinants varies not only between countries but also between different types of FDI. Traditionally, the determinants of FDI include the following:

1. ***Size of the Market:*** Large developing countries provide substantial markets where the consumers demand for certain goods far exceed the available supplies. This demand potential is a big draw for many foreign-owned enterprises. In many cases, the establishment of a low cost

marketing operation represents the first step by a multinational into the market of the country. This establishes a presence in the market and provides important insights into the ways of doing business and possible opportunities in the country.

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2. ***Political stability:*** In many countries, the institutions of government are still evolving and there are unsettled political questions. Companies are unwilling to contribute large amounts of capital into an environment where some of the basics political questions have not yet been resolved.
3. ***Macro-economic Environment:*** Instability in the level of prices and exchange rate enhance the level of uncertainty, making business planning difficult. This increases the perceived risk of making investments and therefore adversely affects the inflow of FDI.
4. ***Legal and Regulatory Framework:*** The transition to a market economy entails the establishment of a legal and regulatory framework that is compatible with private sector activities and the operation of foreign owned companies. The relevant areas in this field include protection of property rights, ability to repatriate profits, and a free market for currency exchange. It is important that these rules and their administrative procedures are transparent and easily comprehensive.
5. ***Access to Basic Inputs:*** Many developing countries have large reserves of skilled and semi-skilled workers that available for employment at wages significantly lower than in developed countries. This provides an opportunity for foreign firms to make investments in these countries to cater to the export market. Availability of natural resources such as oil and gas, minerals and forestry products also determine the extent of FDI.

5.14.7 Routes of FDI

Various Routes of FDI are as follows:

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Table 5.1

	Before the Proposal		*After the Proposal*	
Sector/Activity	*% of FDI /Equity*	*Entry Route*	*% of FDI / Equity*	*Entry Route*
Defense Sector	26%	Government Route	No Change	Higher limits of foreign investment in "state of-the-art" manufacturing would be considered by the CCS
Insurance Sector	26%	Automatic Route	49%	Automatic Route
Telecom Services	74%	Automatic up to 49% Government route beyond 49% and up to 74%	100%	Automatic up to 49% Government route beyond 49% and up to 100%
Tea Plantation	100%	Government Route	100%	Automatic up to 49% Government route beyond 49% and up to 100%
Asset Reconstruction Company	74% of paid-up capital of ARC (FDI+FII)	Government Route	100%	Automatic up to 49% Government route beyond 49% and up to 100%
Petroleum & Natural Gas	49%	Government Route	49%	Automatic Route
Commodity Exchanges	49% (FDI & FII) + [Investment by Registered FII under Portfolio Investment Scheme (PIS) will be limited to 23% and Investment under FDI Scheme limited to 26%]	Government Route (For FDI)	49%	Automatic Route
Power Exchanges	49% (FDI &FII) FDI limit of 26 per cent and an FII limit of 23 per cent of the paidup capital	Government Route (For FDI)	49%	Automatic Route
Stock Exchanges/ Clearing Corporations	49% (FDI &FII) FDI limit of 26 per cent and an FII limit of 23 per cent of the paid-up capital	Government Route(For FDI)	49%	Automatic Route

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Credit Information Companies	49% (FDI & FII)	Government Route	74%	Automatic Route
Courier Services	100%	Government Route	100%	Automatic Route
Single Brand product retail trading	100%	Government Route	100%	Automatic up to 49% Government route beyond 49% and up to 100%

5.14.8 Government Initiatives

FDI in Retailing in India

Foreign Investment in India is governed by the FDI policy announced by the Government of India and the provision of the Foreign Exchange Management Act (FEMA) 1999. The FDI policy is notified through Press Notes by the Secretariat for Industrial Assistance (SIA), Department of Industrial Policy and Promotion (DIPP). FDI in retailing has been so for introduced in two forms i.e. FDI in single brand retailing and FDI in multi-brand retailing.

FDI in Single-Brand Retailing

Single brand retail outlets with FDI generally pertain to high-end products and cater to the needs of a brand conscious segment of the population, mainly attracting a brand loyal clientele, which often has a pre-set positive disposition towards the specific brand. FDI in single brand was however, permitted in 2006, to the extent of 51%. Since then, a total of 94 proposals have been received till May, 2010. Of this, 57 proposals were approved. An FDI inflow of US $ 194.69 million (₹ 901.64 crores) was received between April, 2006 and March, 2010, while FDI in cash and carry wholesale trading was first permitted, to the extent of 100%, under the Government approval route, in 1997. It was brought under the automatic route in 2006. Between April, 2000 to March, 2010, FDI inflows of US $ 1.779 billion (₹7799 crores) were received in the sector. This comprised 1.54 % of the total FDI inflows received during the period.

FDI in Multi-brand retailing

In simple terms in multi-brand retailing a single retailer comes up with the number of new brands to capture the market. It is important to understand the definition of single versus multi-brand retail. Multi-brand retail, as considered by the Indian government, would include retailers like Wal-Mart, Tesco, Carrefour, CVS, Walgreens, 7-11, Best Buy, Home Depot, Staples and Office Depot. Under multi-brand retail the policy framework is as follows:

(i) Government has decided to allow 51% FDI in Multi-brand retails.

(ii) Minimum investment of $100 million.

(iii) 50% of the investment is to be in backend infrastructure development.

(iv) 30% of all raw materials have to be procured from India's small and medium industries.

(v) Permission to set up malls only in cities with a minimum population of 10 lakhs.

(vi) Government has the first right to procure material from the farmers.

(vii) Products should be sold under the same brand internationally.

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Foreign Direct Investment in India

Since independence till 1990, the performance of Indian economy has been dominated by a regime of multiple controls, restrictive regulations and wide ranging state intervention. Industrial economy of the country was protected by the state and insulated from external competition. As a result of which, India was thrown a long way behind the world of rapid expanding technology. The cumulative effect of these policies started becoming more and more pronounced. By the year 1989-90, the situation on the balance of payment and foreign exchange reserves became precarious and the country was driven to the brink of default. The credibility reached the sinking level that no country was willing to advance or lend to India at any cost. In such circumstances, the government quickly followed a liberalized economic policy in July 1991.

The main objectives of the liberalized economic policy are twofold. At the country level the reform aims at freeing domestic investors from all the licensing requirements, virtual abolition of MRTP restriction on the investment by large houses, and a competitive industrial structure for Indian companies to achieve a global presence by becoming as competitive as their counterparts worldwide. Secondly, the focus on structural reforms intended to tap foreign investment for economic growth and development.

Gradually & systematically the government has taken a series of measures like devaluation of rupee, lowering of import duties and allowing foreign investment upto 51% of the equity in a large number of industries and investment of large foreign equity (even up to 100%) in selected areas especially for export oriented products.

In India, since the 1960's foreign investment and/or foreign collaborations by the multinationals have been principally viewed as an instrument to facilitate the much needed 'transfer of technology'. In technological as well as financial collaborations with foreign firms, the approval and extent of ownership participation had been predominantly determined by the technology component of the respective products. 'Import of technology' as against the direct foreign investment was the main focus of the policies till mid-eighties.

The New Industrial Policy (NIP) of July 1991 and subsequent policy amendments have significantly liberalized the industrial policy regime in the country especially as it applies to FDI. The industrial approval system in all industries has been abolished except for some strategic or environmentally sensitive industries. In 35 high priority industries, FDI up to 51% is approved automatically if certain norms are satisfied. FDI proposals do not necessarily have to be accompanied by technology transfer agreements. Trading companies engaged primarily in export activities are also allowed up to 51% foreign entity. A Foreign Investment Promotion Board (FIPB) has been set up to invite and facilitate investment in India by international companies. The use of foreign brand names for goods manufactured by domestic industry which had earlier been restricted was also liberalized. New sectors have been opened to private and foreign investment. The international

trade policy regime has been considerably liberalized too. The rupee was made convertible first on trade and finally on the current account. Capital market has been strengthened. In spite of all these liberalization measures taken by the Indian government- foreign investments have not been up to expectations. Actual inflow of FDI has been less than the approval FDI.

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Liberalization in FDI

Foreign Direct Investment (FDI) in India is subject to certain Rules and Regulations and is subject to predefined limits ('Limits') in various sectors which range from 20% to 100%. There are also some sectors in which FDI is prohibited. The FDI Limits are reviewed by the Government from time to time and as and when the need is felt and FDI is allowed in new sectors where the limits of investment in the existing sectors are modified accordingly. In order to revise the FDI Limits to attract more foreign investment in India, the Union Government constituted a committee named, Arvind Mayaram Committee headed by the Economic Affairs Secretary. On Tuesday, 16th July, 2013, the Government approved the recommendations given by the Arvind Mayaram Committee to increase FDI limits in 12 sectors out of the proposed 20 sectors, including crucial ones such as defense and telecom.

Some of the important changes made in the Existing FDI Limits are provided below:

- FDI Limit in Telecom Sector is increased from 74 per cent to 100 percent, out of which up to 49 per cent will be allowed under automatic route and the remaining through Foreign Investment Promotion Board (FIPB) approval. A similar dispensation would be allowed for asset reconstruction companies and tea plantations.
- FDI in 4 sectors i.e. gas refineries, commodity exchanges, power trading and stock exchanges have been allowed via the automatic route. In case of PSU oil refineries, commodity exchanges, power exchanges, stock exchanges and clearing corporations, FDI will be allowed up to 49 per cent under automatic route as against current routing of the investment through FIPB.
- FDI in single brand retail is to be allowed up to 49 percent under the automatic route and beyond that shall be through FIPB.
- In credit information firms, 74 per cent FDI under automatic route will be allowed.
- In respect of courier services, FDI of up to 100 per cent will be allowed under automatic route. Earlier, similar amount of investment was allowed through FIPB route.
- FDI cap in defense sector remained unchanged at 26%, however higher limits of foreign investment in state-of-the-art manufacturing would be considered by the Cabinet Committee on Security (CCS). Technically, the decision leaves it open for CCS to even allow 100% foreign investment in what the defence ministry will define as "state-of-the-art" segments with safeguards built in to ensure that the technology and equipment are not shared with other countries.

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- In the contentious insurance sector, it was decided to raise the sectoral FDI cap from 26 per cent to 49 per cent under automatic route under which companies investing do not require prior government approval. A Bill to raise FDI cap in this sector is pending in the Rajya Sabha.

Some of the sectors in which FDI limits were expected to be increased but did not were civil aviation, airport, media, multi-brand retail and brown field (existing firms) pharmaceuticals.

5.15 ADVANTAGES OF FOREIGN DIRECT INVESTMENT

Foreign Direct Investment has the following advantages:

1. ***Raising the Level of Investment:*** Foreign investment can fill the gap between desired investment and locally mobilized savings. Local capital markets are often not well developed. Thus, they cannot meet the capital requirements for large investment projects. Besides, access to the hard currency needed to purchase investment goods not available locally can be difficult. FDI solves both these problems at once as it is a direct source of external capital. It can fill the gap between desired foreign exchange requirements and those derived from net export earnings.
2. ***Up-gradation of Technology:*** Foreign investment brings with it technological knowledge while transferring machinery and equipment to developing countries. Production units in developing countries use out-dated equipment and techniques that can reduce the productivity of workers and lead to the production of goods of a lower standard.
3. ***Improvement in Export Competitiveness:*** FDI can help the host country improve its export performance. By raising the level of efficiency and the standards of product quality, FDI makes a positive impact on the host country's export competitiveness. Further, because of the international linkages of MNCs, FDI provides to the host country better access to foreign markets. Enhanced export possibility contributes to the growth of the host economies by relaxing demand side constraints on growth. This is important for those countries which have a small domestic market and must increase exports vigorously to maintain their tempo of economic growth.
4. ***Employment Generation:*** Foreign investment can create employment in the modern sectors of developing countries. Recipients of FDI gain training of employees in the course of operating new enterprises, which contributes to human capital formation in the host country.
5. ***Benefits to Consumers:*** Consumers in developing countries stand to gain from FDI through new products, and improved quality of goods at competitive prices.
6. ***Resilience Factor:*** FDI has proved to be resilient during financial crisis. For instance, in East Asian countries such investment was remarkably stable during the global financial crisis of 1997-98. In sharp contrast,

other forms of private capital flows like portfolio equity and debt flows were subject to large reversals during the same crisis. Similar observations have been made in Latin America in the 1980s and in Mexico in 1994-95. FDI is considered less prone to crises because direct investors typically have a longer-term perspective when engaging in a host country. In addition to risk sharing properties of FDI, it is widely believed that FDI provides a stronger stimulus to economic growth in the host countries than other types of capital inflows. FDI is more than just capital, as it offers access to internationally available technologies and management know-how.

7. ***Revenue to Government:*** Profits generated by FDI contribute to corporate tax revenues in the host country.

5.16 DISADVANTAGES OF FOREIGN DIRECT INVESTMENT

FDI is not an unmixed blessing. Governments in developing countries have to be very careful while deciding the magnitude, pattern and conditions of private foreign investment. Possible disadvantages of foreign investment are the following:

1. When foreign investment is competitive with home investment, profits in domestic industries fall, leading to fall in domestic savings.
2. Contribution of foreign firms to public revenue through corporate taxes is comparatively less because of liberal tax concessions, investment allowances, disguised public subsidies and tariff protection provided by the host government.
3. Foreign firms reinforce dualistic socio-economic structure and increase income inequalities. They create a small number of highly paid modern sector executives. They divert resources away from priority sectors to the manufacture of sophisticated products for the consumption of the local elite. As they are located in urban areas, they create imbalances between rural and urban opportunities, accelerating flow of rural population to urban areas.
4. Foreign firms stimulate inappropriate consumption patterns through excessive advertising and monopolistic market power. The products made by multinationals for the domestic market are not necessarily low in price and high in quality. Their technology is generally capital-intensive which does not suit the needs of a labour-surplus economy.
5. Foreign firms able to extract sizeable economic and political concessions from competing governments of developing countries. Consequently, private profits of these companies may exceed social benefits.
6. Continual outflow of profits is too large in many cases, putting pressure on foreign exchange reserves. Foreign investors are very particular about profit repatriation facilities.

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7. Foreign firms may influence political decisions in developing countries. In view of their large size and power, national sovereignty and control over economic policies may be jeopardized. In extreme cases, foreign firms may bribe public officials at the highest levels to secure undue favours. Similarly, they may contribute to friendly political parties and subvert the political process of the host country.

5.17 FDI IN WHOLESALE AND RETAIL SECTOR

Retail sector in India is estimated to account for about 10 per cent share in GDP, as compared to 8 per cent in China, 6 per cent in Brazil and 10 per cent in USA. India is estimated to have around 15 million retails outlets.

FDI in Wholesale Sector

Wholesale trading would mean the sale of goods to retailers, industrial, commercial, other professional business users or to other wholesalers, but not for personal consumption. The FDI Policy lists a number of 'valid business customers' with whom wholesale transactions can be entered into the Government. These entities should have relevant tax and business registrations. It is expressly clarified that a retailer undertaking cash and carry wholesale trade cannot open retail outlets, whereby sales will be made to the customer directly unless retail trading and cash and carry wholesale trading are undertaken through separate business arms, wherein separate books of accounts for both arms of the business are duly audited by statutory auditors. The conditions of the FDI policy for wholesale/cash and carry business and for retail business have to be separately complied with by the respective business arms. Under the existing FDI Policy, wholesale deals would be permitted among companies of the same group. However, such wholesale trade to group companies taken together should not exceed 25 percent of the total turnover of the wholesale venture.

FDI in Retail Sector

FDI in retail sector in India is considered to be the major catalyst for promoting sustainable development in India. Because of the relaxed policies, foreign brands can now invest in the Indian market to generate employment for the ever-increasing population of the country, raise productivity, increase incomes, enhance exports, and play a part in the long-term economic stability of India.

The Indian retail trading has received Foreign Direct Investment (FDI) equity inflow totaling US$ 3.47 billion during April 2000-March 2021, according to Department for Promotion of Industry and Internal Trade (DPIIT).

With the rising need for consumer goods in different sectors including consumer electronics and home appliances, many companies have invested in the Indian retail space in the past few months.

India's retail sector attracted US$ 6.2 billion from various private equity and venture capital funds in 2020.

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In May 2021, Big Bazaar rolled out its two-hour delivery service in small cities, such as Bhopal, Mangalore, Raipur, Ranchi, Guwahati, Kanpur, Lucknow and Varanasi, and recorded a boost in orders over the past weeks.

In April 2021, Flipkart expanded its hyperlocal delivery service Quick to six new cities including Delhi, Gurugram, Ghaziabad, Noida, Hyderabad and Pune as the demand for essential goods on e-commerce platforms surges amid the second wave of the pandemic. In March 2021, AP Group announced an expansion plan for their Italian brand – Just Cavalli in India with the launch of 200 offline stores in 2021.

In March 2021, Realme announced to expand retail footprint in India with flagship stores; it is planning to launch its first flagship store (over a 10,000 sq. ft. area) in Gujarat.

On March 25, 2021, Xiaomi introduced a new initiative 'Develop with Mi' (GWM). GWM plans to have 30,000 touchpoints in a year and 6,000+ retail stores in the next two years.

In March 2021, ASICS expanded its retail concept in India with a new store in Bengaluru.

In March 2021, Vivo announced plan to open ~100 exclusive retail stores across India in 2021; aims to cross the 650-store mark in India by 2021.

In March 2021, Unicorn, a premium Apple reseller, announced plan to launch 4-6 new flagship stores in India by FY22.

In March 2021, Mi India launched a ₹ 100-crore (US$ 13.62 million) support plan over the next two years for its retail partners.

In February 2021, Greyweave, a hand-made carpets and rugs brand, announced to invest ₹ 75 lakh (US$ 102,875.65) for the firm's offline expansion plan.

New Government Policy for Foreign Direct Investment (FDI)

The Government of India has taken various initiatives to improve the retail industry in India. Some of them are listed below:

(a) Government may change Foreign Direct Investment (FDI) rules in food processing in a bid to permit E-commerce companies and foreign retailers to sell Made in India consumer products.

(b) Government of India has allowed 100% FDI in online retail of goods and services through the automatic route, thereby providing clarity on the existing businesses of E-commerce companies operating in India.

(c) The government's focus to improve digital infrastructure in Tier 2 and Tier 3 markets would be favourable to the sector.

Check Your Progress

3. Discuss the concept of Liberalization, Privatisation and Globalisation (LPG).
4. Explain various types of Disinvestment Methods in India.
5. Discuss the importance of Foreign Direct Investment.

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5.18 ANSWERS TO 'CHECK YOUR PROGRESS'

1. The objectives of Industrial Policy are as follows:

   (i) ***Rapid Industrial Development:*** The industrial policy of the Government of India is aimed at increasing the tempo of industrial development.

   (ii) ***Balanced industrial Structure:*** The industrial policy is designed to correct the prevailing lopsided industrial structure. Thus, for example, before independence, India had some fairly developed consumer goods industries. But the capital goods sector was not developed at all and basic and heavy industries were by and large absent.

   (iii) ***Prevention of Concentration of Economic Power:*** The industrial policy seeks to provide a framework of rules, regulations and reservation of spheres of activity for the public and the private sectors.

   (iv) ***Balanced Regional Growth:*** Industrial policy also aims at correcting regional imbalances in industrial development. It is quite well-known that some regions in the country are industrially quite advanced e.g., Maharashtra and Gujarat while others are industrially backward, like Bihar, Orissa.

2. In order to accelerate Industrial Development in India, and in accordance with the changing circumstances, various industrial policies were declared in the years 1948, 1956, 1977, 1980 and 1985, but in spite of all efforts, the pace and as well as the level of Industrial Development in India, could not reached according to its need. Therefore, in order to lift unnecessary restrictions on Industries, under the licensing policy, and to increase their efficiency, development and technological level, in order to make Indian goods usable in the competitive global market, on 24th July, 1991, in Lok-Sabha the Minister of States for industries, Mr. P. J. Kurian declared the Industrial Policy, 1991. The basic impartial of the New Industrial Policy is to make the industrial economy free from the unnecessary bureaucratic control, to introduce liberalization in order to integrate the Indian economy to the rest of the world, to remove restriction on direct foreign investment and also to free the domestic industrialists from the restriction of M.R.T.P Act.

3. Liberalization: Liberalization refers to the relaxation of the previous government restriction usually in area of social and economic policies. When government liberalized trade, it means it has removed the tariff, subsidies and other restriction on the flow of goods and services between the countries.

   Privatisation: Privatisation means transfer of ownership and/or management of an enterprise from the public sector to the private sector. Privatisation is

opening up of an industry that has been reserved for public sector to the private sector.

Globalisation: Globalisation refers to the integration of economics and societies all over the world. It involves technological, economic, political, and cultural exchanges made possible largely by advances in communication, transportation, and infrastructure.

4. The following are the types of disinvestment methods in India:
   1. ***Minority Disinvestment:*** Minority disinvestment in PSUs is such that, at the end of it, if the government of India retains a majority stake (typically more than 51%) in the company, it ensures management control.
   2. ***Majority Disinvestment:*** Majority disinvestment in PSUs is such that, at the end of it, the government of India retains a minority stake in the company i.e. it sells off a majority stake. It is also called Strategic Disinvestment.
   3. ***Complete Disinvestment:*** Complete disinvestment or privatisation is a form of majority disinvestment wherein 100% control of the company is passed on to a buyer i.e government of India completely disinvests from that PSU. Example of this includes 18 hotel properties of India Tourism Development Corporation (ITDC).
5. The importance of Foreign Direct Investment are as follows:
   1. Foreign Direct Investment (FDI) in economic term is own and investments made by foreign parties in a country.
   2. Foreign expertise can be an important factor in improving the existing technical processes in the country.
   3. Advances in technology and process it improves the competitiveness of countries in the domestic economy.
   4. FDI can improve the quality of products and processes in a particular sector, increased attempts to better human resource.

5.19 SUMMARY

- Industrial policy is defined as the strategic effort by the state to encourage the development and growth of a sector of the economy. It refers to any type of selective intervention or government policy that attempts to alter the structure of production toward sectors that are expected to offer better prospects for economic growth than would occur in the absence of such intervention.
- Liberalization refers to the relaxation of the previous government restriction usually in area of social and economic policies. When government liberalized trade, it means it has removed the tariff, subsidies and other restriction on the flow of goods and services between the countries.

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- Privatisation means transfer of ownership and/or management of an enterprise from the public sector to the private sector. Privatisation is opening up of an industry that has been reserved for public sector to the private sector.
- Globalisation refers to the integration of economics and societies all over the world. It involves technological, economic, political, and cultural exchanges made possible largely by advances in communication, transportation, and infrastructure.
- A natural monopoly occurs when the most efficient number of firms in an industry is one. For example, tap water has very significant fixed costs. Therefore there is no scope for having competition amongst several firms. Information Technology refers to the branch of engineering that deals with the use of computers and telecommunications to retrieve and store and transmit information. It is the combination of systems, procedures, software, and hardware involved in establishing an effective and leading-edge methodology for enabling a total supply chain network of response - from incoming materials through delivery and satisfaction with finished goods and services.
- Disinvestment is taking your money out of the companies you invested in. Ram invested ₹ 1,00,000 in ABC Ltd. for the last few years for 500 shares in the company. Today, he plans to sell his shares to Shyam. Here Ram is disinvesting in ABC Ltd. The word, disinvestment is generally used in the context of Public Sector Undertakings (PSUs). When the government sells its shares in PSUs (Companies where the government has more than 51% ownership) to Private Entities, it is called disinvestment. Minority disinvestment in PSUs is such that, at the end of it, if the government of India retains a majority stake (typically more than 51%) in the company, it ensures management control. Majority disinvestment in PSUs is such that, at the end of it, the government of India retains a minority stake in the company i.e. it sells off a majority stake. It is also called Strategic Disinvestment. Complete disinvestment or privatisation is a form of majority disinvestment wherein 100% control of the company is passed on to a buyer i.e government of India completely disinvests from that PSU. Example of this includes 18 hotel properties of India Tourism Development Corporation (ITDC).
- Foreign Direct Investment refers to the process whereby residents of one country (the home country) acquire ownership of assets for the purpose of controlling the production, distribution and other activities of a firm in another country (the host country).

5.20 KEY TERMS

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- **Industrial Policy:** Industrial policy is defined as the strategic effort by the state to encourage the development and growth of a sector of the economy. It refers to any type of selective intervention or government policy that attempts to alter the structure of production toward sectors that are expected to offer better prospects for economic growth than would occur in the absence of such intervention.
- **Liberalization:** Liberalization refers to the relaxation of the previous government restriction usually in area of social and economic policies. When government liberalized trade, it means it has removed the tariff, subsidies and other restriction on the flow of goods and services between the countries.
- **Privatisation:** Privatisation means transfer of ownership and/or management of an enterprise from the public sector to the private sector. Privatisation is opening up of an industry that has been reserved for public sector to the private sector.
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- **Natural monopoly:** A natural monopoly occurs when the most efficient number of firms in an industry is one. For example, tap water has very significant fixed costs. Therefore there is no scope for having competition amongst several firms.
- **Information Technology (IT):** Information Technology refers to the branch of engineering that deals with the use of computers and telecommunications to retrieve and store and transmit information. It is the combination of systems, procedures, software, and hardware involved in establishing an effective and leading-edge methodology for enabling a total supply chain network of response - from incoming materials through delivery and satisfaction with finished goods and services.
- **Disinvestment:** Disinvestment is taking your money out of the companies you invested in.
- Ram invested ₹ 1,00,000 in ABC Ltd. for the last few years for 500 shares in the company. Today, he plans to sell his shares to Shyam. Here Ram is disinvesting in ABC Ltd. The word, disinvestment is generally used in the context of Public Sector Undertakings (PSUs). When the government sells its shares in PSUs (Companies where the government has more than 51% ownership) to Private Entities, it is called disinvestment.
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- **Foreign Direct Investment:** Foreign Direct Investment refers to the process whereby residents of one country (the home country) acquire ownership of assets for the purpose of controlling the production, distribution and other activities of a firm in another country (the host country).

5.21 SELF-ASSESSMENT QUESTIONS AND EXERCISES

Short Answer Questions

1. What is Industrial Policy?
2. What is Balanced Regional Growth?
3. Give the meaning of Foreign Investment.
4. What is Workers' Participation in Management?
5. Give the meaning of Liberalization.
6. What is Privatisation?
7. Give the meaning of Globalisation.
8. What is Information Technology (IT)?
9. What is IT Revolution?
10. Define the term Foreign Direct Investment.
11. Give the meaning of Foreign Direct Investment.
12. State any four advantages of Foreign Direct Investment.
13. Mention any four disadvantages of Foreign Direct Investment.
14. What is multi-brand retailing?
15. Give the meaning of single brand retailing.
16. What do you mean by Foreign Collaboration?

Long Answer Questions

1. State various objectives of Industrial Policy.
2. Explain importance of Industrial Policy.
3. Discuss trends in Industrial Growth in India.

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4. Explain various issues in Industrial Sector.
5. Discuss objectives of New Industrial Policy, 1991.
6. Explain features of industrial policy 1991.
7. Discuss evaluation of new industrial policy 1991.
8. Explain limitations of new industrial policy 1991.
9. Discuss reasons for implementing LPG.
10. Discuss impact of Privatisation on Indian Economy.
11. Explain factors contributing to Globalisation.
12. Discuss impact of Globalisation on Indian Business and Industry.
13. Explain various Consequences of LPG.
14. Discuss challenges of LPG.
15. Explain various issues of Privatisation.
16. Discuss in details about Information Technology Revolution in India.
17. Discuss the nature of FDI.
18. Explain FDI in Developing Countries.
19. State the advantages of Foreign Direct Investment.
20. Discuss disadvantages of Foreign Direct Investment.
21. Explain Government initiatives and polices towards FDI.
22. Discuss FDI in Multi-brand retailing.
23. State various objectives of Foreign Collaboration.
24. Explain the importance of Foreign Direct Investment.
25. Explain the Foreign Direct Investment in India.

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